

The Virginia Tech – U.S. Forest Service

May 2016

Housing Commentary: Section I



VirginiaTech
Invent the Future



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<http://woodproducts.sbio.vt.edu/housing-report>. To request the report, please email: buehlmann@gmail.com

Summary

In May, aggregate housing data was mixed; with new single-family housing exhibiting declines in permits, starts, spending, and sales. Month-over-month data were lackluster as well, with the exception being total housing completions. Year-over-year total housing permits and completions are now negative. 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.

The Joint Center for Housing Studies at Harvard University recent *State of the Nation's Housing 2016* report echo's this sentiment, as they wrote, "... at 1.1 million units, new home construction was still running near historic lows last year. A key factor holding back housing starts is the sustained falloff in household growth. Given the size and age of the adult population and under normal economic conditions, roughly 1.2 million net new households would have formed on average each year in 2007–2013. But the actual increase was just half that number as the weak economy made it difficult for young adults to live on their own and for immigrants to settle in the United States. In 2015, however, with the economy nearing full employment and incomes beginning to climb, household growth returned to its expected pace and new home construction was up by a healthy 11 percent.¹"

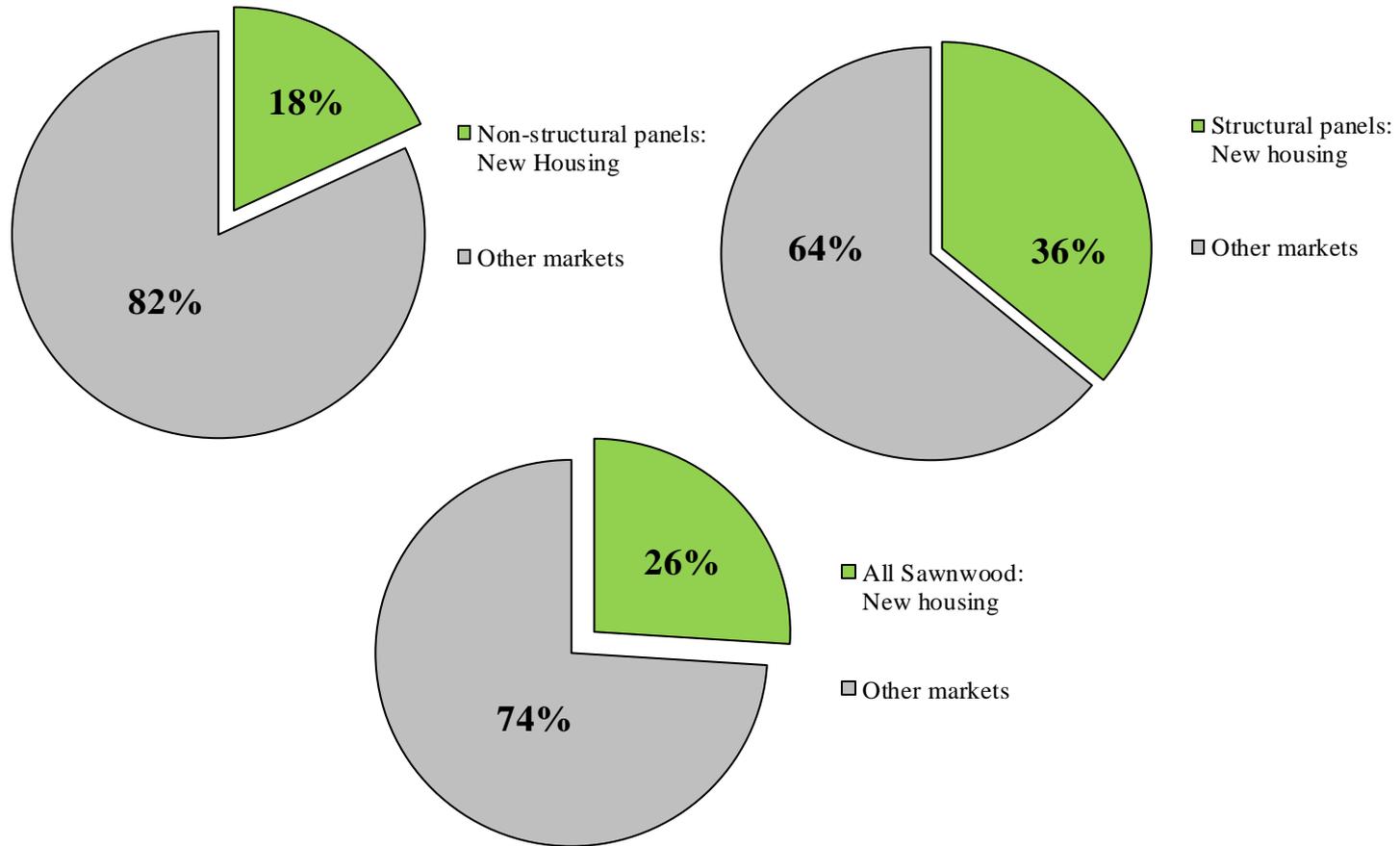
This month's commentary contains relevant housing data; data exploration; household formations; economics and also includes several slides addressing housing affordability and home ownership. Section I contains data and commentary and Section II includes Federal Reserve analysis; private indicators;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

May 2016 Housing Scorecard

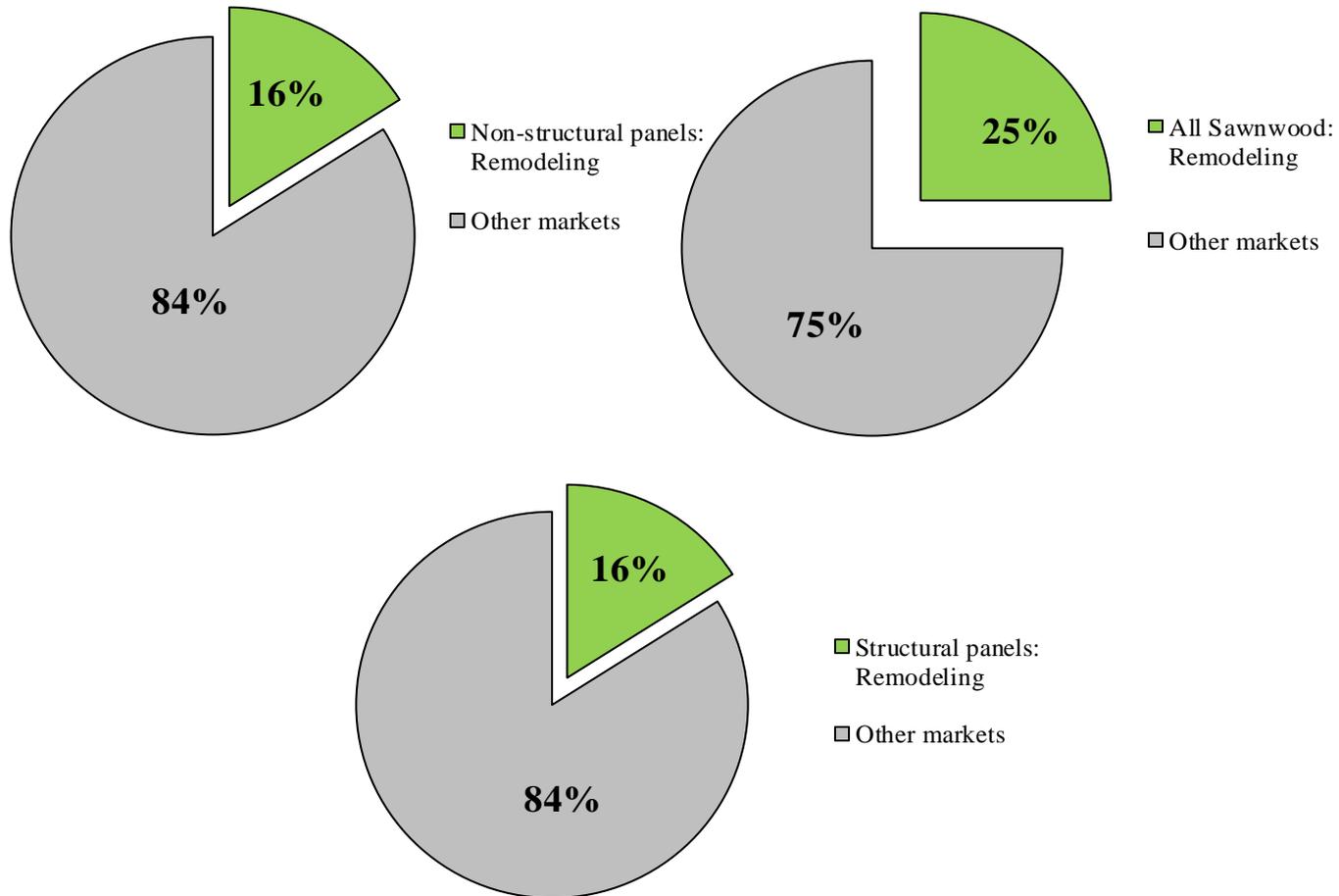
	M/M	Y/Y
Housing Starts	▽ 0.3%	△ 9.5%
Single-Family Starts	△ 0.3%	△ 10.1%
Housing Permits	△ 0.7%	▽ 10.1%
Single-Family Permits	▽ 2.0%	△ 4.8%
Housing Completions	△ 5.1%	▽ 3.5%
New Single-Family House Sales	▽ 6.0%	△ 8.7%
Existing House Sales ¹	△ 1.8%	△ 4.5%
Private Residential Construction Spending	NC 0.0%	△ 5.4%
Single-Family Construction Spending	▽ 1.3%	△ 6.3%

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



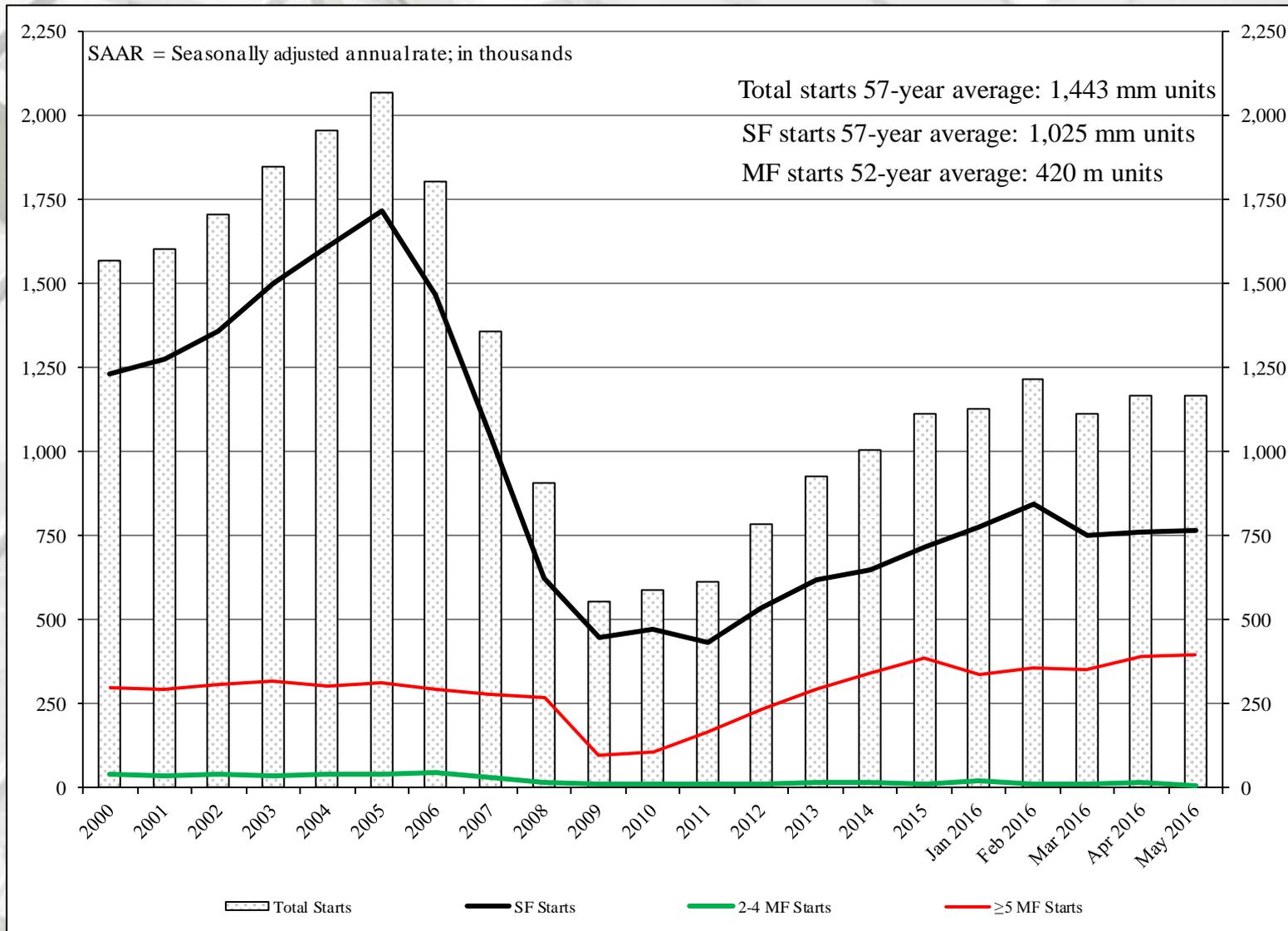
New Housing Starts

	Total Starts*	Single -Family (SF) Starts	Multifamily (MF) 2-4 unit** Starts	MF ≥ 5 unit Starts
May	1,164,000	764,000	4,000	396,000
April	1,167,000	762,000	14,000	391,000
2015	1,063,000	694,000	9,000	360,000
M/M change	-0.3%	0.3%	-71.4%	1.3%
Y/Y change	9.5%	10.1%	-55.6%	10.0%

* 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



New Housing Starts by Region

	NE Total	NE SF	NE MF**
May	134,000	56,000	78,000
April	145,000	57,000	88,000
2015	191,000	54,000	137,000
M/M change	-7.6%	-1.8%	-11.4%
Y/Y change	-29.8%	3.7%	-43.1%

	MW Total	MW SF	MW MF
May	199,000	110,000	89,000
April	204,000	129,000	75,000
2015	145,000	102,000	43,000
M/M change	-2.5%	-14.7%	18.7%
Y/Y change	37.2%	7.8%	107.0%

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

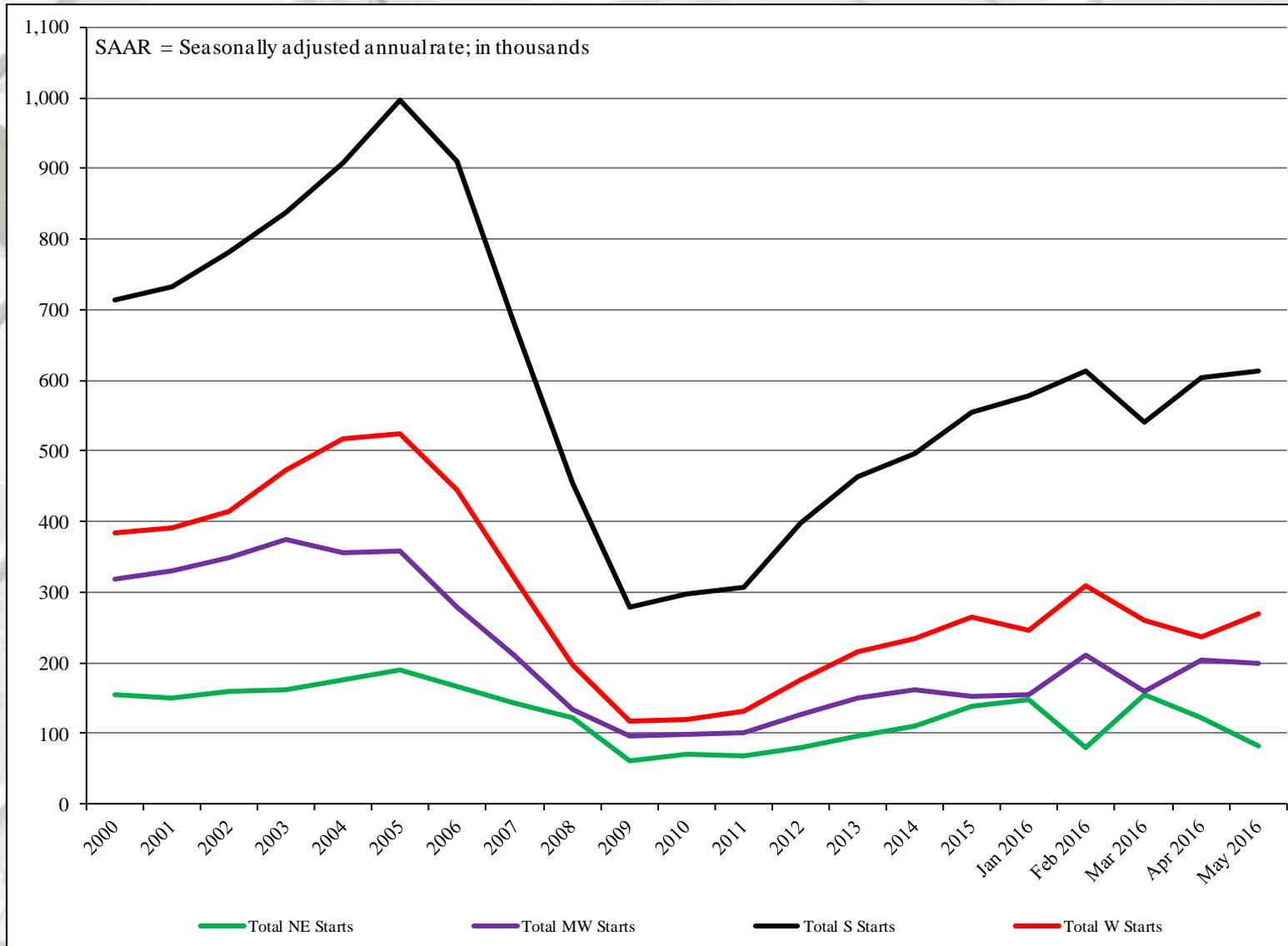
	S Total	S SF	S MF**
May	432,000	181,000	270,000
April	421,000	183,000	236,000
2015	369,000	139,000	267,000
M/M change	2.6%	-1.1%	14.4%
Y/Y change	17.1%	30.2%	1.1%

	W Total	W SF	W MF
May	270,000	160,000	110,000
April	236,000	157,000	79,000
2015	267,000	168,000	99,000
M/M change	14.4%	1.9%	39.2%
Y/Y change	1.1%	-4.8%	11.1%

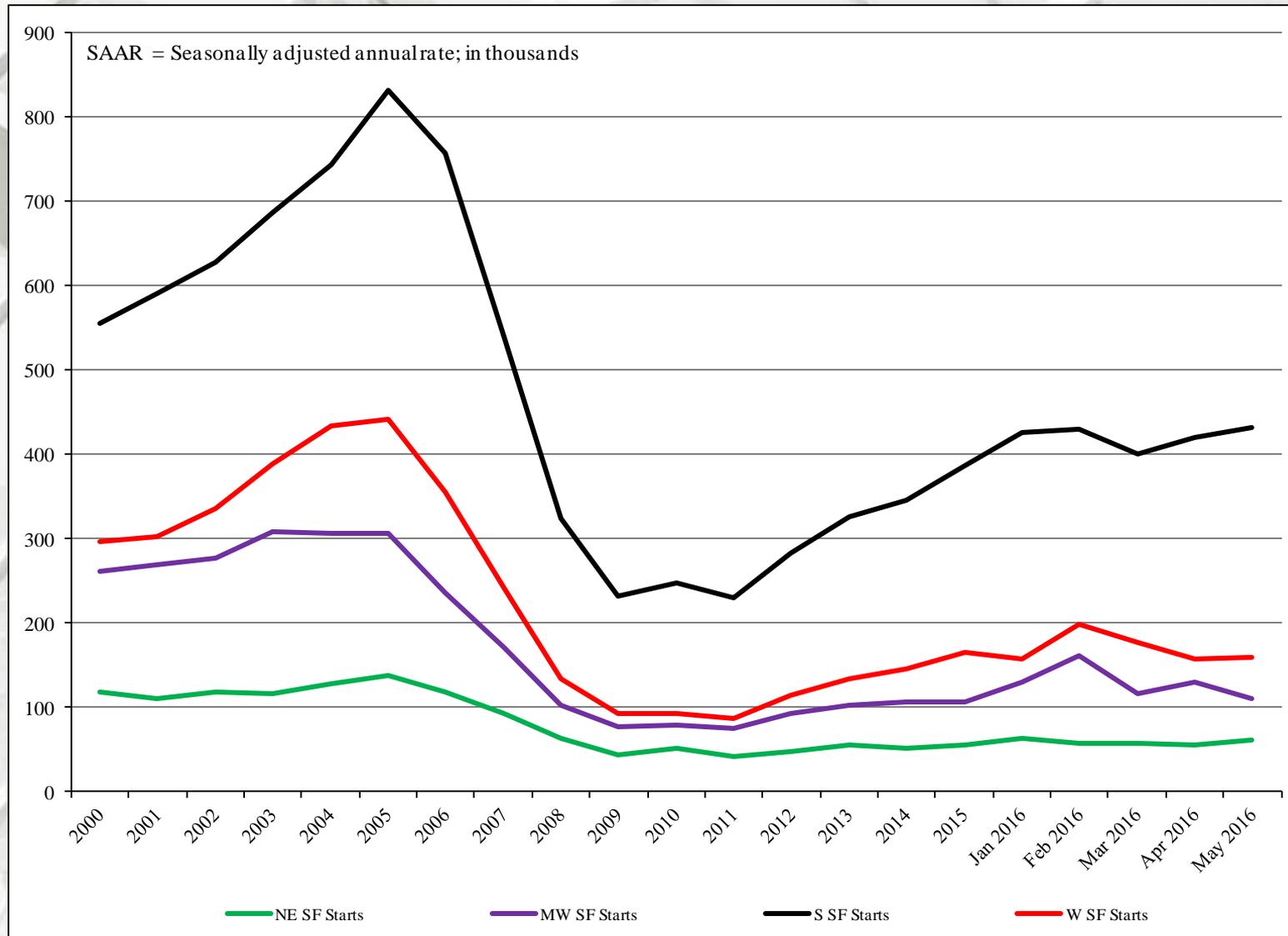
All data are SAAR; S = South and W = West.

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

Total Housing Starts by Region

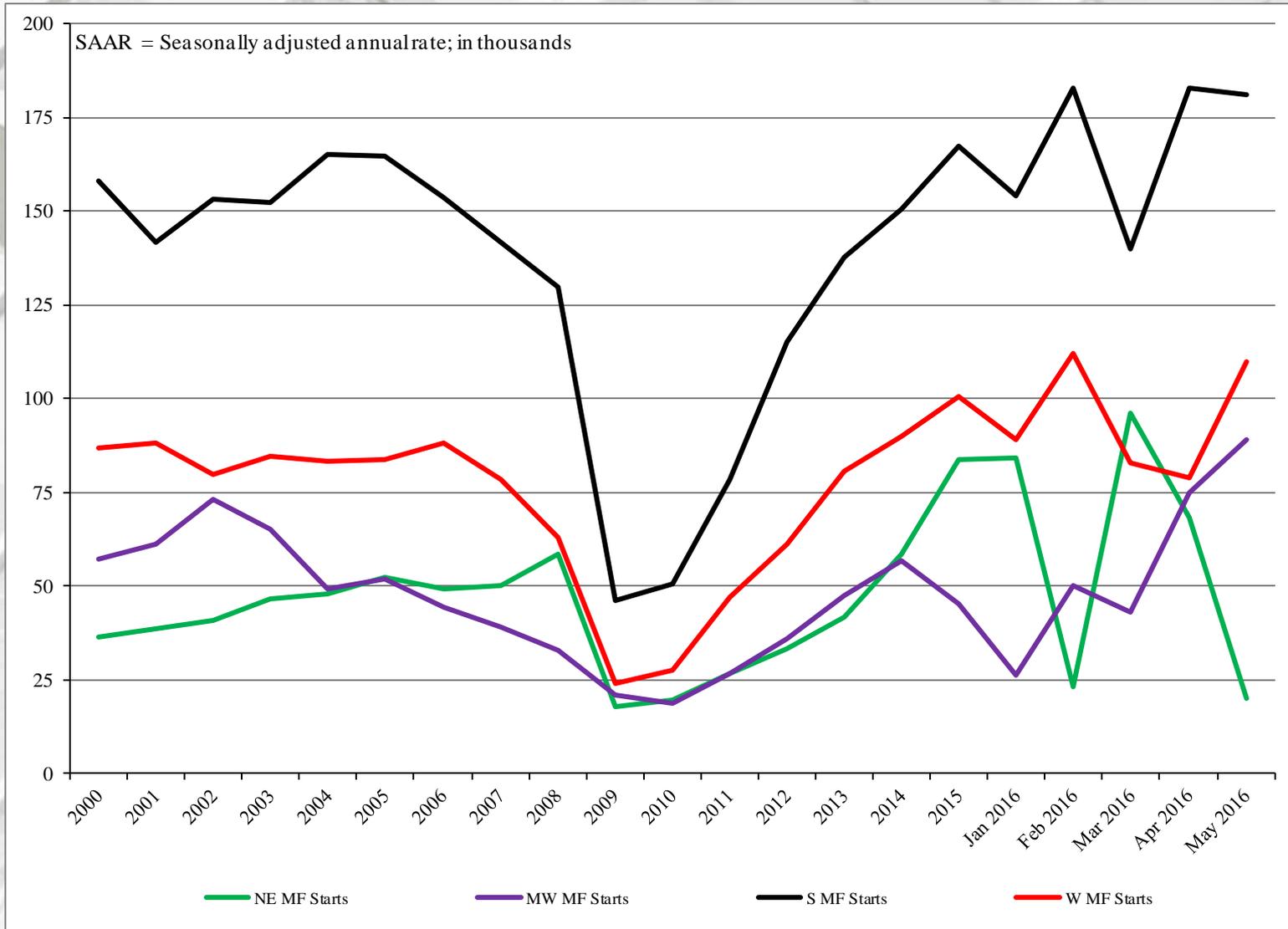


SF Housing Starts by Region



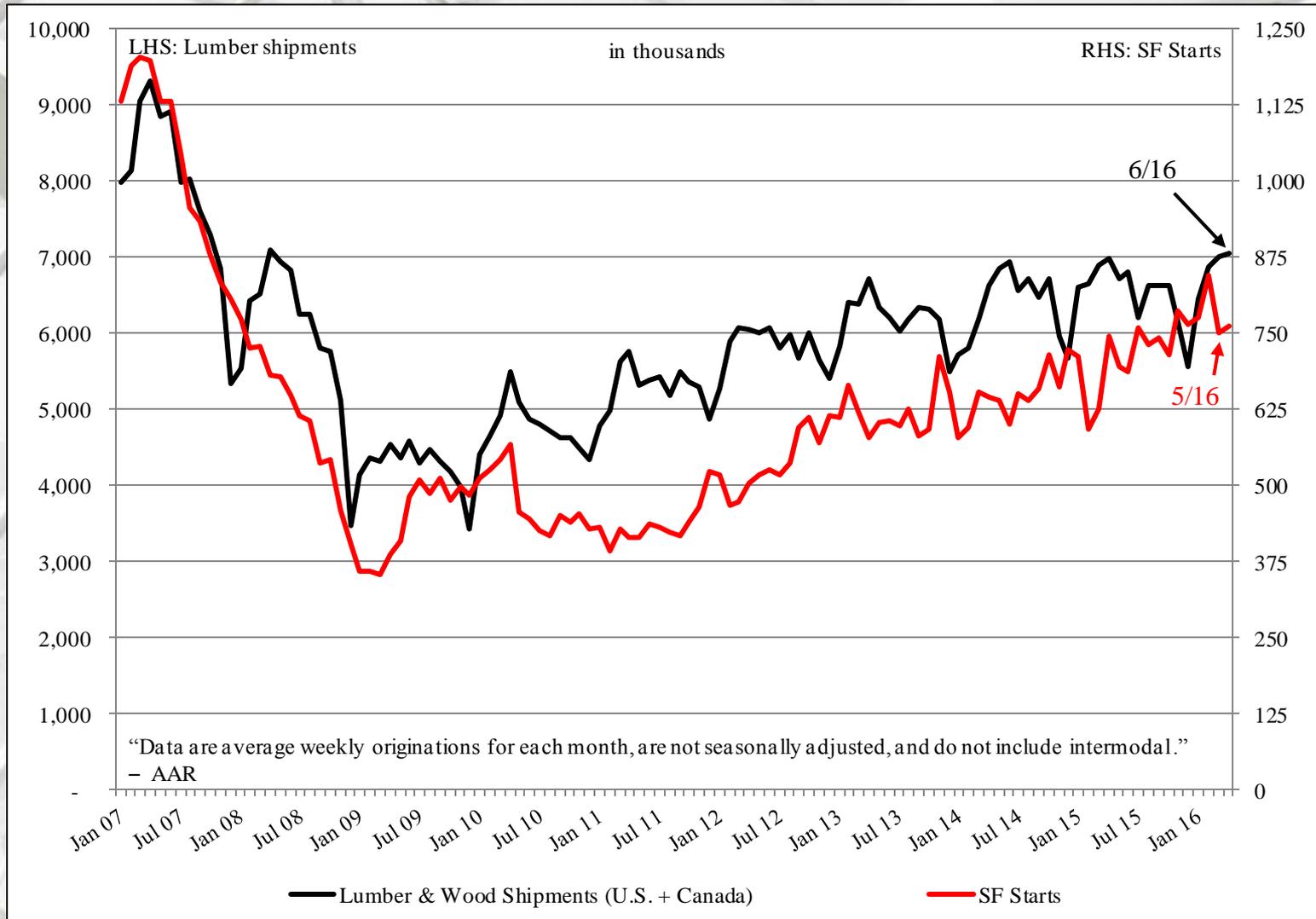
Source: <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 6/17/16

MF Housing Starts by Region

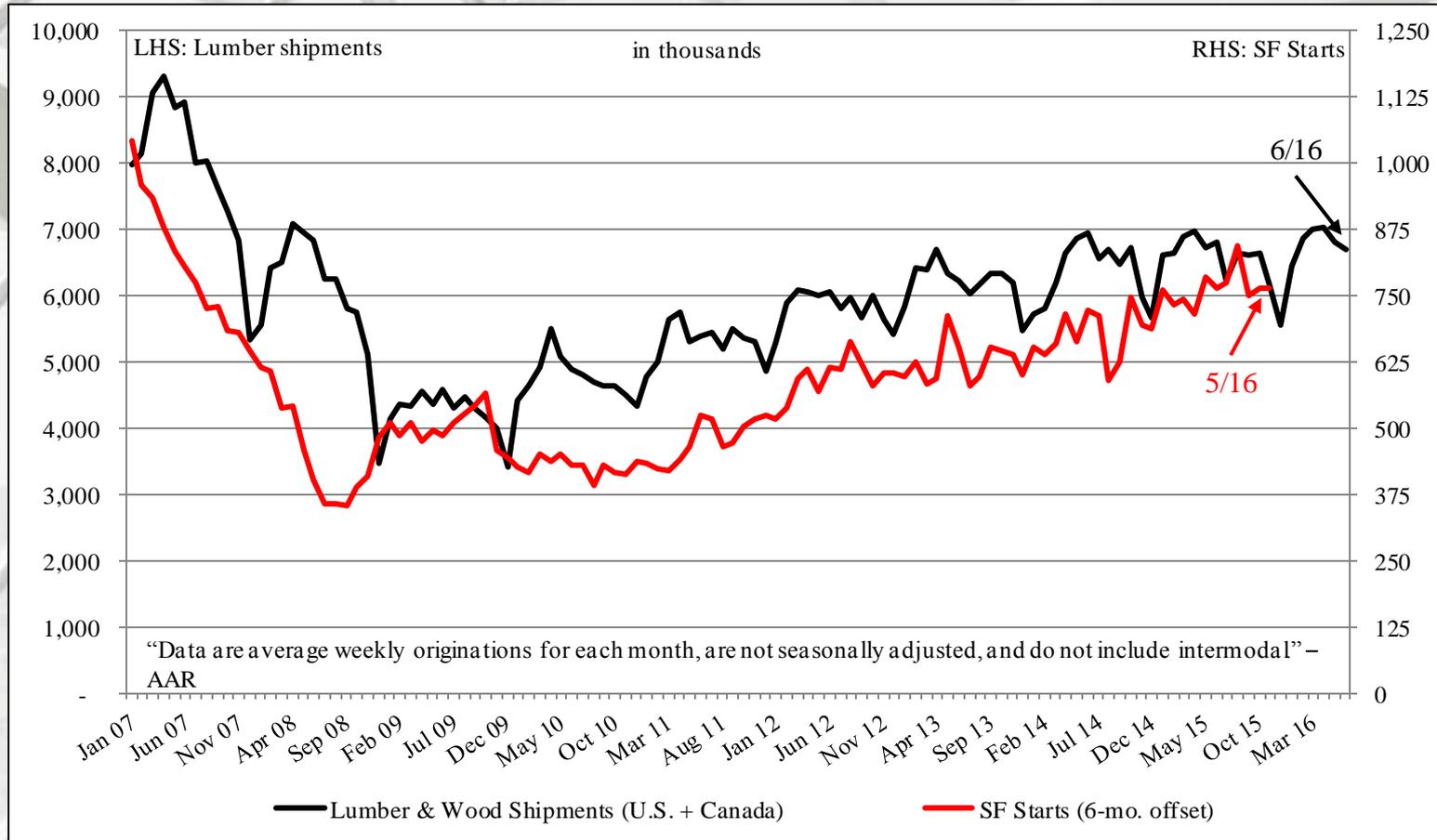


Source: <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 6/17/16

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



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



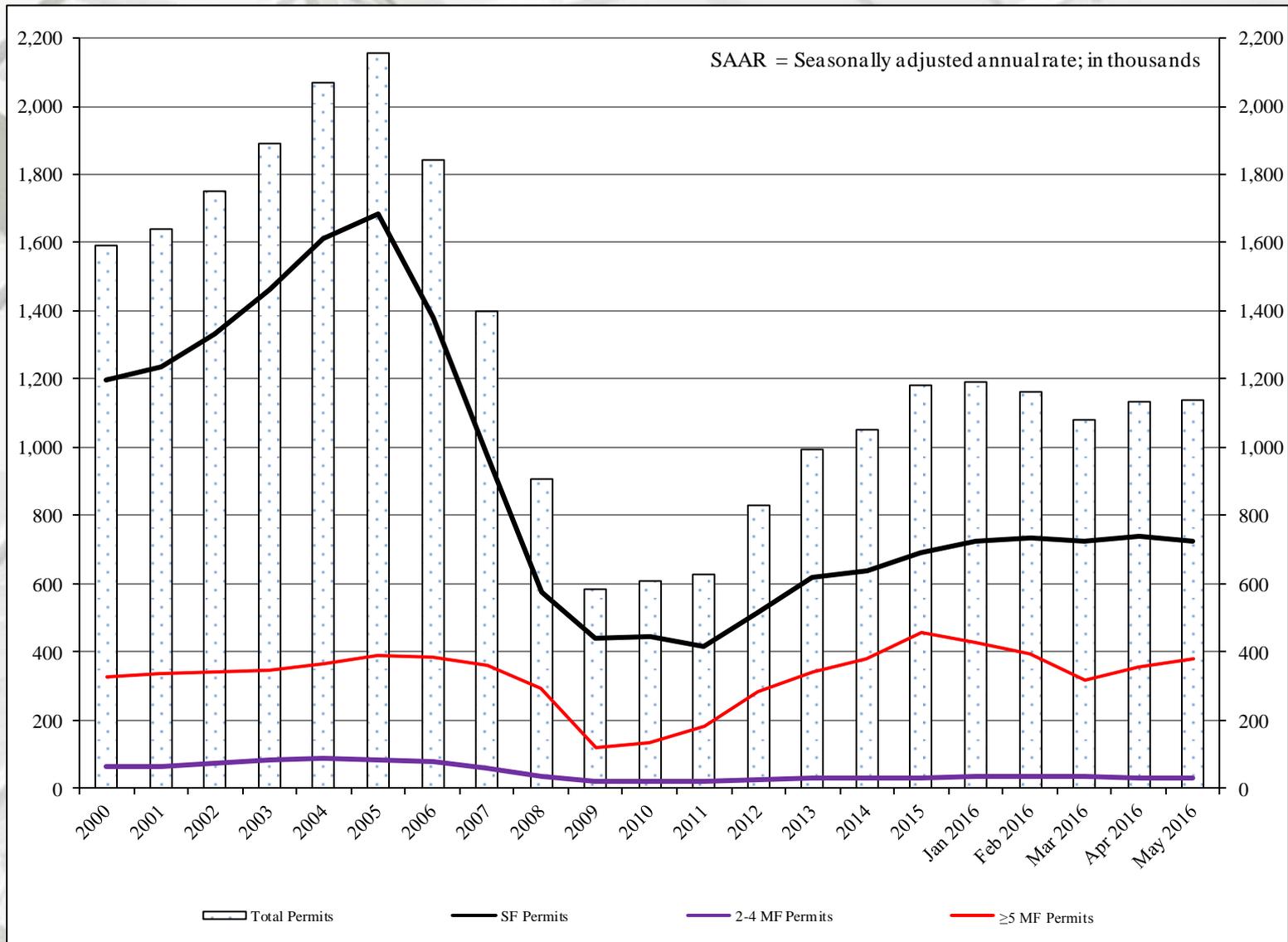
In this graph, January 2007 lumber shipments are contrasted with June 2007 starts, and continuing through May 2016 starts. The purpose is to discover if lumber shipments relate to future single-family starts. Also, it is realized that lumber and wood products are trucked; however, to our knowledge comprehensive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

New Housing Permits

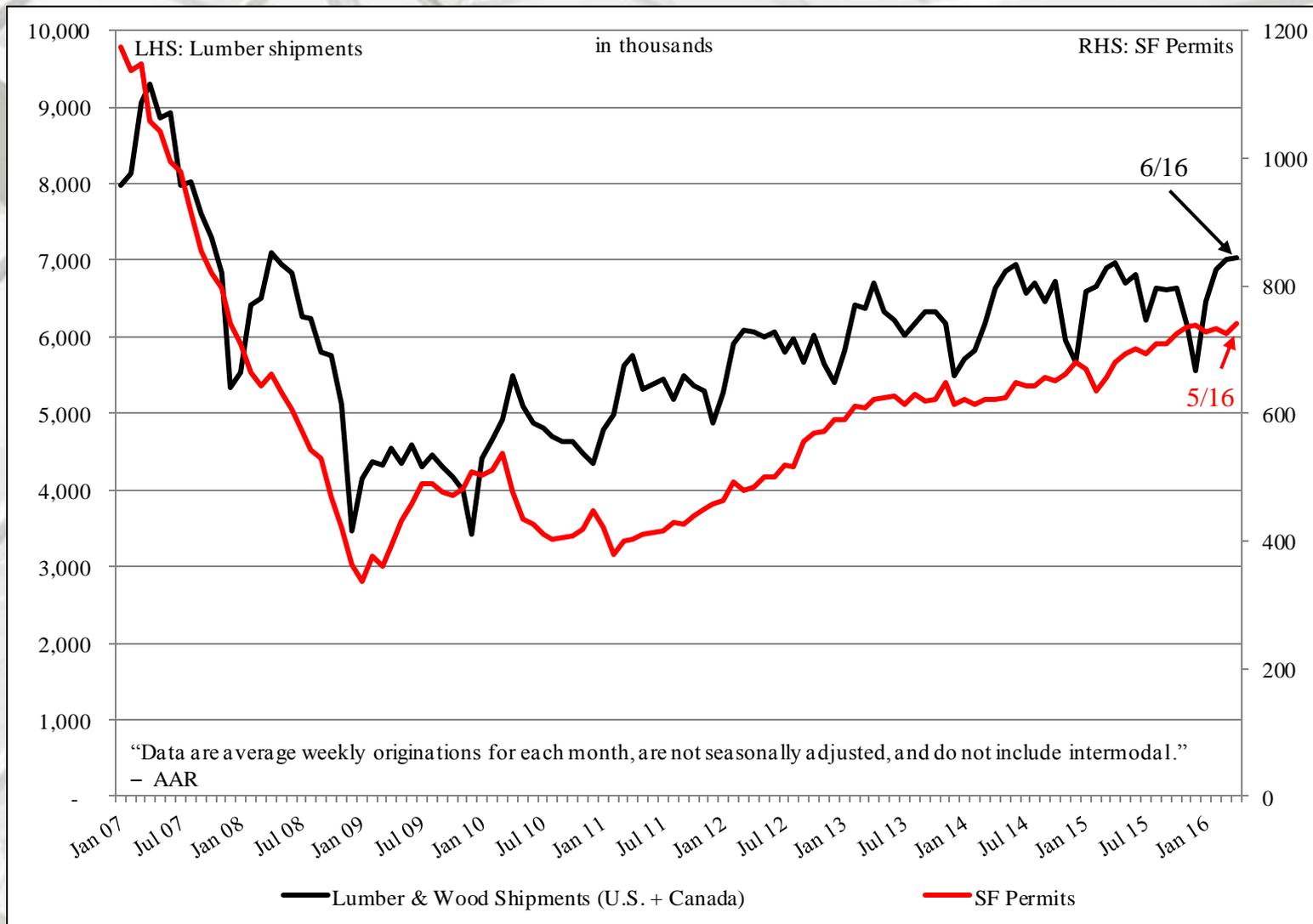
	Total Permits*	SF Permits	MF 2-4 unit Permits	MF ≥ 5 unit Permits
May	1,138,000	726,000	31,000	381,000
April	1,130,000	741,000	32,000	357,000
2015	1,266,000	693,000	34,000	539,000
M/M change	0.7%	-2.0%	-3.1%	6.7%
Y/Y change	-10.1%	4.8%	-8.8%	-29.3%

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

Total New Housing Permits

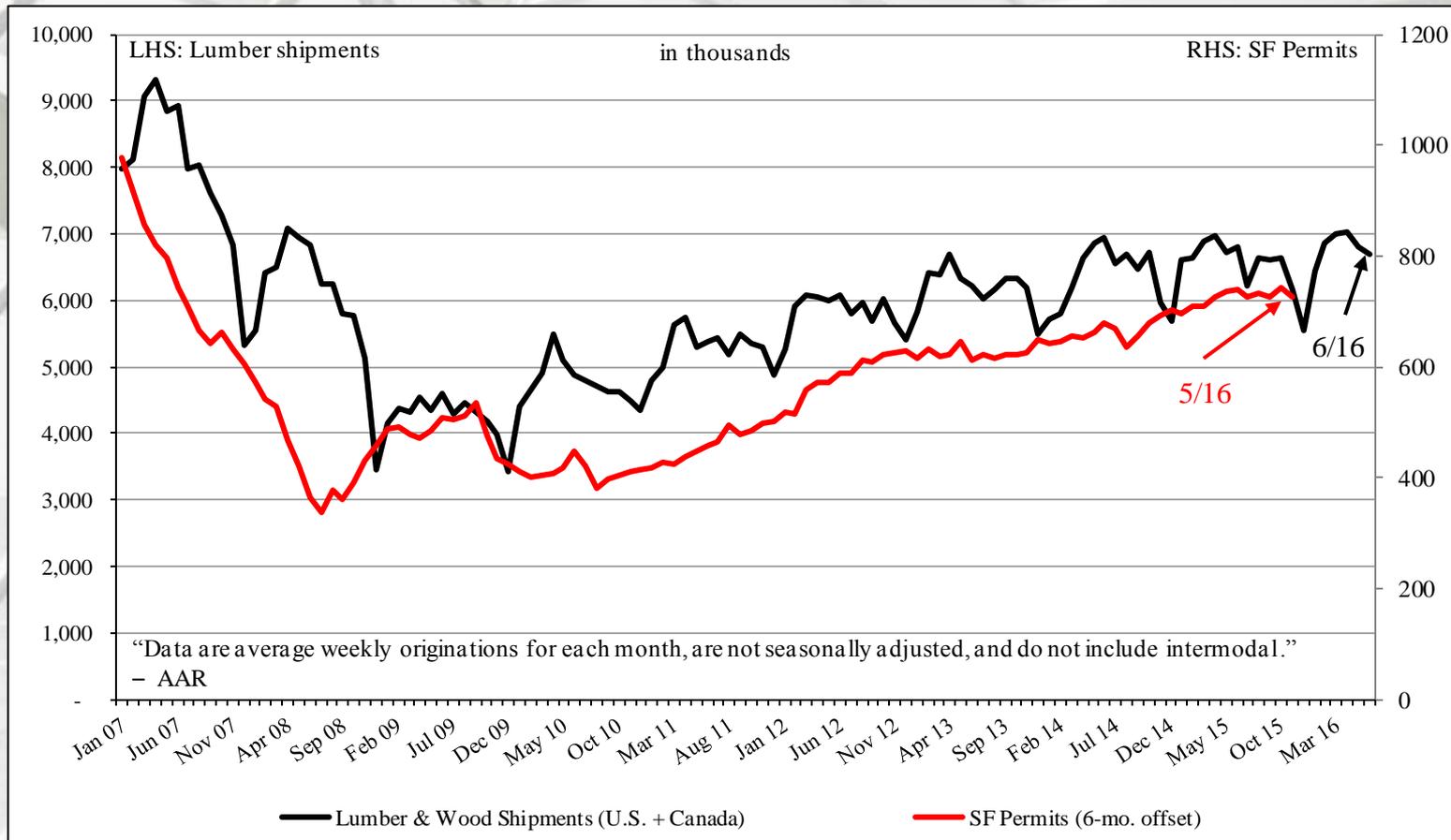


Railroad Lumber & Wood Shipments vs. U.S. SF Housing Permits



Sources: Association of American Railroads (AAR), *Rail Time Indicators* report 7/8/16; U.S. DOC-Construction; 6/17/16

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



In this graph, January 2007 lumber shipments are contrasted with June 2007 permits, and continuing through May 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

	NE Total	NE SF	NE MF
May	95,000	51,000	44,000
April	103,000	56,000	47,000
2015	289,000	50,000	241,000
M/M change	-7.8%	-8.9%	-6.4%
Y/Y change	-67.1%	2.0%	-81.7%

	MW Total	MW SF	MW MF
May	177,000	109,000	68,000
April	195,000	113,000	82,000
2015	175,000	107,000	66,000
M/M change	-9.2%	-3.5%	-17.1%
Y/Y change	1.1%	1.9%	3.0%

* All data are SAAR.

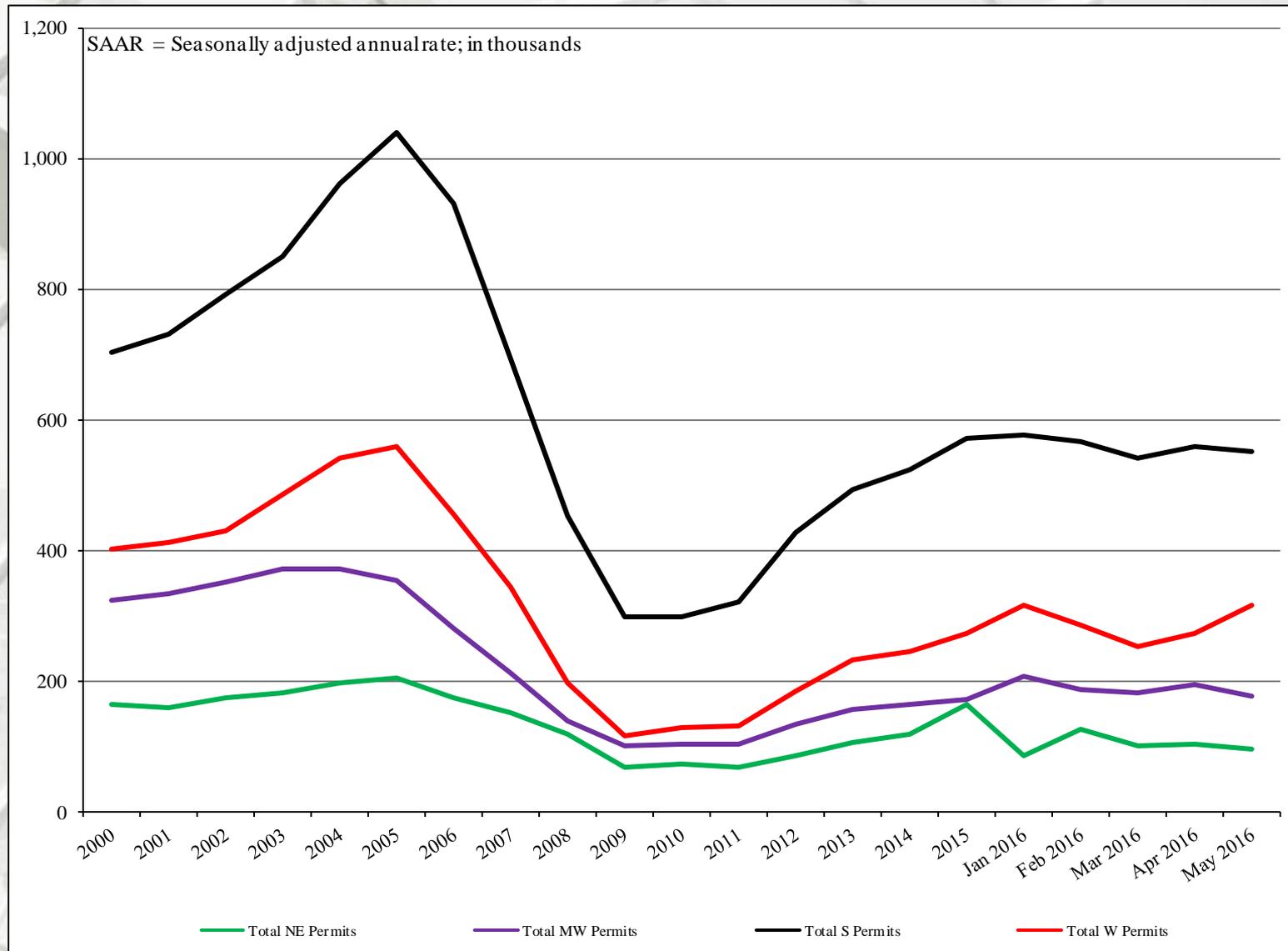
New Housing Permits by Region

	S Total	S SF	S MF
May	550,000	399,000	151,000
April	558,000	396,000	162,000
2015	692,170	507,522	184,648
M/M change	-1.4%	0.8%	-6.8%
Y/Y change	-20.5%	-21.4%	-18.2%

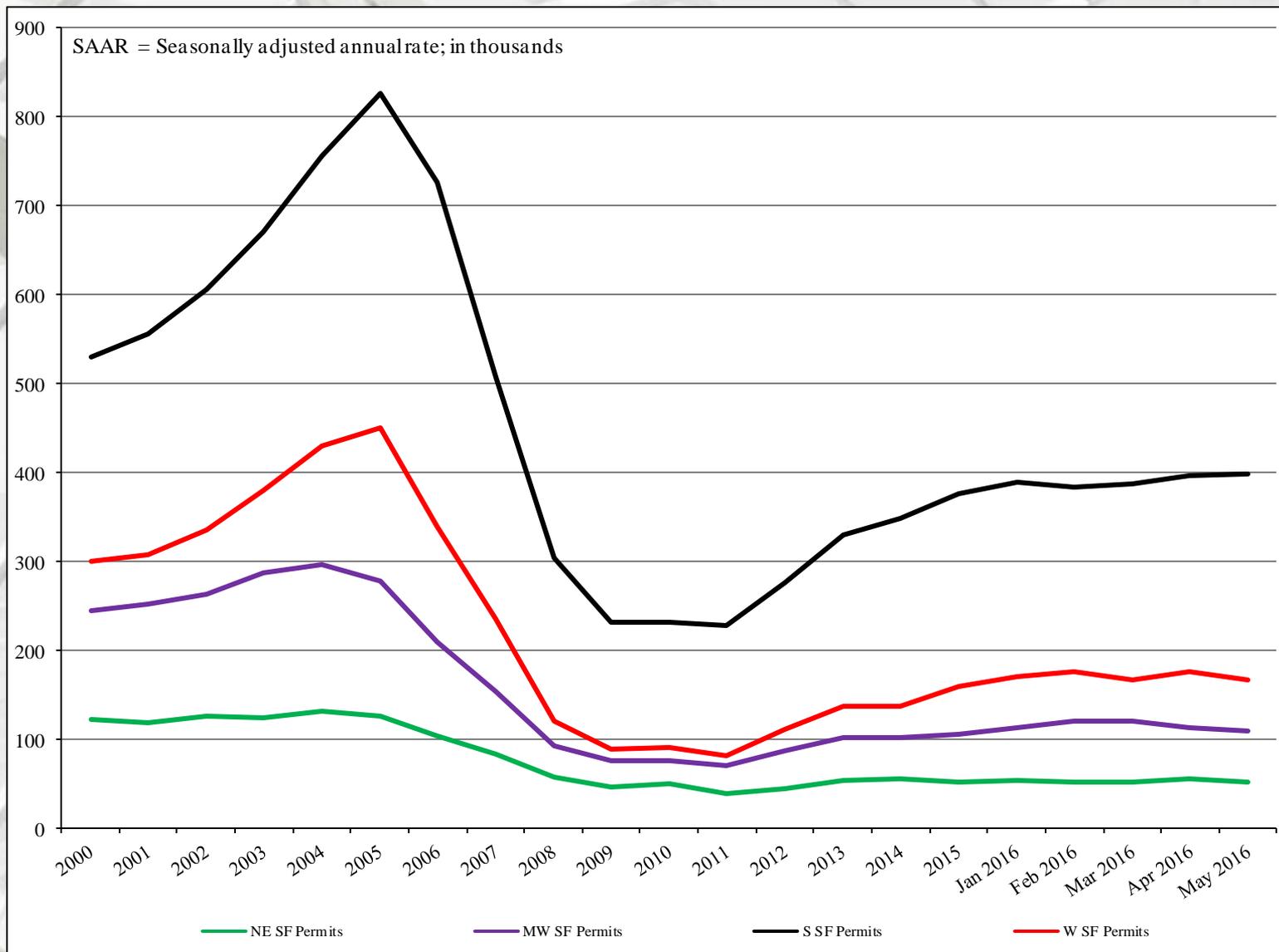
	W Total	W SF	W MF
May	316,000	167,000	149,000
April	274,000	176,000	98,000
2015	263,000	164,000	102,000
M/M change	15.3%	-5.1%	52.0%
Y/Y change	20.2%	1.8%	46.1%

* All data are SAAR.

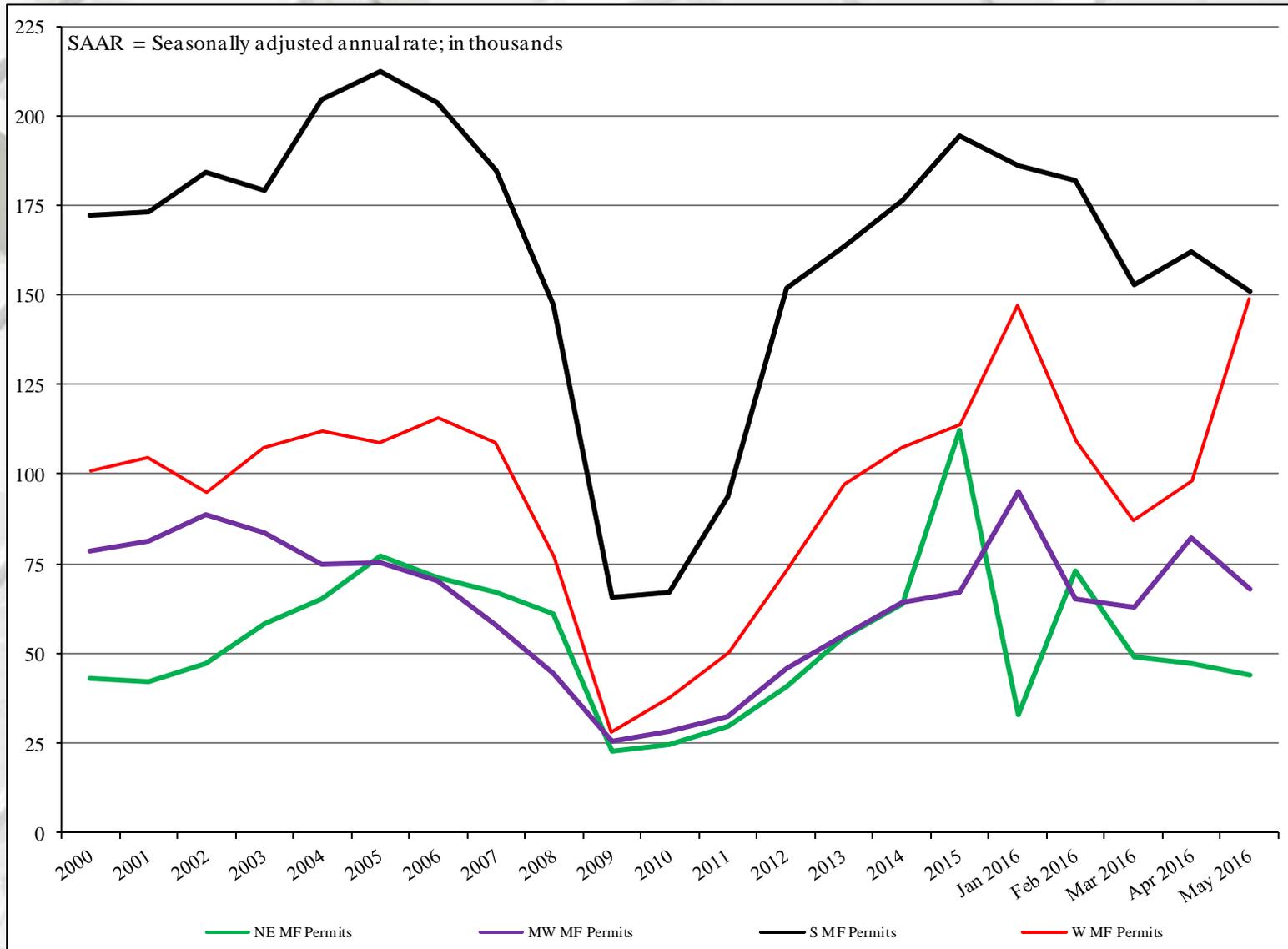
Total Housing Permits by Region



SF Housing Permits by Region



MF Housing Permits by Region



Source: <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 6/17/16

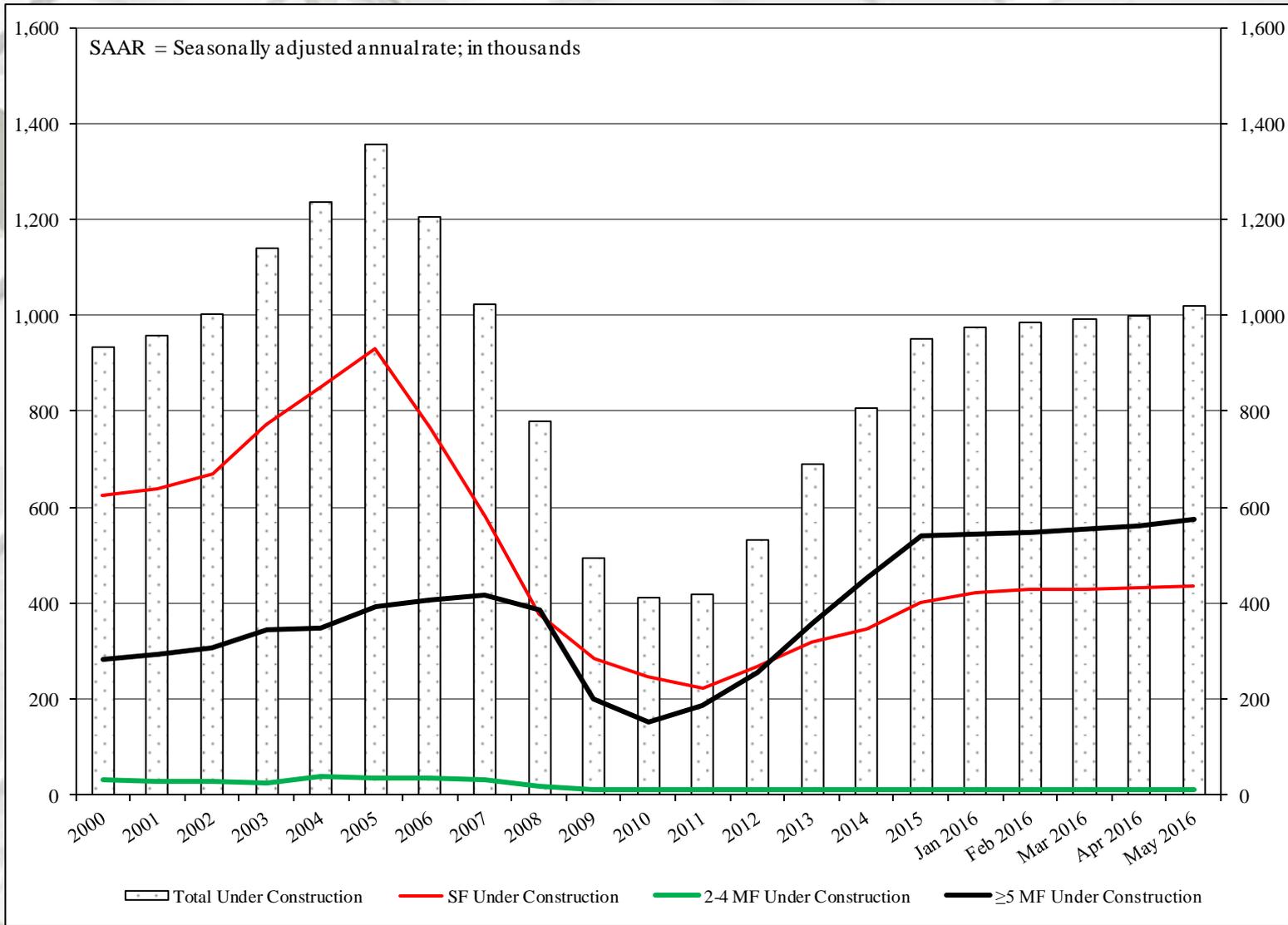
New Housing Under Construction

	Total Under Construction*	SF Under Construction	MF 2-4 unit** Under Construction	MF ≥ 5 unit Under Construction
April	1,019,000	435,000	10,000	574,000
March	1,001,000	431,000	10,000	560,000
2015	878,000	371,000	12,000	495,000
M/M change	1.8%	0.9%	0.0%	2.5%
Y/Y change	16.1%	17.3%	-16.7%	16.0%

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

	NE Total	NE SF	NE MF**
April	190,000	50,000	140,000
March	187,000	49,000	138,000
2015	147,000	43,000	104,000
M/M change	1.6%	2.0%	1.4%
Y/Y change	29.3%	16.3%	34.6%

	MW Total	MW SF	MW MF
April	140,000	75,000	65,000
March	138,000	75,000	63,000
2015	129,000	63,000	66,000
M/M change	1.4%	0.0%	3.2%
Y/Y change	8.5%	19.0%	-1.5%

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).

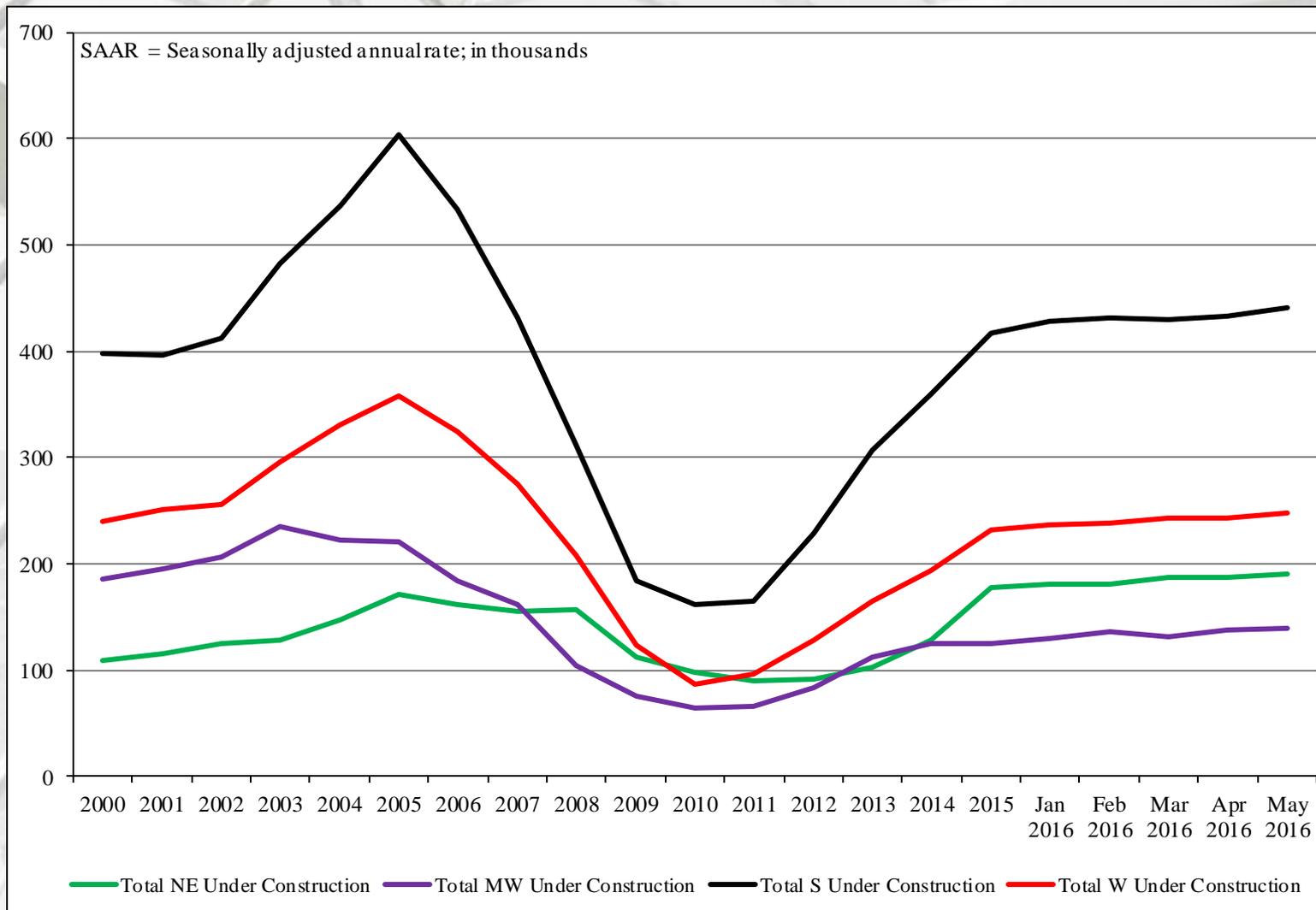
New Housing Under Construction by Region

	S Total	S SF	S MF**
April	441,000	214,000	227,000
March	433,000	212,000	221,000
2015	383,000	179,000	204,000
M/M change	1.8%	0.9%	2.7%
Y/Y change	15.1%	19.6%	11.3%
	W Total	W SF	W MF
April	248,000	96,000	152,000
March	243,000	95,000	148,000
2015	219,000	86,000	133,000
M/M change	2.1%	1.1%	2.7%
Y/Y change	13.2%	11.6%	14.3%

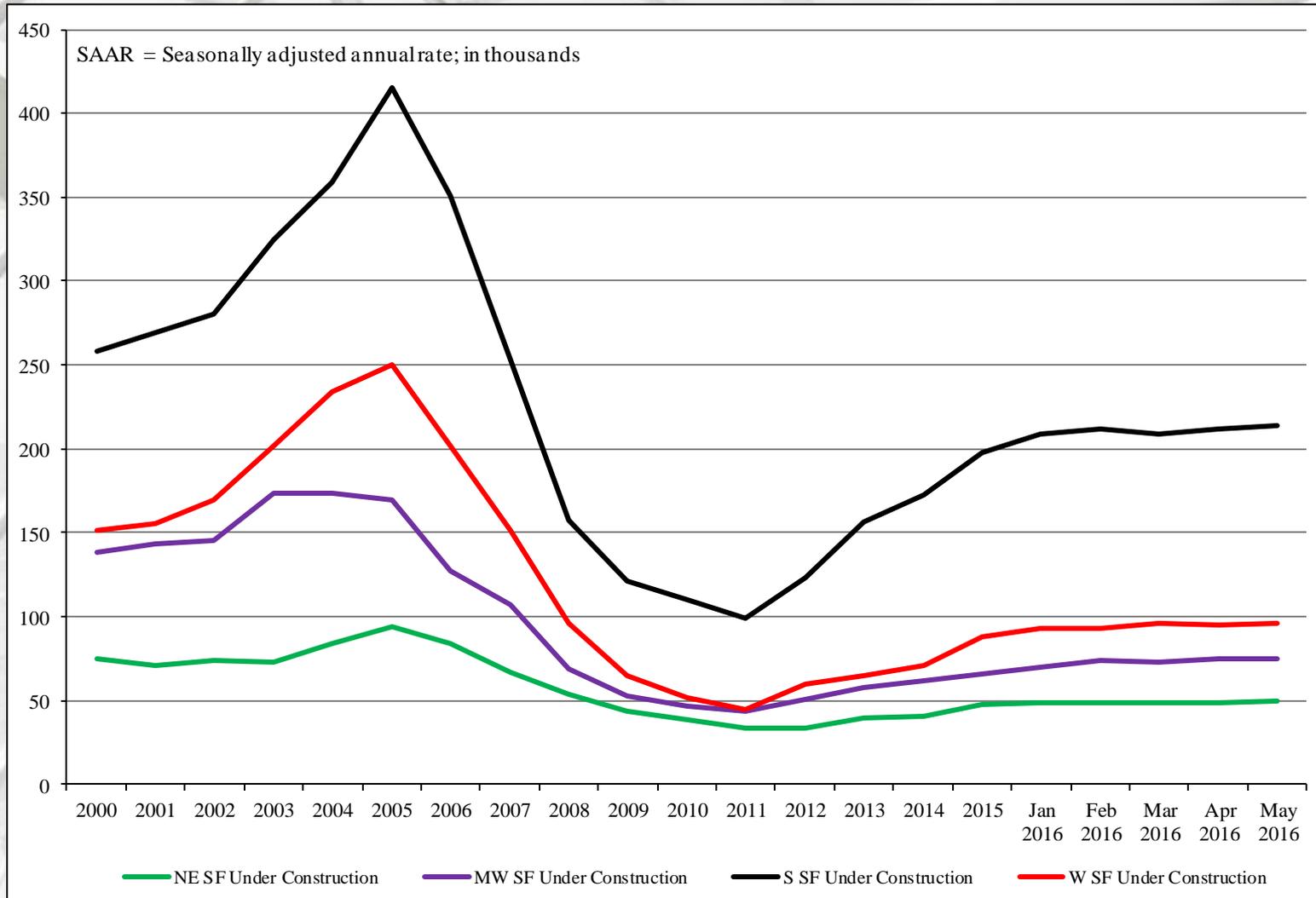
All data are SAAR; S = South and W = West.

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

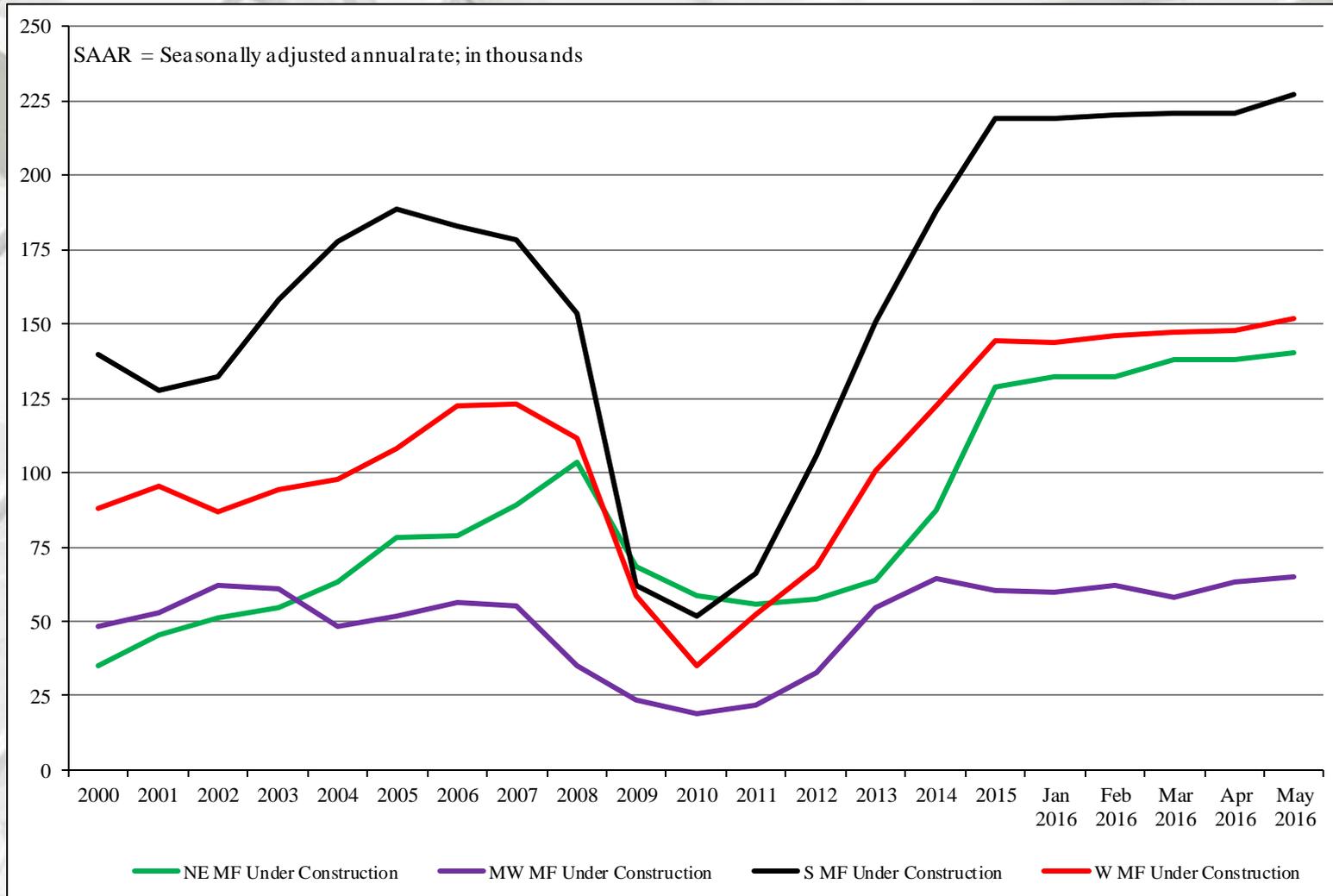
Total Housing Under Construction by Region



SF Housing Under Construction by Region



MF Housing Under Construction by Region



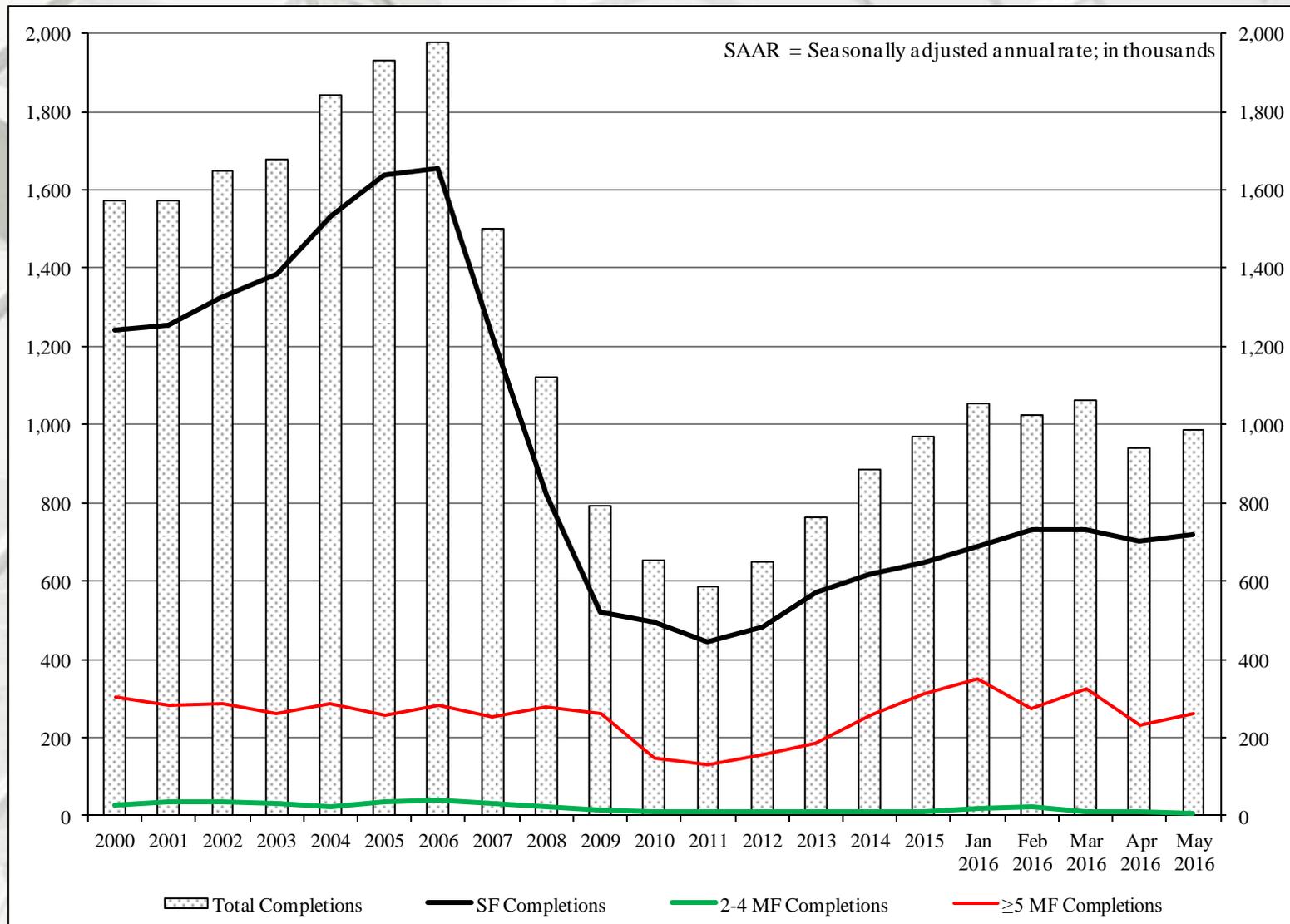
New Housing Completions

	Total Completions*	SF Completions	MF 2-4 unit**	MF ≥ 5 unit Completions
May	988,000	717,000	8,000	263,000
April	940,000	701,000	9,000	230,000
2015	1,024,000	647,000	7,000	370,000
M/M change	5.1%	2.3%	-11.1%	14.3%
Y/Y change	-3.5%	10.8%	14.3%	-28.9%

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/hrc/pdf/newresconst.pdf>; 6/17/16

New Housing Completions by Region

	NE Total	NE SF	NE MF**
May	62,000	48,000	14,000
April	83,000	55,000	28,000
2015	147,000	42,000	105,000
M/M change	-25.3%	-12.7%	-50.0%
Y/Y change	-57.8%	14.3%	-86.7%

	MW Total	MW SF	MW MF
May	166,000	113,000	53,000
April	137,000	112,000	25,000
2015	164,000	104,000	60,000
M/M change	21.2%	0.9%	112.0%
Y/Y change	1.2%	8.7%	-11.7%

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

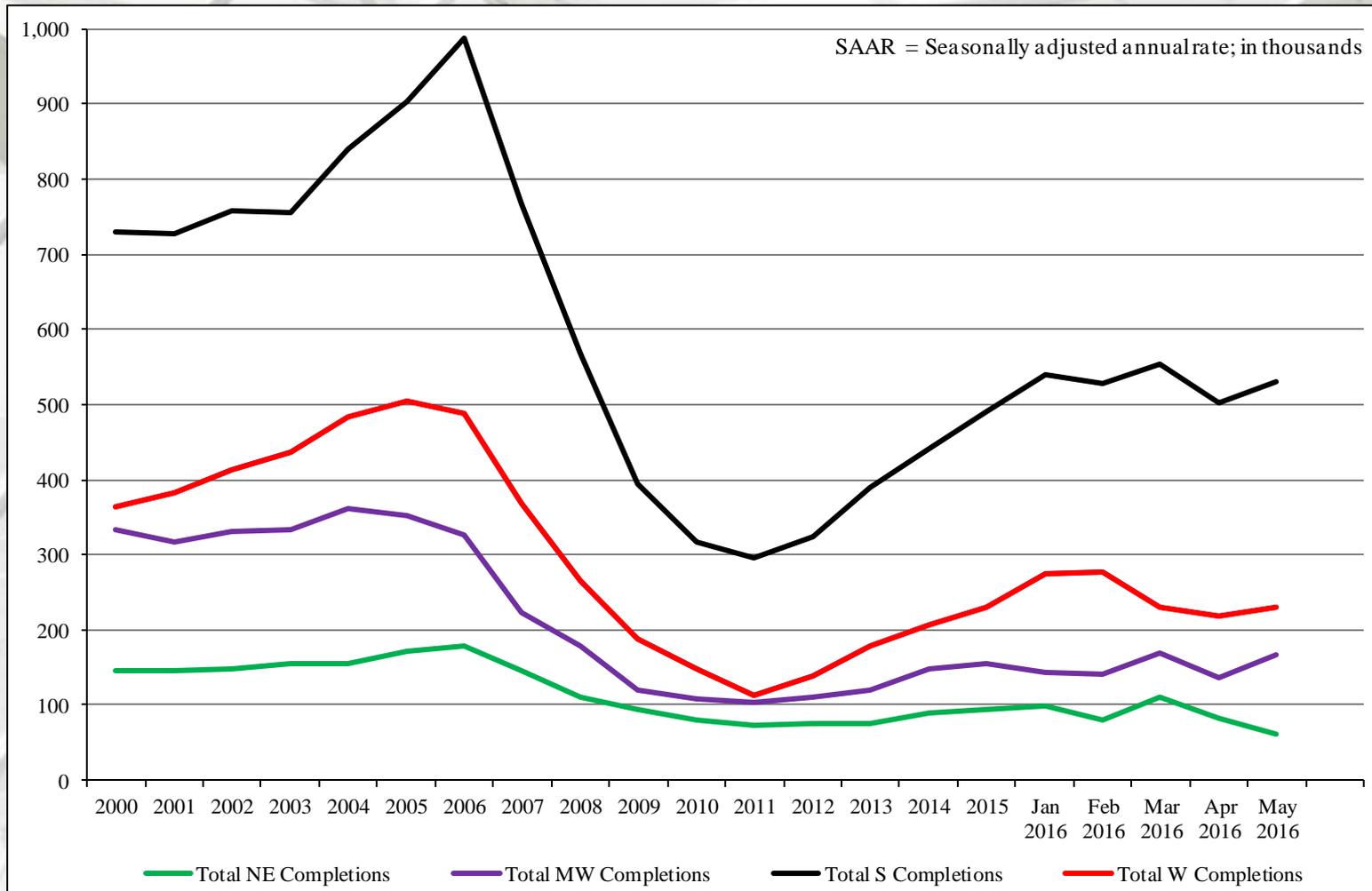
	S Total	S SF	S MF**
May	530,000	401,000	129,000
April	502,000	383,000	119,000
2015	490,000	358,000	132,000
M/M change	5.6%	4.7%	8.4%
Y/Y change	8.2%	12.0%	-2.3%

	W Total	W SF	W MF
May	230,000	155,000	75,000
April	218,000	151,000	67,000
2015	223,000	143,000	80,000
M/M change	5.5%	2.6%	11.9%
Y/Y change	3.1%	8.4%	-6.3%

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

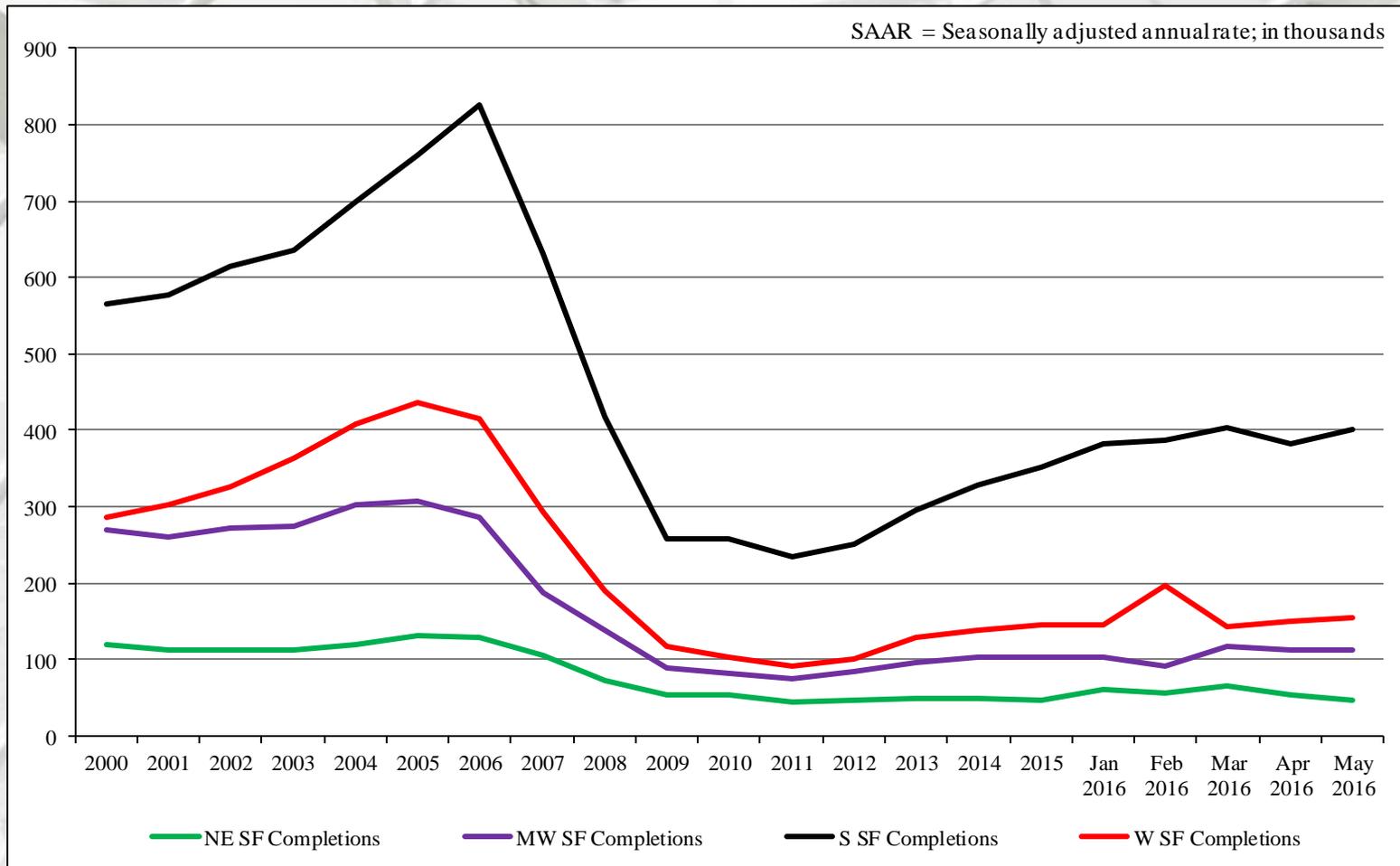
** US DOC does not report multi-family completions directly, this is an estimation (Total completions – SF completions).

Total Housing Completions by Region



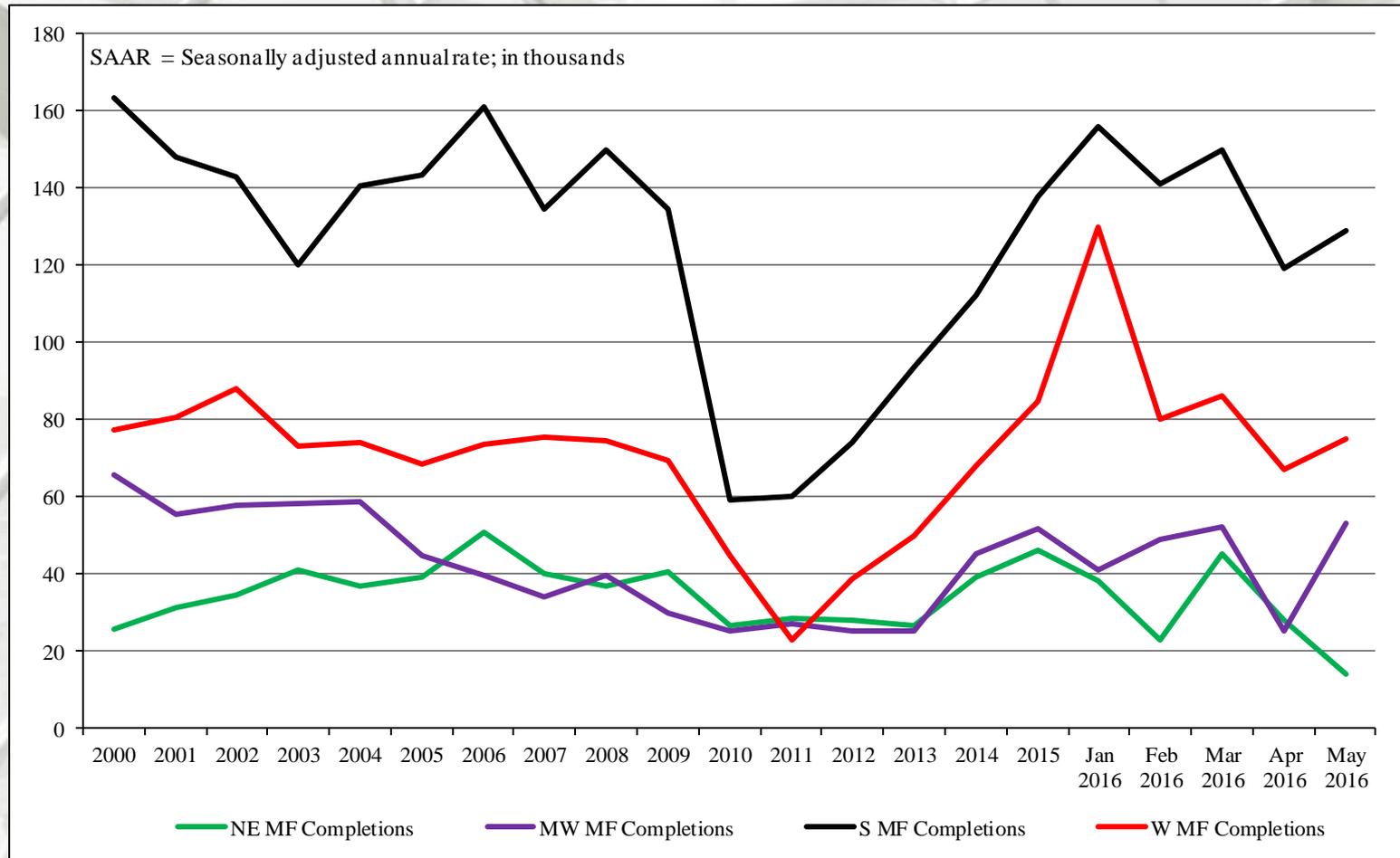
Source: <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 6/17/16

SF Housing Completions by Region



Source: <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 6/17/16

MF Housing Completions by Region



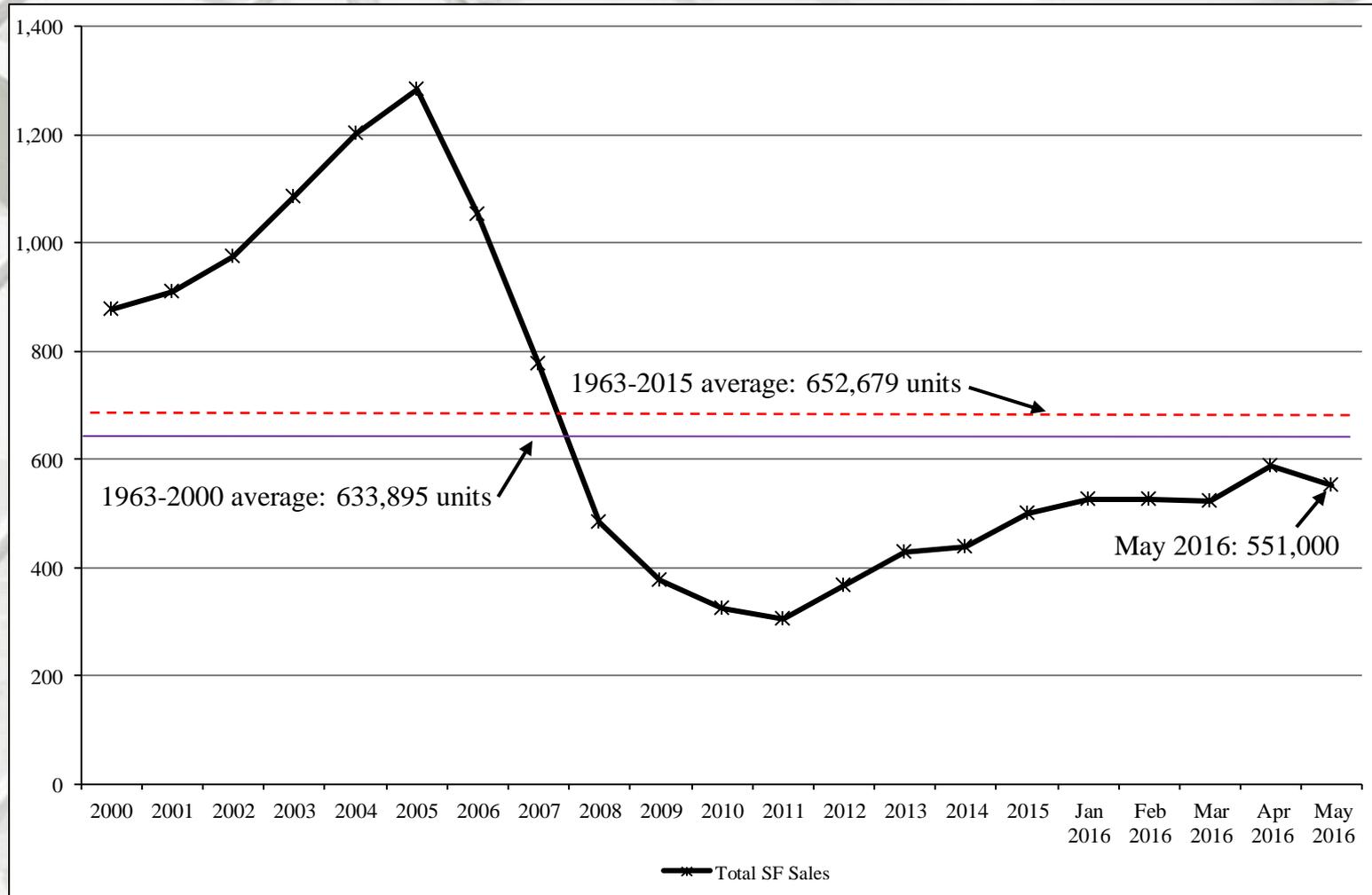
Source: <http://www.census.gov/construction/nrc/pdf/newresconst.pdf>; 6/17/16

New Single-Family House Sales

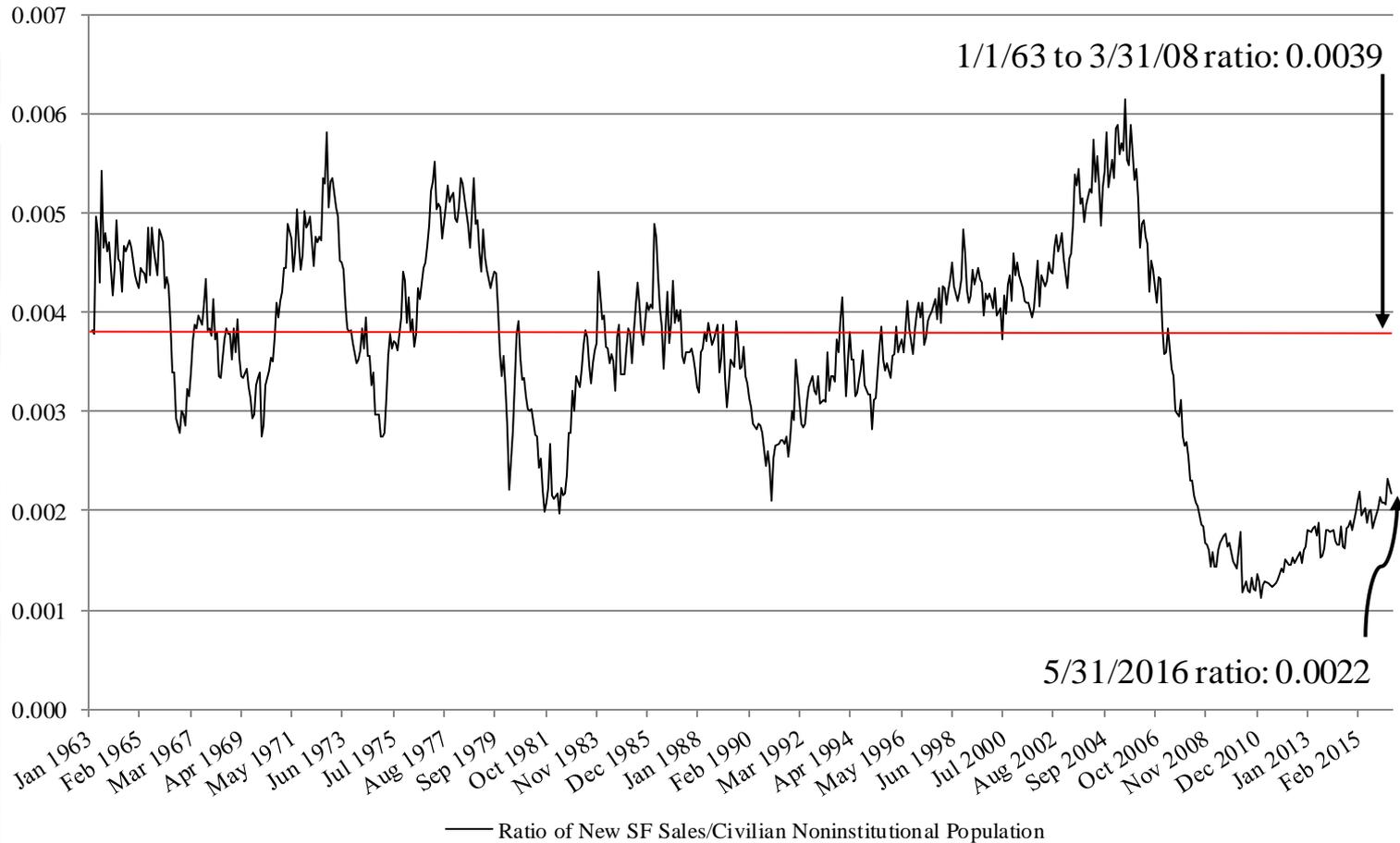
	New SF Sales*	Median Price	Mean Price	Month's Supply
April	551,000	\$290,400	\$358,900	5.3
March	586,000	\$320,200	\$378,200	4.9
2015	507,000	\$287,400	\$340,800	5.0
M/M change	-6.0%	-9.3%	-5.1%	8.2%
Y/Y change	8.7%	1.0%	5.3%	6.0%

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

New SF House Sales



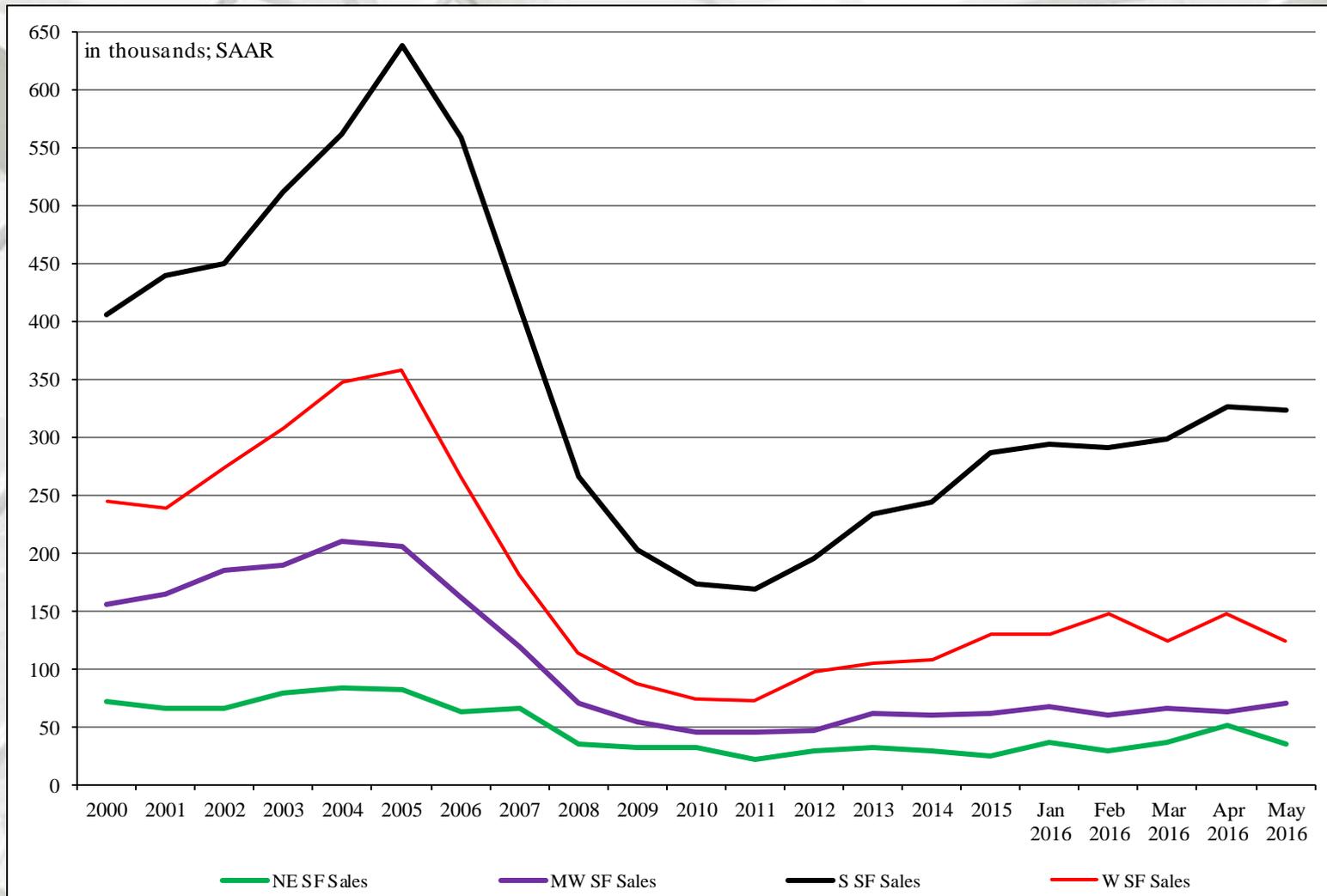
New SF House Sales



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 May it was 0.0022 – a decrease from April. From a population viewpoint, construction is less than what is necessary for changes in population (i.e., under-building).

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
May	34,000	70,000	323,000	124,000
April	51,000	62,000	326,000	147,000
2015	26,000	60,000	285,000	136,000
M/M change	-33.3%	12.9%	-0.9%	-15.6%
Y/Y change	30.8%	16.7%	13.3%	-8.8%

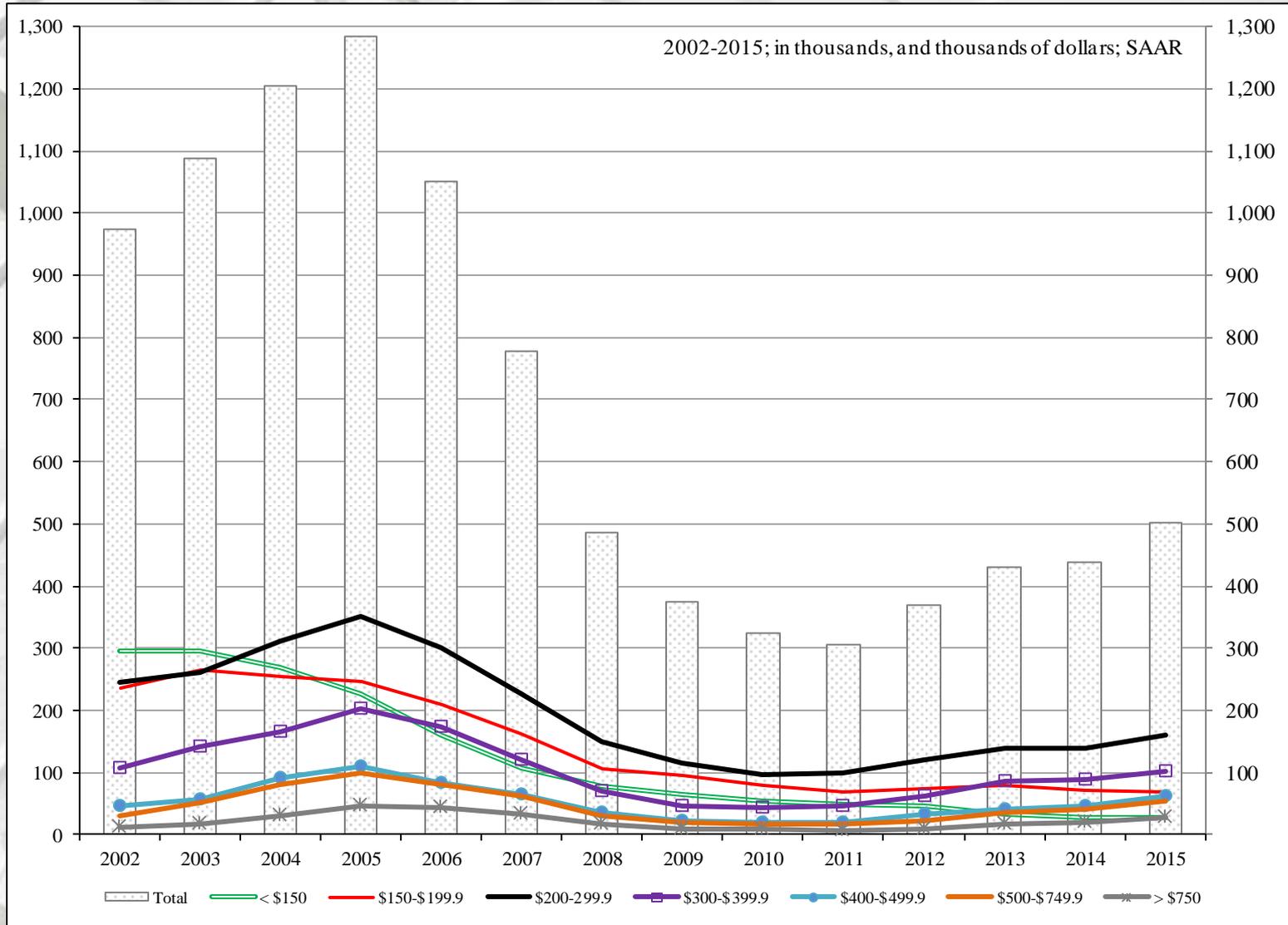
	< \$150m	\$150 - \$199.9m	\$200 - \$299.9m	\$300 - \$399.9m	\$400 - \$499.9m	\$500 - \$749.9m	> \$750m
May ^{1,2}	2,000	7,000	17,000	12,000	5,000	5,000	3,000
April	2,000	8,000	16,000	14,000	6,000	8,000	3,000
2015	3,000	7,000	15,000	10,000	5,000	5,000	2,000
M/M change	0.0%	-12.5%	6.3%	-14.3%	-16.7%	-37.5%	0.0%
Y/Y change	-33.3%	14.3%	6.7%	40.0%	20.0%	60.0%	50.0%

All data are SAAR.

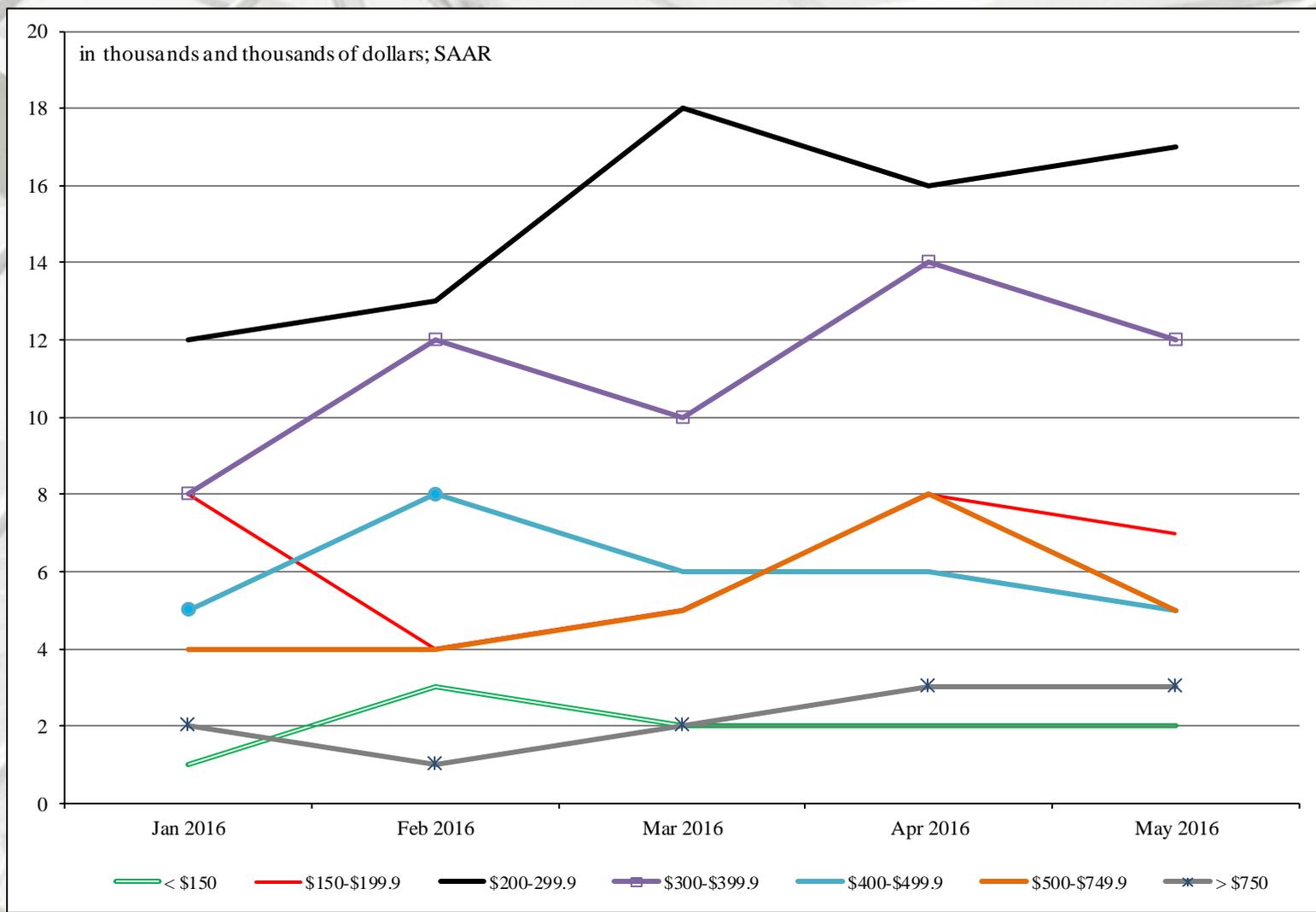
¹ Houses for which sales price were not reported have been distributed proportionally to those for which sales price was reported;

² Detail may not add to total because of rounding.

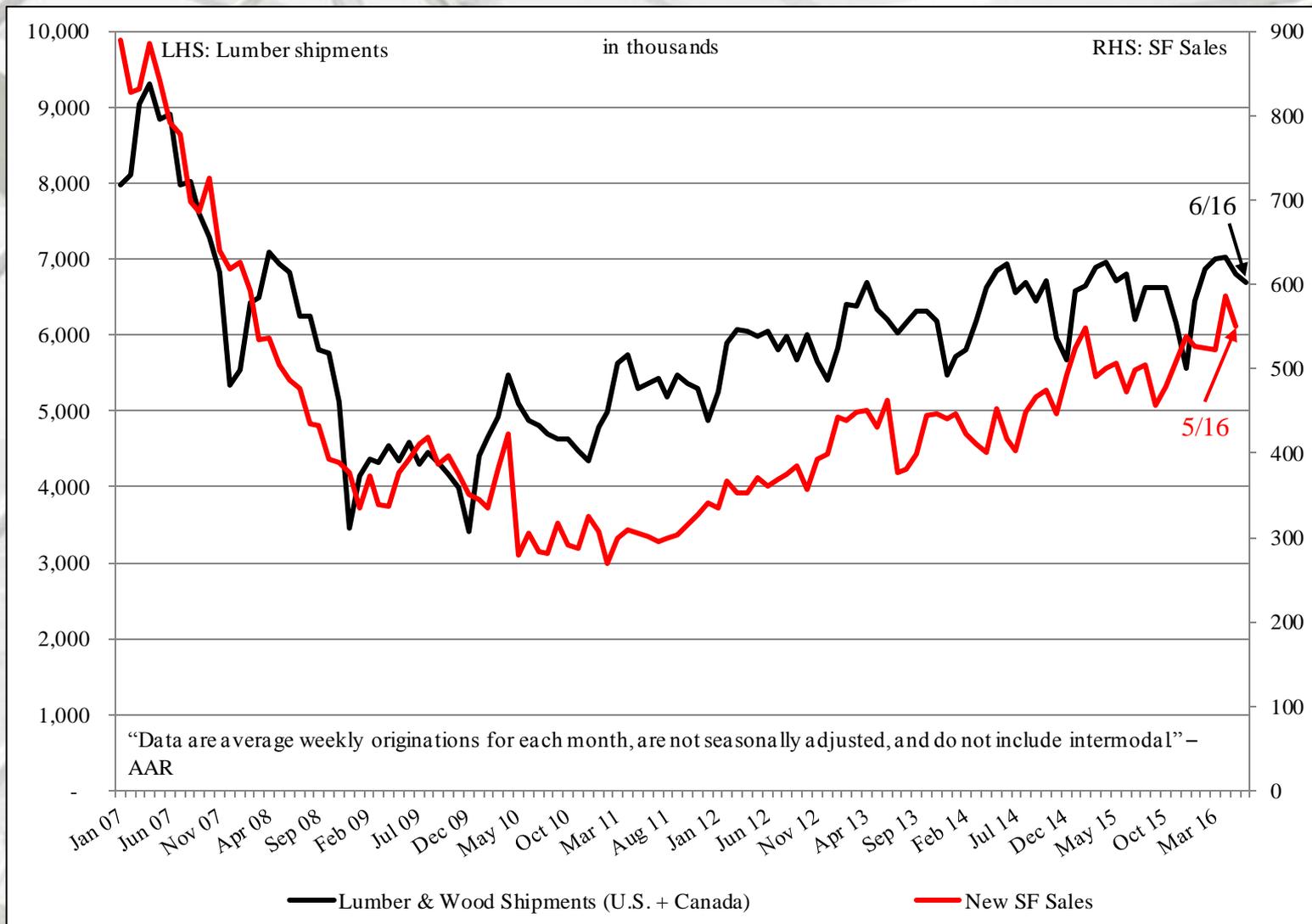
New SF House Sales by Price Category



New SF House Sales by Price Category

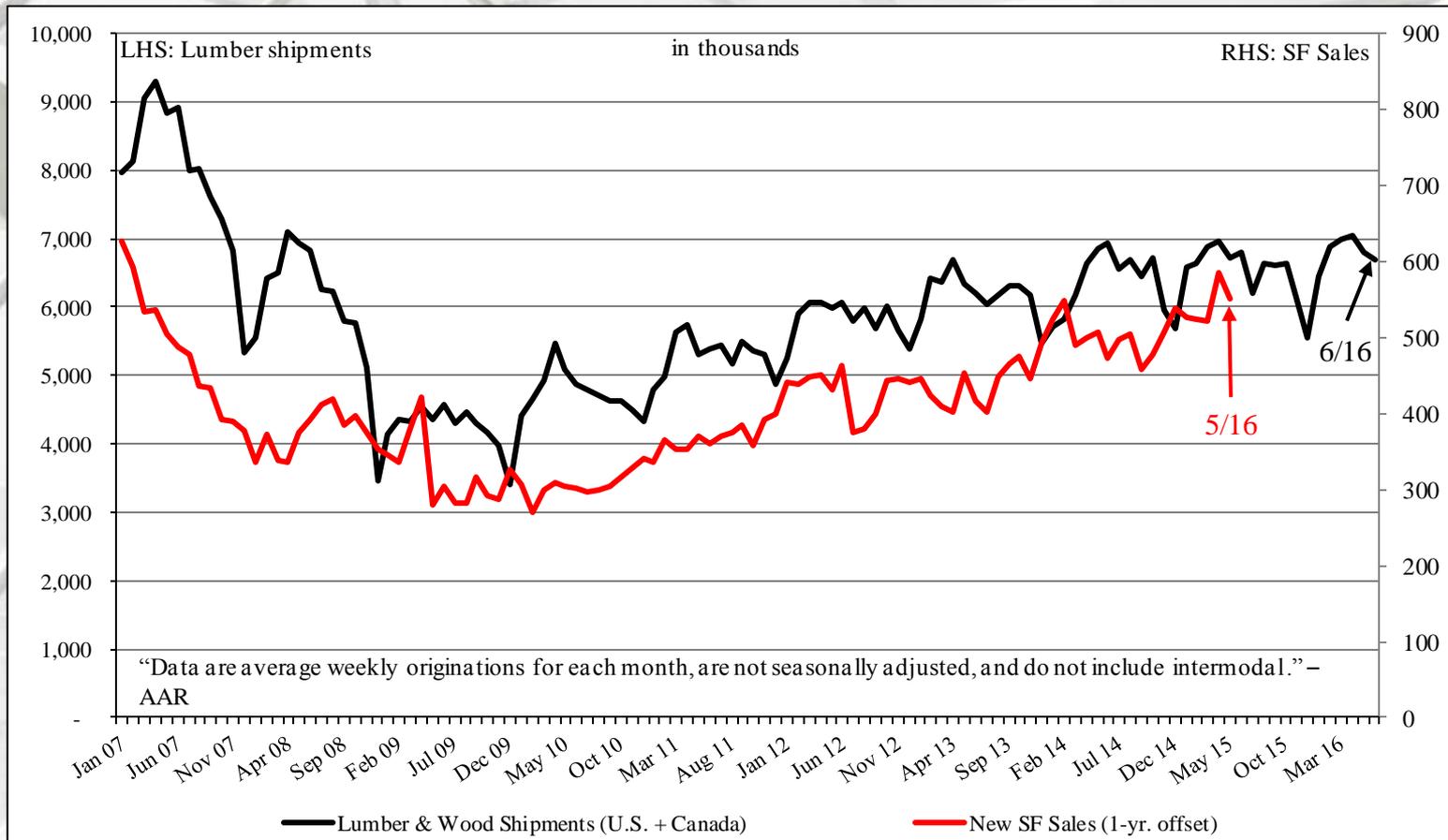


Railroad Lumber & Wood Shipments vs. U.S. New SF House Sales



Sources: Association of American Railroads (AAR), *Rail Time Indicators* report 7/8/16; U.S. DOC-Construction; 6/17/16

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 May 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.

May 2016 Construction Spending

2016 May Total Private Residential Construction: \$451.9 billion (SAAR)

0.03% more than the revised April estimate of \$451.7 billion (SAAR)

5.4% greater than the May 2015 estimate of \$428.7 billion (SAAR)

May SF construction: \$239.2 billion (SAAR)

-1.3% less than April: \$242.3 billion (SAAR)

6.3% greater than May 2015: \$225.0 billion (SAAR)

May MF construction: \$61.4 billion (SAAR)

1.8% more than April: \$60.3 billion (SAAR)

23.9% greater than May 2015: \$49.6 billion (SAAR)

May Improvement^C construction: \$151.2 billion (SAAR)

1.4% less than April: \$149.1 billion (SAAR)

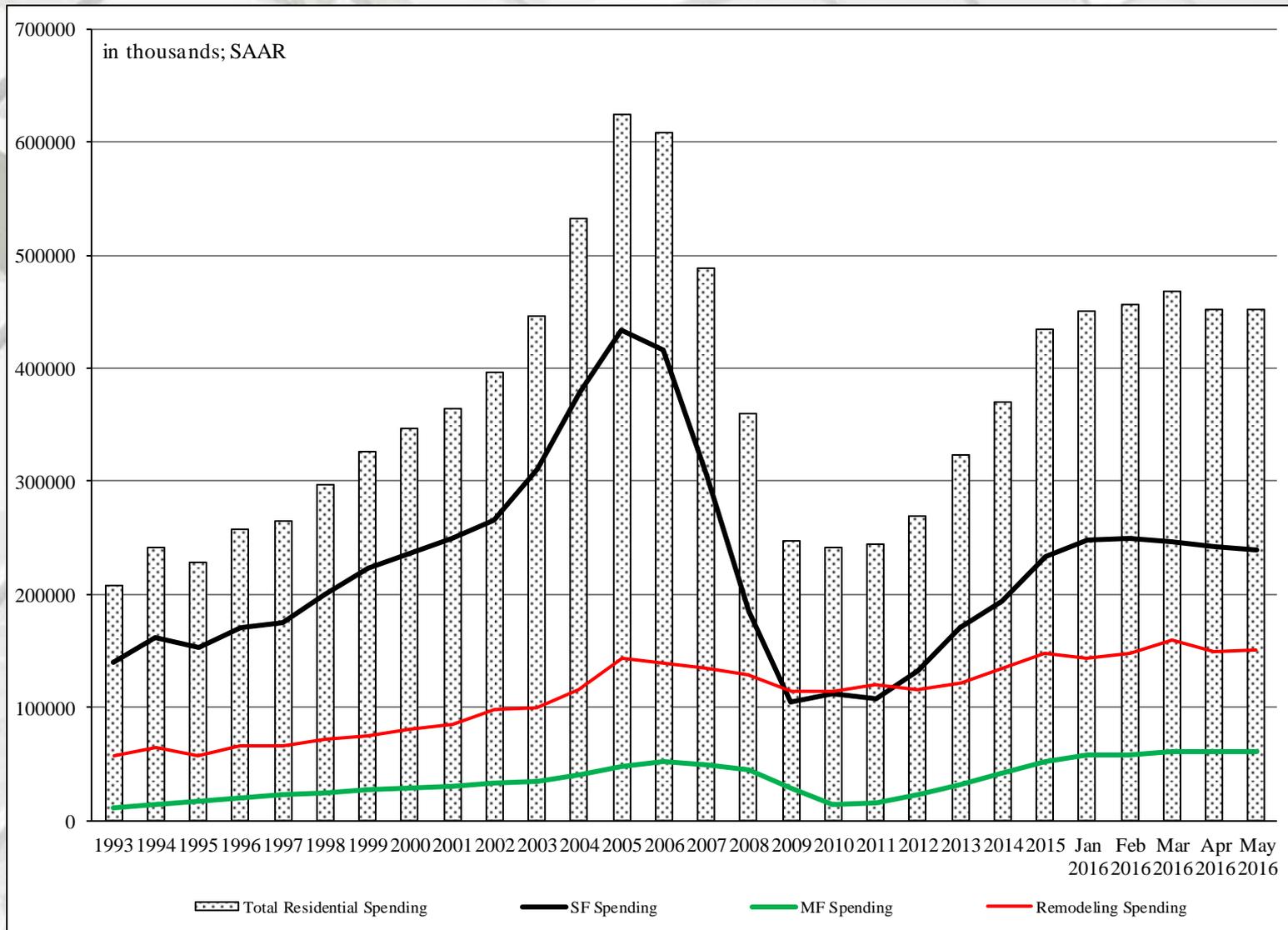
-1.9% less than May 2015: \$154.1 billion (SAAR)

^C The US DOC does not report improvement spending directly, this is an estimation:

((Total Private Spending – (SF spending + MF spending)).

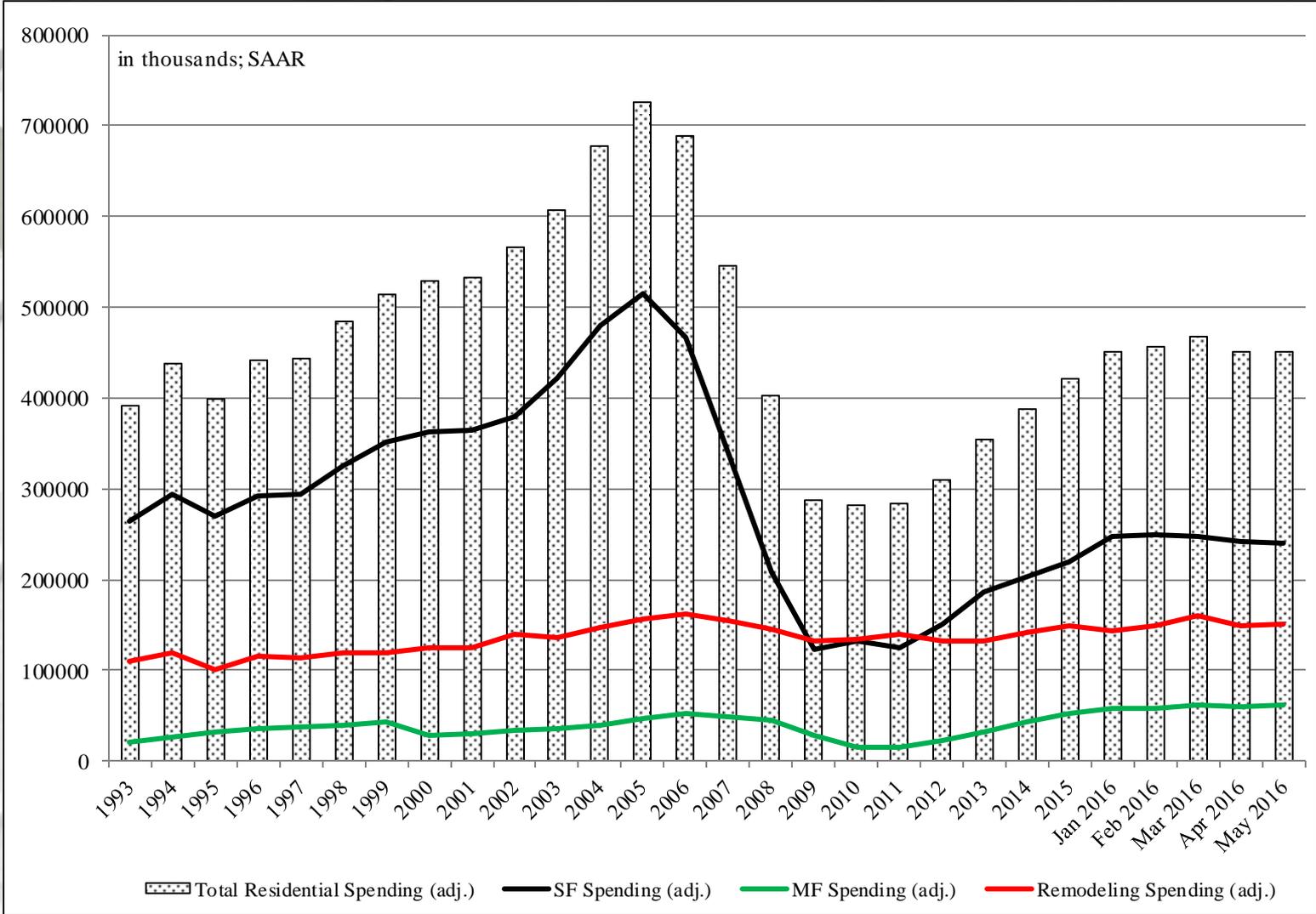
All data are SAARs and reported in nominal US\$.

Construction Spending (nominal): 1993-2016



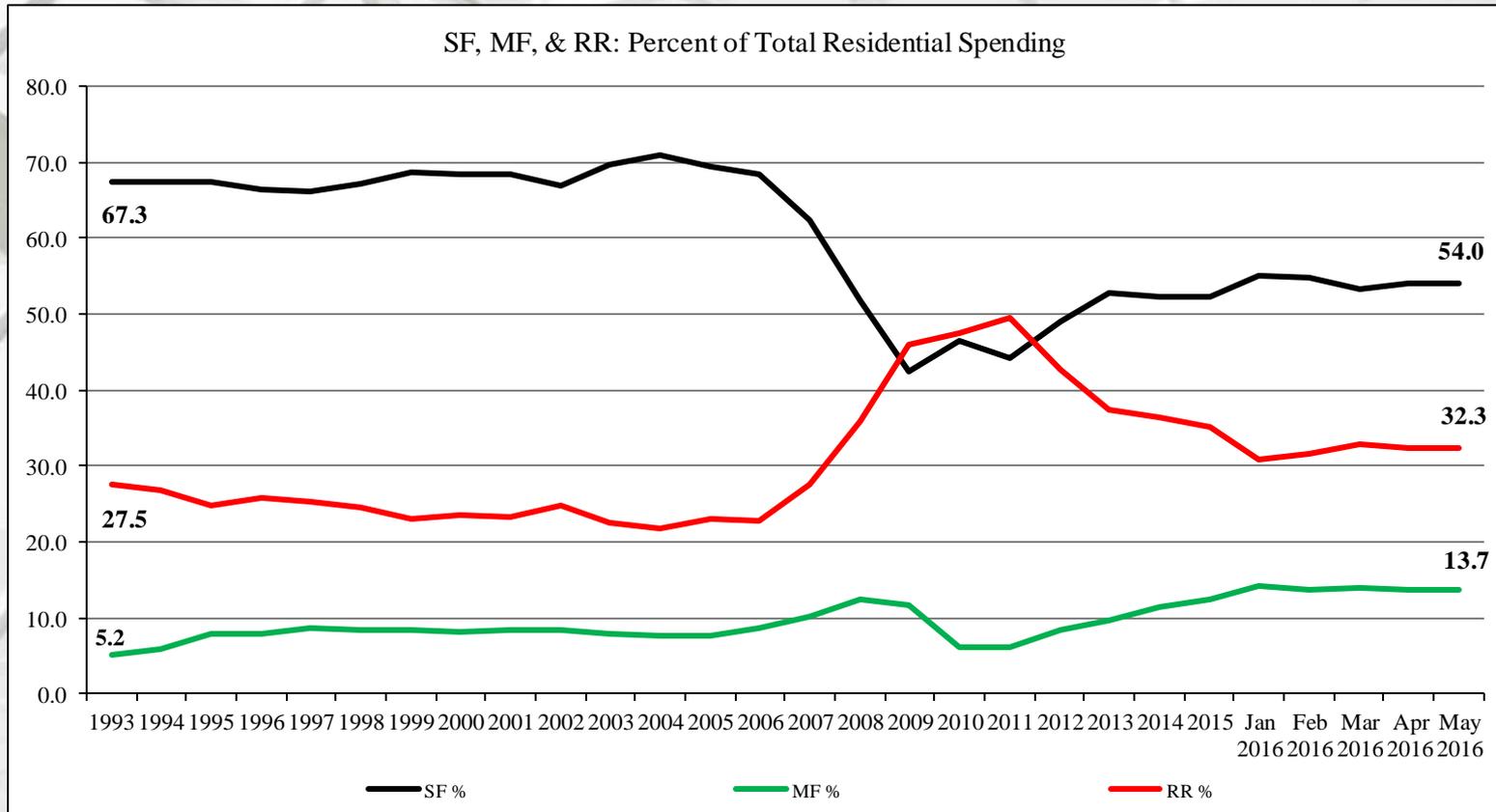
Reported in nominal US\$.

Construction Spending (adjusted): 1993-2016*



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

Construction Spending Shares: 1993 to May 2016



Total Residential Spending: 1993 through 2006

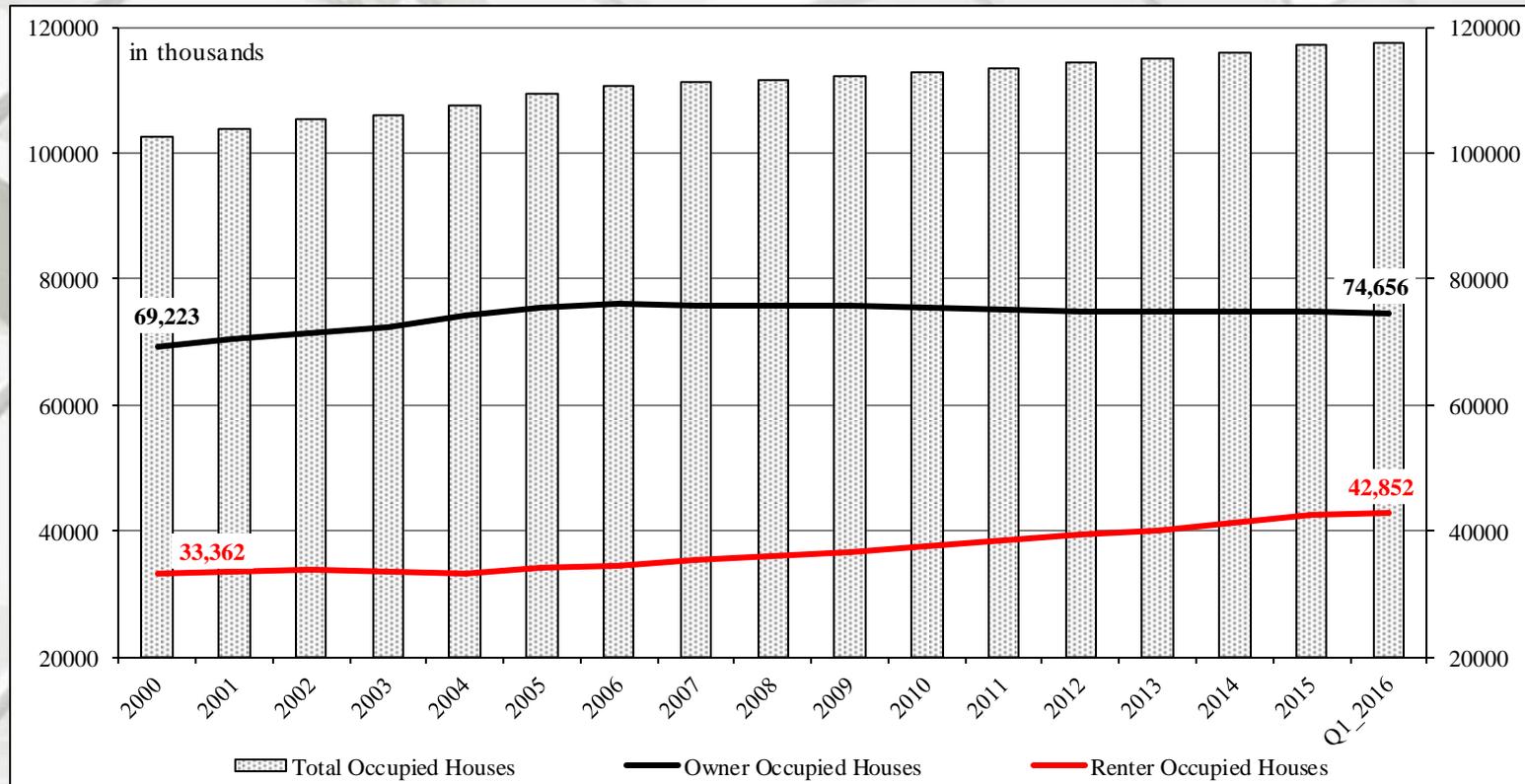
SF spending average: 69.2 %

MF spending average: 7.5 %;

RR spending average: 23.3 % (SAAR).

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

Total Occupied Houses

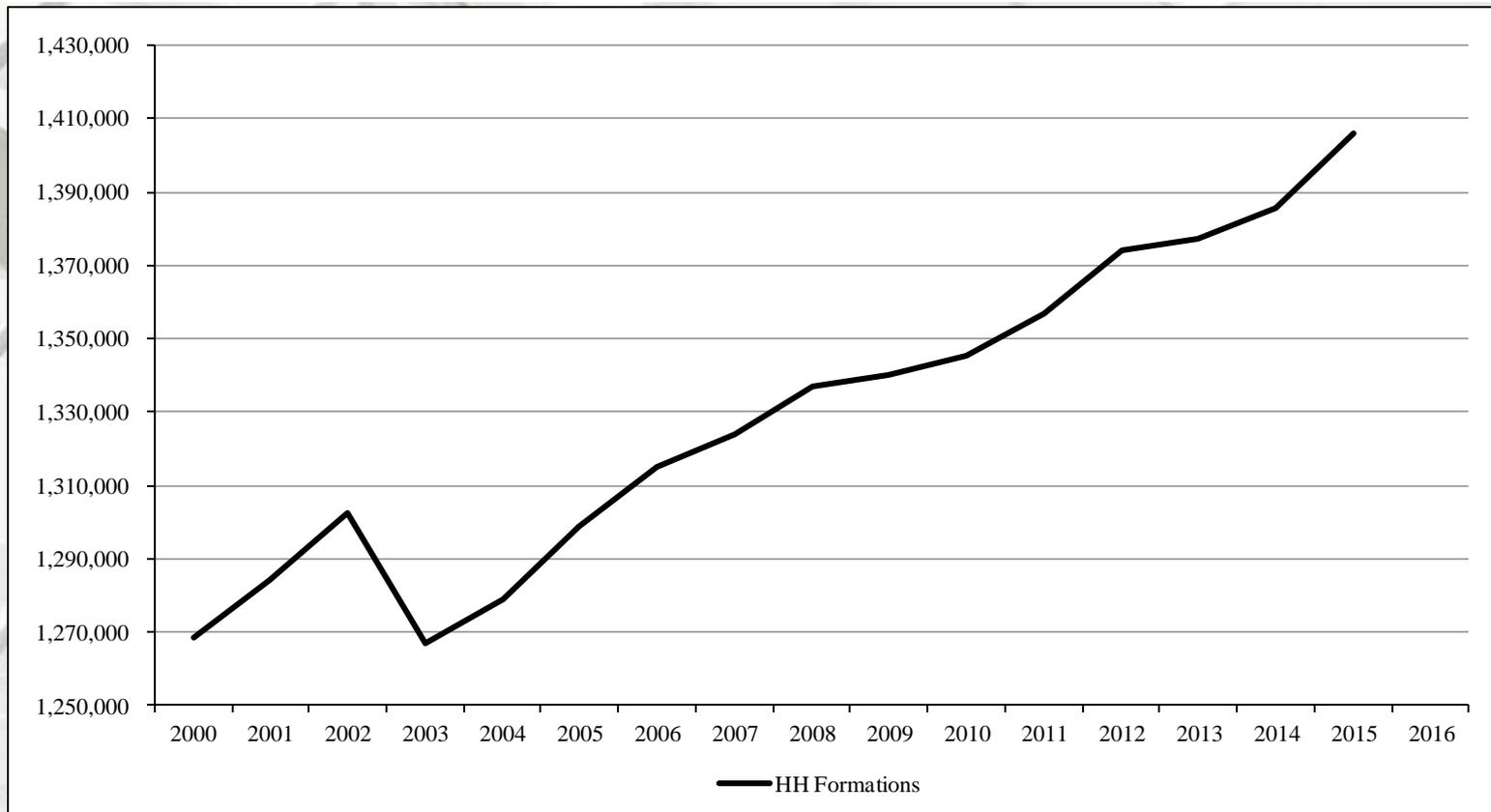


Total Occupied Houses: 2000 to 2016

From 2000 to 2015, an increase of 14,761 occupied houses was realized. Owner occupied units increased by 5,483 units and renter occupied housing increased by 9,277 units. In 2015, 63.7% of occupied houses were owner occupied and 36.3% were renter occupied. By a percentage basis, total occupation decreased by 4% in owner occupied units and renter occupied units increased by the same quantity.

Note: Based on CPS/HVS-Series H-111, Housing Vacancies and Homeownership data and does not include vacant houses.

Total Occupied Houses and Household Formations

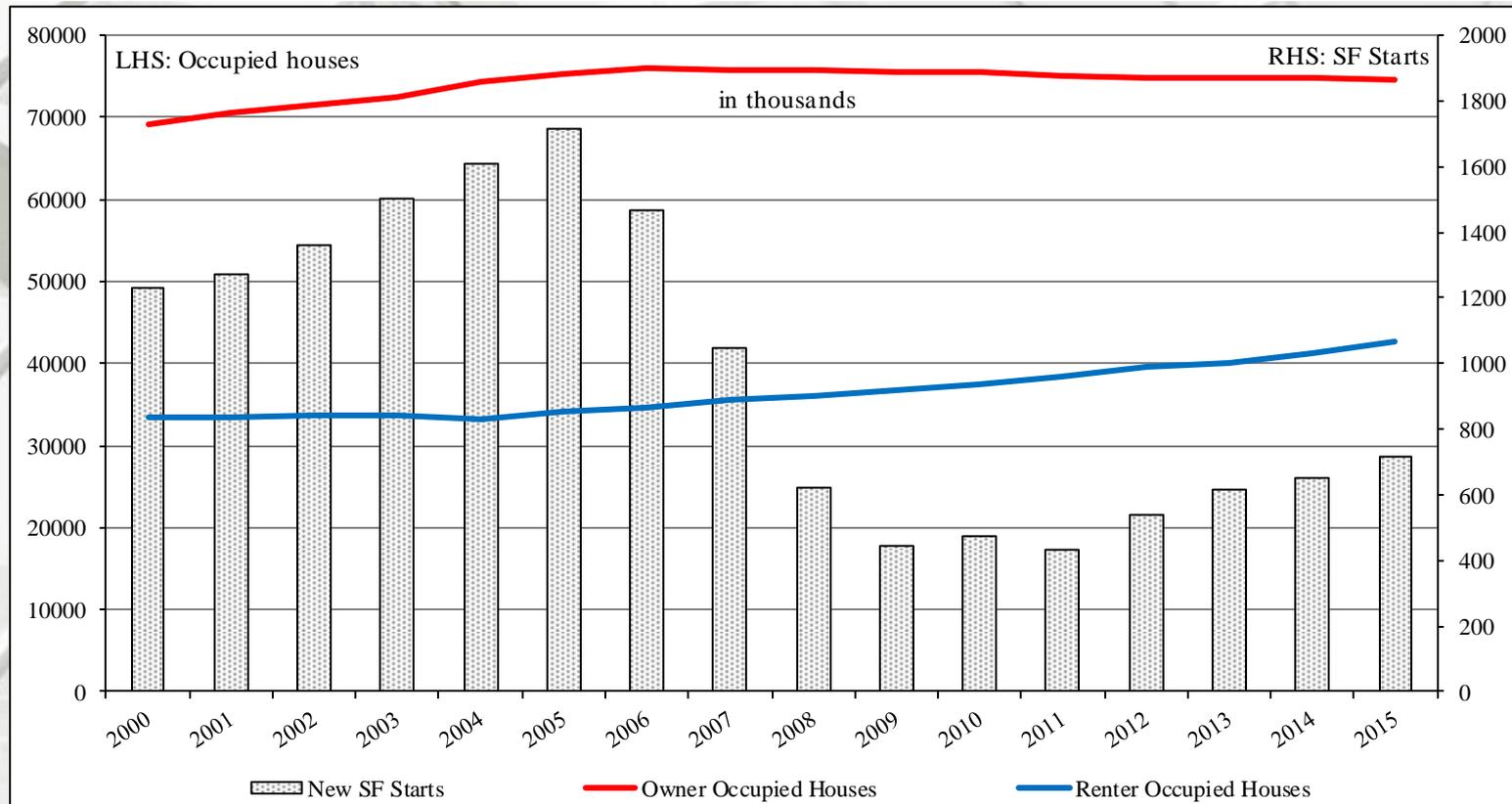


Total Occupied Houses and Household Formations: 2000 to 2015

From 2000 to 2015, 137,213 new households were formed. Household formations equal the year-over-year change in total occupied houses. (Calculated using CPS/HVS-Series H-111 data). This was about one-half of annual historical household formations.

Note: Based on CPS/HVS-Series H-111, Housing Vacancies and Homeownership data

Total Occupied Houses, Household Formations, and SF Starts

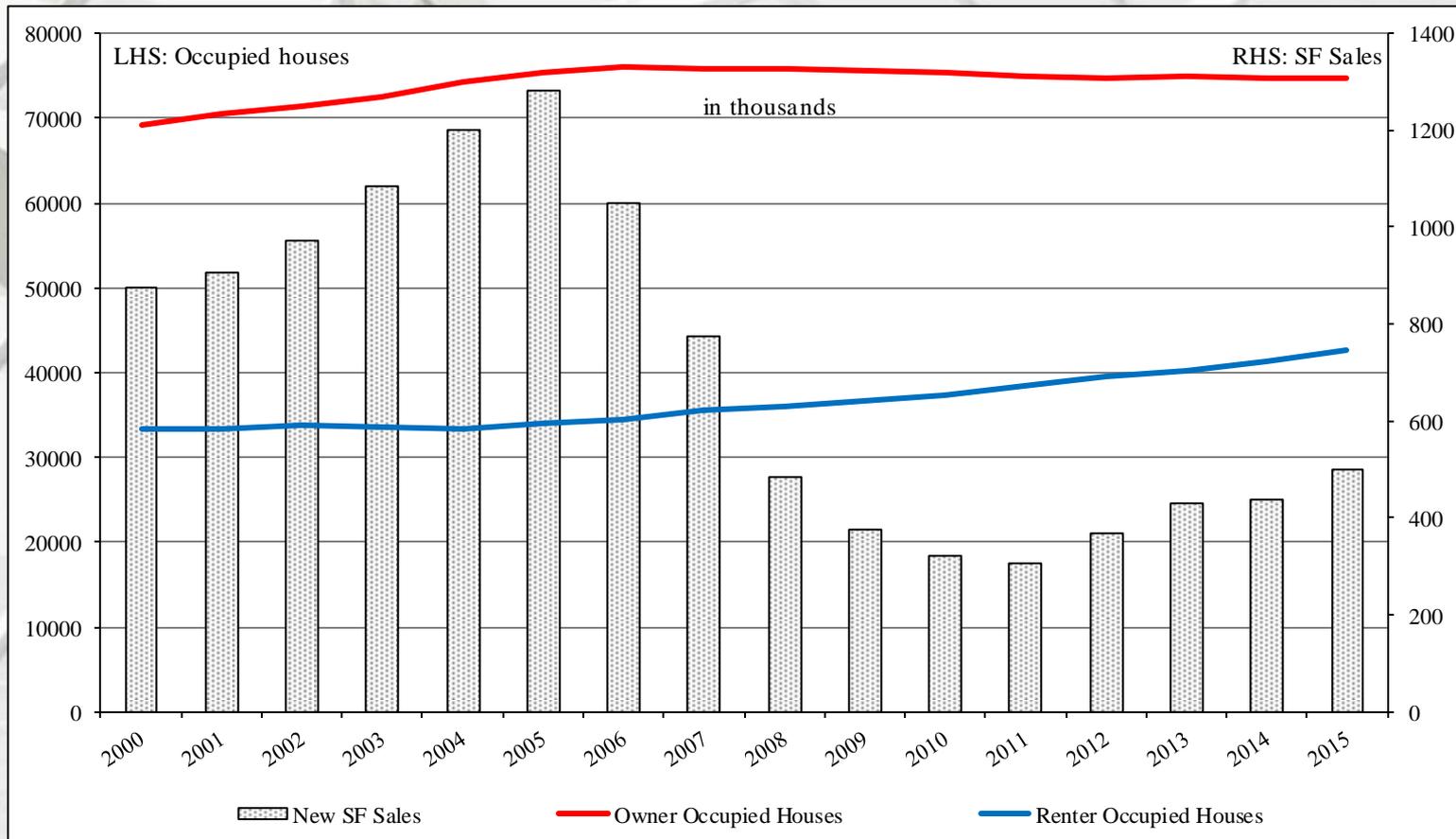


Total Occupied Houses, Household Formations, and New SF Starts: 2000 to 2015

From 2009 to 2015, owner occupied houses increased by 5,050 units and renter occupied houses increased by 5,979 units. During this same time-period, SF starts have lagged population growth and remain less than historical averages (about 1.025 million units).

Note: Based on CPS/HVS-Series H-111, Housing Vacancies and Homeownership data

Total Occupied Houses, Household Formations, and SF Sales



Total Occupied Houses, Household Formations, and New SF Sales: 2000 to 2015

Since 2006, on year-over-year basis, owner occupied units have decreased annually by about -1.7% and renter occupied units have increased by the same percentage. Similar to SF starts, new SF sales have lagged population growth and remain less than its historical average (652,679 units).

Note: Based on CPS/HVS-Series H-111, Housing Vacancies and Homeownership data

Existing House Sales

National Association of Realtors (NAR®)

May 2016 sales: 5.530 million houses sold (SAAR)

Distressed house sales: 6% of sales –
(5% foreclosures and 1% short-sales);
7% in March and 10% in May 2015.

All-cash sales: 24% and 25% in March,
and 24% (May 2015).

Individual investors still purchase a considerable portion of
“all cash” sale houses – 22% in May;
24% in April and 24% in May 2015.

63% of investors paid cash in May.

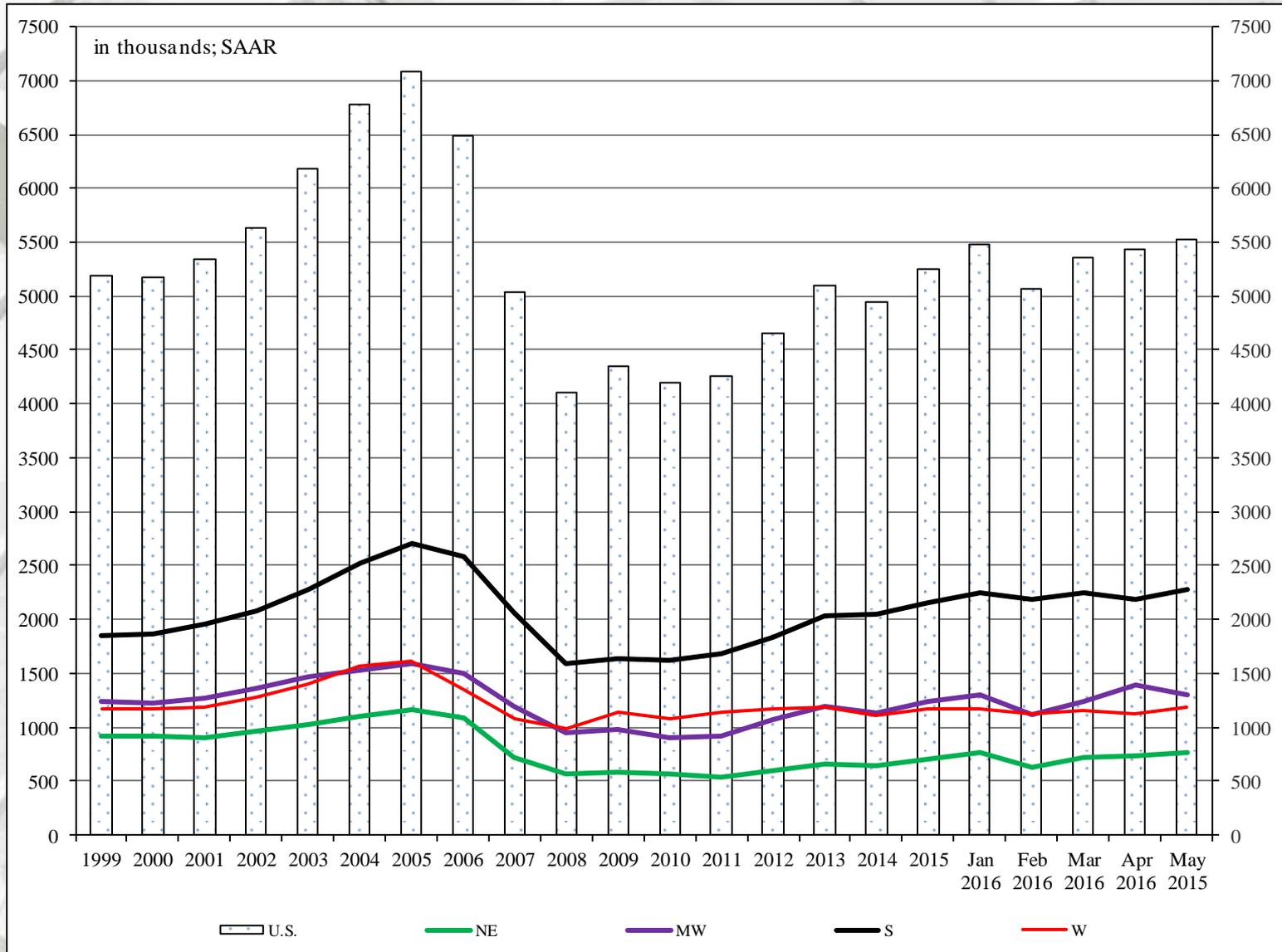
Existing House Sales

	Existing Sales*	Median Price	Mean Price	Month's Supply
May	5,530,000	\$239,700	\$281,700	4.7
April	5,430,000	\$230,900	\$273,600	4.7
2015	5,290,000	\$228,900	\$273,000	5.2
M/M change	1.8%	3.8%	3.0%	0.0%
Y/Y change	4.5%	4.7%	3.2%	-9.6%

	NE Sales	MW Sales	S Sales	W Sales
April	740,000	1,390,000	2,180,000	1,120,000
March	720,000	1,240,000	2,250,000	1,150,000
2015	630,000	1,240,000	2,100,000	1,170,000
M/M change	4.1%	-6.5%	4.6%	5.4%
Y/Y change	11.6%	3.2%	6.5%	-1.7%

* All sales data: SAAR

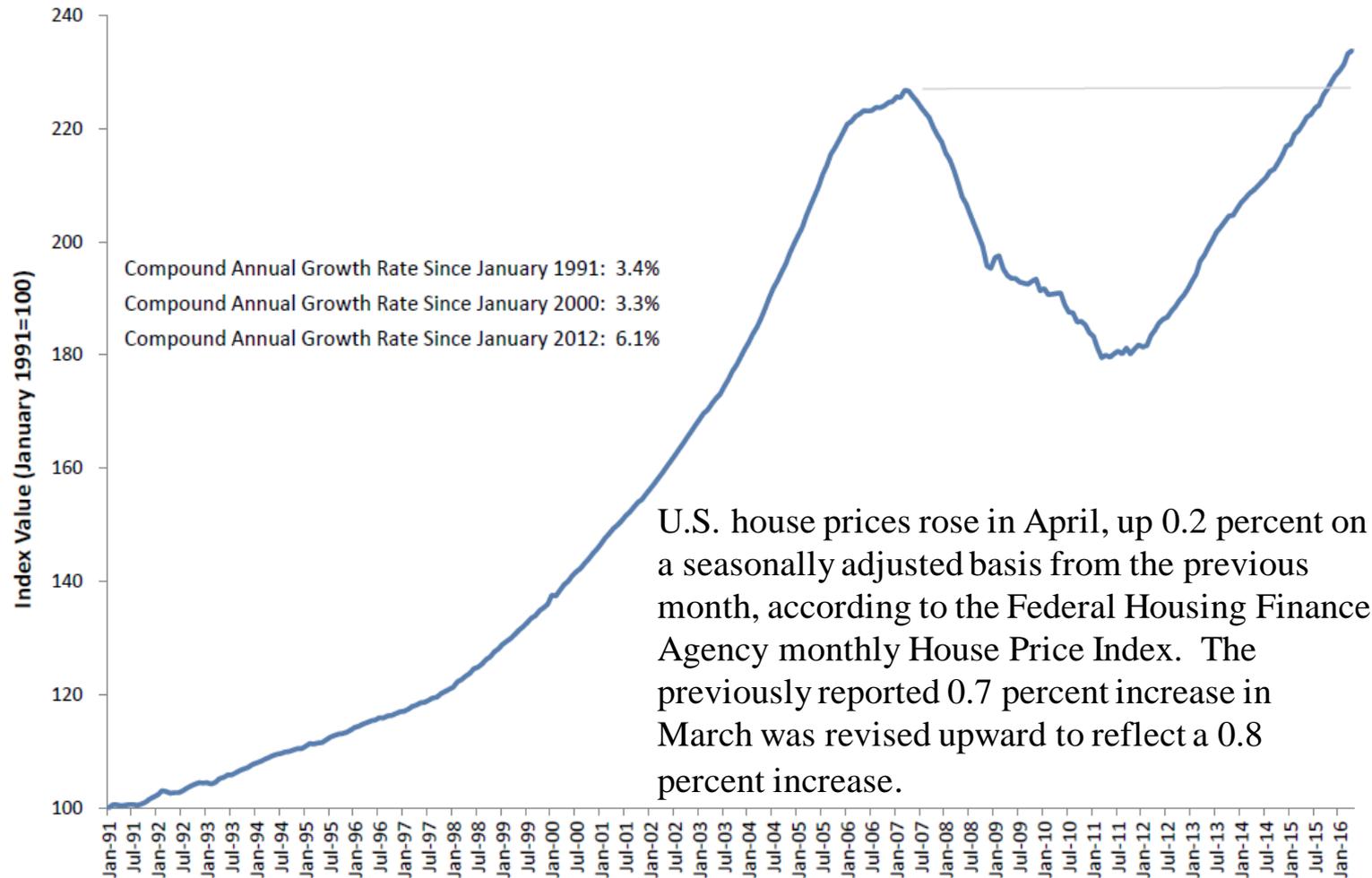
Total Existing House Sales



Federal Housing Finance Agency

Monthly House Price Index for U.S.

Purchase-Only, Seasonally Adjusted Index, January 1991 - Present



Source: FHFA

First-Time Purchasers

National Association of Realtors (NAR®)

30% of sales in May – 32% in April and 32% in May 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 May 2015.

“The 2016 spring buying season continues to be exceptionally strong for first-time buyers, as both purchase loan share and volume once again hit series’ highs for the month of May. Increasing demand pressure against a constrained supply continue to drive real home prices higher. While bullish in the short-medium term, long term prospects point to a painful mean reversion down the road.” – Edward Pinto, Codirector, AEI-ICHR

“First-time buyer activity has been on a steep uptrend so far this year. All signs point to a robust spring and summer home buying season.” – Stephen Oliner, Codirector, AEI-ICHR

Urban Institute

“The first-time homebuyer share of GSE purchase loans has been rising steadily since the second half of 2015, and reached a high of 45.4 percent in March 2016. The FHA has always been more focused on first-time homebuyers, with its first-time homebuyer share hovering around 80 percent and now stands at 82.4 percent.” – Laurie Goodman, Center Co-Director, Housing Finance Policy, Urban Institute

Overall House Sales

Week of	Weekly	4 Week Avg.
6/5/16	16.0%	0.0%
6/12/16	0.3%	0.0%
6/19/16	-0.8%	0.6%
6/26/16	-1.9%	3.9%

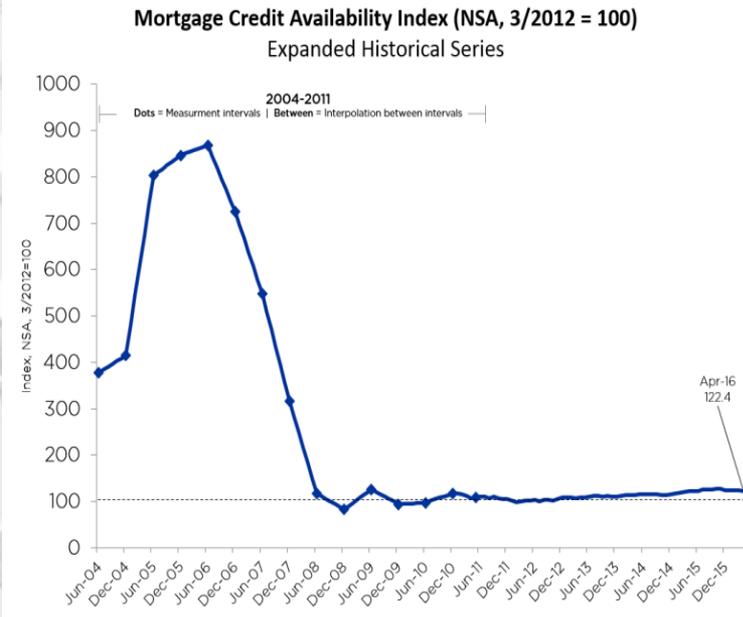
June appraisal volume closes on a low note

“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.

June appraisal volume wrapped up on a low note despite starting the month on a high. According to the latest National Appraisal Volume Index, appraisal volume fell 1.9% for the week of June 26.

And while the four-week average did rise to 3.9%, it was only the result of the low Memorial Holiday week that dropped off. ... and found that the five-week average is only 0.1%. Looking ahead, ... volume to drop between 15% to 20% next week but recover, per usual, in the week after.” – Brena Swanson, Digital Reporter, HousingWire.com

Mortgage Credit Availability

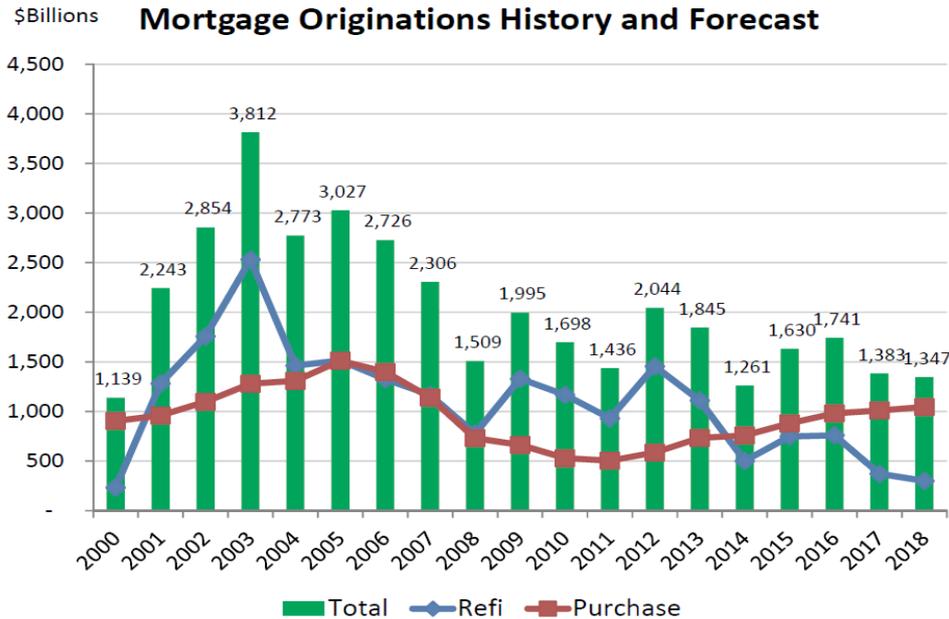


Mortgage Credit Availability Decreases in June

“Credit availability decreased over the month driven primarily by a decrease in availability of conventional conforming loan offerings. In particular, a number of investors discontinued their conventional high balance 7 year adjustable rate loan programs (agency jumbo ARM) while leaving their 5 year and 10 year ARM programs unchanged.” – Lynn Fisher, Vice President of Research and Economics, Mortgage Bankers Association (MBA)

The MCAI is calculated using several factors related to borrower eligibility (credit score, loan type, loan-to-value ratio, etc.). These metrics and underwriting criteria for over 95 lenders/investors are combined by MBA using data made available via the AllRegs[®] Market Clarity[®] product and a proprietary formula derived by MBA to calculate the MCAI, a summary measure which indicates the availability of mortgage credit at a point in time. Base period and values for total index is May 31, 2012=100; Conventional May 31, 2012=69; Government May 31, 2012= 222.

Mortgage Originations History & Forecast



Mortgage Bankers Association MBA Forecast Commentary

“We expect \$1.74 trillion in total mortgage originations in 2016, with around \$980 billion coming from purchase and \$760 billion from refinances. The overall originations total for 2016 now exceeds the 2015 estimated total of \$1.63 trillion, as does the refinance total.

Mortgage Originations History and Forecast

“The overall originations total for 2016 now exceeds the 2015 estimated total of \$1.63 trillion, as does the refinance total. Purchase originations are expected to increase gradually in 2017 and 2018, as continued economic growth and a strong job market will support household formation. Household formation in turn is likely to boost housing demand. Additionally, rising rents may also push some households to purchase homes. Refinance originations is expected to stick around a little longer with lower rates, but will still be sensitive to rate movements as the pool of potential borrowers who can refinance is relatively small.” – Mike Fratantoni, Chief Economist, Lynn Fisher, Vice President of Research and Economics, Joel Kan, Associate Vice President, Mortgage Bankers Association (MBA)

Housing Affordability

May 2016 Market Report: Bottom-Tier Volatility and Top-Tier Stability Reveals A Tale of Two Markets

- “Entry-level home values rose twice as fast (8 percent) over the past year as top-tier home values.
- The number of expensive homes for sale has remained steady, but there are fewer entry-level homes on the market.
- Nationally, home values rose 5.4 percent over the past year, to a median home value of \$186,100. Rents rose 2.9 percent to a Zillow Rent Index of \$1,407.

Rapid and accelerating growth in entry-level U.S. home values, and the [affordability squeeze](#) it’s causing for the market’s core, [has gained a lot of attention lately](#). But flying largely under the radar has been an almost year-and-a-half-long stabilization in home value growth among top-tier U.S. homes.

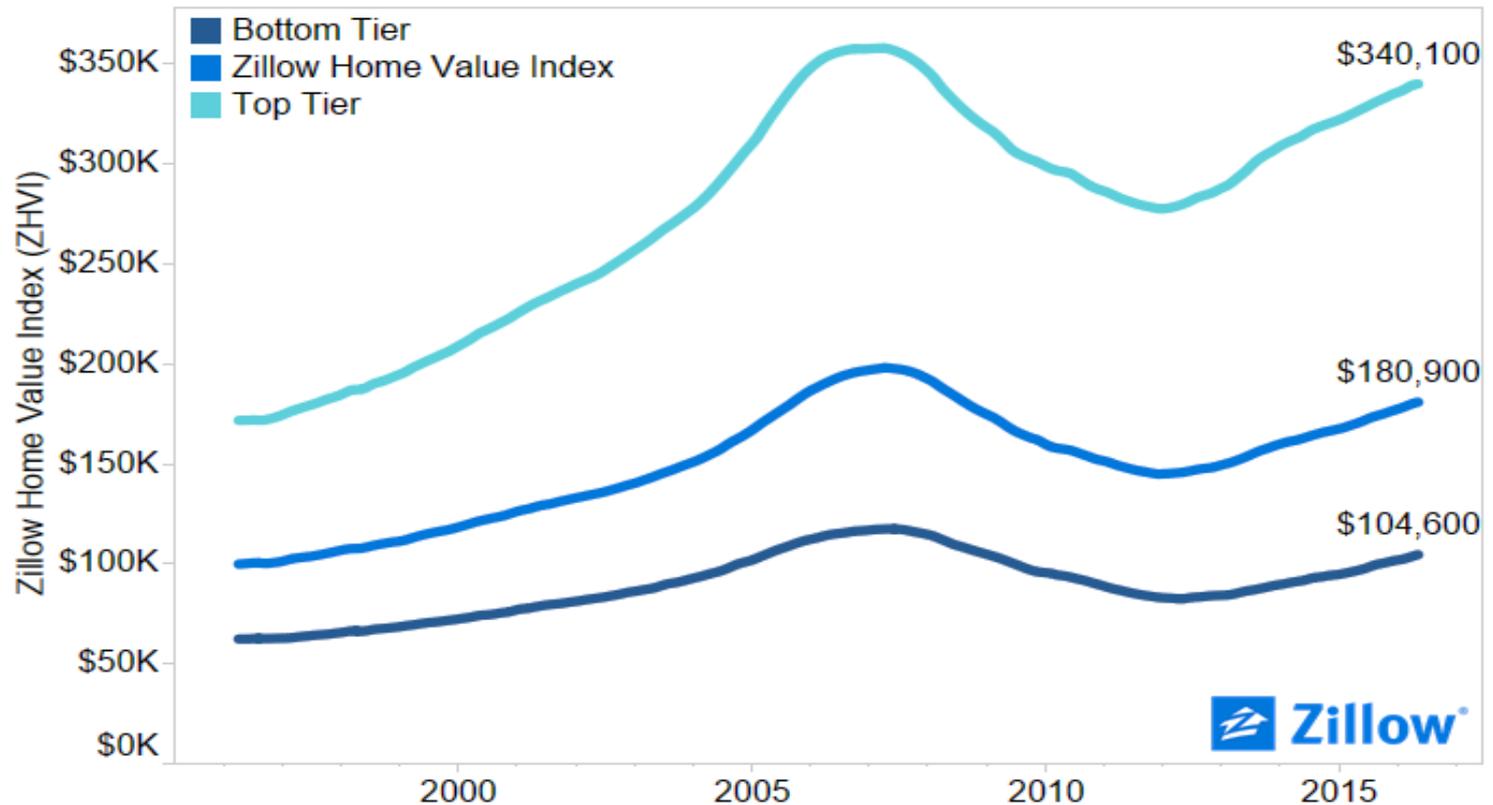
And while annual home value growth among bottom-tier homes nationwide has been faster than the month prior in 12 of the past 14 months, home value growth among top-tier homes has been remarkably constant over the past roughly year-and-a-half. After peaking at 7.3 percent annual growth in early 2014 and steadily slowing down each month for a year after, U.S. top-tier home values have grown at a 4 percent to 4.3 percent year-over-year pace in every month since January 2015.

This trend is echoed in a majority of large markets nationwide. Top-tier home value growth is slowest among all three tiers in 25 of the top 35 markets where home value appreciation data for all three tiers is available. Still, higher-end homes are appreciating more quickly than entry-level homes in pockets of the country, including large markets in the Northeast, West and Midwest.” – Svenja Gudell, Chief Economist, Zillow

Housing Affordability

May 2016 Market Report: Bottom-Tier Volatility and Top-Tier Stability Reveals A Tale of Two Markets

Figure 1: U.S. Zillow Home Value Index by Tiers, May 2016



Housing Affordability

May 2016 Market Report: Bottom-Tier Volatility and Top-Tier Stability Reveals A Tale of Two Markets

“Regardless of the precise reasons why the top is stable while the bottom is hot, the stark difference between the top and bottom of the housing market sheds light on the two very different experiences home buyers will face this summer in most markets. Buyers looking for the most expensive homes will find more options and less competition. It’s a much different story for entry-level buyers, who will be up against rising prices, low inventory and tough competition, with homes selling over asking price in many of the nation’s hottest housing markets.

Outlook

Looking ahead, Zillow expects national home values to continue growing, rising another 3.1 percent through May 2017 to a Zillow Home Value Index of \$191,800. U.S. rents are also expected to keep growing over the next year, at a 3.2 percent pace through May 2017 to a Zillow Rent Index of \$1,452.

The top of the market is starting to stabilize, and people are beginning to take notice. Buyers looking for entry-level homes are having bidding wars in many markets, while it’s not uncommon for high priced homes to stay on the market a few months longer. The housing market is much more forgiving for current homeowners looking to move into a bigger, more expensive home. These buyers can be a bit more selective, and may even get a good deal.” – Svenja Gudell, Chief Economist, Zillow

Housing Affordability

2016 How Housing Matters Survey How Housing Matters

“Americans are losing faith that the housing crisis that began nearly a decade ago is over. A significant majority (81%) continues to believe that housing affordability is a problem in America today.” – MacArthur Foundation

Overview of Key Findings:

“The recovery may be underway, but that is not reflected in the American people’s perceptions, as pessimism about the housing crisis is on the rise.”

1. The American people continue to express high levels of pessimism about economic mobility and the ability to achieve a secure middle-class lifestyle in America today. Housing-related issues are central to their concerns.
 - Overwhelmingly the public believes it is more common today for middle-class people to fall into a lower economic class (78%) than for people in lower economic classes to rise up to the middle class (12%).
 - Similarly, three in four (76%) adults believe it is harder today than it was for previous generations to achieve a secure middle-class lifestyle, while only 8% say it is easier today.
 - This bleak outlook is nearly identical to that of one year ago and is expressed at similarly high rates across the public, regardless of age, income, or race.” – MacArthur Foundation

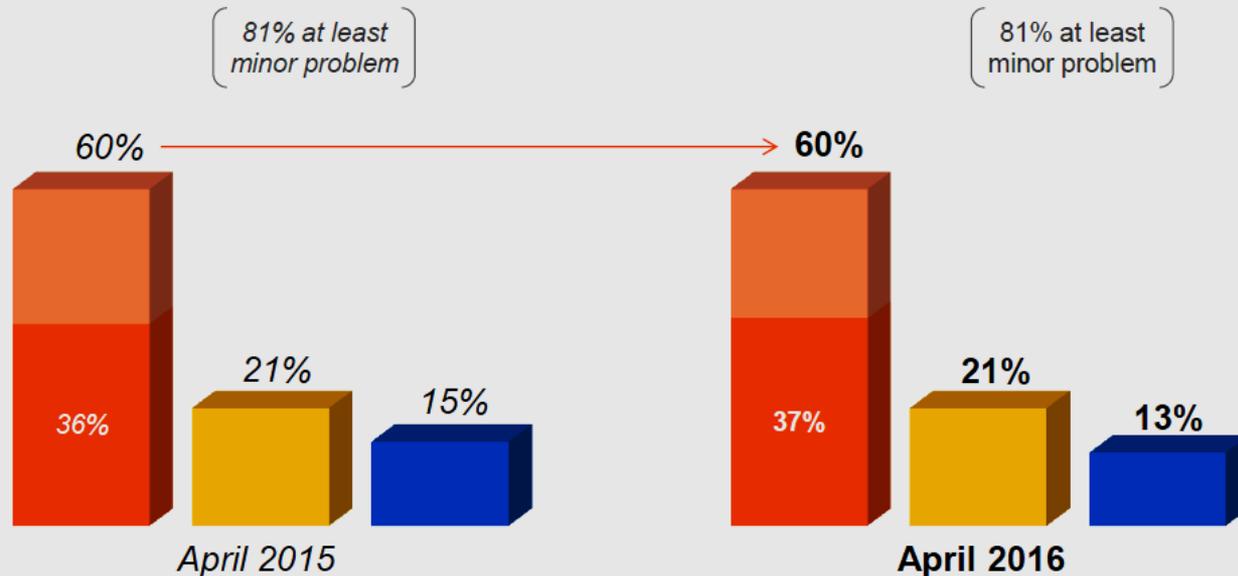
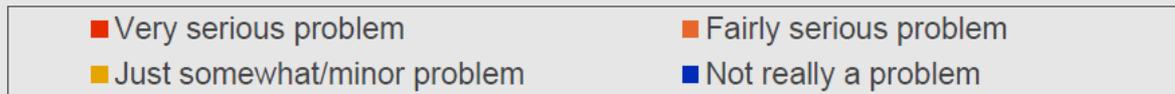
Housing Affordability

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HART RESEARCH ASSOCIATES

There has been no change from one year ago in perceptions about the severity of the housing affordability problem in America today.

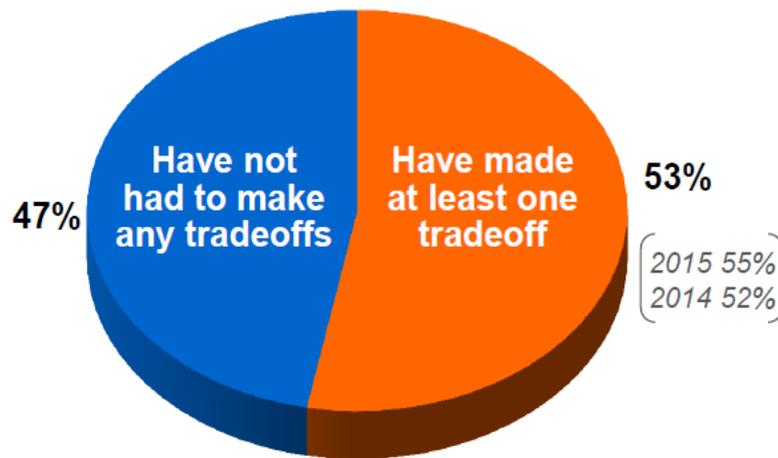
Is housing affordability a problem in America today? If so, how serious a problem is it?



Housing Affordability

More than half of the public continues to make tradeoffs or sacrifices to cover their housing costs.

Have you had to make any of these tradeoffs in the past three years because you were struggling to pay your rent or mortgage?



I have made this tradeoff:

Taken second job, working more hours	24%
Stopped saving for retirement	19%
Accumulating credit card debt	17%
Cut back on healthy food	13%
Cut back on healthcare	11%
Moved to a neighborhood I feel is less safe	6%
Moved to where schools are not as good	4%

Housing Affordability

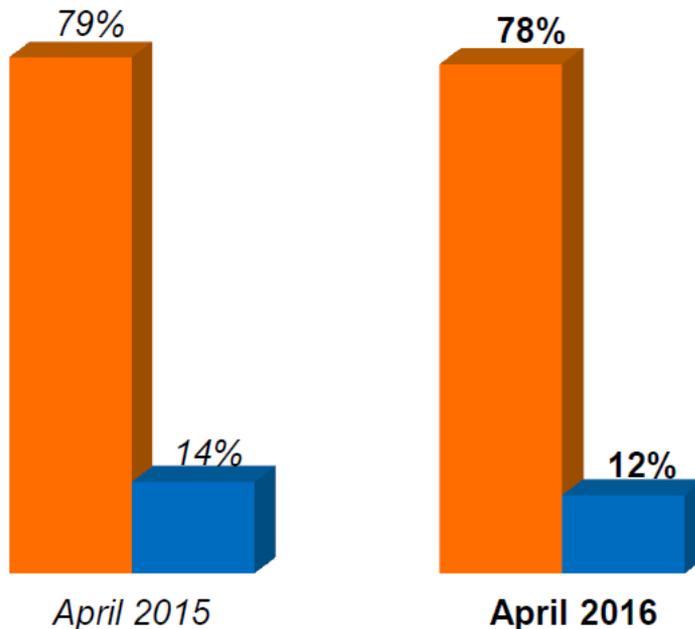
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HART RESEARCH

Americans across the spectrum are deeply pessimistic about economic mobility.

Which do you think happens more often today?

- Middle-class people falling into a lower economic class
- People in lower economic classes rising into the middle class



Middle-class people falling into a lower economic class happens more often:

Age 18 to 34	76%
Age 35 to 49	80%
Age 50 to 64	80%
Age 65/older	76%
Whites	79%
African Americans	75%
Hispanics	76%
Household income:	
Under \$40K	77%
\$40K to \$75K	81%
\$75K/more	78%
Democrats	77%
Independents	80%
Republicans	79%

Housing Affordability

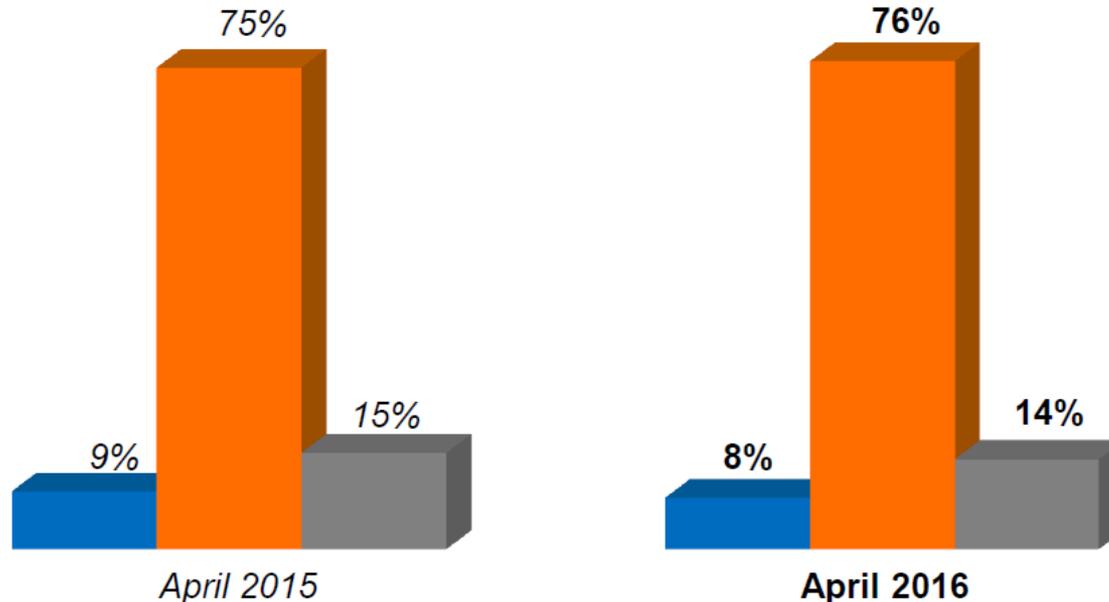
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HART RESEARCH

Overwhelmingly Americans continue to believe it is harder today than it was for previous generations to achieve a secure middle-class lifestyle.

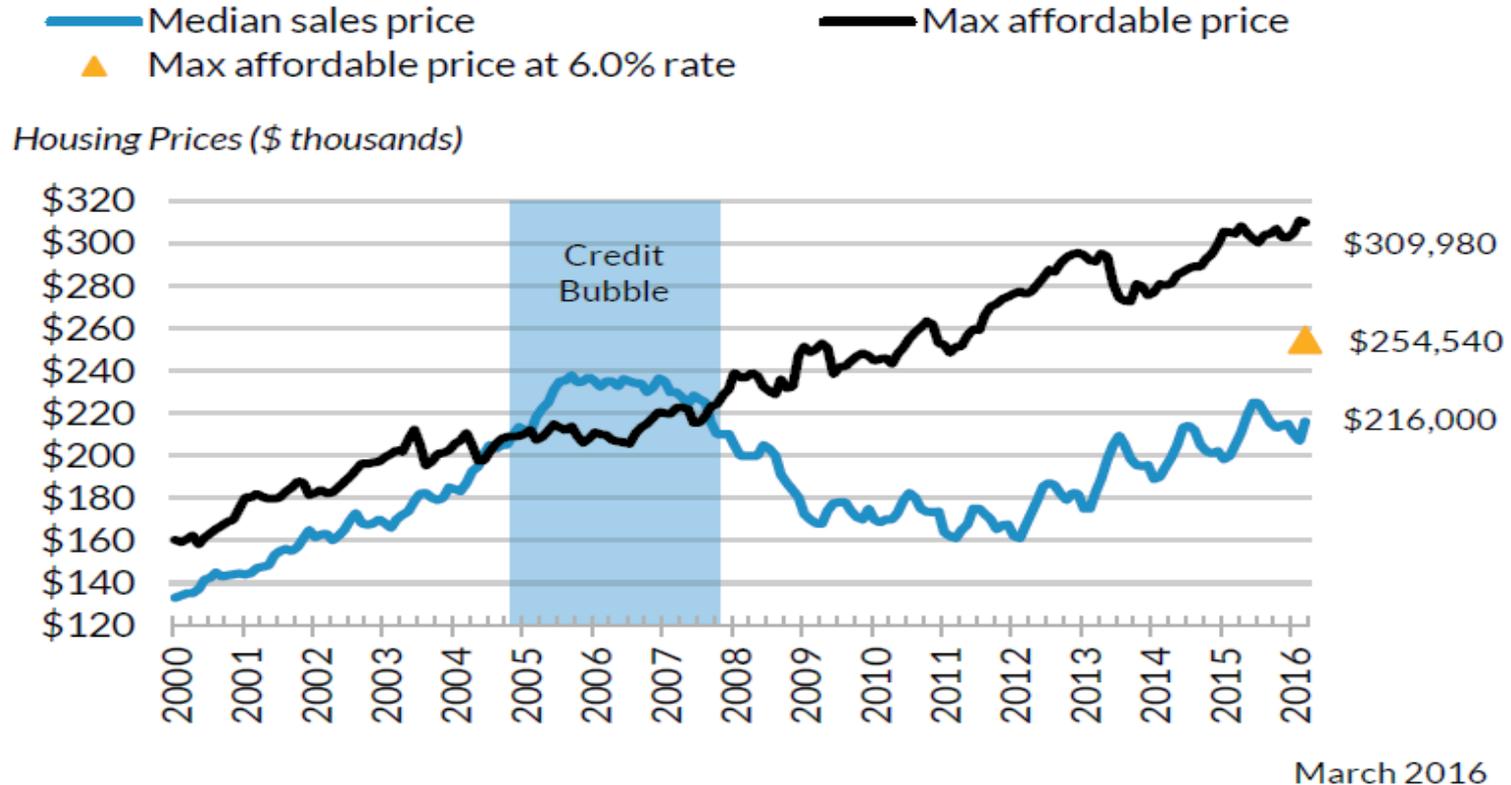
Perceived Difficulty of Achieving a Secure Middle-Class Lifestyle Today

- Easier than for previous generations
- Harder than for previous generations
- About the same as for previous generations



Housing Affordability

National Housing Affordability Over Time



Sources: CoreLogic, US Census, Freddie Mac, and Urban Institute.

Note: The maximum affordable price is the house price that a family can afford putting 20 percent down, with a monthly payment of 28 percent of median family income, at the Freddie Mac prevailing rate for 30-year fixed-rate mortgage, and property tax and insurance at 1.75 percent of housing value.

“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 regressed in May 2016 – particularly in the new single-family house sector. Multifamily and remodeling construction and spending appear to be leveling off. Month-over-month new SF sales were disappointing – five of eight categories were negative; two were reported as no change; and one category increased in sales. Existing sales increased marginally – and according to housing analysts, lack of inventory is the primary constraint hindering existing sales expansion.

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 2015; yet, nearly 36% of the formations were renter households and in Q1 2016 (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) Changing attitudes towards SF ownership and as stated by some – “gentrification”;
- 3) Job creation is improving and consistent but some economists question the quantity and types of jobs being created;
- 4) Stagnant real median household incomes;
- 5) Strict home loan lending standards (including TRID) plus constrained builder loans – AD&C; and
- 6) Global uncertainty?

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