The Virginia Tech – U.S. Forest Service November 2016 Housing Commentary: Section I

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This report is a free monthly service of Virginia Tech. Past issues can be found at: http://woodproducts.sbio.vt.edu/housing-report. To request the report, please email: buehlmann@gmail.com

Summary

In November, aggregate monthly housing data were mixed. Overall permits declined month-over-month and year-over-year and single-family permits declined month-over-month. New single-family house construction spending improved minimally on a month-over-month basis and year-over-year basis. The January 13th Atlanta Fed GDPNow™ model projects aggregate residential investment spending increased at a 9.2 percent (seasonally adjusted annual rate); new residential investment spending was estimated at 9.5 percent; and improvements were projected 3.4 percent in 2016 (based on December 16 data).[1] Regionally, data were mixed across all sectors.

"… Slowing population growth suggests that we will have a short-lived housing boom in which starts hit the 1.3–1.4 million level, followed by a period of contraction until starts reach the level of long-run demand. We estimate this to be about 1.0 million units in the medium term. Housing will likely contribute to GDP growth in 2017–18 — particularly if economic policy creates a boom — but subtract from GDP growth by 2019 as the pent-up demand dissipates. In the long run, the slowing population suggests that housing will not be a growth sector (although specific segments, such as housing for elderly residents, might well be very strong).[2]" – Dr. Daniel Bachman, Senior Manager, and Dr. Rumki Majumdar, Manager and Economist, Deloitte

In this month's issue, we present several 2017 new housing forecasts. In aggregate, these projections have decreased slightly from the 2016 forecasts. You may access the 2016 forecasts here: http://woodproducts.sbio.vt.edu/housing-report/casa-2015-11a-november-main.pdf. This month's commentary also contains relevant housing data; data exploration; new single- and multifamily and existing housing data; economic information; and demographics. 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.

Sources: [1] https://www.frbatlanta.org/-/media/Documents/cqer/researchcq/gdpnow/GDPTrackingModelDataAndForecasts.xlsx; 1/13/17
[2] https://dupress.deloitte.com/dup-us-en/economy/us-economic-forecast/2016-q4.html; 12/13/16

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November 2016
Housing Scorecard

	M/M		Y/Y	
Housing Starts	▽	18.7%	▽	6.9%
Single-Family Starts	▽	4.1%	△	5.3%
Housing Permits	▽	4.7%	▽	6.6%
Single-Family Permits	△	0.5%	△	5.9%
Housing Completions	△	15.4%	△	25.0%
New Single-Family House Sales	△	5.2%	△	16.5%
Private Residential Construction Spending	△	1.0%	△	3.0%
Single-Family Construction Spending	△	1.8%	▽	0.9%
Existing House Sales[1]	△	0.7%	△	15.4%

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

Source: U.S. Department of Commerce-Construction; [1]National Association of Realtors® (NAR®)

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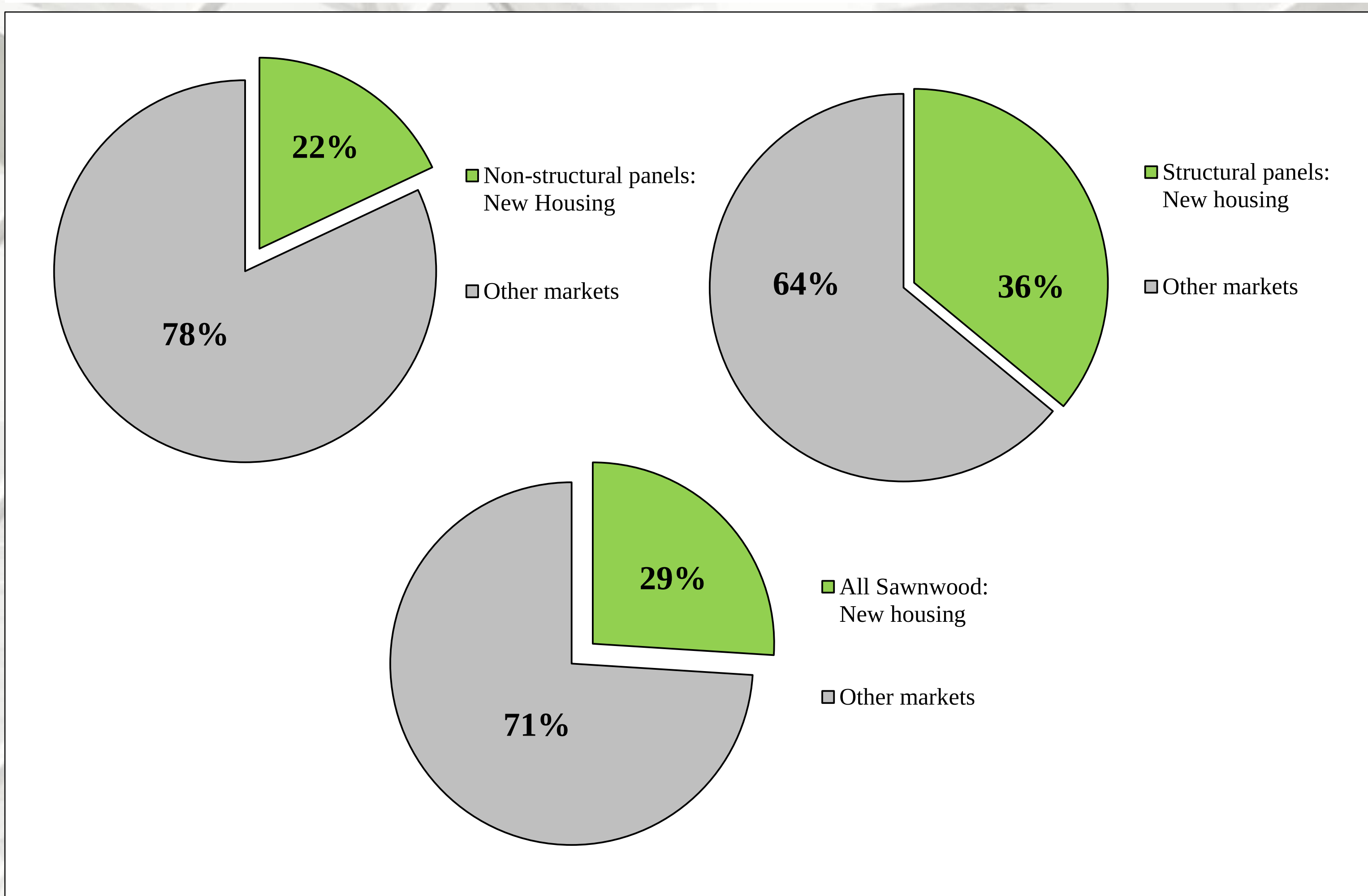
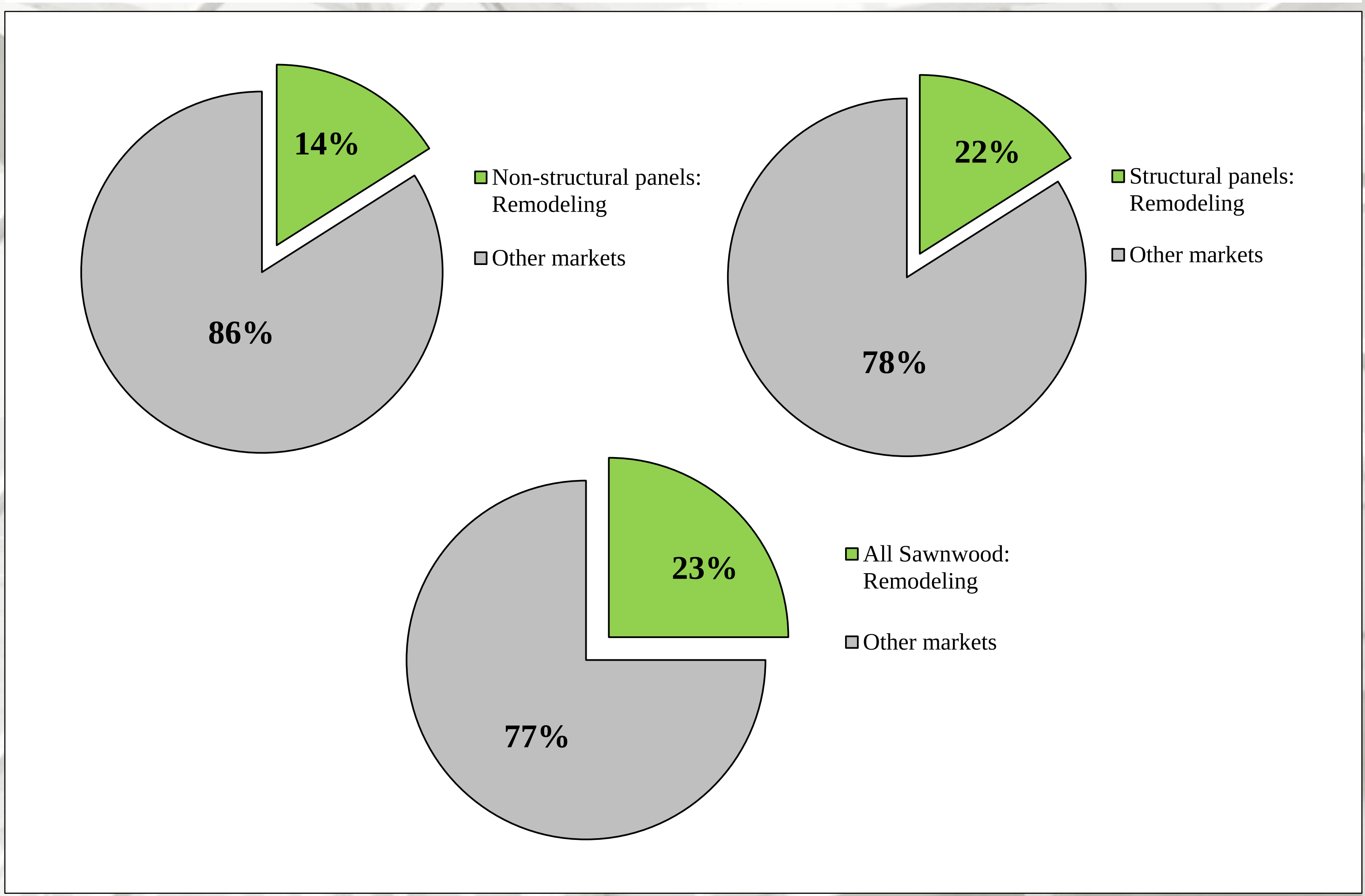
New Construction's Percentage of Wood Products Consumption



Source: U.S. Forest Service. Howard, J. and D. McKeever. 2015. U.S. Forest Products Annual Market Review and Prospects, 2010-2015

Repair and Remodeling's Percentage of Wood Products Consumption



Source: U.S. Forest Service. Howard, J. and D. McKeever. 2015. U.S. Forest Products Annual Market Review and Prospects, 2010-2015

2017 Housing Forecasts*

Total starts, range:	**1,170 to 1,360**	**Median: 1,256**
Single-family starts, range:	**795 to 893**	**Median: 855**
New house sales, range:	**610 to 671**	**Median: 644**

Organization	Total Starts	Single-Family Starts	New House Sales
APA - The Engineered Wood Association[a]	1,285.0	835.0	
Bank of Montreal[b]	1,320.0		
Bloomberg[c]	1,250.0		
Blue Chip[d]	1,260.0		
The Conference Board[e]	1,280.0		
Deloitte[f]	1,270.0		
Dodge Data & Analytics[g]	1,230.0	795.0	
Export Development Canada[h]	+13 %		
Fannie Mae[i]	1,308.0	883.0	671.0
Freddie Mac[j]	1,360.0		
Forest Economic Advisors[k]	1,285.0	855.0	

* All in thousands of units

2017 Housing Forecasts*

Organization	Total Starts	Single-Family Starts	New House Sales
Forisk[l]	1,250.0 to 1,300.0		
Home Advisor[m]	1,236.0	893.0	614.0
Goldman Sachs[n]	1,333.0	893.0	648.0
Merrill Lynch[o]	1,225.0	825.0	625.0
Metrostudy[p]	1,256.0		
Mortgage Bankers Association[q]	1,265.0	860.0	644.0
National Association of Homebuilders[r]	1,256.0	863.0	
National Association of Realtors[s]	1,220.0		620.0
PiperJaffray[t]	1,242.0	855.0	630.0
Royal Bank of Canada (RBC)[u]	1,212.0		
Scotia Bank[v]	1,300.0		
TD Economics[w]	1,240.0		
The Federal Reserve Bank of Chicago[x]	1,200.0		
UCLA Ziman Center for Real Estate[y]	1,200.0 to 1,250.0		
Wells Fargo[z]	1,220.0	840.0	610.0

* All in thousands of units

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2017 Housing Forecasts

References

a-Random Lengths, Volume 73, Issue 1 (1/6/17)

b-http://economics.bmocapitalmarkets.com/economics/outlook/20170104/nao.pdf

c-http://www.calculatedriskblog.com/2016/12/2017-housing-forecasts.html

d-http://www.calculatedriskblog.com/2016/12/2017-housing-forecasts.html

e-https://www.conference-board.org/pdf_free/economics/2017_01_11.pdf

f-https://dupress.deloitte.com/dup-us-en/economy/us-economic-forecast/2016-q4.html

g-http://www.constructiondive.com/news/inside-the-dodge-2017-construction-outlook-commercial-and-residential-pred/428821/

h-http://www.edc.ca/EN/Knowledge-Centre/Economic-Analysis-and-Research/Documents/gef-fall-2016.pdf

i-http://www.fanniemae.com/resources/file/research/emma/pdf/Housing_Forecast_122016.pdf

j-http://www.freddiemac.com/finance/pdf/201612-Outlook-12%2021%2016.pdf

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l-http://forisk.com/blog/2016/10/24/forisk-forecast-us-housing-starts-outlook-q4-2016-update/

m-http://www.homeadvisor.com/r/2017-housing-market-outlook/#.WG0nvn0-KEU

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2017 Housing Forecasts

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q-https://www.mba.org/news-research-and-resources/research-and-economics/forecasts-and-commentary/mortgage-finance-forecast-archives

r-http://hbapdx.org/wp-content/uploads/2016/10/Robert-Dietz-v-2.pdf

s-http://narnewsline.blogs.realtor.org/2016/11/04/nars-2017-housing-forecast-sales-first-time-buyers-on-the-rise/

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u-http://www.rbc.com/economics/economic-reports/pdf/other-reports/Econoscope.pdf

v-http://www.gbm.scotiabank.com/scpt/gbm/scotiaeconomics63/retrends.pdf

w-https://www.td.com/document/PDF/economics/qef/long_term_dec2016.pdf

x-http://app.frbcommunications.org/e/es.aspx

y-http://www.anderson.ucla.edu/Documents/areas/ctr/ziman/UCLA_Economic_Letter_Shulman_12.06.16.pdf

z-http://image.mail1.wf.com/lib/fe8d13727664027a7c/m/1/five-housing-questions-20170104.pdf

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New Housing Starts

	Total Starts	SF Starts	MF 2-4 Starts	MF ≥5 Starts
November	1,090,000	828,000	3,000	259,000
October	1,340,000	863,000	15,000	462,000
2015	1,171,000	786,000	7,000	379,000
M/M	-18.7%	-4.1%	-80.0%	-43.9%
Y/Y change	-6.9%	5.3%	-57.1%	-31.7%

* 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)).

Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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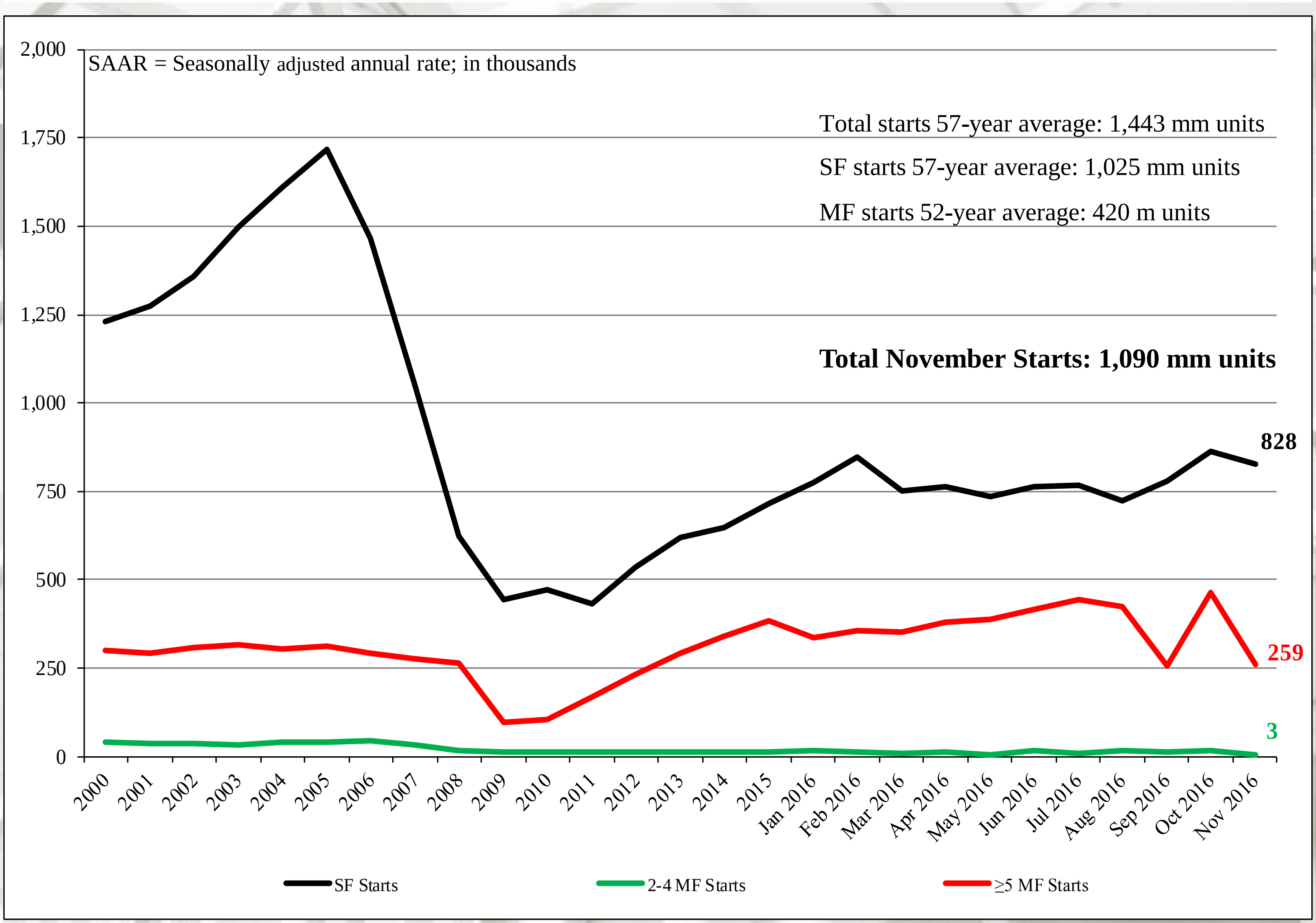
Total Housing Starts



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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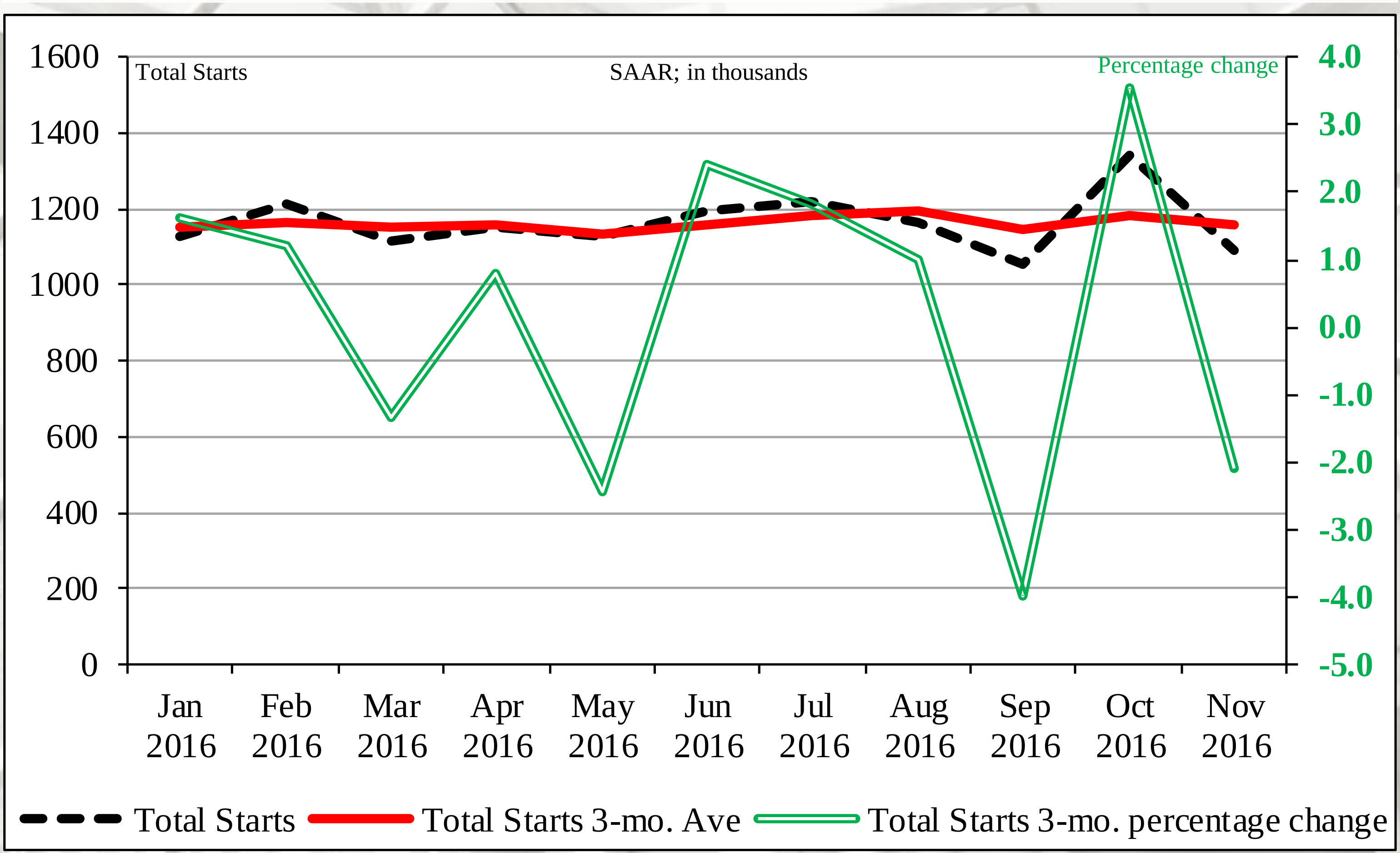
Total Housing Starts: Three-Month Average



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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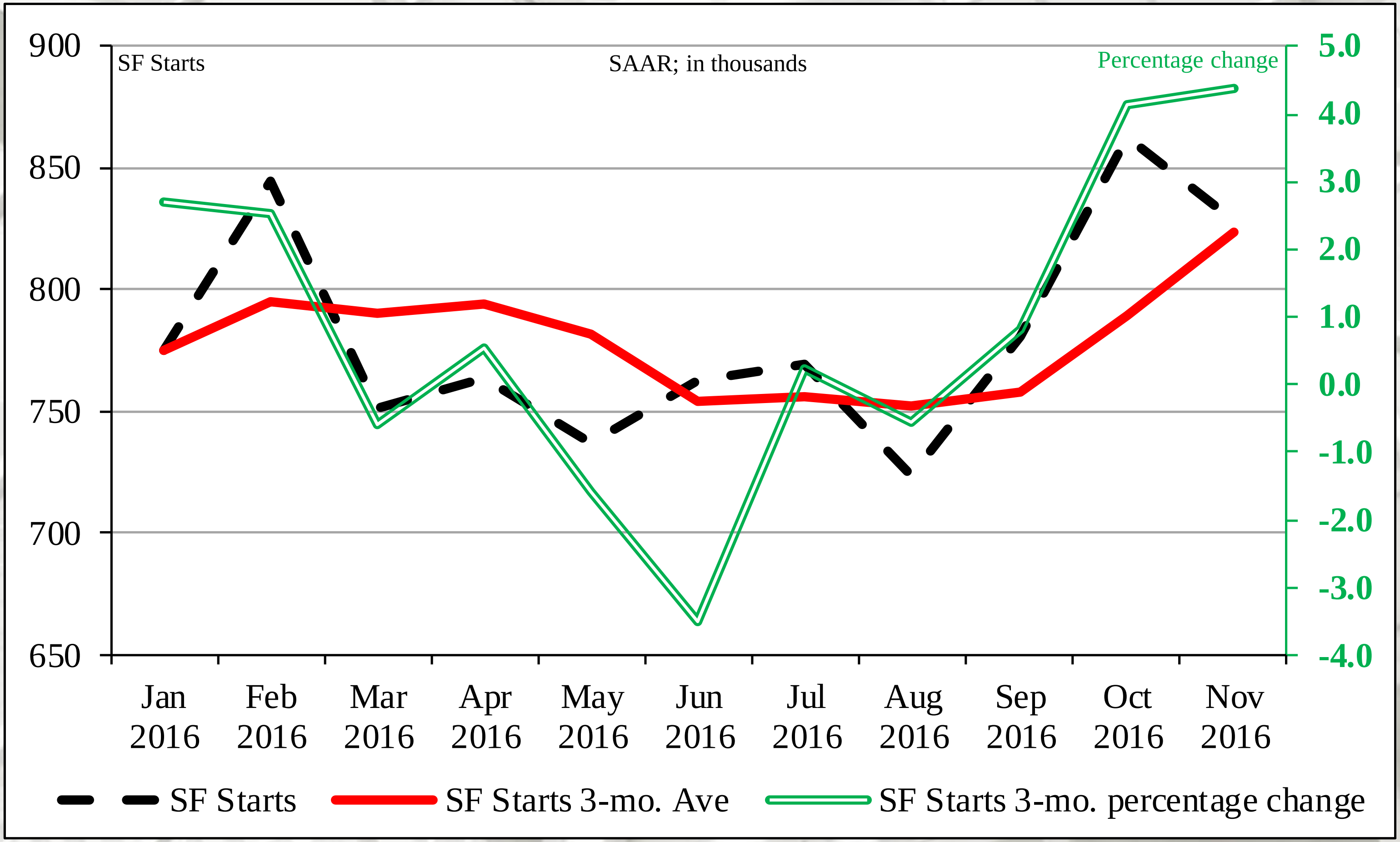
SF Housing Starts: Three-Month Average



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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New Housing Starts by Region

	NE Total	NE SF	NE MF**
November	80,000	61,000	19,000
October	167,000	66,000	101,000
2015	125,000	66,000	59,000
M/M change	-52.1%	-7.6%	-81.2%
Y/Y change	-36.0%	-7.6%	-67.8%

	MW Total	MW SF	MW MF
November	175,000	145,000	30,000
October	204,000	121,000	83,000
2015	169,000	109,000	60,000
M/M change	-14.2%	19.8%	-63.9%
Y/Y change	3.6%	33.0%	-50.0%

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).

Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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New Housing Starts by Region

	S Total	S SF	S MF**
November	567,000	439,000	128,000
October	625,000	460,000	165,000
2015	609,000	423,000	186,000
M/M change	-9.3%	-4.6%	-22.4%
Y/Y change	-6.9%	3.8%	-31.2%

	W Total	W SF	W MF
November	268,000	183,000	85,000
October	344,000	216,000	128,000
2015	268,000	188,000	80,000
M/M change	-22.1%	-15.3%	-33.6%
Y/Y change	0.0%	-2.7%	6.3%

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).

Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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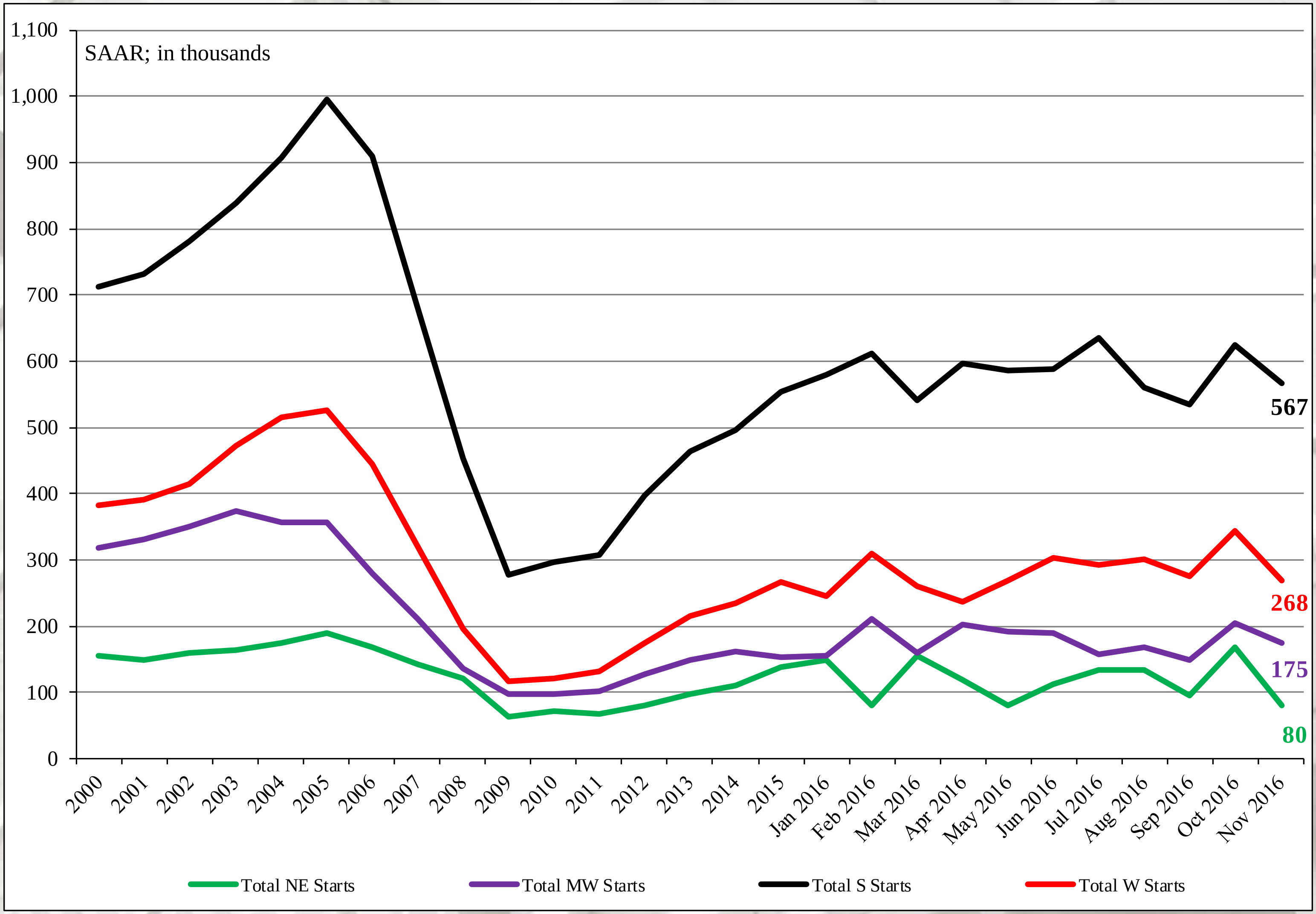
Total Housing Starts by Region



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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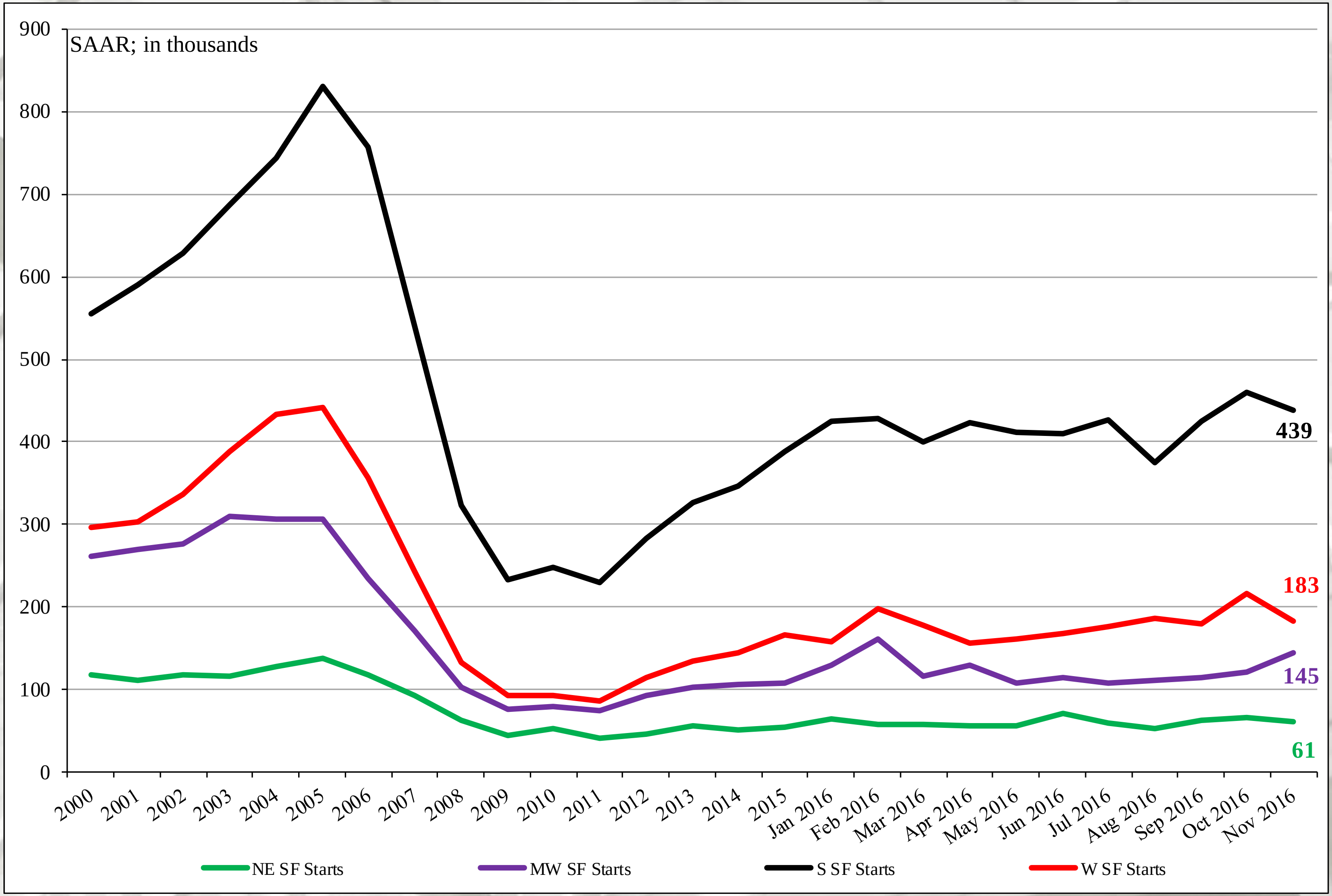
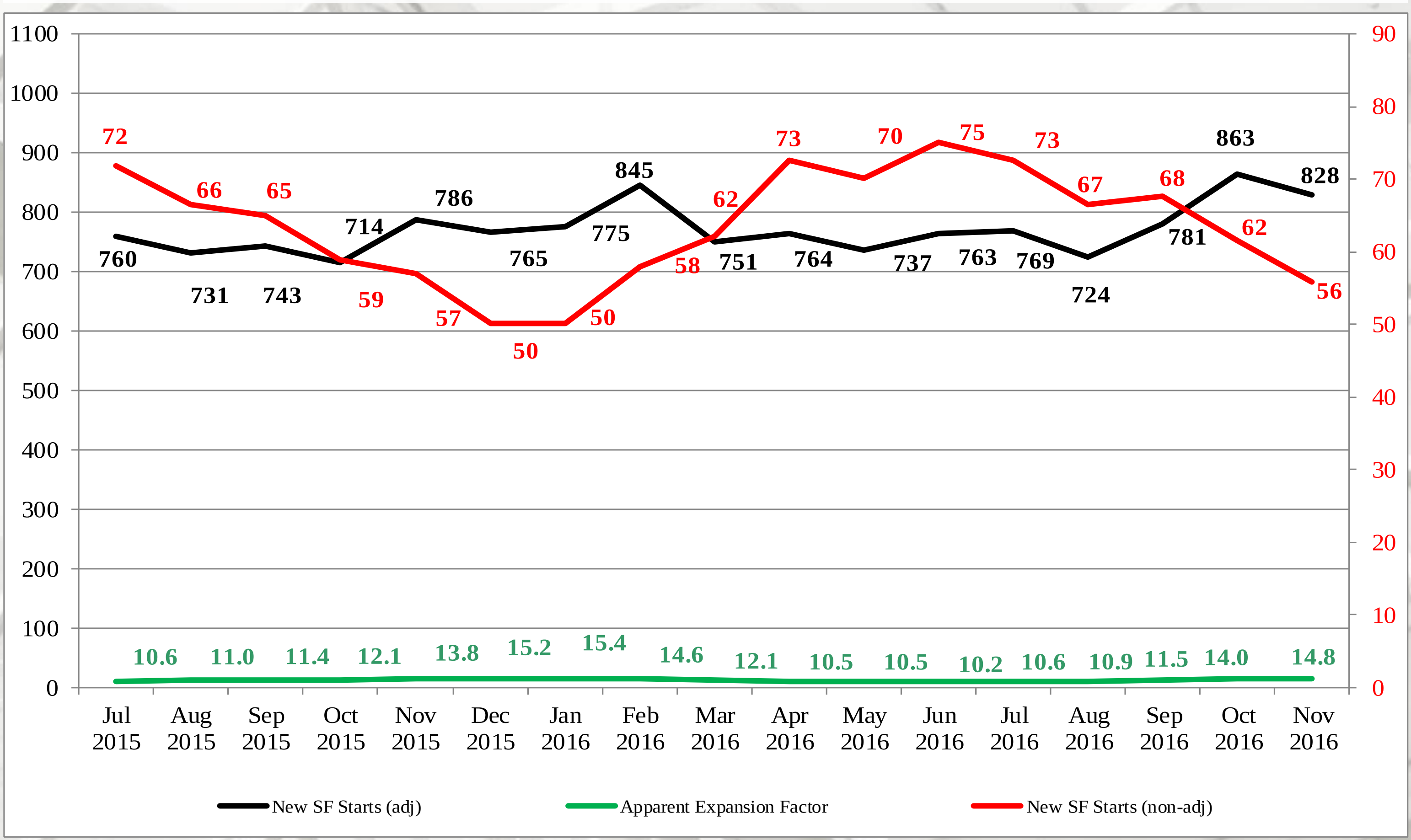
SF Housing Starts by Region



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

Nominal & SAAR SF Housing Starts



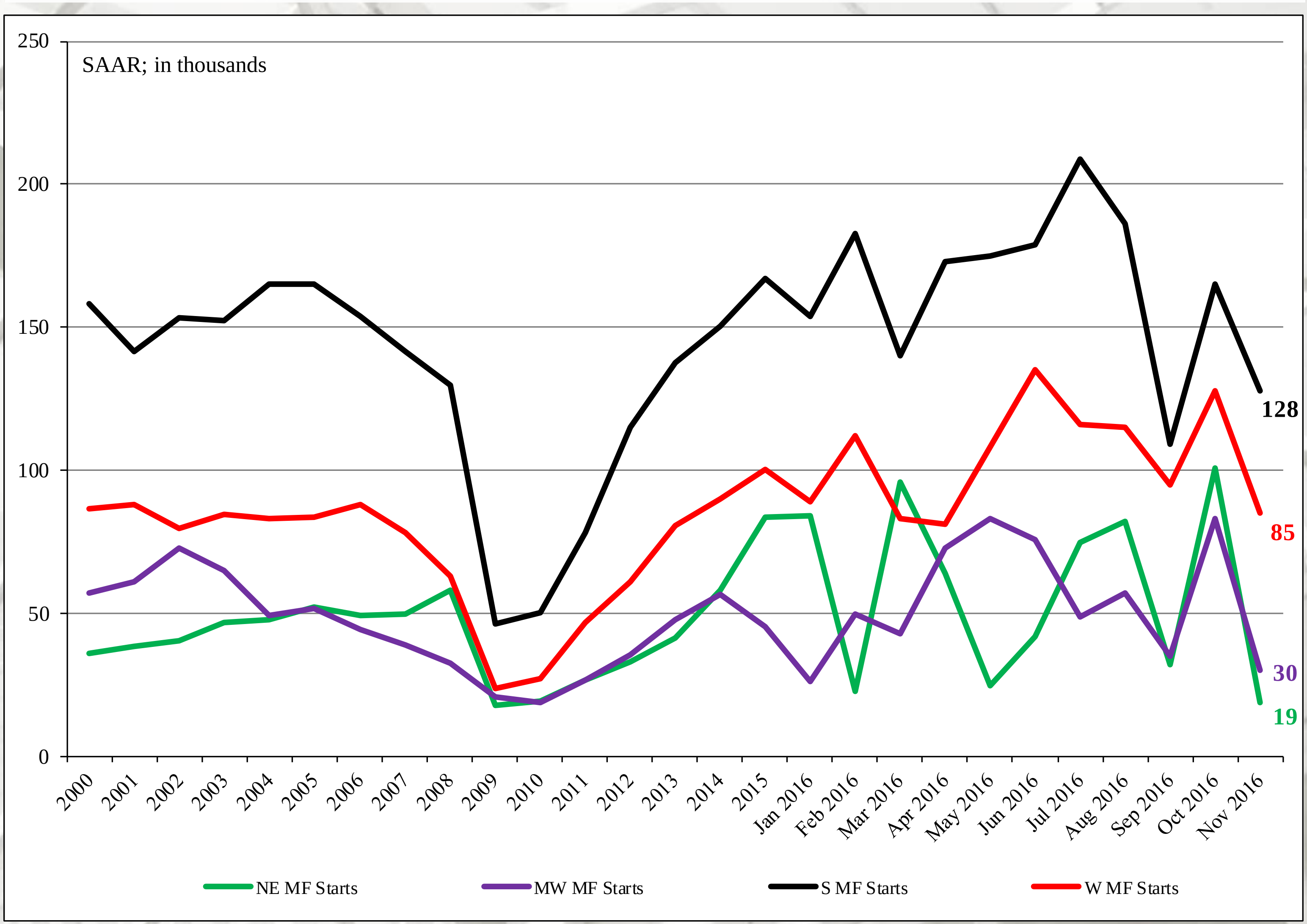
Nominal and Adjusted New SF Monthly Sales

Presented above is nominal (non-adjusted) new SF start data contrasted against SAAR data.

The apparent expansion factor "…is the ratio of the unadjusted number of houses started in the US to the seasonally adjusted number of houses started in the US (i.e., to the sum of the seasonally adjusted values for the four regions)." – U.S. DOC-Construction

Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

MF Housing Starts by Region



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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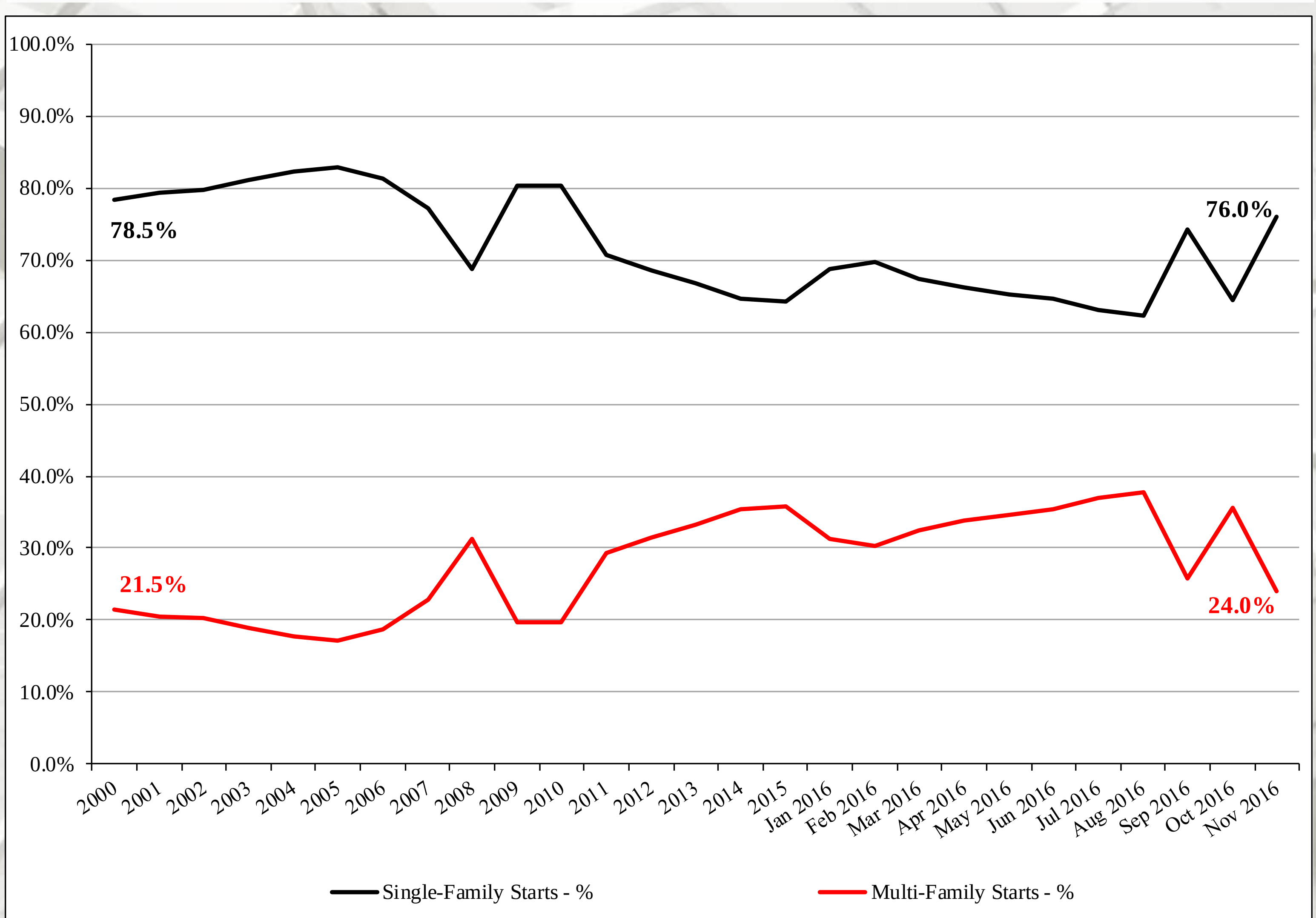
Housing Starts by Percent



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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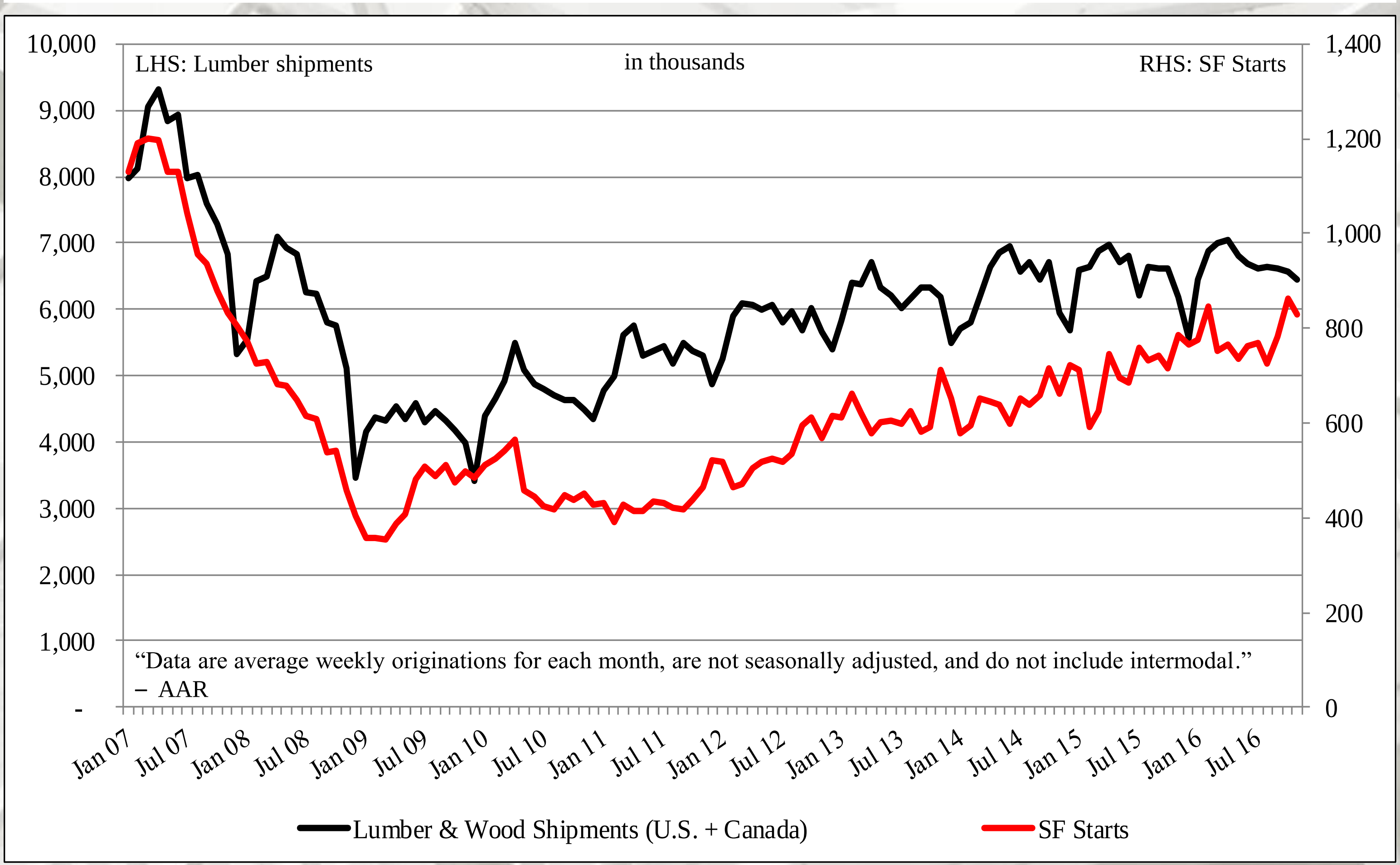
Railroad Lumber & Wood Shipments vs. U.S. SF Housing Starts



Sources: Association of American Railroads (AAR), *Rail Time Indicators* report 12/8/16; U.S. DOC-Construction; 12/16/16

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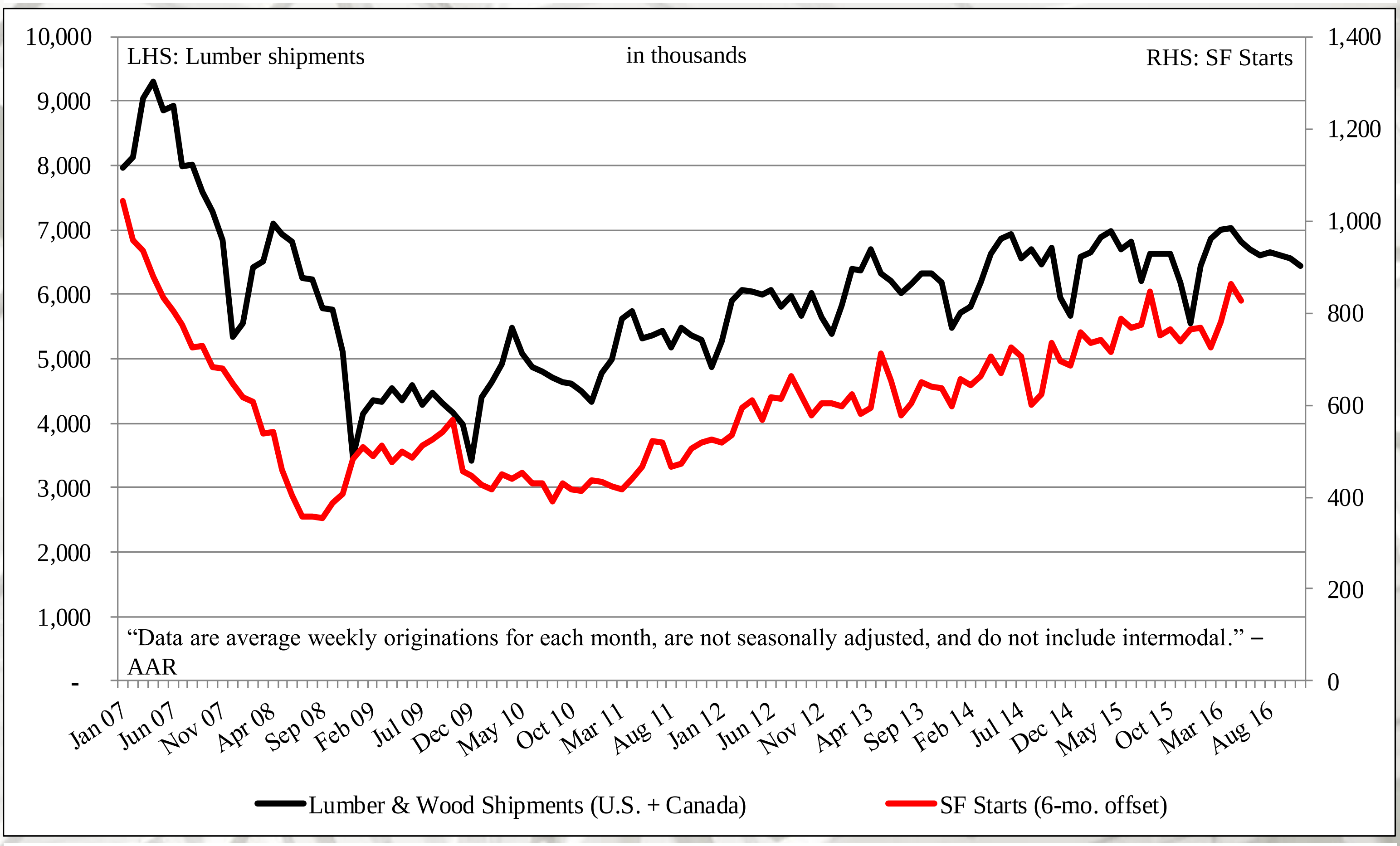
Railroad Lumber & Wood Shipments vs. U.S. SF Housing Starts: 6-month Offset



In this graph, January 2007 lumber shipments are contrasted with July 2007 SF starts, and continuing through November 2016 SF 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.

Sources: Association of American Railroads (AAR), *Rail Time Indicators* report 12/8/16; U.S. DOC-Construction; 12/16/16

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New Housing Permits

	Total Permits*	SF Permits	MF 2-4 unit Permits	MF ≥ 5 unit Permits
November	1,201,000	778,000	39,000	384,000
October	1,260,000	774,000	30,000	456,000
2015	1,286,000	735,000	29,000	522,000
M/M change	-4.7	0.5	30.0	-15.8
Y/Y change	-6.6	5.9	34.5	-26.4

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

Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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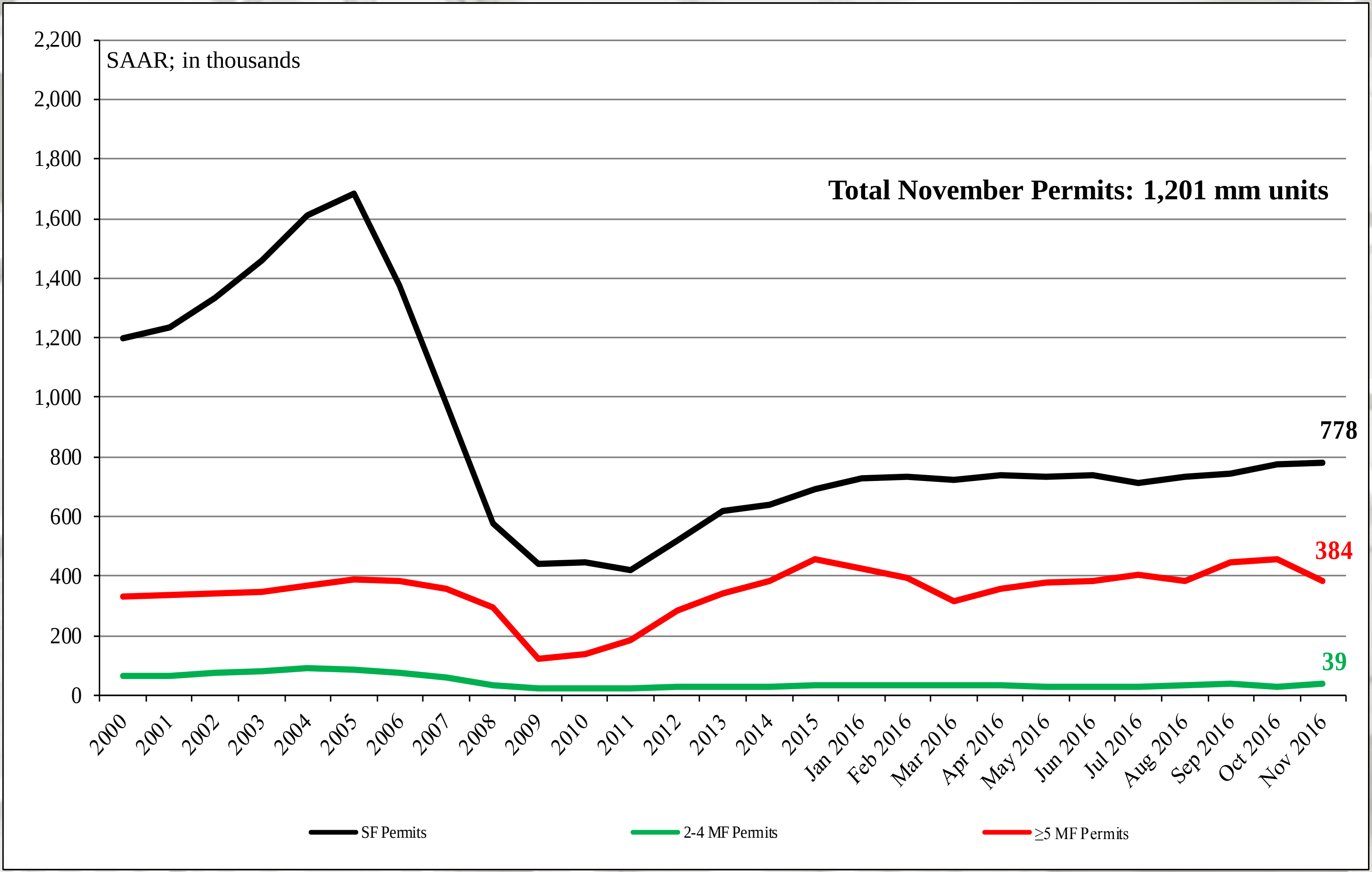
Total New Housing Permits



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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New Housing Permits by Region

	NE Total	NE SF	NE MF
November	110,000	55,000	55,000
October	107,000	59,000	48,000
2015	124,000	57,000	75,000
M/M change	2.8	-6.8	14.6
Y/Y change	-11.3	-3.5	-26.7

	MW Total	MW SF	MW MF
November	189,000	123,000	66,000
October	206,000	115,000	91,000
2015	209,000	108,000	98,000
M/M change	-8.3	7.0	-27.5
Y/Y change	-9.6	13.9	-32.7

* All data are SAAR.

Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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New Housing Permits by Region

	S Total	S SF	S MF
November	578,000	411,000	167,000
October	602,000	416,000	186,000
2015	635,000	396,000	236,000
M/M change	-4.0	-1.2	-10.2
Y/Y change	-9.0	3.8	-29.2

	W Total	W SF	W MF
November	324,000	189,000	135,000
October	345,000	184,000	161,000
2015	318,000	174,000	146,000
M/M change	-6.1	2.7	-16.1
Y/Y change	1.9	8.6	-7.5

* All data are SAAR.

Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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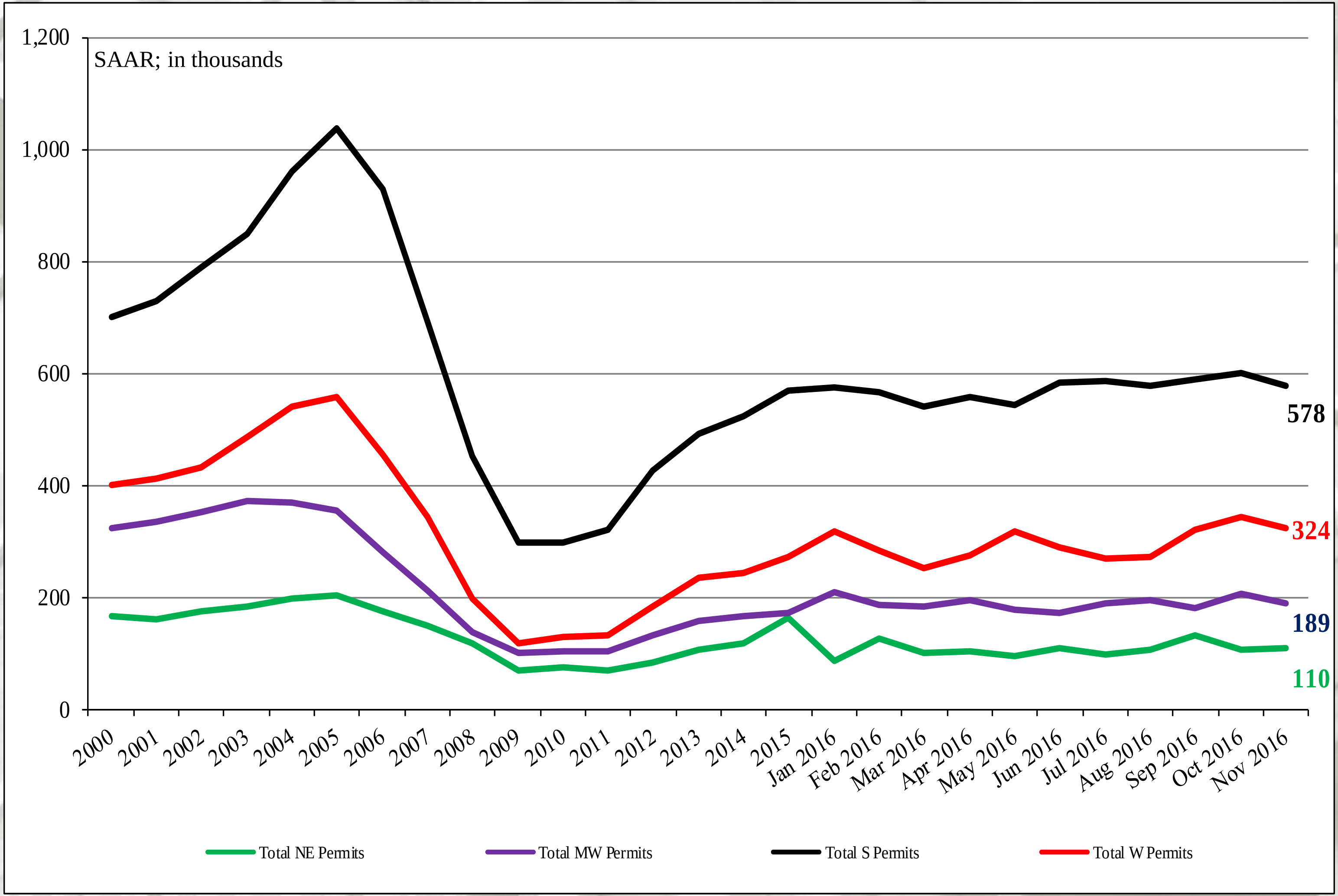
Total Housing Permits by Region



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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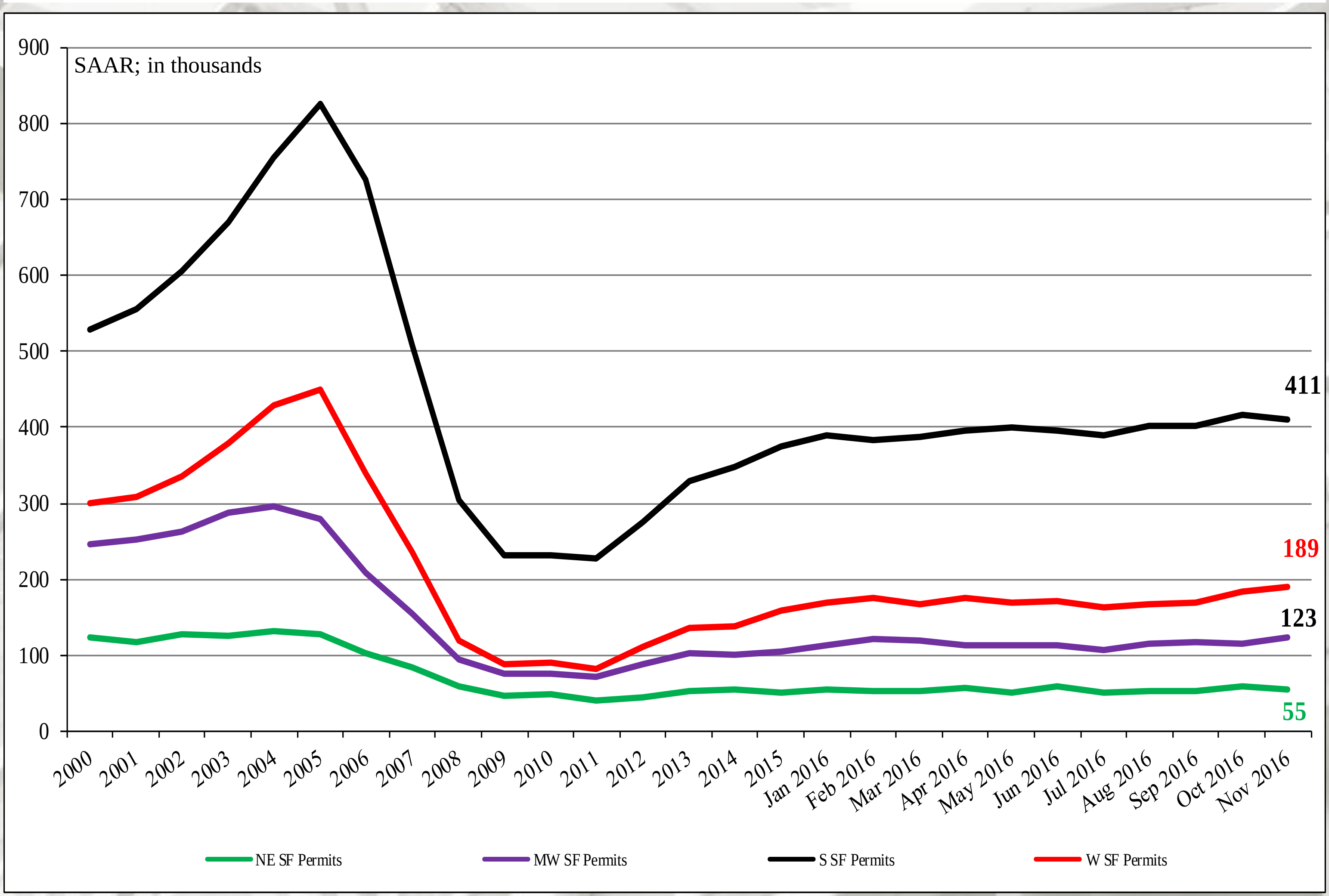
SF Housing Permits by Region



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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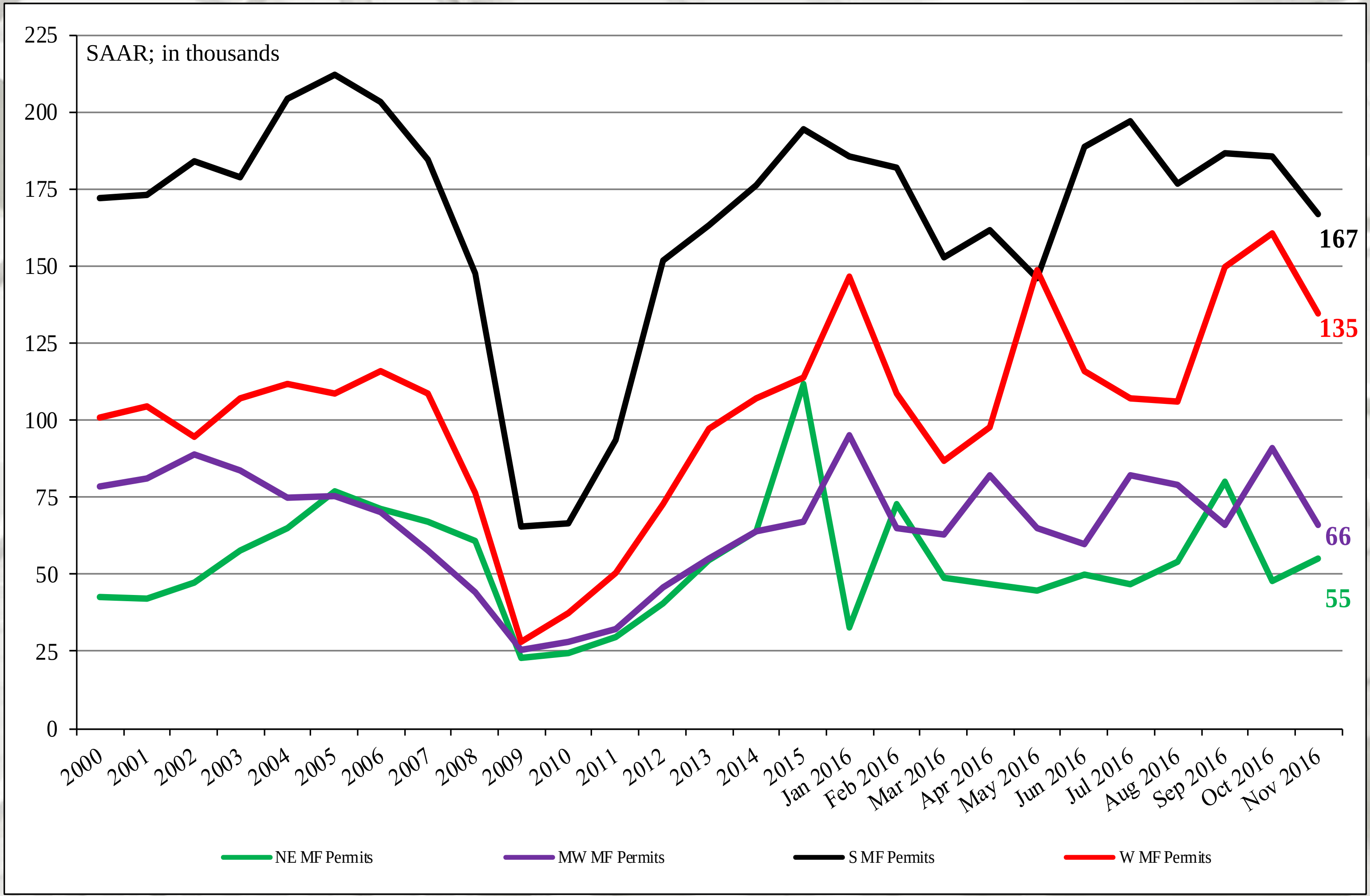
MF Housing Permits by Region



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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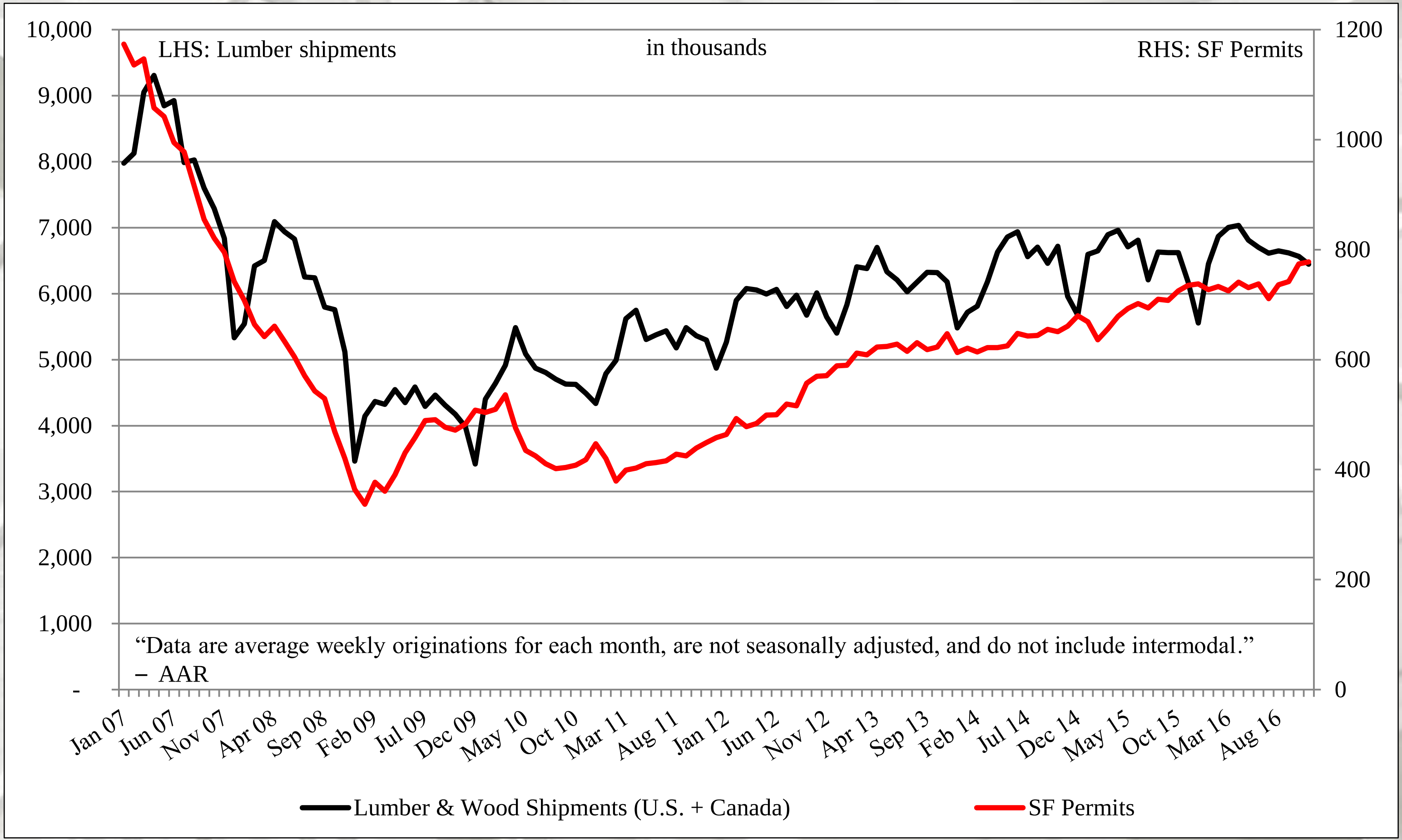
Railroad Lumber & Wood Shipments vs. U.S. SF Housing Permits



Sources: Association of American Railroads (AAR), *Rail Time Indicators* report 12/8/16; U.S. DOC-Construction; 12/16/16

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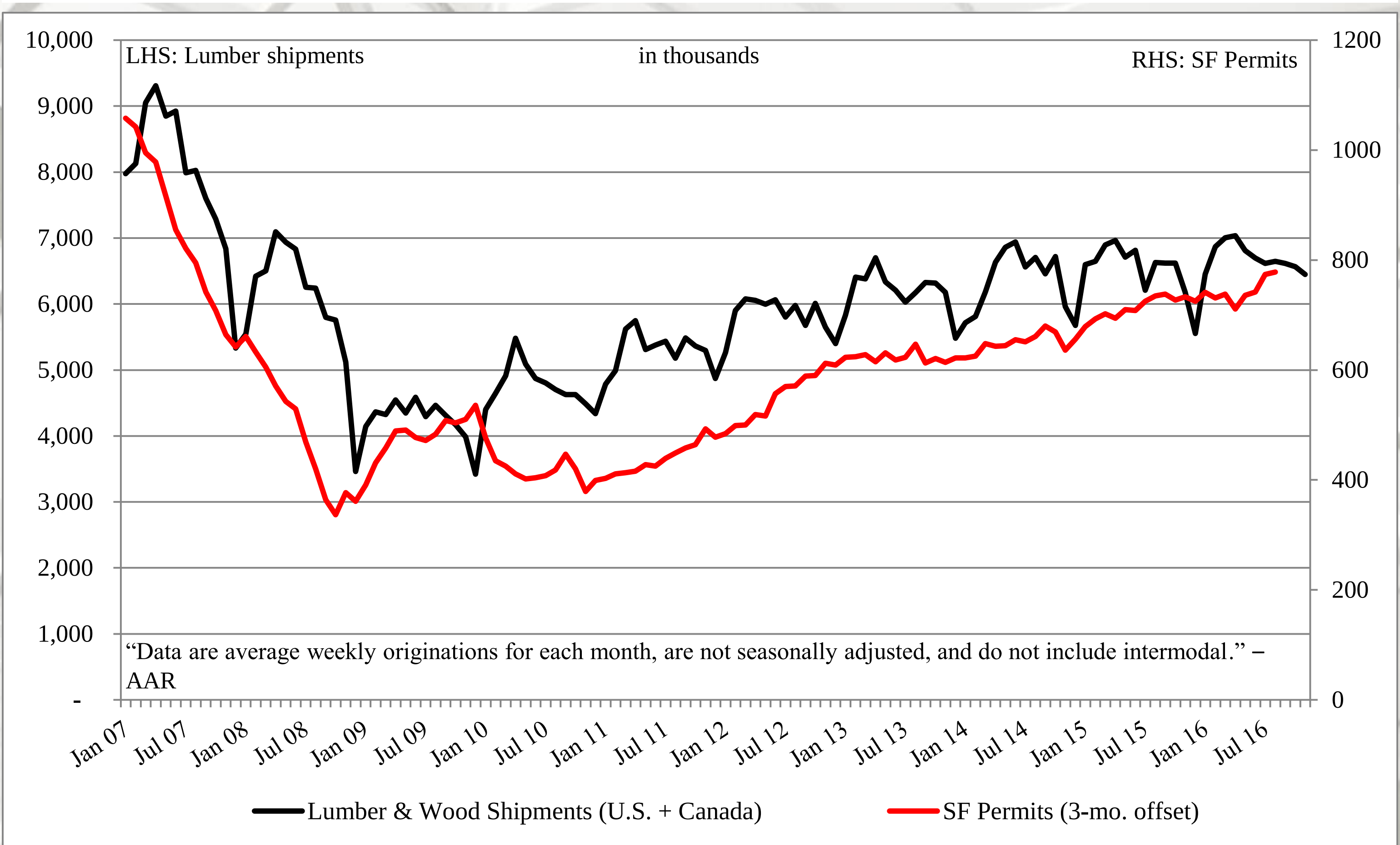
Railroad Lumber & Wood Shipments vs. U.S. SF Housing Starts: 3-month Offset



In this graph, January 2007 lumber shipments are contrasted with April 2007 SF permits, and continuing through November 2016 SF permits. 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.

Sources: Association of American Railroads (AAR), *Rail Time Indicators* report 12/8/16; U.S. DOC-Construction; 12/16/16

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New Housing Under Construction

	Total Under Construction*	SF Under Construction	MF 2-4 unit** Under Construction	MF ≥ 5 unit Under Construction
November	1,044,000	445,000	11,000	588,000
October	1,054,000	442,000	12,000	600,000
2015	964,000	415,000	11,000	538,000
M/M change	-0.9%	0.7%	-8.3%	-2.0%
Y/Y change	8.3%	7.2%	0.0%	9.3%

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)).

Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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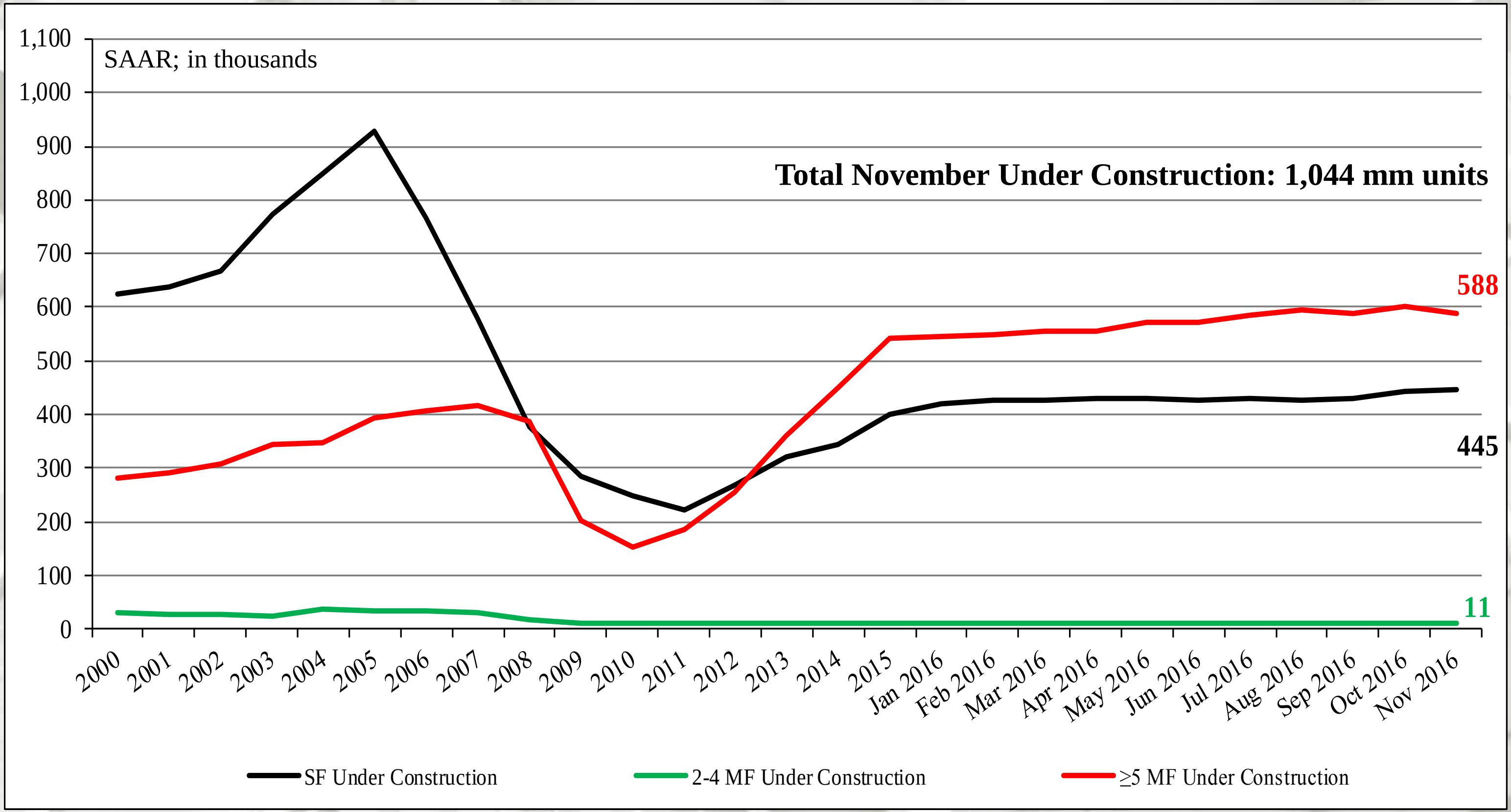
Total Housing Under Construction



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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New Housing Under Construction by Region

	NE Total	NE SF	NE MF**
November	189,000	52,000	137,000
October	194,000	51,000	143,000
2015	173,000	48,000	125,000
M/M change	-2.6%	2.0%	-4.2%
Y/Y change	9.2%	8.3%	9.6%

	MW Total	MW SF	MW MF
November	142,000	74,000	68,000
October	143,000	73,000	70,000
2015	128,000	69,000	59,000
M/M change	-0.7%	1.4%	-2.9%
Y/Y change	10.9%	7.2%	15.3%

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).

Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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New Housing Under Construction by Region

	S Total	S SF	S MF**
November	443,000	212,000	231,000
October	449,000	213,000	236,000
2015	423,000	205,000	218,000
M/M change	-1.3%	-0.5%	-2.1%
Y/Y change	4.7%	3.4%	6.0%

	W Total	W SF	W MF
November	270,000	107,000	163,000
October	268,000	105,000	163,000
2015	240,000	93,000	147,000
M/M change	0.7%	1.9%	0.0%
Y/Y change	12.5%	15.1%	10.9%

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).

Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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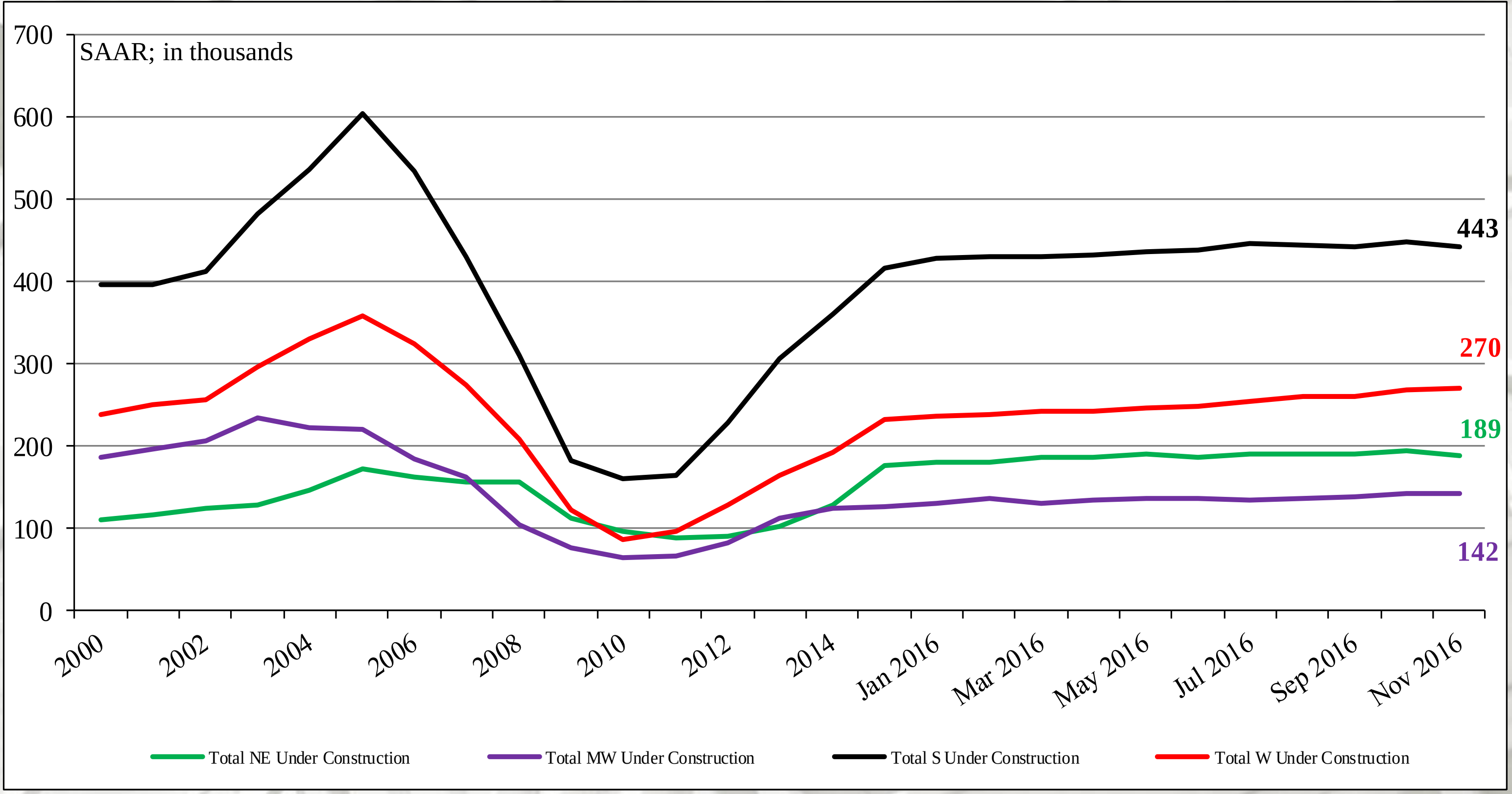
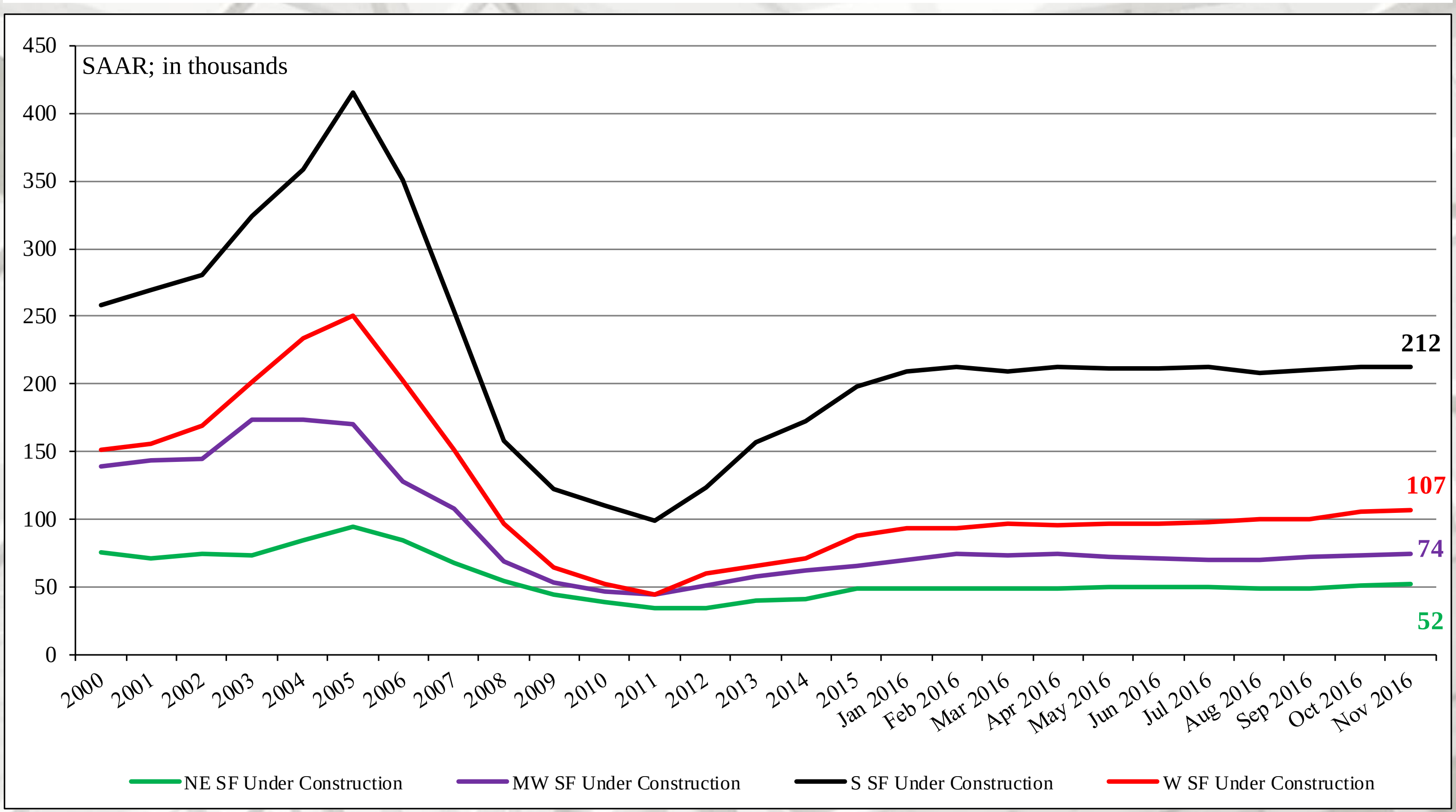
Total Housing Under Construction by Region



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

Return TOC

SF Housing Under Construction by Region



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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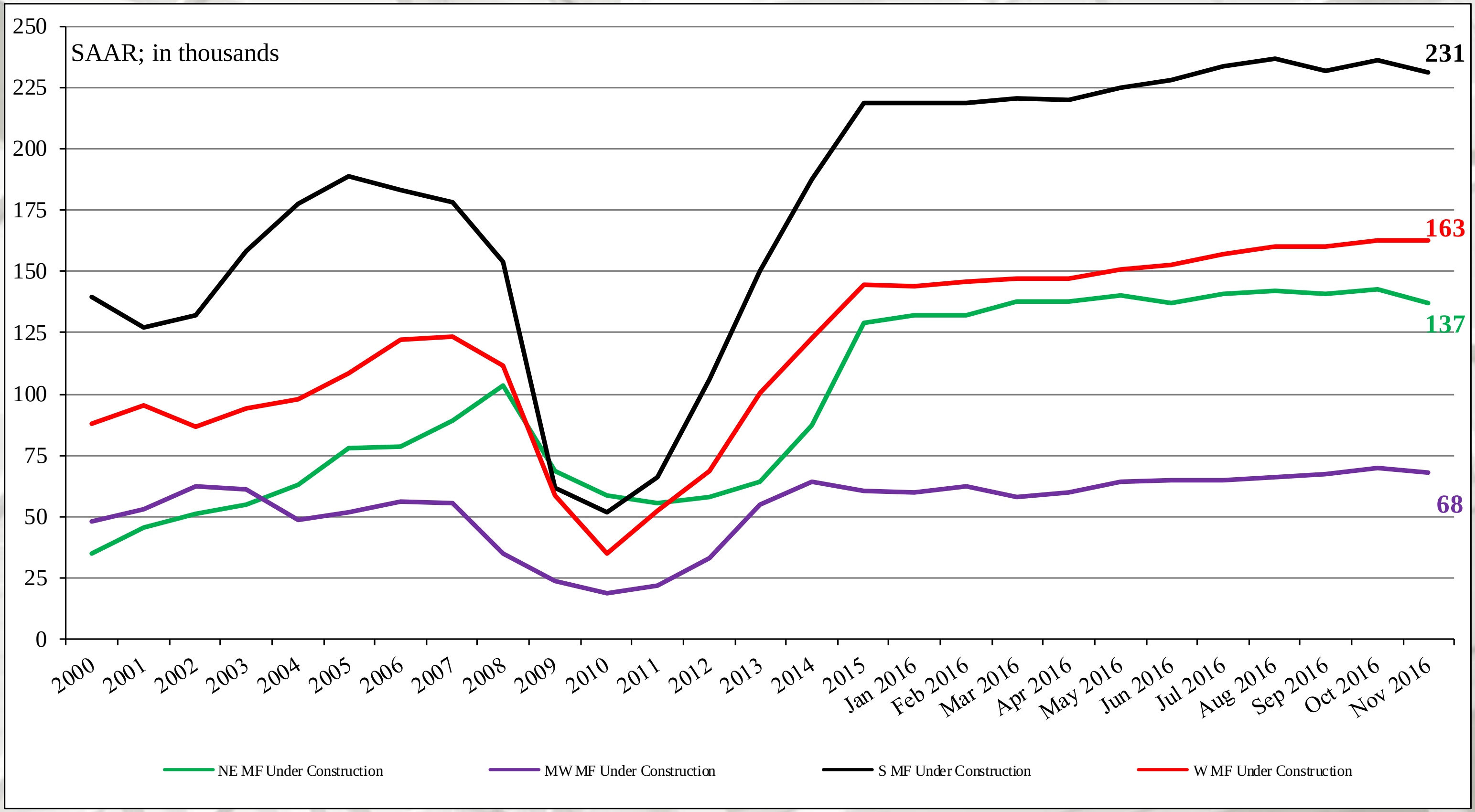
MF Housing Under Construction by Region



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

Return TOC

New Housing Completions

	Total Completions*	SF Completions	MF 2-4 unit** Completions	MF ≥ 5 unit Completions
November	1,216,000	774,000	10,000	432,000
October	1,054,000	749,000	6,000	299,000
2015	973,000	642,000	14,000	317,000
M/M change	15.4%	3.3%	66.7%	44.5%
Y/Y change	25.0%	20.6%	-28.6%	36.3%

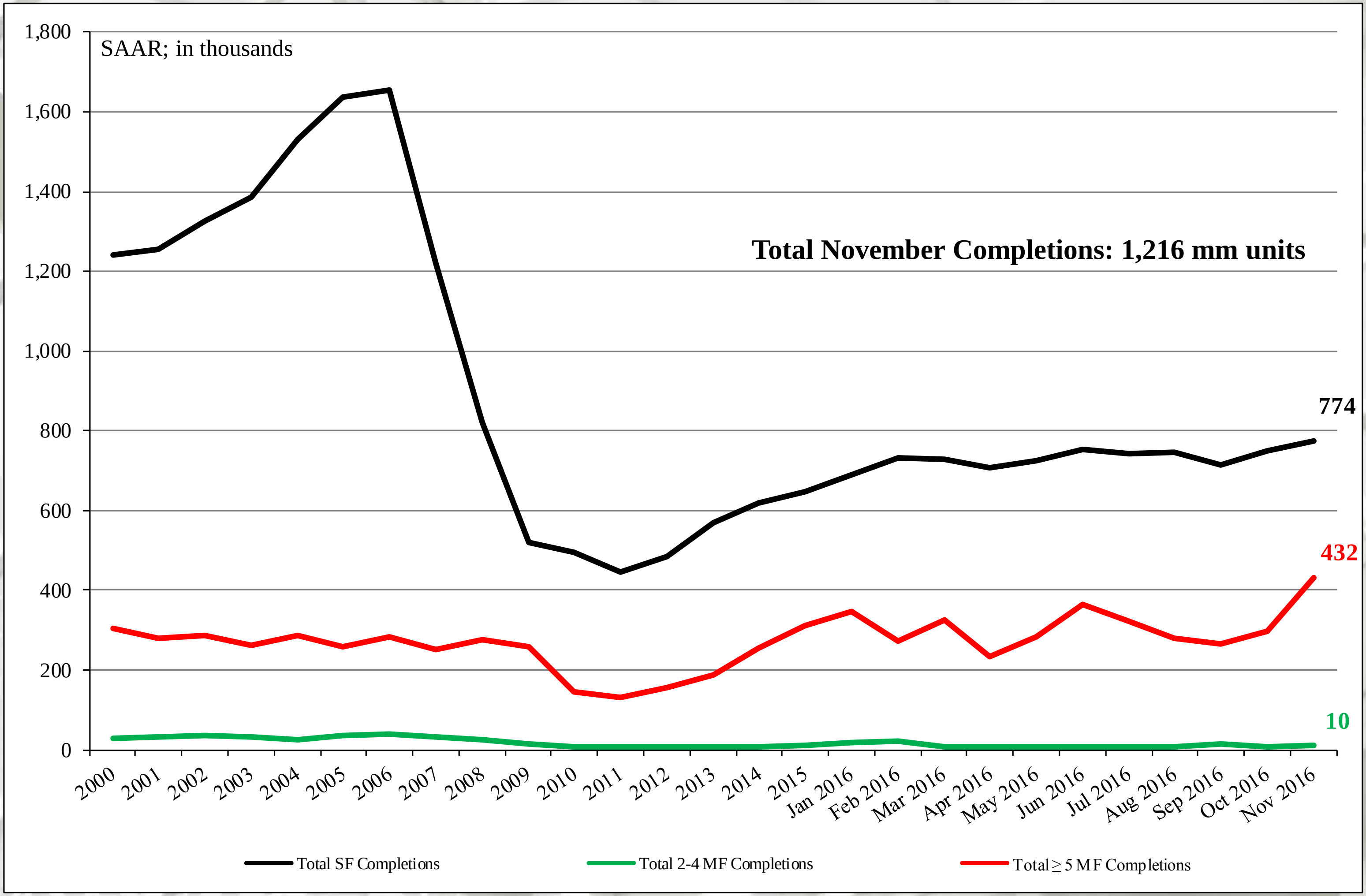
All completion data are presented at a seasonally adjusted annual rate (SAAR).

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

Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

Return TOC

Total Housing Completions



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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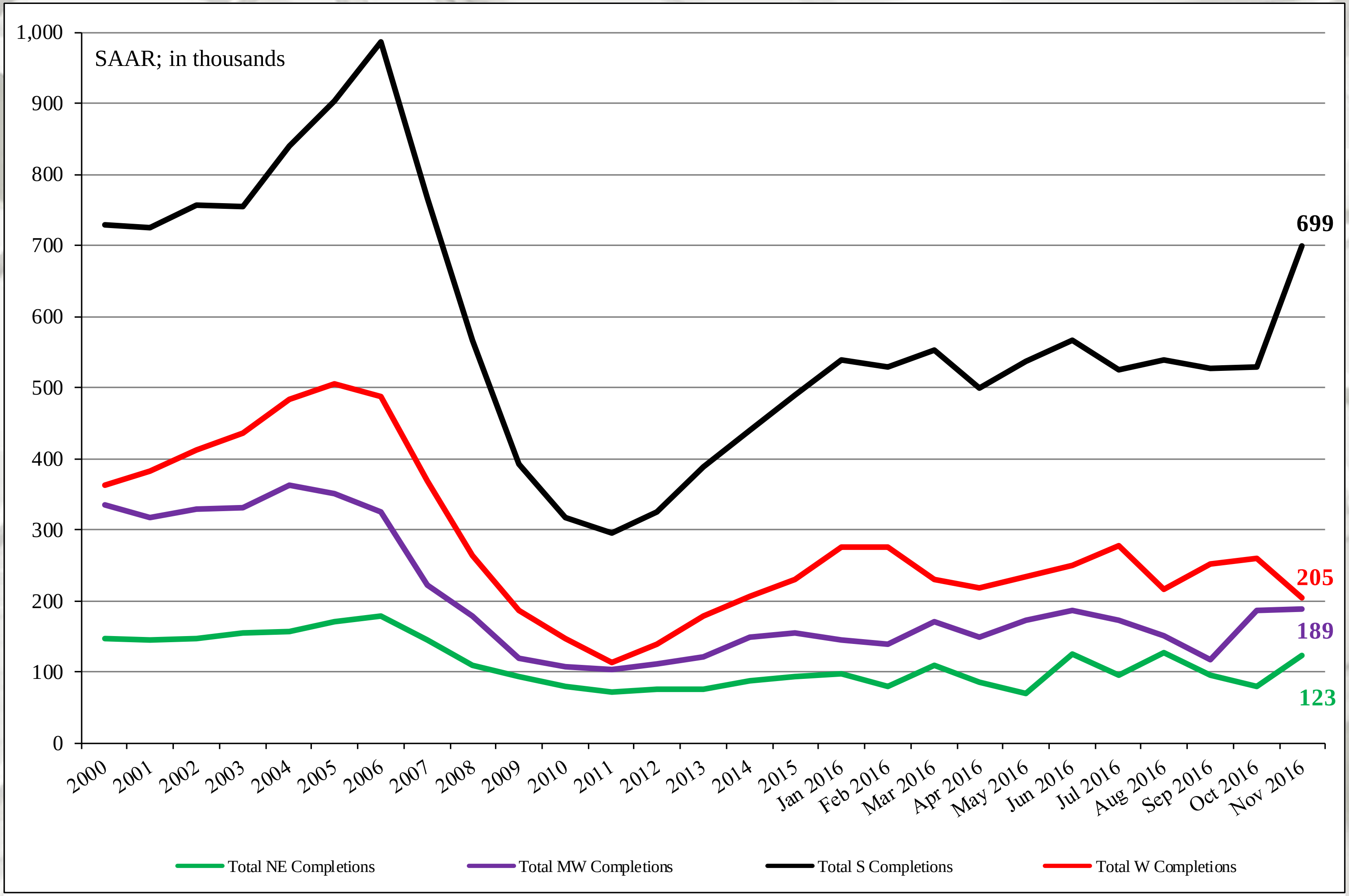
New Housing Completions by Region



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).

Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

Return TOC

Total Housing Completions by Region

	NE Total	NE SF	NE MF**
November	123,000	46,000	77,000
October	80,000	47,000	33,000
2015	106,000	54,000	52,000
M/M change	53.8%	-2.1%	133.3%
Y/Y change	16.0%	-14.8%	48.1%

	MW Total	MW SF	MW MF
November	189,000	128,000	61,000
October	186,000	118,000	68,000
2015	113,000	84,000	29,000
M/M change	1.6%	8.5%	-10.3%
Y/Y change	67.3%	52.4%	110.3%

Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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New Housing Completions by Region

	S Total	S SF	S MF**
November	699,000	440,000	259,000
October	529,000	422,000	107,000
2015	497,000	364,000	133,000
M/M change	32.1%	4.3%	142.1%
Y/Y change	40.6%	20.9%	94.7%

	W Total	W SF	W MF
November	205,000	160,000	45,000
October	259,000	162,000	97,000
2015	257,000	140,000	117,000
M/M change	-20.8%	-1.2%	-53.6%
Y/Y change	-20.2%	14.3%	-61.5%

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).

Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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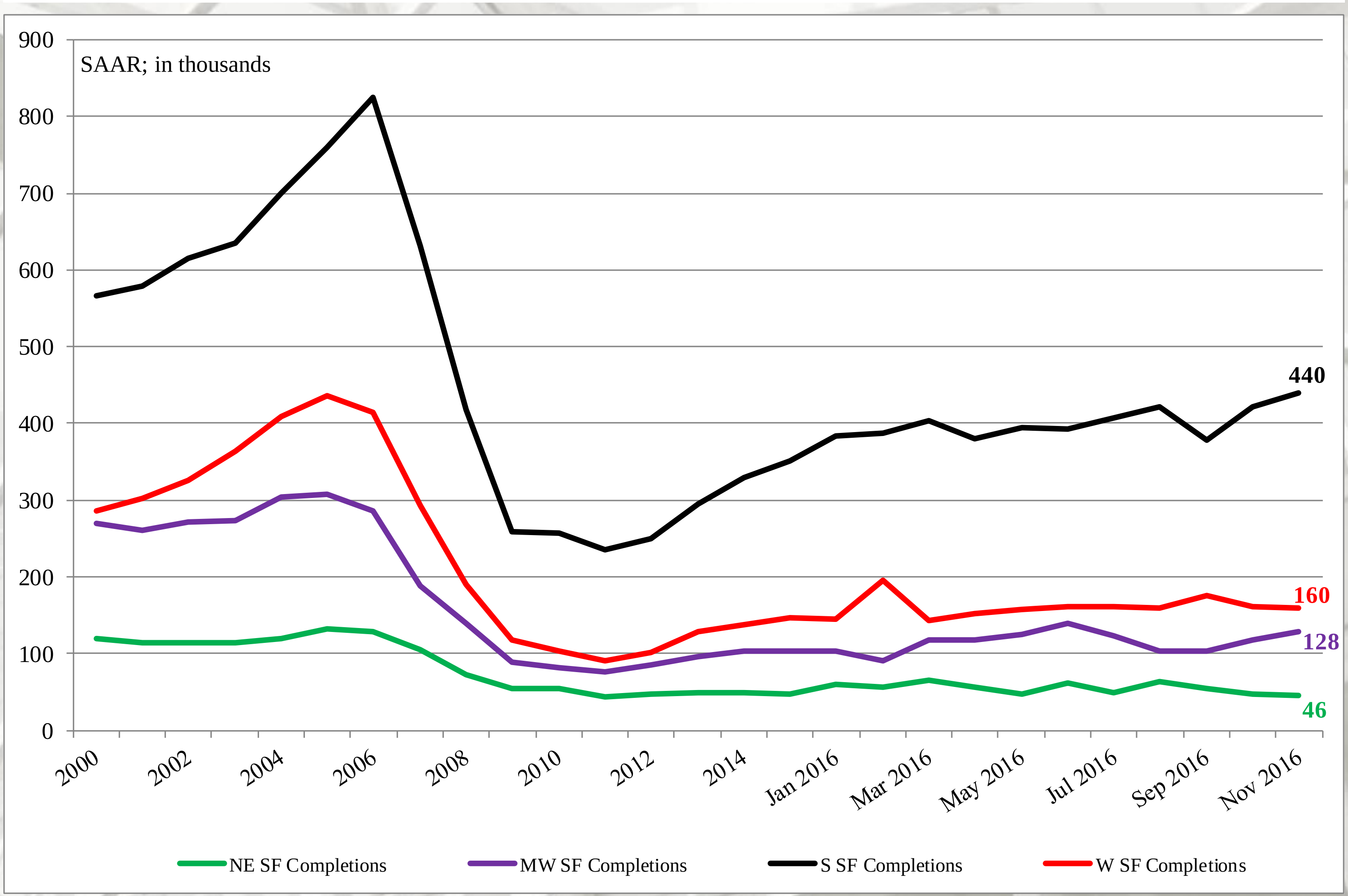
SF Housing Completions by Region



Source: http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 12/16/16

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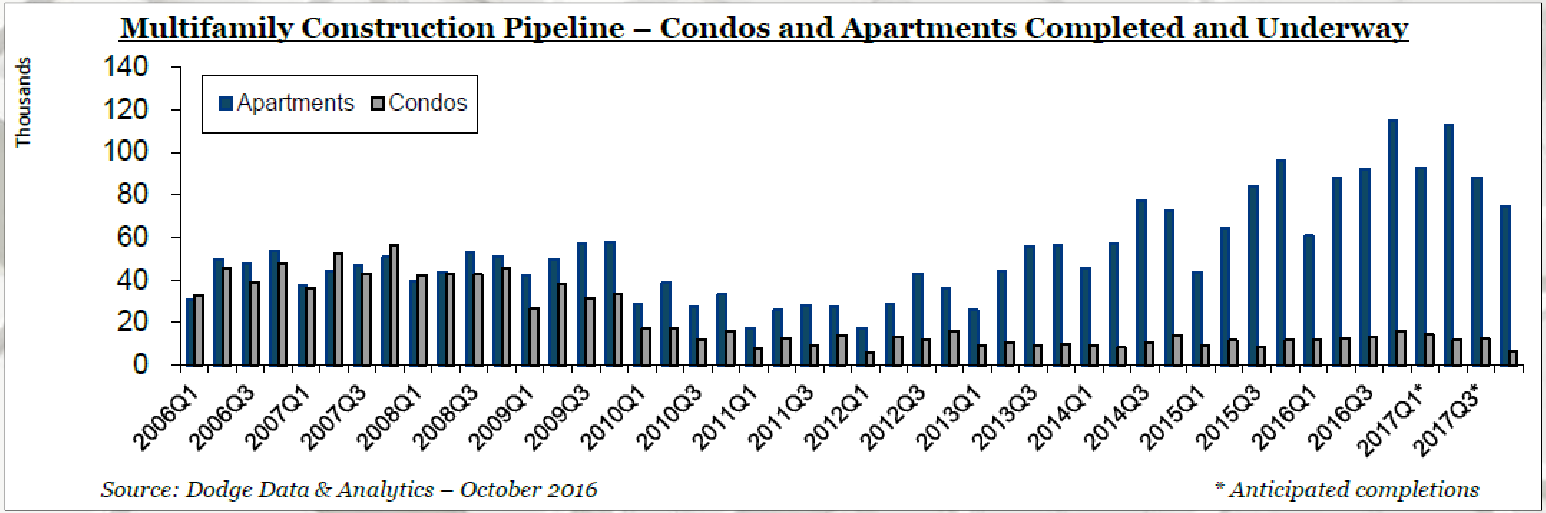
MF Housing



Multifamily Market Commentary – December 2016

Concessions Remain Low Despite Surge of New Supply – For Now

"The nation's multifamily markets are continuing to see an exceptional surge in the supply of new apartments. In 2016, the industry expects to complete more than 350,000 new apartment units, according to Dodge Data & Analytics. It added nearly 290,000 units in 2015.

Over the past two years, we have seen remarkably resilient apartment market fundamentals – with solid rent growth, strong net absorptions, and low vacancy rates. Ordinarily, the significant volume of new supply would suggest that property owners might be under pressure to lower rents – or risk having empty units. But ongoing demand from new rental household formations has kept that from happening in 2016 – at least on a nationwide basis." – Tim Komosa, Economist Manager, and Kim Betancourt, Director of Economics, Multifamily Economics and Market Research, Fannie Mae

Source: http://www.fanniemae.com/resources/file/research/emma/pdf/MF_Market_Commentary_122016.pdf; 12/120/16

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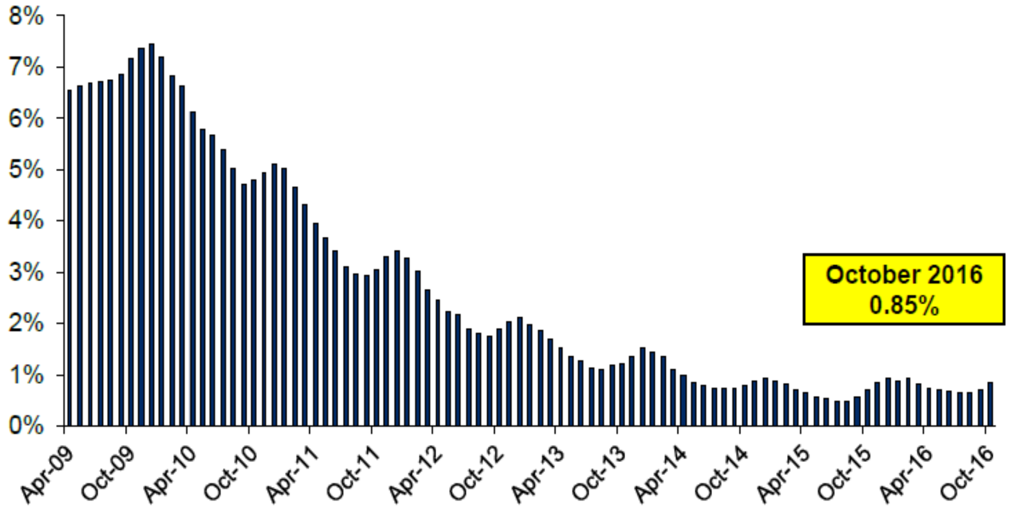
MF Housing

National Multifamily Concession Rate



Source: Axiometrics

Concession Magnitude	Weeks
8.33%	4 weeks
6.23%	3 weeks
4.17%	2 weeks
2.08%	1 week
1.04%	½ week
0.9%	3 days
0.6%	2 days
0.3%	1 day

Multifamily Market Commentary – December 2016

Concessions Remain Low Despite Surge of New Supply – For Now

"Offering concessions is one way property owners can attract tenants in a competitive market. Concessions are enticements with economic value for renters – such as periods of free rent, utilities, or other amenities. Data from Dallas-based commercial real estate researcher Axiometrics tracking the value of these concessions suggest that, by and large, property owners have not had to use them. As seen in the chart below, concessions remain historically low. Their value has remained below 1 percent of annual asking rents for over two years. That's down from more than 7 percent in 2009 – the equivalent of three to four weeks of annual rent." – Tim Komosa, Economist Manager, and Kim Betancourt, Director of Economics, Multifamily Economics and Market Research, Fannie Mae

Source: http://www.fanniemae.com/resources/file/research/emma/pdf/MF_Market_Commentary_122016.pdf; 12/120/16

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MF Housing

Multifamily Market Commentary – December 2016

Concessions Remain Low Despite Surge of New Supply – For Now

“The recent surge of new apartments has generally occurred among higher-quality buildings, which offer more amenities and higher-end finishes and appliances. Under increased competition among these Class A properties, owners ordinarily might have to offer higher concession rates to fill units. However, with demand for apartments remaining robust, the owners of most Class A properties appear to have navigated the supply surge without having to significantly increase their concessions.

As with the overall market, concessions for Class A properties have declined over the past three years – with minor upticks in the interim. Concessions fell from approximately 1.1 percent in December 2013 to 0.7 percent in October 2016. This is remarkable, considering that the 600,000 or so apartment units added to the nation’s housing stock during this period consisted primarily of Class A properties.

Over the past several years, concessions for Class B and C properties have shown similar improvement, which is also noteworthy considering the impact of new supply. Since December 2013, Class C concessions have fallen to about 1.0 percent from 2.5 percent. Theoretically, the surge in new supply should have forced owners of Class B and C properties to offer increased concessions to retain their tenants. The overall strength of fundamental demand for all classes of apartments appears to have prevented that from happening.” – Tim Komosa, Economist Manager, and Kim Betancourt, Director of Economics, Multifamily Economics and Market Research, Fannie Mae

Source: http://www.fanniemae.com/resources/file/research/emma/pdf/MF_Market_Commentary_122016.pdf; 12/120/16

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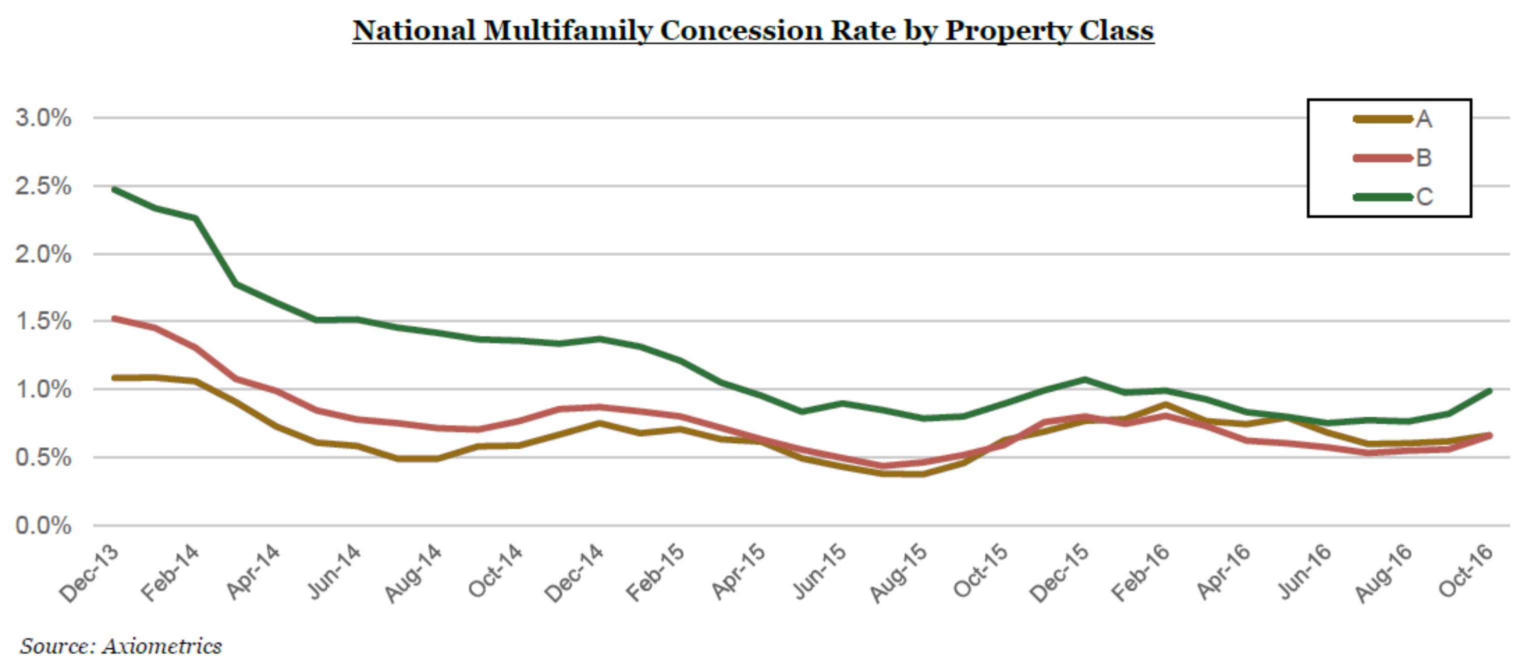
MF Housing



Multifamily Market Commentary – December 2016

Concessions Remain Low Across the Country

"We expect more than 350,000 new apartment unit completions in 2016. But these units are not evenly distributed on a national basis. In fact, the majority of the new apartment supply is concentrated in approximately 10 metropolitan areas – and primarily in an even smaller set of submarkets within those metros. The most active metros in the country for apartment development continue to be New York, Dallas, Washington, and Los Angeles. New York has more than 70,000 units underway, while the other three exceed 20,000 each. Boston, Houston, and Denver follow with slightly fewer units. Seattle, Chicago, and Atlanta round out the top 10." – Tim Komosa, Economist Manager, and Kim Betancourt, Director of Economics, Multifamily Economics and Market Research, Fannie Mae

Source: http://www.fanniemae.com/resources/file/research/emma/pdf/MF_Market_Commentary_122016.pdf; 12/120/16

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New Single-Family House Sales

	New SF Sales*	Median Price	Mean Price	Month's Supply
November	592,000	$305,400	$359,900	5.1
October	563,000	$302,700	$354,700	5.2
2015	508,000	$317,000	$376,800	5.4
M/M change	5.2%	0.9%	1.5%	-1.9%
Y/Y change	16.5%	-3.7%	-4.5%	-5.6%

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

Source: http://www.census.gov/construction/nrs/xls/newressales.xls; 12/16/16

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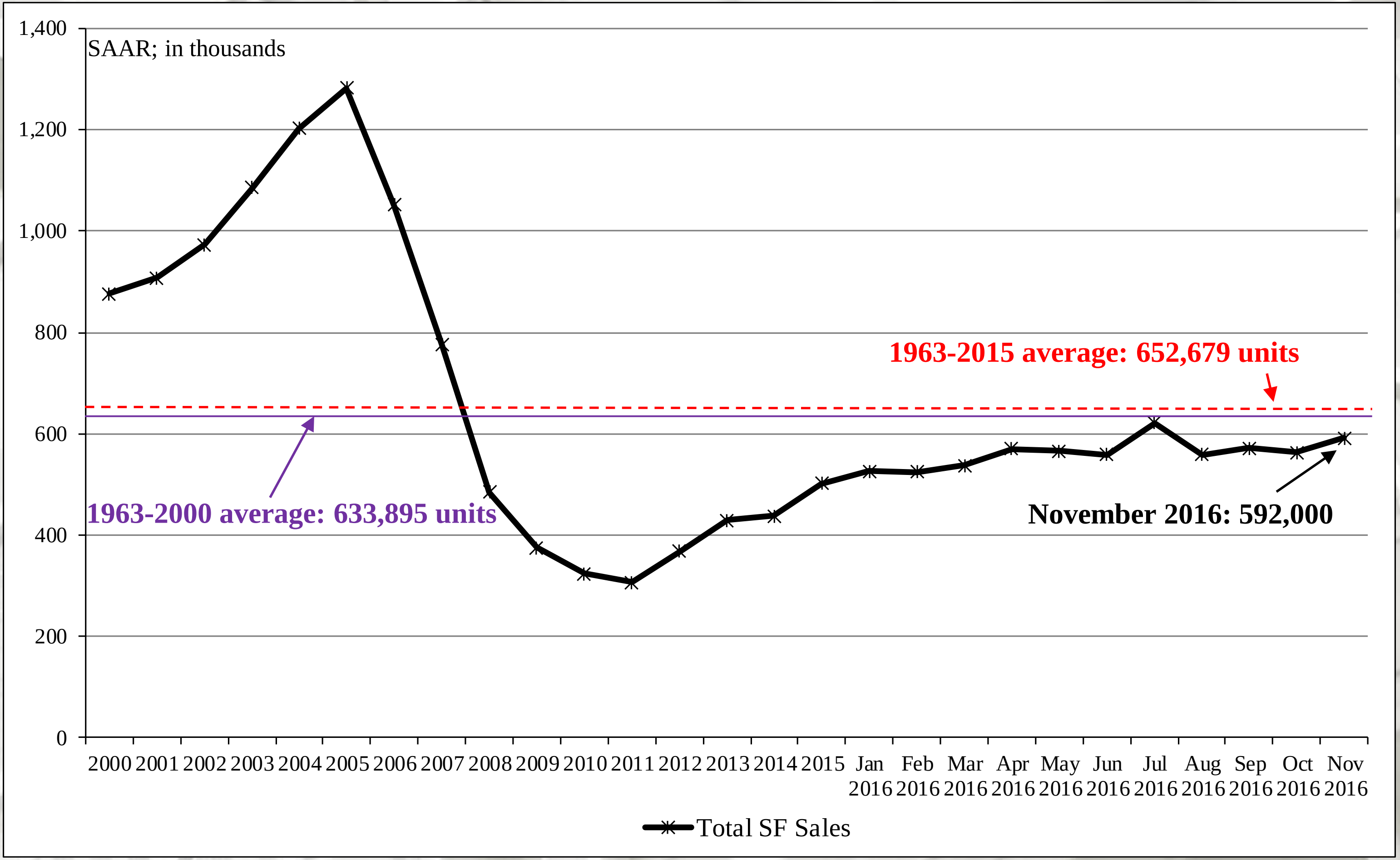
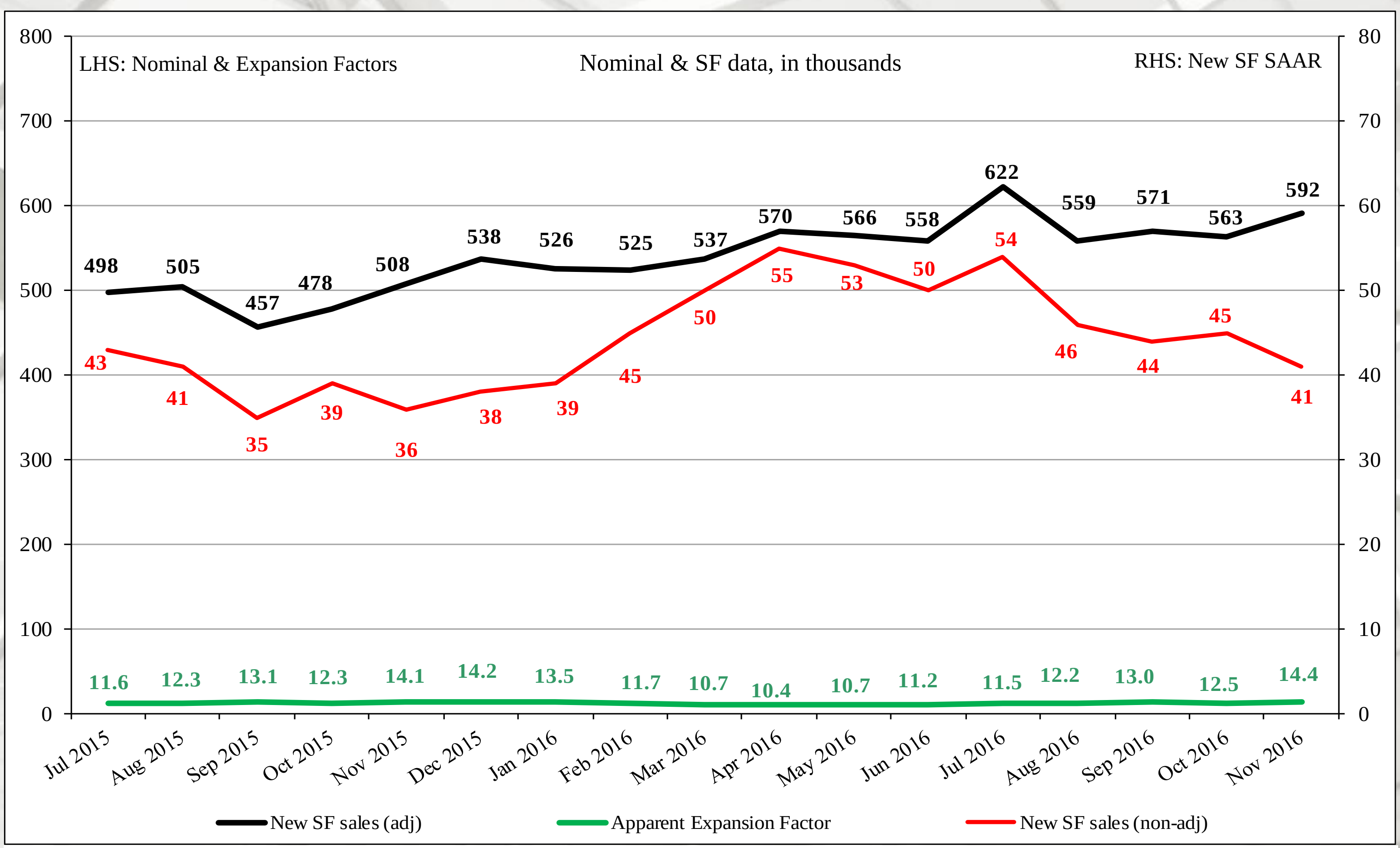
New SF House Sales



Source: http://www.census.gov/construction/nrs/xls/newressales.xls; 12/16/16

New SF House Sales



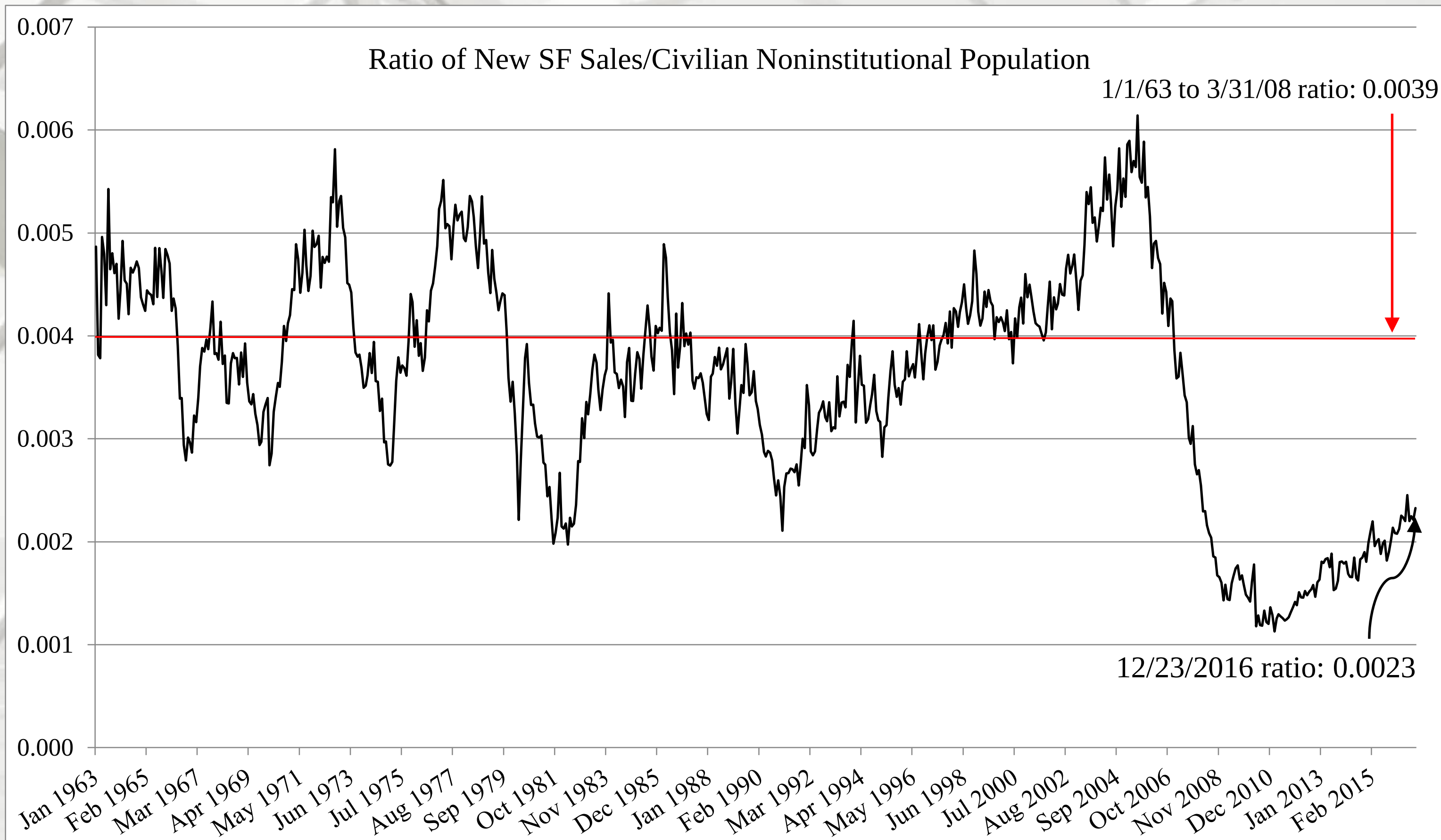
Nominal and Adjusted New SF Monthly Sales

Presented above is nominal (non-adjusted) new SF sales data contrasted against SAAR data.

The apparent expansion factor "…is the ratio of the unadjusted number of houses sold in the US to the seasonally adjusted number of houses sold in the US (i.e., to the sum of the seasonally adjusted values for the four regions)." – U.S. DOC-Construction

Source: http://www.census.gov/construction/nrs/xls/newressales.xls; 12/16/16

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 November 2016 it was 0.0023 – a minimal increase from October. From a population viewpoint, construction is less than what is necessary for changes in population (i.e., under-building).

Sources: http://www.census.gov/construction/nrs/xls/newressales.xls and The Federal Reserve Bank of St. Louis; 12/16/16

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New SF House Sales by Region and Price Category

	NE SF Sales	MW SF Sales	S SF Sales	W SF Sales
November	33,000	64,000	323,000	143,000
October	32,000	72,000	330,000	137,000
2015	32,000	58,000	273,000	115,000
M/M change	0.0%	43.8%	-3.1%	7.7%
Y/Y change	22.2%	39.4%	13.4%	10.8%

	≤ $150m	$150 - $199.9m	$200 - 299.9m	$300 - $399.9m	$400 - $499.9m	$500 - $749.9m	≥ $750m
November[1,2]	1,000	5,000	14,000	10,000	5,000	5,000	1,000
October	2,000	8,000	13,000	11,000	6,000	4,000	2,000
2015	1,000	3,000	12,000	8,000	6,000	3,000	2,000
M/M change	-50.0%	-37.5%	7.7%	-9.1%	-16.7%	25.0%	-50.0%
Y/Y change	0.0%	66.7%	16.7%	25.0%	-16.7%	66.7%	-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 June not add to total because of rounding.

Source: http://www.census.gov/construction/nrs/xls/newressales.xls; 12/16/16

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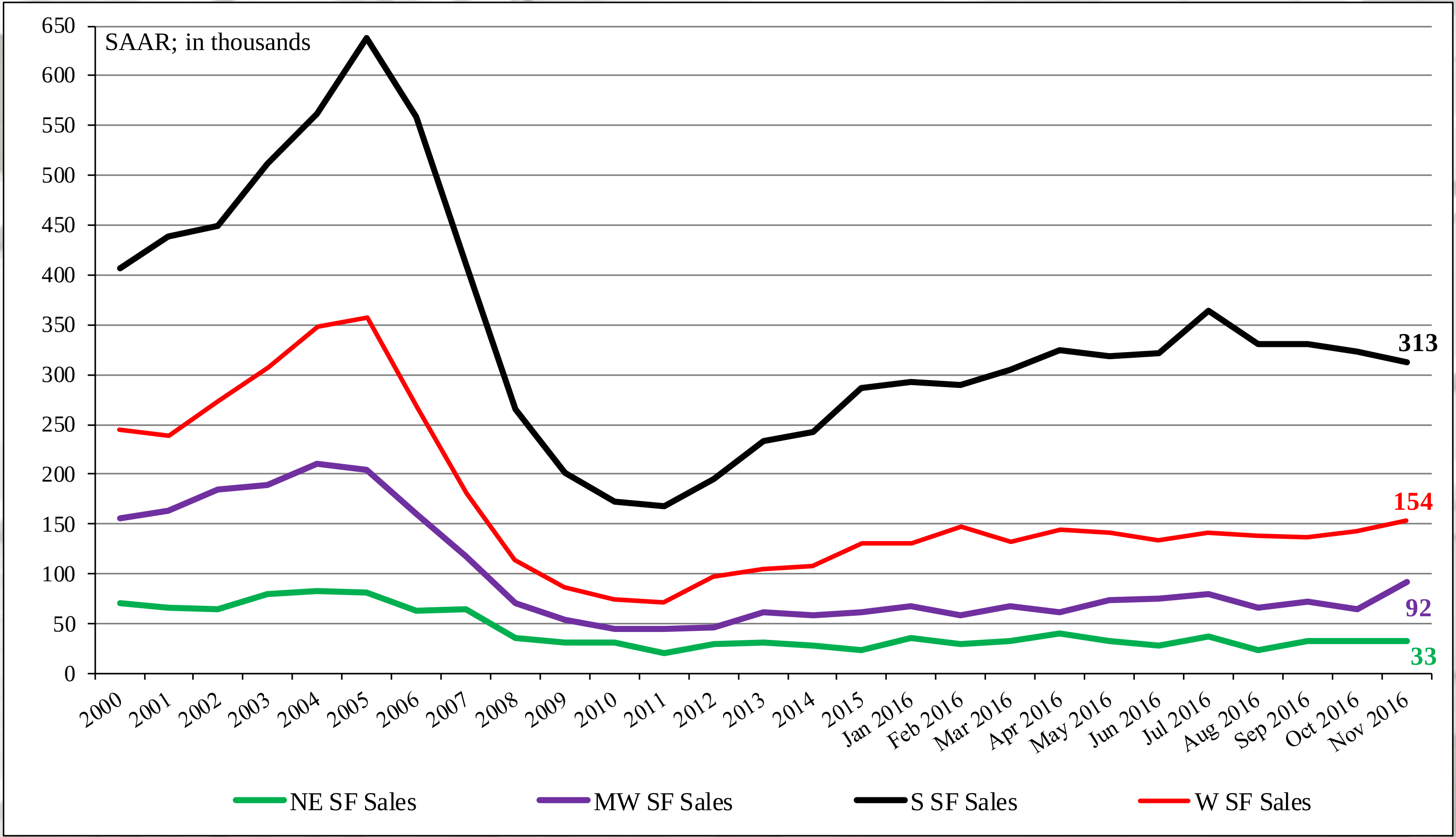
New SF House Sales by Region



Source: http://www.census.gov/construction/nrs/xls/newressales.xls; 12/16/16

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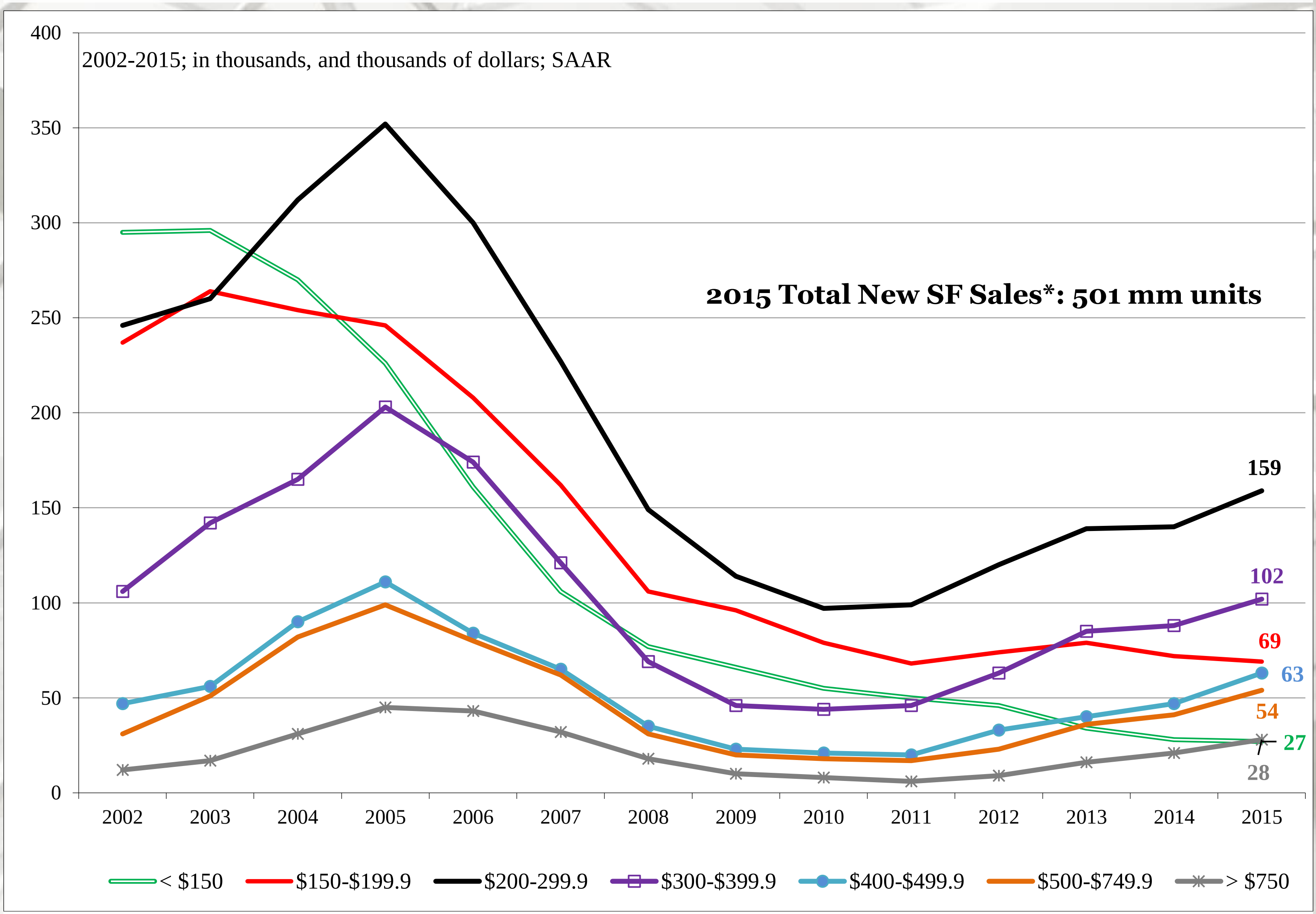
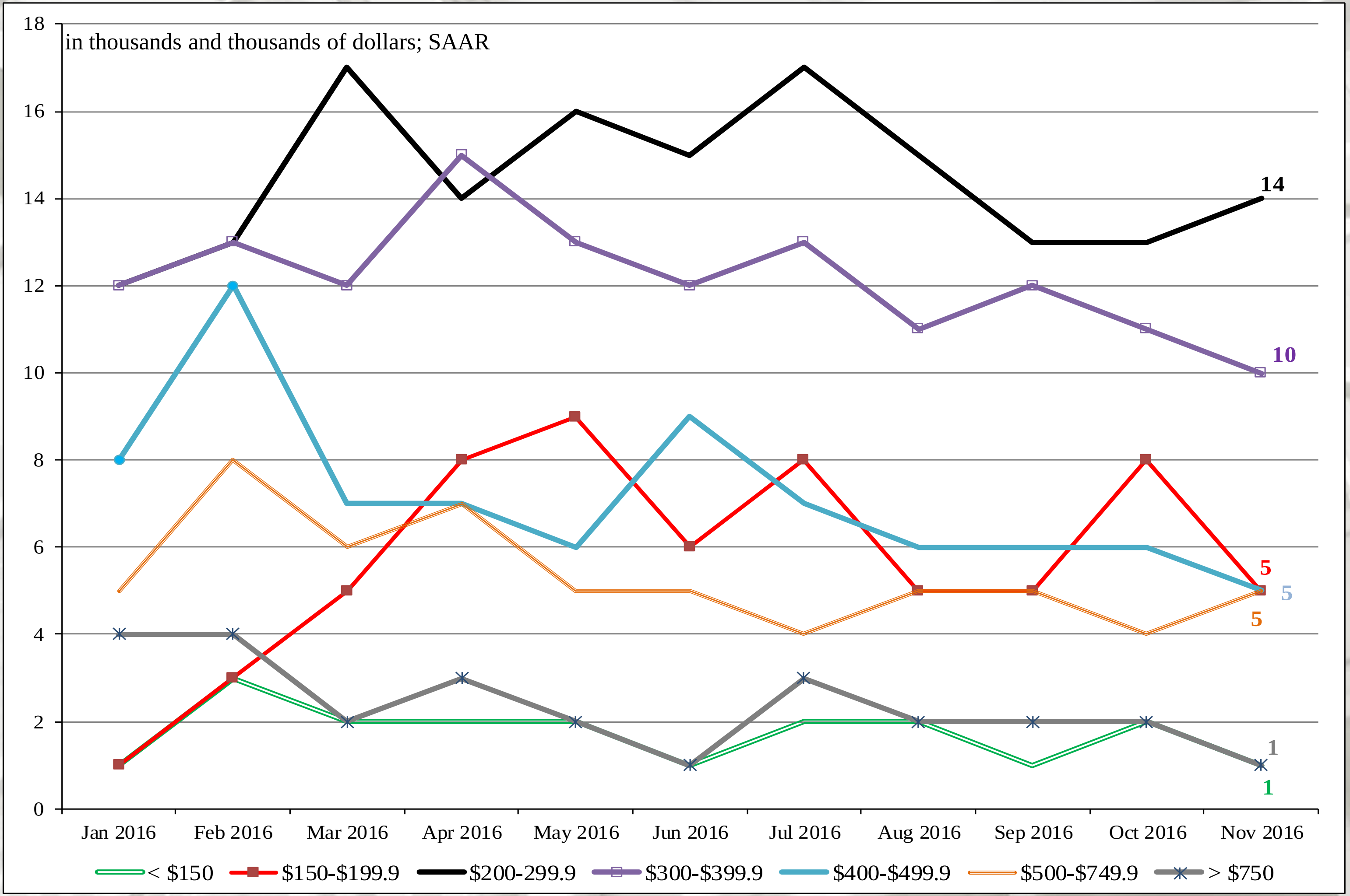
New SF House Sales by Price Category



* Sales tallied by price category.

Source: http://www.census.gov/construction/nrs/xls/newressales.xls; 8/23/16

New SF House Sales by Price Category



Source: http://www.census.gov/construction/nrs/xls/newressales.xls; 12/16/16

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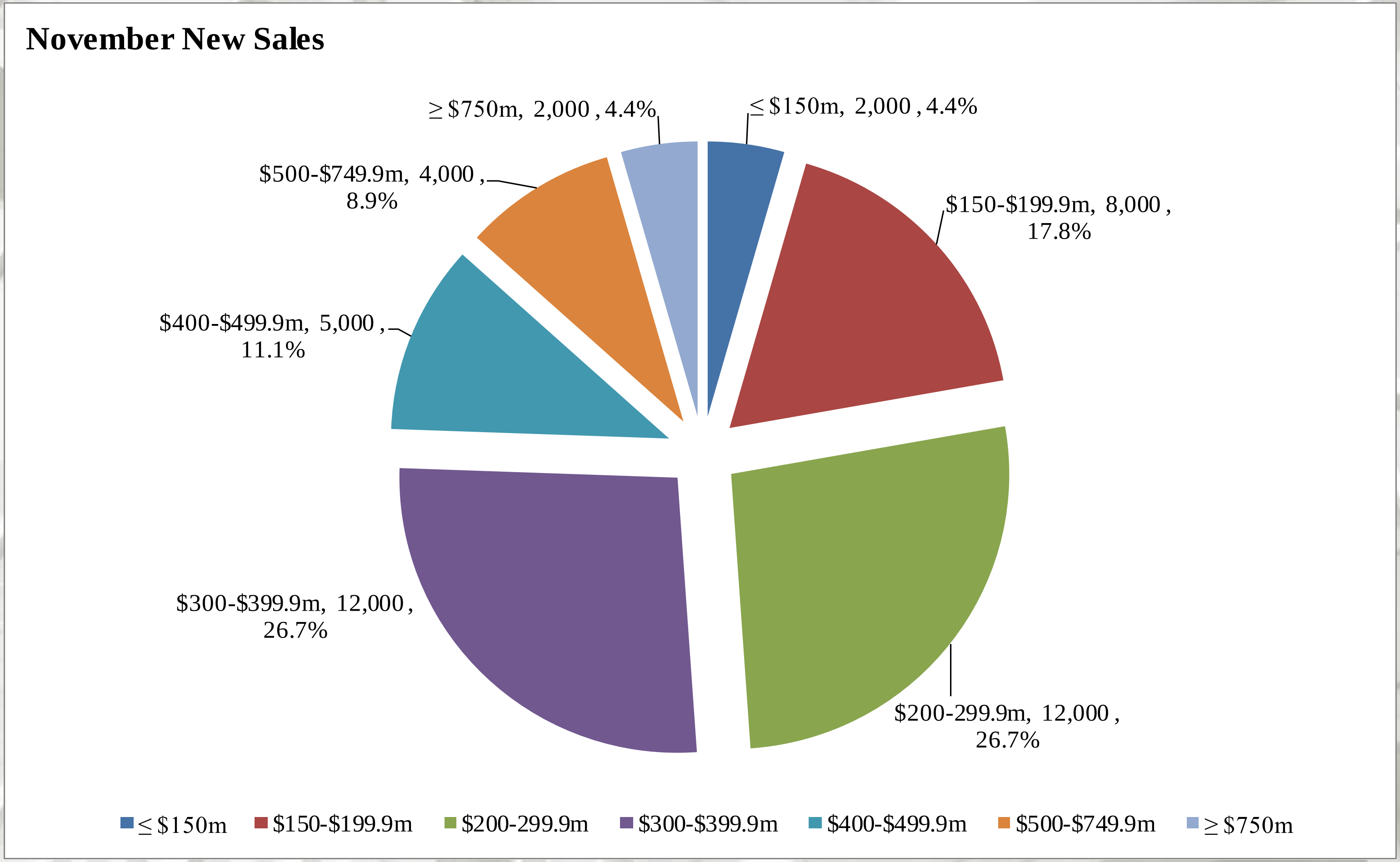
New SF House Sales



Source: http://www.census.gov/construction/nrs/xls/newressales.xls; 12/16/16

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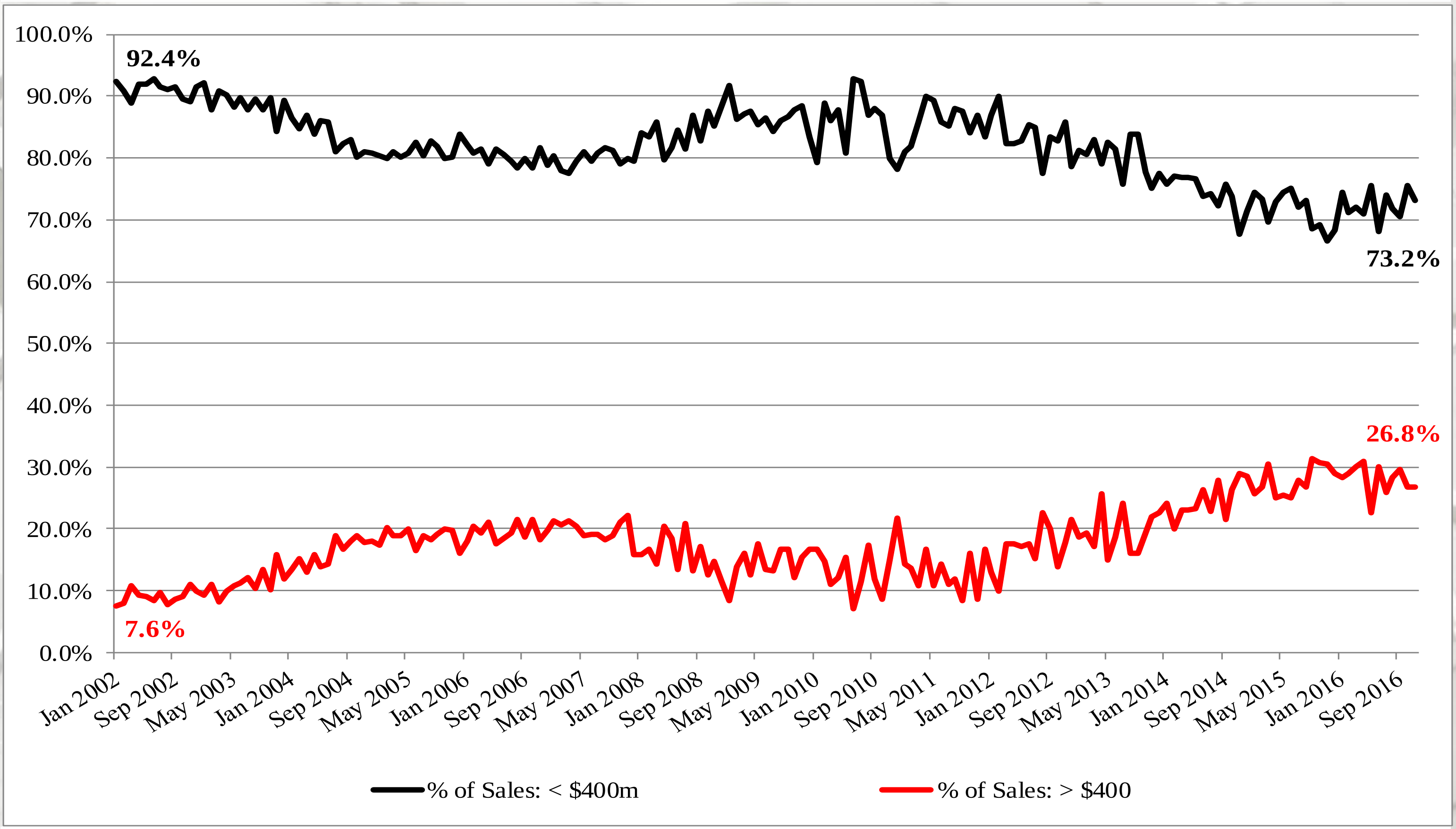
New SF House Sales



New SF Sales: 2002 – November 2016

The sales share of $400 thousand plus SF houses is presented above. Since the beginning of 2012, 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.

Source: http://www.census.gov/construction/nrs/xls/newressales.xls; 12/16/16

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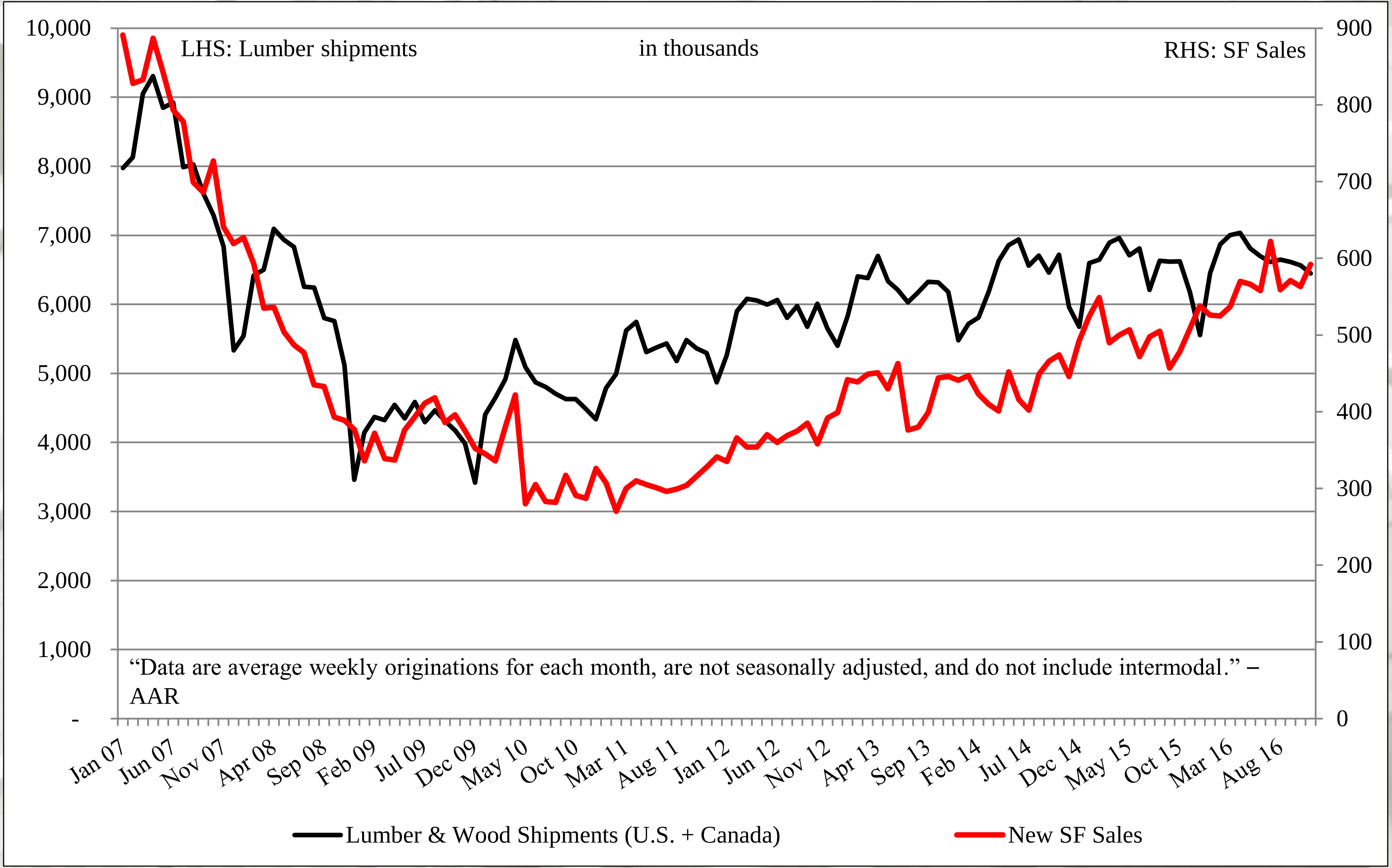
Railroad Lumber & Wood Shipments vs. U.S. New SF House Sales



Sources: Association of American Railroads (AAR), *Rail Time Indicators* report 10/8/16; U.S. DOC-Construction; 12/16/16

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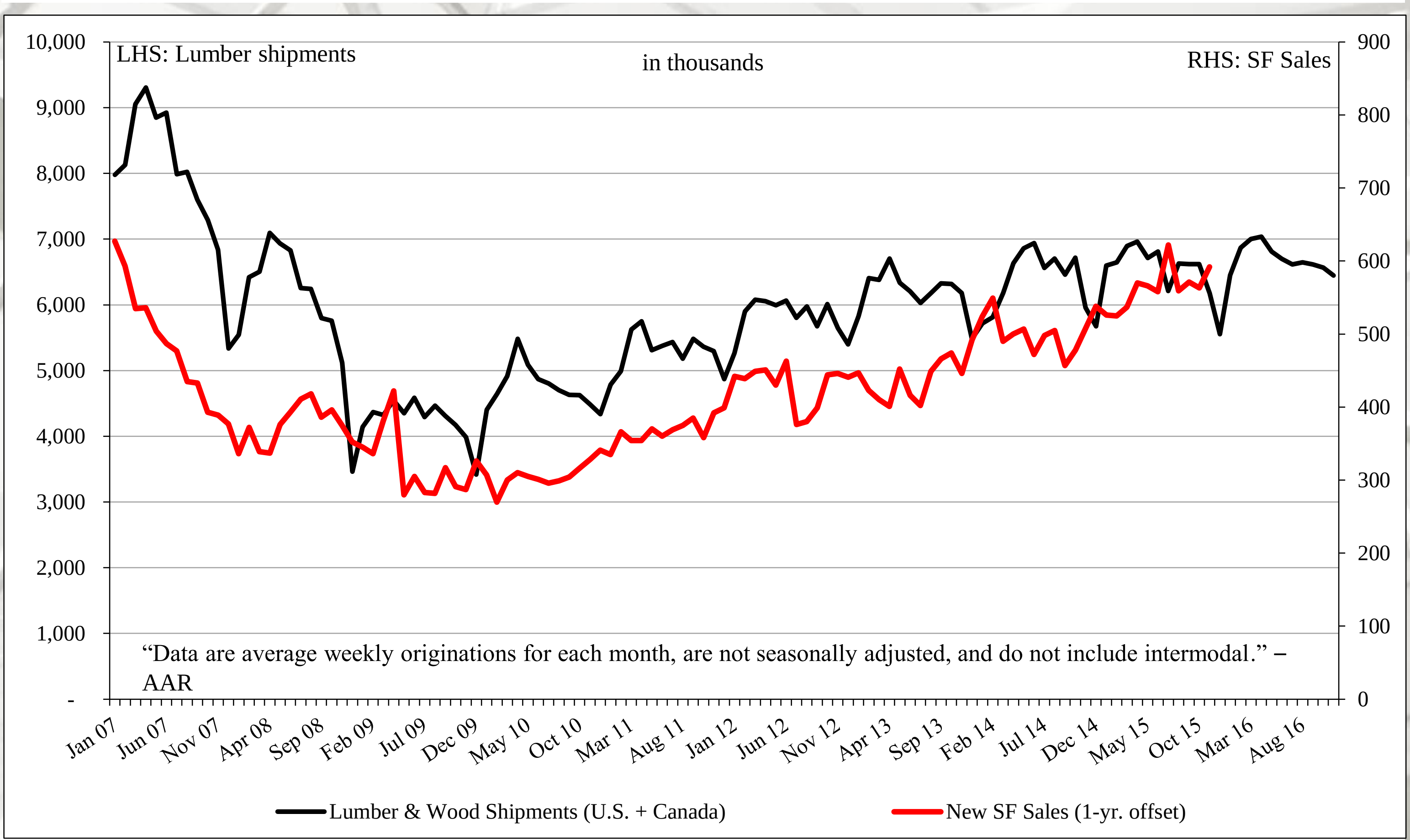
Railroad Lumber & Wood Shipments vs. U.S. New SF House Sales: 1-year offset



In this graph, initially January 2007 lumber shipments are contrasted with January 2008 new SF sales through November 2016 new SF 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.

Sources: Association of American Railroads (AAR), *Rail Time Indicators* report 10/8/16; U.S. DOC-Construction; 12/16/16

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November 2016 Construction Spending

2016 November Total Private Residential Construction: $462.9 billion (SAAR)

1.0% more than the revised October estimate of $458.2 billion (SAAR)
3.0% greater than the November 2015 estimate of $449.5 billion (SAAR)

November SF construction: $247.6 billion (SAAR)
1.8% more than October: $243.3 billion (SAAR)
-0.9% less than November 2015: $249.8 billion (SAAR)

November MF construction: $61.8 billion (SAAR)
-2.7% less than October: $63.6 billion (SAAR)
10.7% greater than November 2015: $55.9 billion (SAAR)

November Improvement[C] construction: $153.4 billion (SAAR)
1.5% greater than October: $151.3 billion (SAAR)
6.8% more than November 2015: $143.7 billion (SAAR)

[C] The US DOC does not report improvement spending directly, this is a monthly estimation for 2016:
((Total Private Spending – (SF spending + MF spending)).
All data are SAARs and reported in nominal US$.

Source: http://www.census.gov/construction/c30/pdf/privsa.pdf; 1/3/17

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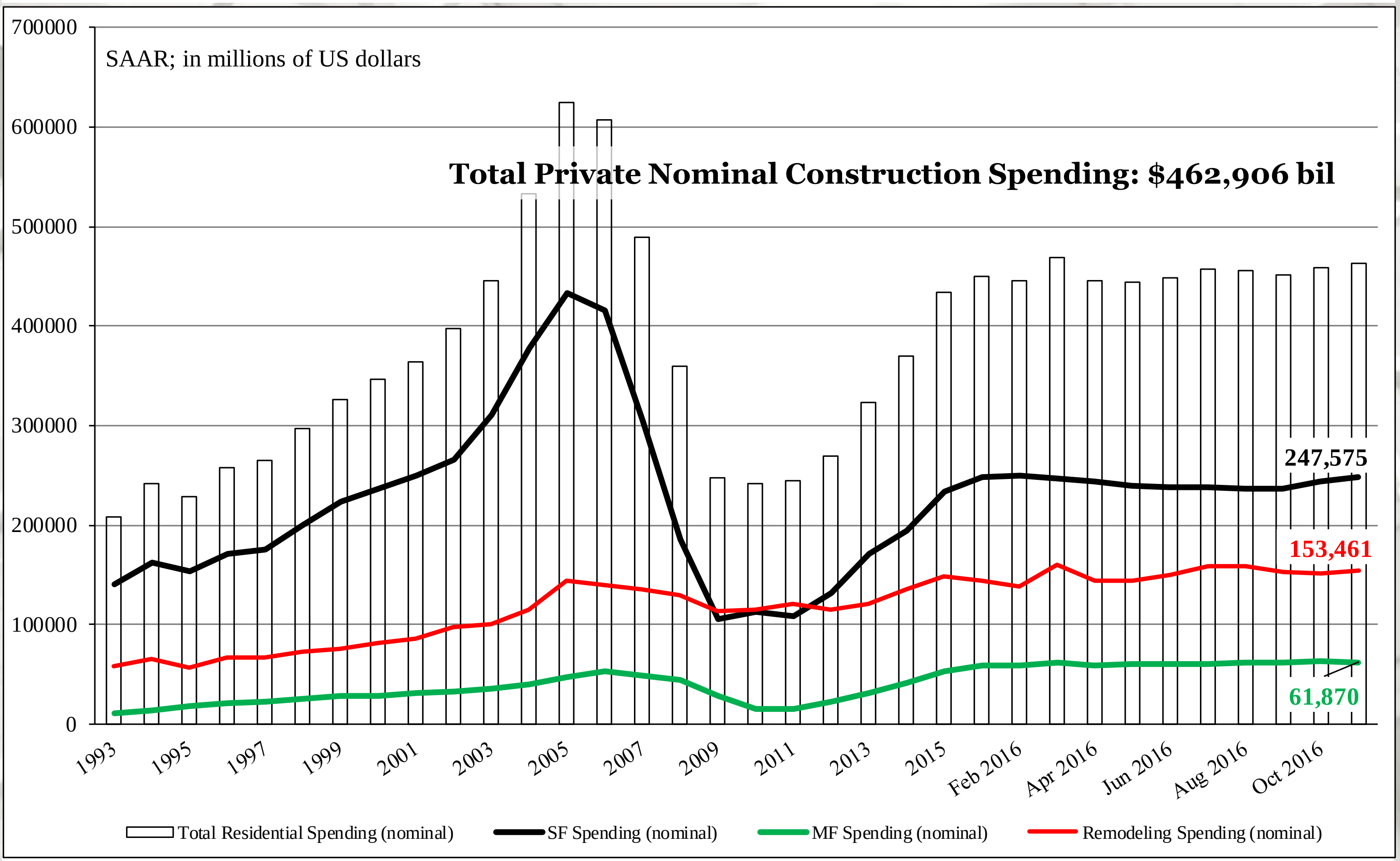
Total Construction Spending (nominal): 1993 – November 2016



Reported in nominal US$.
The US DOC does not report improvement spending directly, this is a monthly estimation for 2016.

Source: http://www.census.gov/construction/c30/pdf/privsa.pdf; 1/3/17

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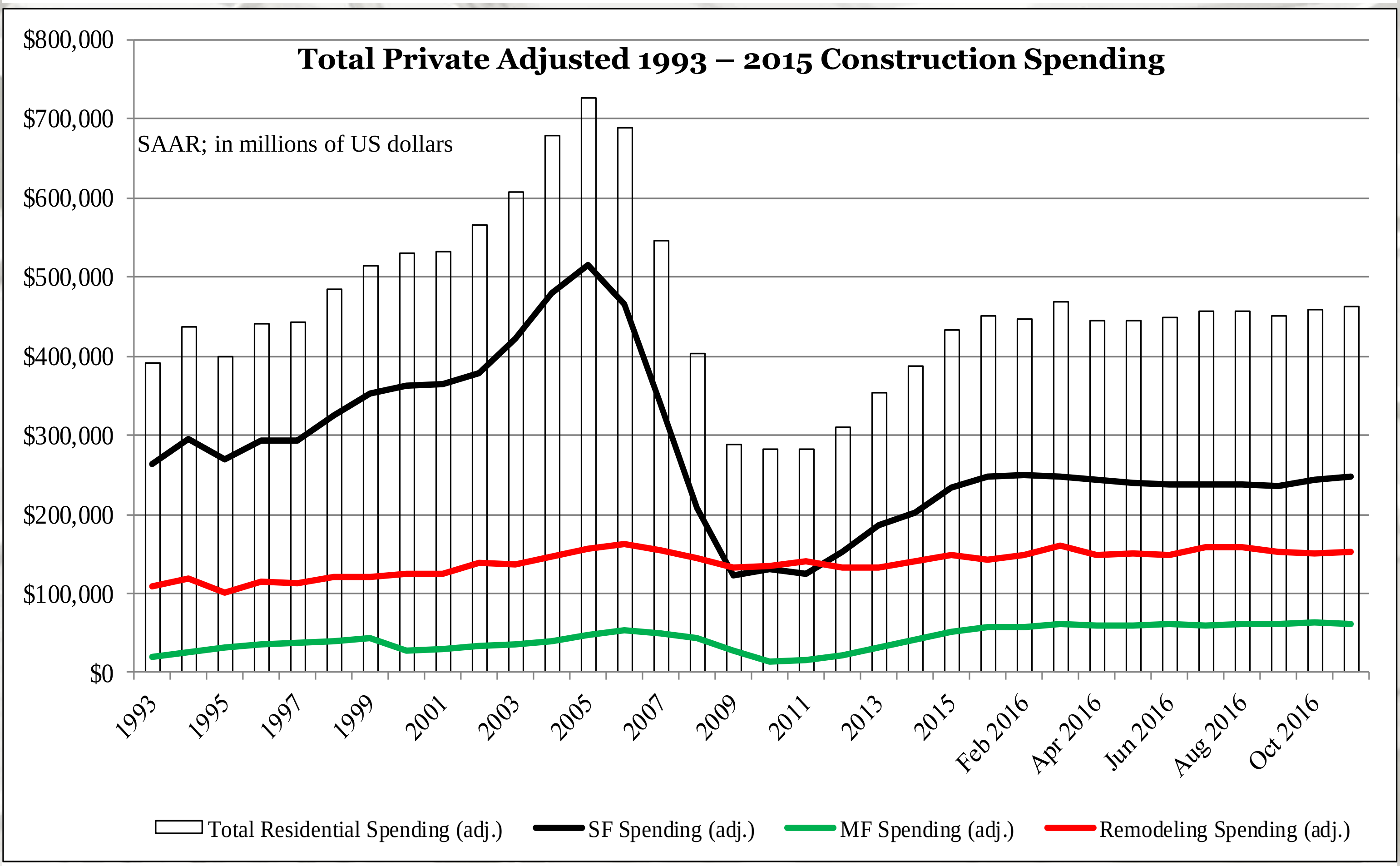
Total Construction Spending (adjusted): 1993-2016*



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

Source: http://www.census.gov/construction/c30/pdf/privsa.pdf; 1/3/17

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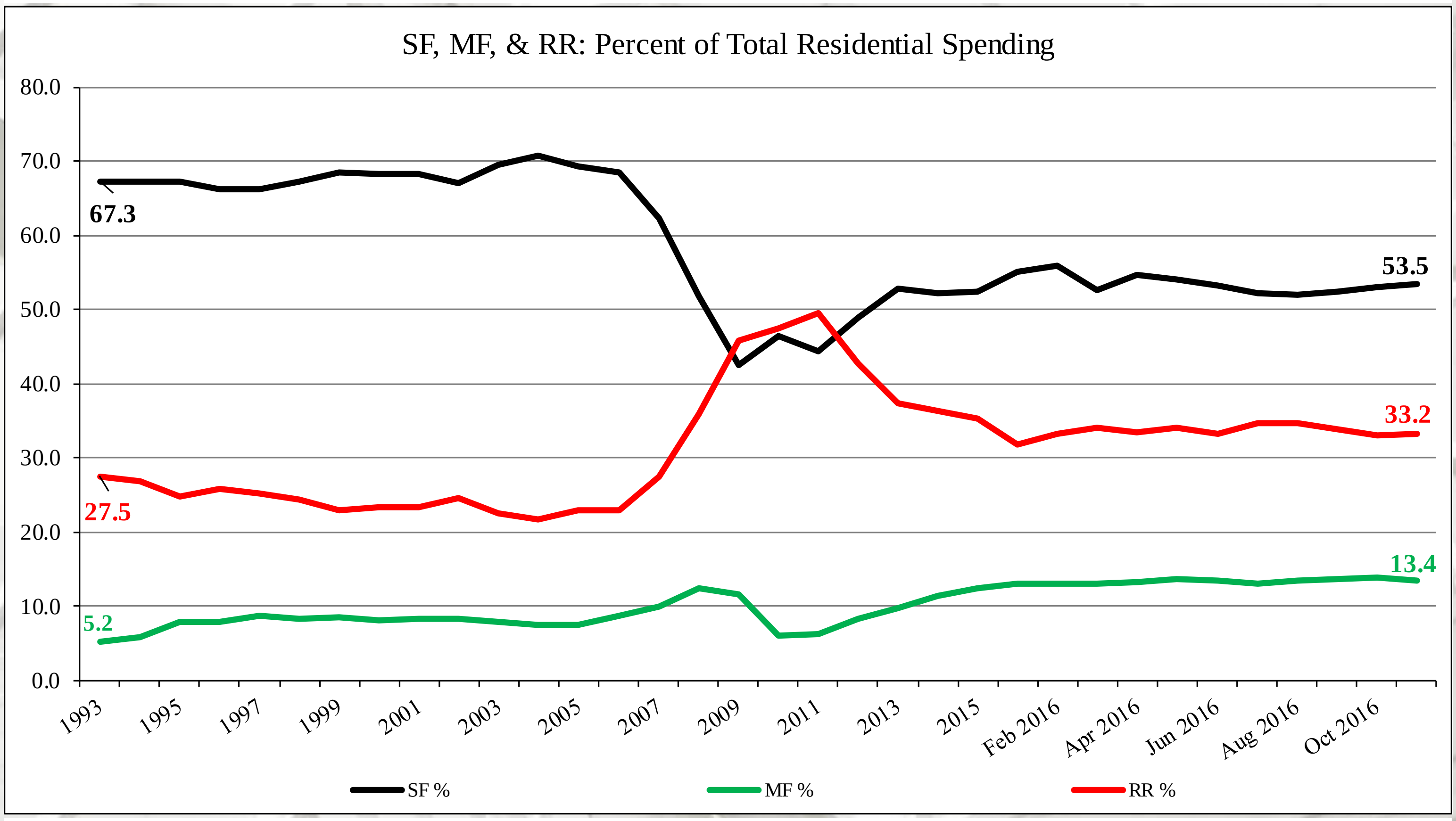
Construction Spending Shares: 1993 to November 2016



Total Residential Spending: 1993 through 2006

SF spending average: 69.2 %

MF spending average: 7.5 %;

Residential remodeling (RR) spending average: 23.3 % (SAAR).

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

Source: http://www.census.gov/construction/c30/pdf/privsa.pdf and http://www.bea.gov/iTable/iTable.cfm; 1/3/17

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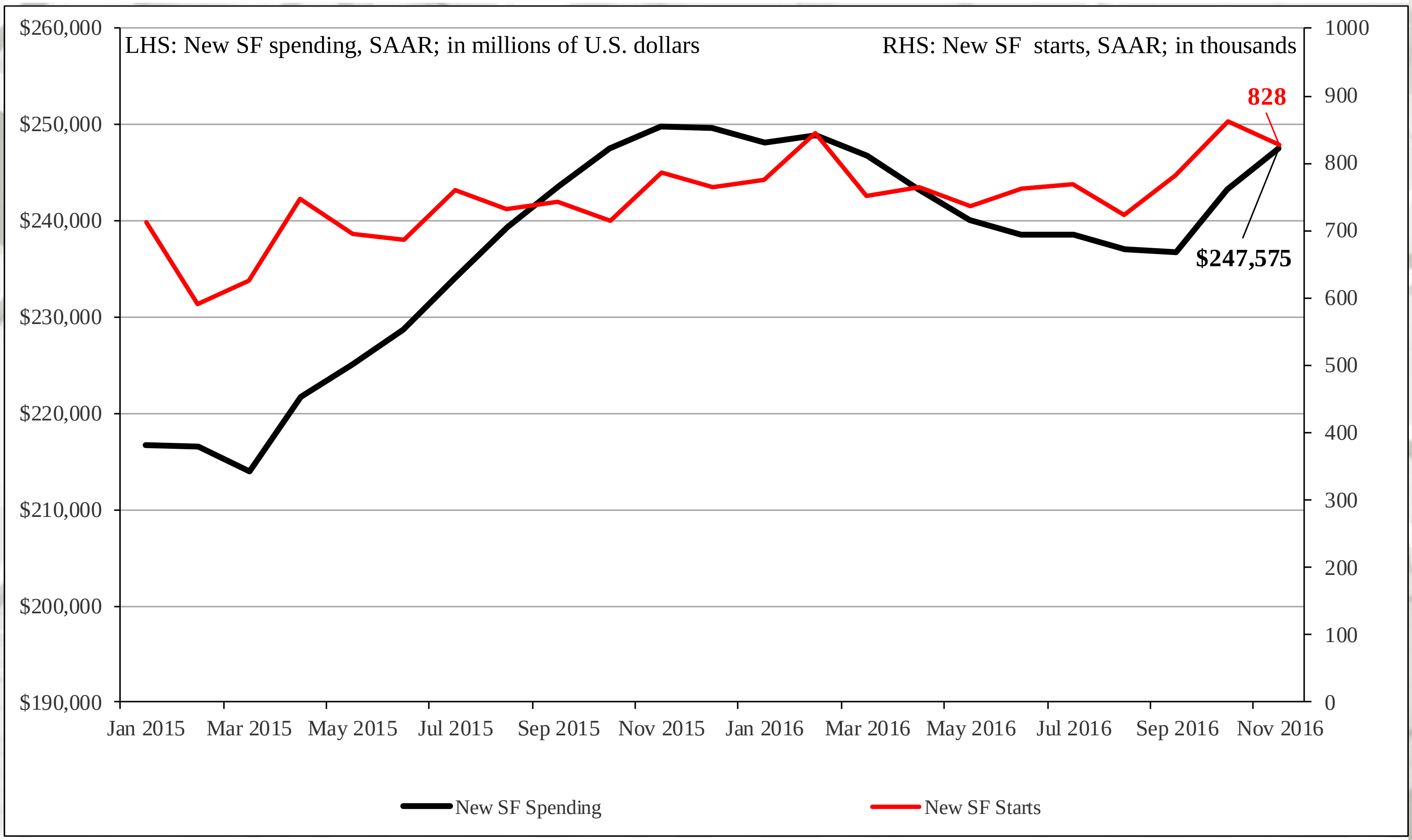
Construction Spending & Starts: 2010 to November 2016



New SF Residential contrasted against New SF Starts: 2010 through 2016

In the above graph, new SF construction spending is compared to new SF starts. Generally, as SF starts increase so does spending. However, there are other factors involved: house size, amenities, lot price, location, etc. Note that 2016 spending is reported in nominal dollars.

Source: http://www.census.gov/construction/c30/pdf/privsa.pdf and : http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 11/17/16-1/3/17

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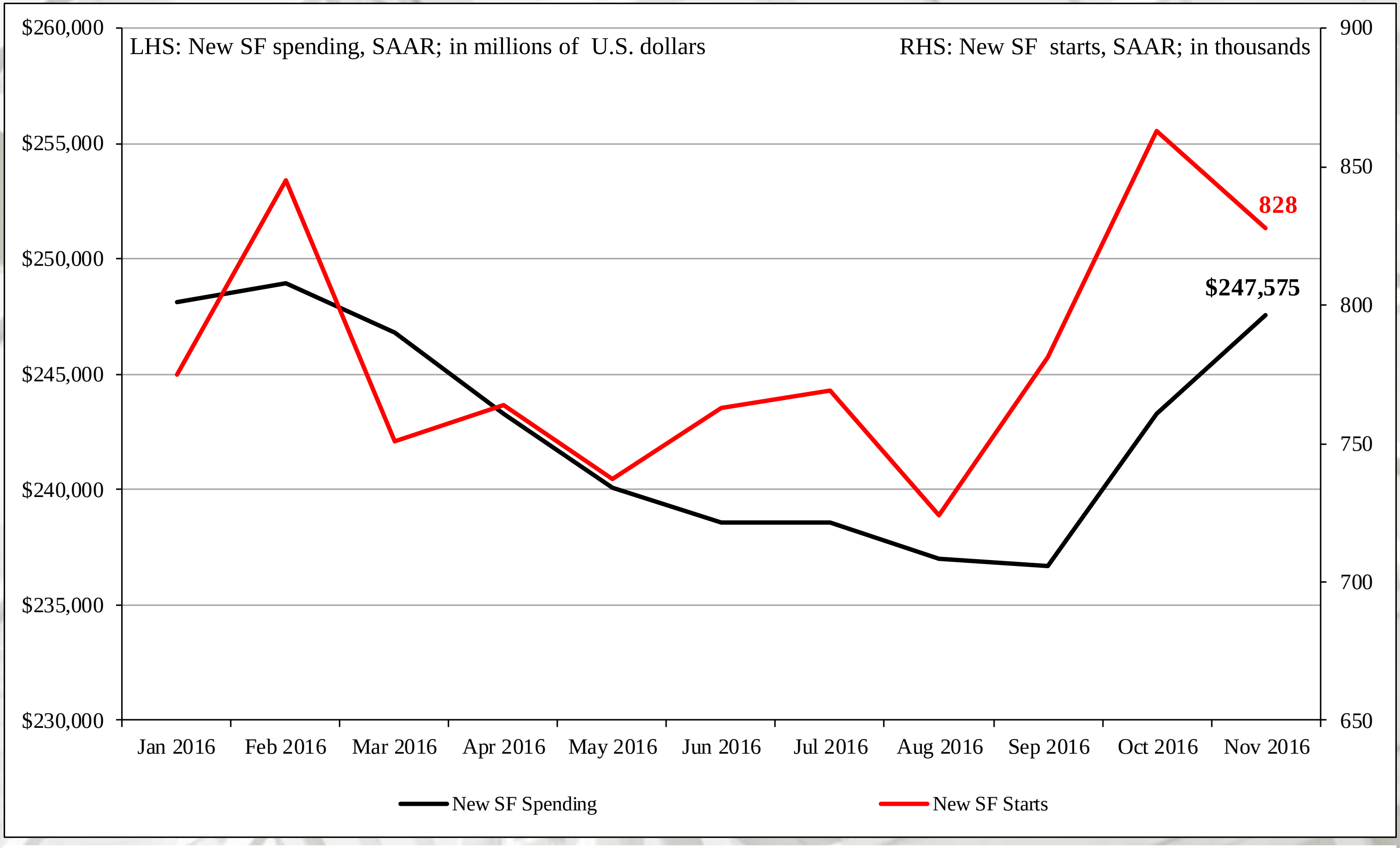
Construction Spending & Starts: 2016



New SF Residential contrasted against New SF Starts: 2016

As presented above, the decline in spending decoupled from starts in November. Given that it is one-month of data, we should pay attention to this relationship going forward. Note that 2016 spending is reported in nominal dollars.

Source: http://www.census.gov/construction/c30/pdf/privsa.pdf and : http://www.census.gov/construction/nrc/pdf/newresconst.pdf; 11/17/16-1/3/17

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Remodeling

Rising Interest Rates, and What They Mean for Home Improvement

"The recent hike in short-term interest rates by the Federal Reserve Board has raised concerns about what rising interest rates mean for consumer borrowing, particularly how they will affect the demand for home improvement loans. The counterintuitive but probable outcome is that home improvement borrowing is likely to increase, and that borrowers will rely more heavily on loans tied to short-term interest rates, which are expected to rise significantly over the coming year.

Why is this likely to occur? To begin, it is worth noting that owners undertaking home improvement projects, even larger projects, rely heavily on savings to pay for these projects. Findings from a October 2016 Piper Jaffray Home Improvement Survey are consistent with previous consumer surveys regarding how owners pay for major home improvement projects. Savings continue to be the principal source of funds as 62 percent of respondents planning a project indicated that they would use savings for all or part of the payment. Another 37 percent said they would put all or part of the cost on a credit card, with many of these planning to immediately pay off their balance. In contrast, only 18 percent said they planned to use a home equity line of credit to fully or partially fund their projects.

The relatively low use of home equity loans, which has in fact been trending up in recent years, is due in part to the facts that home equity levels for homeowners fell dramatically after the housing crash and lenders became more restrictive with home equity lending. However, there is another reason why these loans have fallen sharply since the housing crash. Long-term interest rates have been trending down for the past decade, and many owners who want to borrow to finance a home improvement project had another appealing and readily available option: they could refinance their principal mortgage to take advantage of lower rates, and simultaneously pull out some of their equity by increasing the loan amount on their low-interest, fixed-rate, first mortgage." – Kermit Baker, Director, Remodeling Futures Program, JCHS

Source: http://housingperspectives.blogspot.com/2016/12/rising-interest-rates-and-what-they.html; 12/16/16

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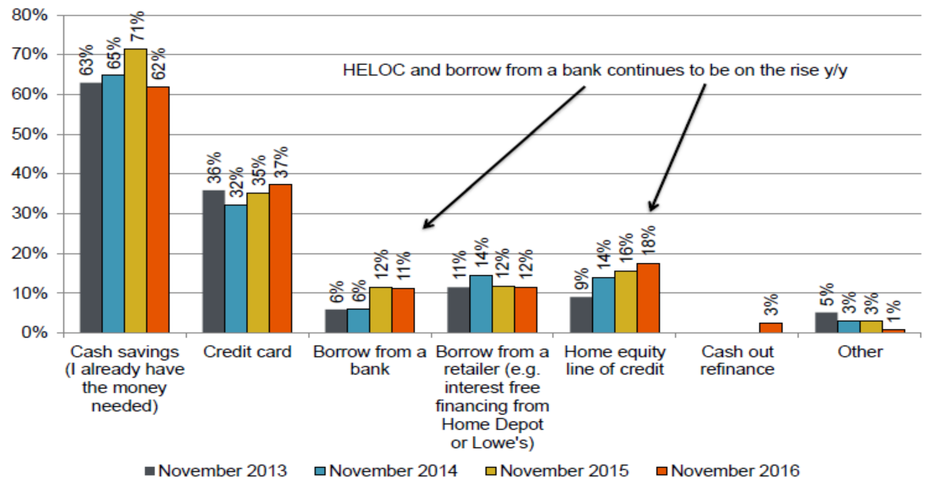
Remodeling

Method of payment for a large ticket project over the next 12 months (please select all that apply)

- **Cash continues to be the preferred method to pay followed by credit card**
- **It is somewhat encouraging that "borrow from a bank" and "home equity line of credit" continue to be on the rise**



Source: Piper Jaffray Home Improvement Survey

Rising Interest Rates, and What They Mean for Home Improvement

"For much of the past decade, the volume of cash-out refinancing has just about equaled borrowing available through home equity credit lines. However, signs are quite clear now that we are at the end of this near decade-long interest rate down cycle. Interest rates on 30-year fixed rate mortgages, which have been trending up since last summer, spiked almost 50 basis points (one-half percentage point) after the presidential election. Noting that the incoming Trump administration is likely to push for tax cuts and infrastructure spending increases, most forecasters are projecting that long-term interest rates will continue to rise in 2017." – Kermit Baker, Director, Remodeling Futures Program, JCHS

Source: http://housingperspectives.blogspot.com/2016/12/rising-interest-rates-and-what-they.html; 12/16/16

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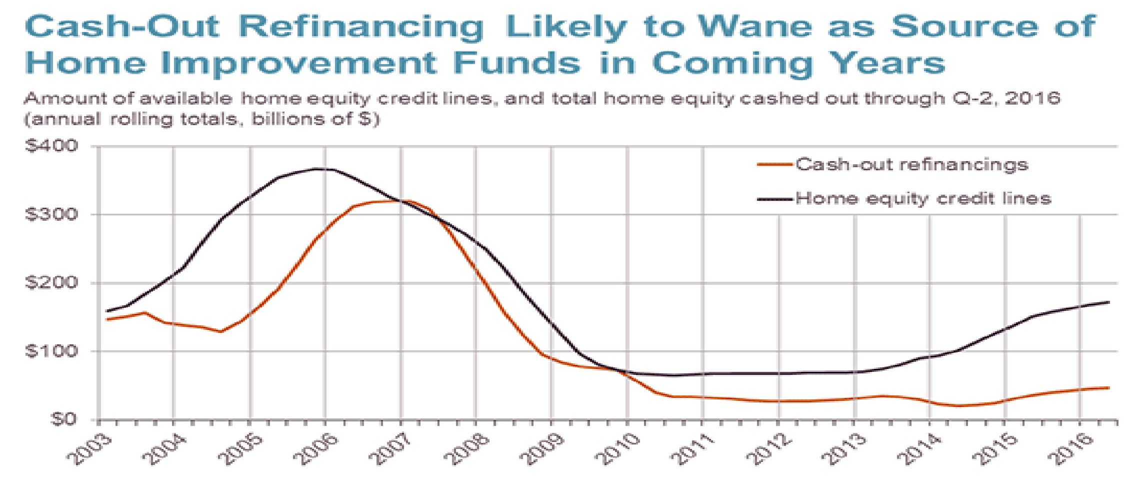
Remodeling



"While higher interest rates will discourage some owners from cashing out home equity to undertake home improvement projects, they may actually promote remodeling spending by others. How can this be the case? Rising mortgage rates may encourage many owners to remain in their current homes. Interest rates for 30-year fixed rate mortgages have been below 5 percent since early 2011, so virtually everyone who has purchased a home or refinanced their fixed rate mortgage over the last six years has locked into a historically low mortgage rate. This means that if rates rise, trading up to a more desirable home also involves paying off a low interest mortgage and taking out a new higher rate loan. Facing this prospect, many owners may instead decide to improve their current home rather than buying a home with the features they now desire.

Those owners who want to tap into their growing levels of home equity to finance their home improvement projects are likely to rely on home equity lines of credit rather than cash-out refinancing. As long-term rates have stabilized near their cyclical low, we've already seen that homeowners are starting to rely more on home equity credit lines. In the coming months as rates trend up, the gap between home equity borrowing and cash-out refinancing is likely to widen, which, unfortunately, will expose these home equity borrowers to future hikes in short-term rates."
– Kermit Baker, Director, Remodeling Futures Program, JCHS

Source: http://housingperspectives.blogspot.com/2016/12/rising-interest-rates-and-what-they.html; 12/16/16

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Existing House Sales

National Association of Realtors (NAR®)

November 2016 sales: 5.610 million houses sold (SAAR)

Distressed house sales: 6% of total sales –
(4% foreclosures and 2% short-sales);

5% in October and 9% in November 2015.

All-cash sales: 21% and 22% in October,
and 27% (November 2015).

Individual investors still purchase a considerable portion of "all cash" sale houses – 12% in November;
13% in October and 16% in November 2015.

58% of investors paid cash in November.

Source: NAR® https://www.nar.realtor/news-releases/2016/12/existing-home-sales-forge-ahead-in-november; 12/21/16

Existing House Sales

	Existing Sales*	Median Price	Mean Price	Month's Supply
November	5,610,000	$234,900	$276,800	4.0
October	5,570,000	$234,100	$275,500	4.3
2015	4,860,000	$220,000	$263,800	5.0
M/M change	0.7%	0.3%	0.5%	-7.0%
Y/Y change	15.4%	6.8%	4.9%	-20.0%

	NE Sales	MW Sales	S Sales	W Sales
November	810,000	1,330,000	2,220,000	1,250,000
October	750,000	1,360,000	2,190,000	1,270,000
2015	700,000	1,120,000	1,990,000	1,050,000
M/M change	8.0%	-2.2%	1.4%	-1.6%
Y/Y change	15.7%	18.8%	11.6%	19.0%

* All sales data: SAAR

Source: NAR® https://www.nar.realtor/news-releases/2016/12/existing-home-sales-forge-ahead-in-november; 12/21/16

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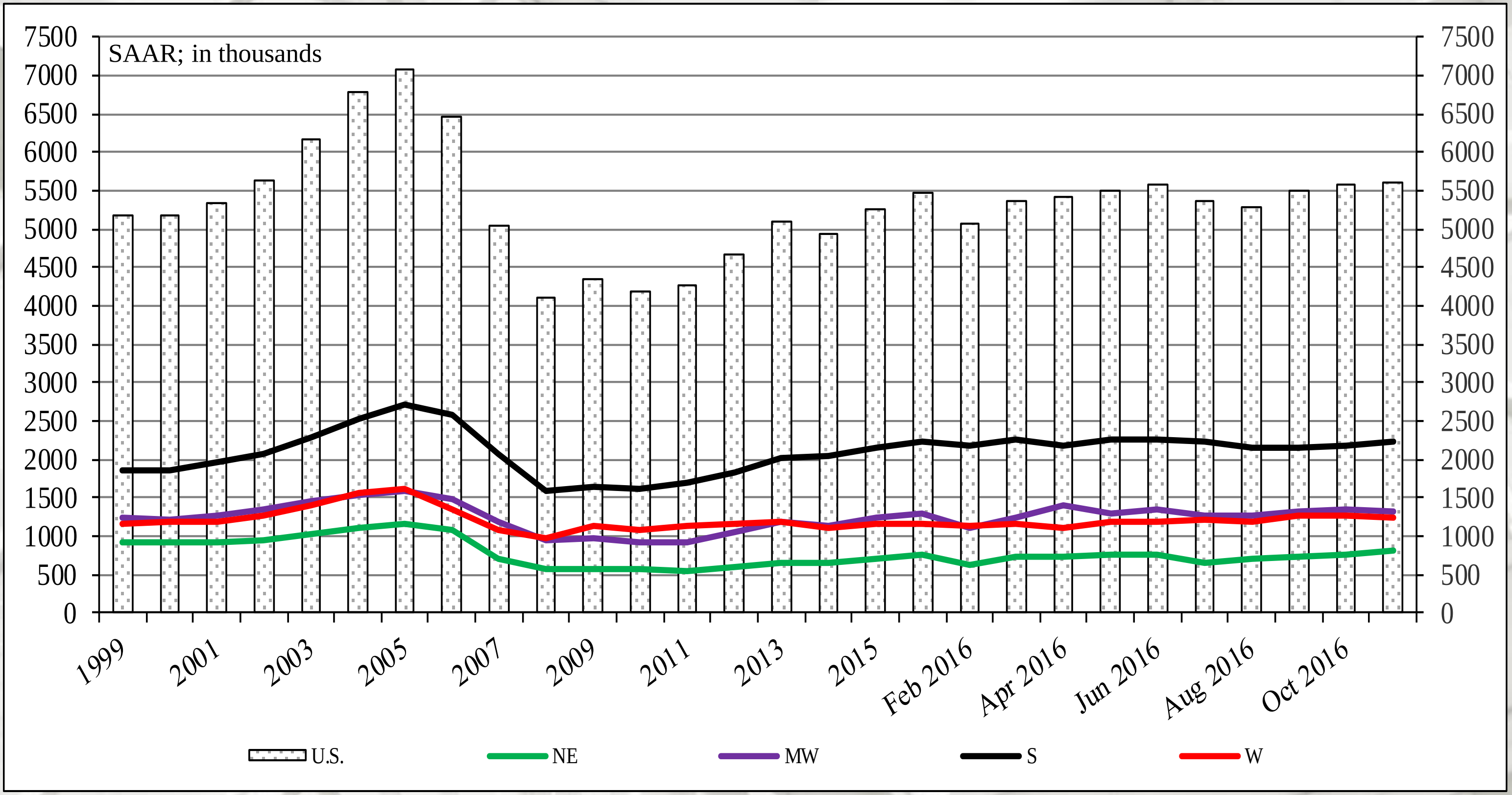
Total Existing House Sales



Source: NAR® https://www.nar.realtor/news-releases/2016/12/existing-home-sales-forge-ahead-in-november; 12/21/16

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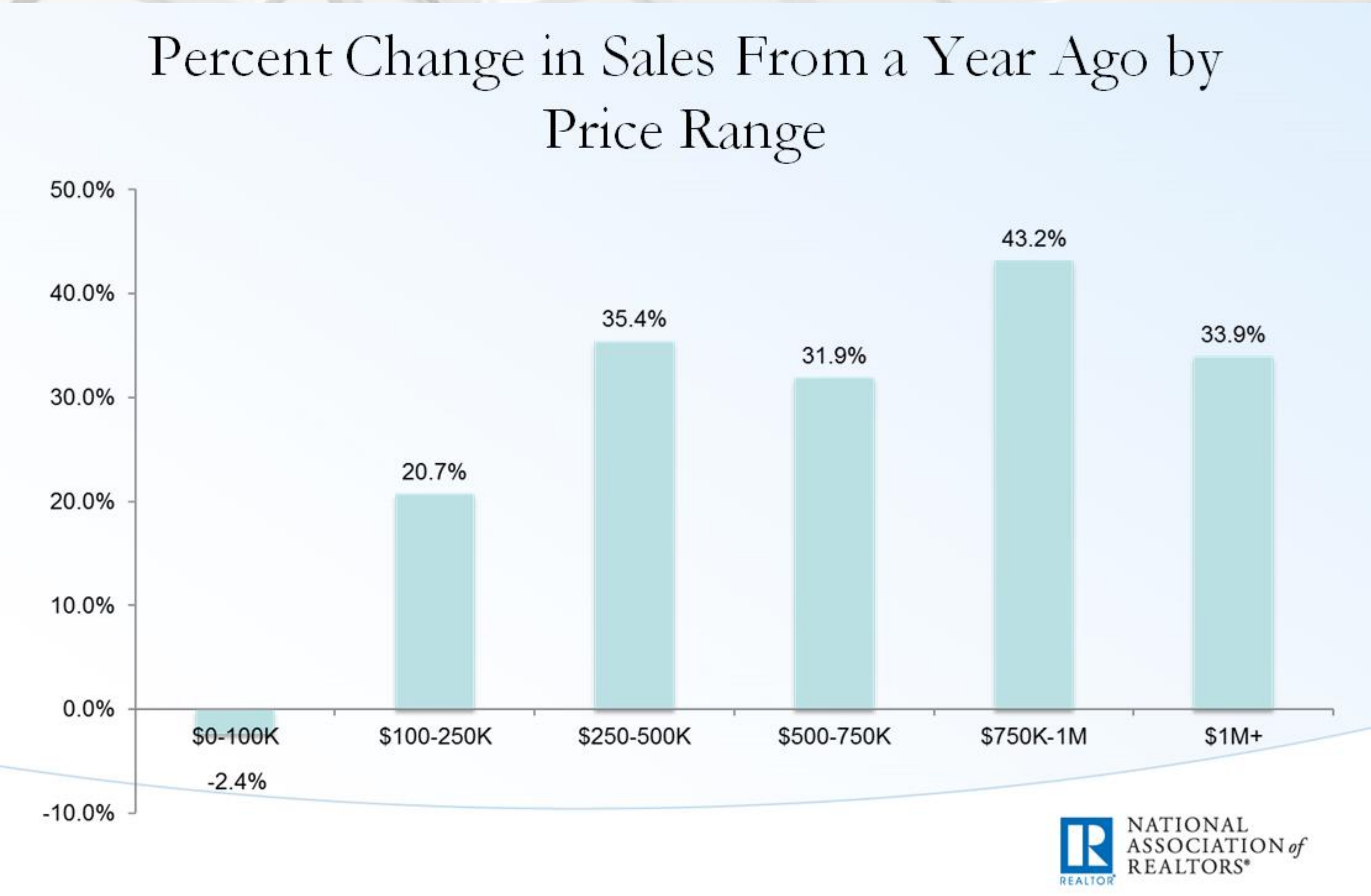
Existing House Sales



Source: NAR® https://www.nar.realtor/news-releases/2016/12/existing-home-sales-forge-ahead-in-november; 12/21/16

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House Sales

Inventory and Price Watch: It's Harder To Get Started

"America's starter-home shortage is worsening. The number of available homes for the average first-time homebuyer saw its steepest year-over-year drop in three years, 12.1%. And buyers have to pay more to get them: 1.9% more of their income, an increasingly unaffordable pace.

We took a look back at affordability since 2012 and compared annual change until 2015 to declines in affordability in the last year and found some markets have drastically slowed their pace of unaffordability, while in others, declines in affordability of starter homes continue to plague first time home buyers. Examining the housing stock across the nation from Q4 2015 to Q4 2016, we found:

- Starter homes continue to represent less than one-quarter of available inventory nationwide, while premium homes make up more than half.
- Starter and trade-up home inventory have tumbled 12.1% and 12.9% respectively during the last year.
- Affordability of starter homes has declined more than twice as much as trade-up homes, and nearly four times as much as premium homes.
- Starter home unaffordability persists in a number of California markets such as Sacramento, Calif., Los Angeles, San Francisco, San Diego as well as Miami. These cities ranked in the top 10 annual declines in affordability for starter homes from 2012 to 2015 and remain in the top 10 for declines in affordability for starter homes from 2015 to 2016." – Trulia Staff

Source: https://www.trulia.com/blog/trends/inventory-q42016/#sthash.5BSdBw9d.dpuf; 12/14/15

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House Sales

2016 Q4 Inventory					Change, 2015 Q4 – 2016 Q4			
Housing Segment	Median List Price	Share	Inventory	% of income needed to buy median price home in segment	% change in median list price	Percentage point change in share	% change in inventory	Additional share of income needed to buy a home (percentage point change)
Starter	$164,920	24.8%	293,059	38.5%	7.6%	-0.1 pts	-12.1%	1.9 pts
Trade-Up	$285,895	24.0%	283,165	25.5%	6.3%	-1.2 pts	-12.9%	0.9 pts
Premium	$591,262	51.1%	594,375	13.9%	7.2%	+1.2 pts	-5.6%	0.5 pts

Among the 100 largest U.S. metro areas. Share is the percent of for-sale homes that fall into each segment, which is defined separately for each metro. Median price for each segment is the stock-weighted average of the median price of each segment in each metro. Some point change estimates may be slightly different than stated values because our differing procedure occurs before rounding.

Inventory and Price Watch: It's Harder To Get Started

"Nationally, housing inventory fell for the sixth consecutive quarter, dropping 9.1% from a year ago. Moreover:

- The number of starter homes on the market fell by 12.1%, while the share of starter homes dropped slightly, from 24.9% to 24.8%. Starter homebuyers will need to pay 1.9% more of their income towards a home purchase than last year;
- The number of trade-up homes on the market decreased by 12.9%, while the share of trade-up homes decreased from 25.2% to 24.0%. Trade-up homebuyers today will need to spend 0.9% more of their income for a home than last year;
- The number of premium homes on the market decreased 5.6%, while the share of premium homes increased from 49.9% to 51.1%.
- Premium homebuyers will need to spend 0.5% more of their income for a home than last year." – Trulia Staff

Source: https://www.trulia.com/blog/trends/inventory-q42016/#sthash.5BSdBw9d.dpuf; 12/14/15

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House Sales

Inventory and Price Watch: It's Harder To Get Started

"Inventory continues to fall across all housing segments, with the biggest decreases in the starter and trade-up housing segments. Starter home inventory dropped 12.1% from this time last year and trade-up homes fell 12.9% while premium home inventory fell a more moderate 5.6%.

Even if first-time buyers can find a home, they may not be able to afford it. Households will need to spend nearly 39% of their monthly income to purchase a home. This represents a 1.9 percentage point increase over the previous year in terms of share of income needed to purchase a starter home. It's more than double the increase in income needed to buy trade-up home (0.9 percentage points) and nearly four times the amount the increase in income needed to purchase a premium home (0.5 percentage points). Trade-up and premium homes remain relatively affordable, requiring 25.5% and 13.9% of monthly income to purchase homes in these segments, respectively.

Source: https://www.trulia.com/blog/trends/inventory-q42016/#sthash.5BSdBw9d.dpuf; 12/14/15

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House Sales

Inventory and Price Watch: It’s Harder To Get Started

The Starter Home Squeeze (continued)

When it comes to affordability, markets matter

In some markets affordability has eroded significantly. In six markets the share of income needed to buy a starter home increased an average of 3.3 percentage points in the last year, compared to the prior three-year period.” – Trulia Staff

13.9% of monthly income to purchase homes in these segments, respectively.

If we look at the 10 markets that saw the biggest increase in the percentage of income needed to buy the median priced starter home since last year, and compare that to their average annual increase from Q4 2012 through Q4 2015, we see that six out of 10 of markets are new to the top 10 list. Northport-Sarasota, Fla., moved up to the metro with the 4th largest increase in the percentage of income needed to buy the median starter home, demanding 6.1 percentage points more income from Q4 2015 to Q4 2016 compared with an average of 1.5 percentage points annually from Q4 2012 through Q4 2015.

Other markets saw unaffordability easing in the past year versus previous years. For example, starter home buyers in Las Vegas saw a 5.1 percentage point annual increase in the percentage of income needed to buy the median starter home from 2012 through 2015, the ninth-largest increase of the top 100 metros. From Q4 2015 to Q4 2016, however, that rate slowed to 1.7 percentage points, making it the 44th fastest increase.” – Trulia Staff

Source: https://www.trulia.com/blog/trends/inventory-q42016/#sthash.5BSdBw9d.dpuf; 12/14/15

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House Sales

Inventory and Price Watch: It's Harder To Get Started

The Starter Home Squeeze

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A number of markets reflect persistent unaffordability. Metros such as Sacramento, Calif., San Francisco, San Diego, Los Angeles, and Miami occupy spots in both the top 10 list of declining affordability from Q4 2012 to Q4 2015 and the top 10 list of declining affordability in the last year, reflecting unabating unaffordability in these markets." – Trulia Staff

Source: https://www.trulia.com/blog/trends/inventory-q42016/#sthash.5BSdBw9d.dpuf; 12/14/15

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Freddie Mac: "After housing's best year in a decade, what's next?"

"Though there are a few weeks left, 2016 will by many measures end up being the best year for housing in a decade. Home sales through October are the highest since 2007 and construction as measured by housing starts has reached the fastest pace since 2008. Home prices, not adjusted for inflation, are at record highs erasing the losses experienced during the downturn.

The picture is mixed for next year. Economic growth appears to be accelerating in the latter half of 2016 and the labor market remains at full employment, but rising interest rates threaten to slow and possibly turn back housing's momentum. As we indicated last month, we think housing will stall a bit in 2017 as higher rates reduce home sales, curb the pace of growth in housing starts, and slow house price growth.

But the fundamentals favor improvement in housing markets. Population and income growth should support housing demand going forward. We anticipate that, after housing absorbs the shock of higher interest rates over time, it resumes on its upward path, and 2018 ends up being a strong year for housing markets despite forecasted increases in mortgage rates.

Over the next two years, we anticipate that economy will keep growing at a modest pace, inflation will pick up and the labor market will stay at full employment. Interest rates will gradually rise as the Federal Reserve continues on its path of policy normalization. Housing markets will slow a bit in 2017 (see last month's Outlook for more analysis), but they will recover after they absorb the initial shock of higher interest rates." – Freddie Mac Economic & Housing Research, Economic & Housing Research Group

Source: http://www.freddiemac.com/finance/report/20161221_whats_next.html; 12/21/16

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Freddie Mac: “After housing's best year in a decade, what's next?”

Looking ahead:

“Key themes for 2017 and beyond:

Homebuyer affordability pinch. As mortgage rates rise and home price growth remains positive, homebuyer affordability will be a growing challenge in many markets. Though income growth is starting to show signs of picking up, the growth rate in personal income is still well below house price appreciation. And while we forecast house price growth to drop from 5.9 percent in 2016 to 4.7 and 3.8 percent in 2017 and 2018 respectively, income growth probably won't keep pace. This means homebuyer affordability will challenge prospective homebuyers in many markets.

Construction picks up, but only gradually. The good news for prospective homebuyers is construction should pick up, but only gradually. We've estimated that long-run fundamental demand for housing is about 1.7 million units annually in the U.S. and for 2016 we'll end up with about 1.16 million units. And while we forecast construction to increase to 1.26 and 1.36 million units in 2016 and 2017, it's still going to be below long-run demand.

Mortgage market shifts to a purchase mix. Refinance waves swiftly end when mortgage rates rise, and we expect to see that happen now. Mortgage refinance activity will drop to very low levels, and the refinance of mortgage originations will drop to 28 and 20 percent in 2017 and 2018, respectively. Increased purchases will partially offset this drop, but in 2017 we anticipate about a 25 percent reduction in mortgage originations. The market will stabilize in 2018, with purchase gains nearly offsetting refinance declines that year.” – Freddie Mac Economic & Housing Research, Economic & Housing Research Group

Source: http://www.freddiemac.com/finance/report/20161221_whats_next.html; 12/21/16

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Freddie Mac: “After housing's best year in a decade, what's next?”

Forecast Snapshot (December 2016)

Summary (annualized)	2016	2017	2018
30-year PMMS (%)	3.7	4.2	4.5
Total home sales (M)	5.97	5.75	6.02
House price growth (%)	5.9	4.7	3.8
Total originations ($B)	2,000	1,505	1,500

Source: http://www.freddiemac.com/finance/report/20161221_whats_next.html; 12/21/16

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First-Time Purchasers

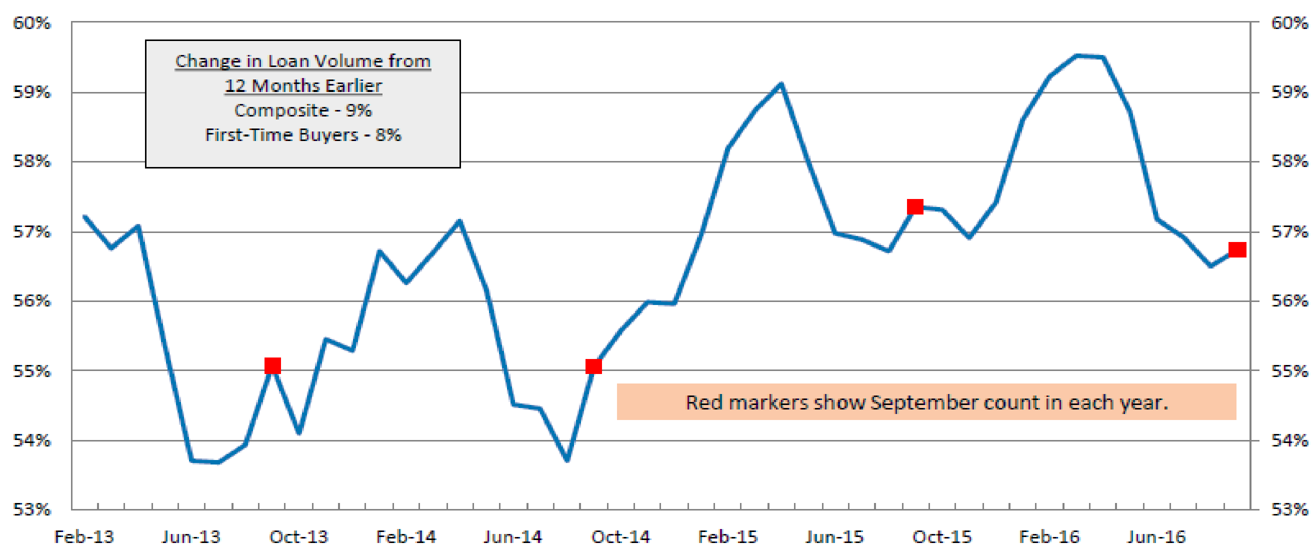
National Association of Realtors (NAR®)

32% of sales in November 2016 – 33% in October 2016 and 30% in November 2015.

American Enterprise Institute
International Center on Housing Risk

Update: Agency First-Time Buyer Mortgage Share

The Agency First-Time Buyer Mortgage Share Index stood at 56.7 in September, slightly down from 57.4 a year ago due to faster growth from repeat buyers. First-time buyer volume still surged 8 percent.



Sources: http://www.nar.realtor/news-releases/2016/12/existing-home-sales-forge-ahead-in-november, 12/16/16; http://www.housingrisk.org/, 1/9/17

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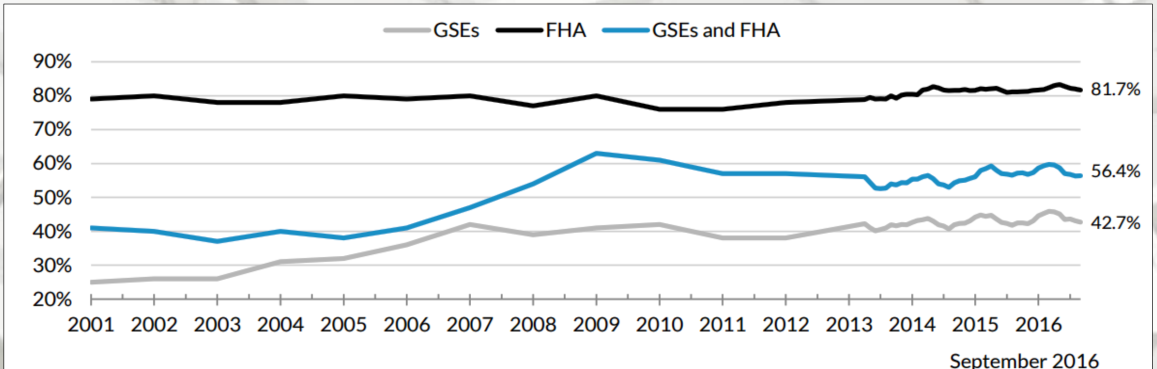
First-Time Purchasers



Sources: eMBS, Federal Housing Administration (FHA) and Urban Institute.
Note: All series measure the first-time homebuyer share of purchase loans for principal residences.

Urban Institute

"In September 2016, the first-time homebuyer share of GSE purchase loans declined slightly to 42.7 percent. The FHA has always been more focused on first-time homebuyers, with its first-time homebuyer share hovering around 80 percent and now stood at 81.7 percent in September 2016, down from the peak of 83.3 percent in May 2016. The bottom table shows that based on mortgages originated in September 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 et al., Codirector, Housing Finance Policy Center

Inside Mortgage Finance:
Campbell/Inside Mortgage Finance HousingPulse Tracking Survey

"" – Brandon Ivey, Editor, Inside Mortgage Finance

Sources: http://www.urban.org/sites/default/files/publication/86696/december_chartbook_final.pdf; 12/21/16; http://www.insidemortgagefinance.com/imfnews/1_968/daily/First-Time-Homebuyer-Share-falls-to-lowest-level-in-two-years-1000038764-1.html; 12/22/16

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United States House Sales

Week of	Weekly	4-Week Avg.
11/27/16	32.3%	-0.8%
12/4/16	0.9%	-0.3%
12/11/16	-3.8%	-1.9%
12/18/16	-14.1%	3.3%

Appraisal volume hits a standstill in December

Holidays dent volume

"As the month of December and holidays wrap up, appraisal volume recorded a 14.1% drop for the week of December 18, according to the latest report from **a la mode**. This is a significantly bigger drop than the 3.8% decline posted in the previous report.

The report noted that with Christmas falling on the weekend, most of the holiday slump occurred the week before. Since 2006, **al la mode** said the week before Christmas has had a normal drop of around 7%. In 2011, when Christmas fell on a Sunday, like this year, the drop was 12.9%. Keeping this in mind, the average Christmas drop for the week before and the week containing the holiday is around 40%, implying a 25% to 30% drop next week if history bears out.

Appraisal volume is an indicator of market strength and holds some advantages over weekly mortgage applications. For example, fallout is less for appraisals since they are ordered later in the mortgage process, after creditworthiness is determined, and there are few multiple-orders, by the time an appraisal is conducted." – Brena Swanson, Digital Reporter, HousingWire.com

Source: http://www.housingwire.com/articles/38828-appraisal-volume-hits-a-standstill-in-december; 12/27/16

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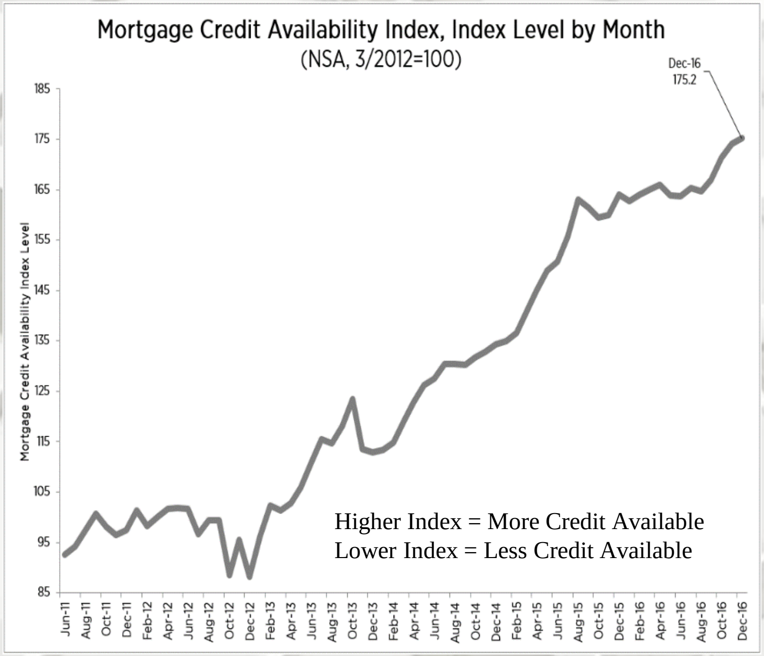
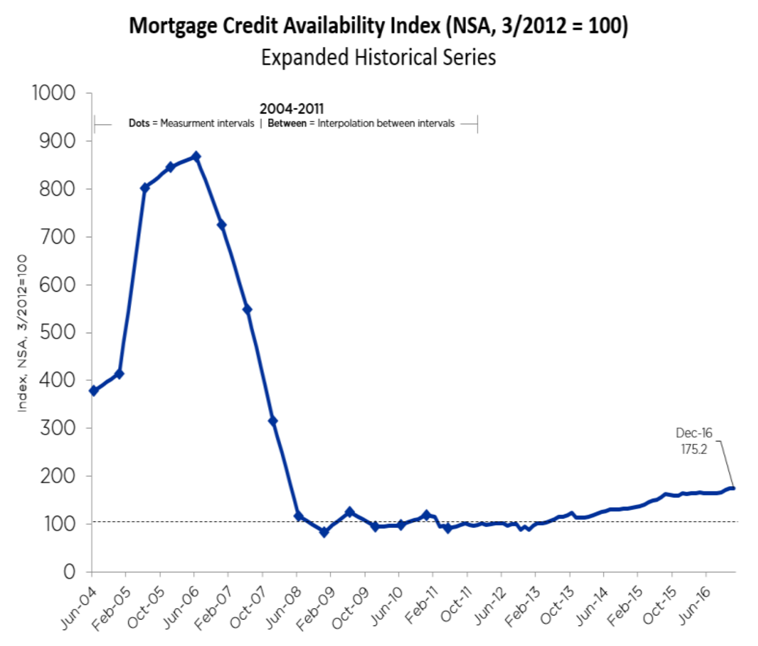
Mortgage Credit Availability





Mortgage Credit Availability Increases in December

"The MCAI increased 0.6 percent to 175.2 in December. 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 MCAI saw the greatest increase in availability over the month (up 1.3 percent), followed by the Conventional MCAI (up 0.7 percent), the Government MCAI (up 0.6 percent), and the Conforming MCAI (up 0.04 percent)."

"Credit availability was up for the fourth consecutive month in December driven by jumbo loan programs as well as loan programs for borrowers with lower credit scores and low down payments." – Lynn Fisher, Vice President of Research and Economics, Mortgage Bankers Association (MBA)

Source: https://www.mba.org/2017-press-releases/january/mortgage-credit-availability-increases-in-december; 1/5/17

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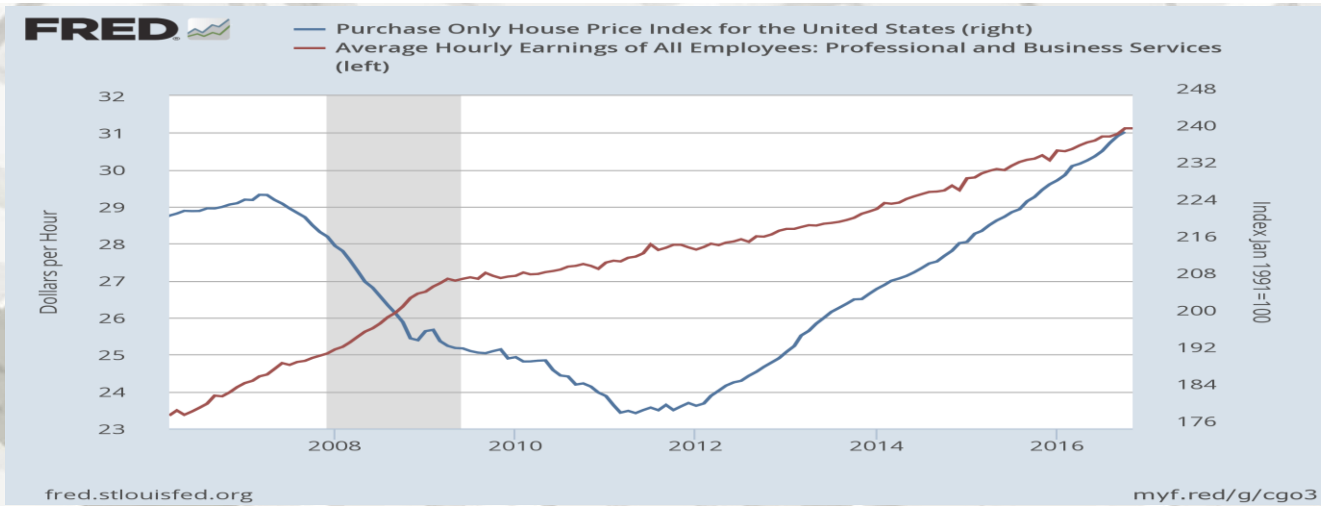
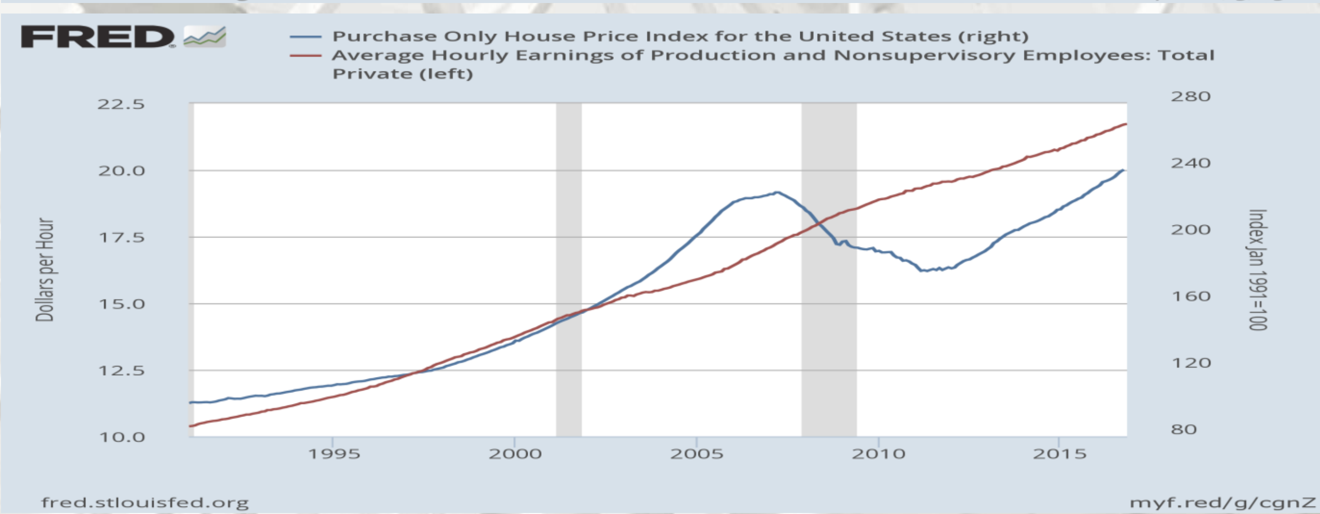
Housing Affordability





Average Hourly Earnings & Purchase Only House Price Index

For the every day American, housing affordability is problematic. As presented above, affordability is much better for the professional – business sector (top) as compared to the production – non-supervisory sector (bottom).

Source: https://fred.stlouisfed.org; 1/3/17

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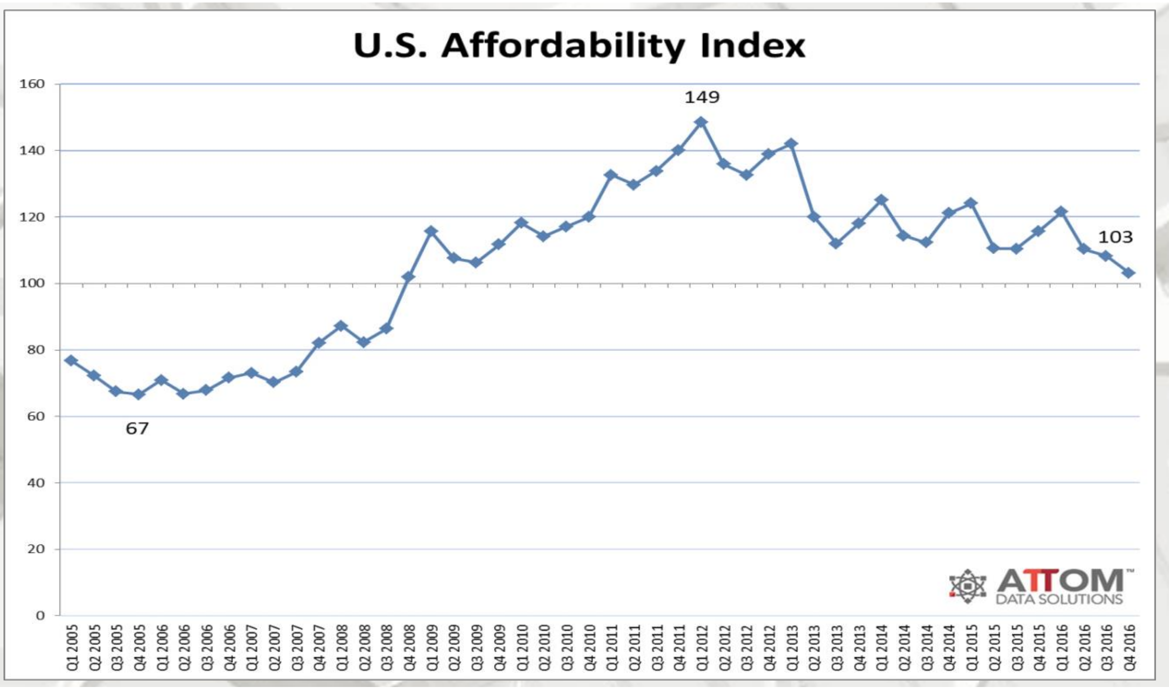
Housing Affordability



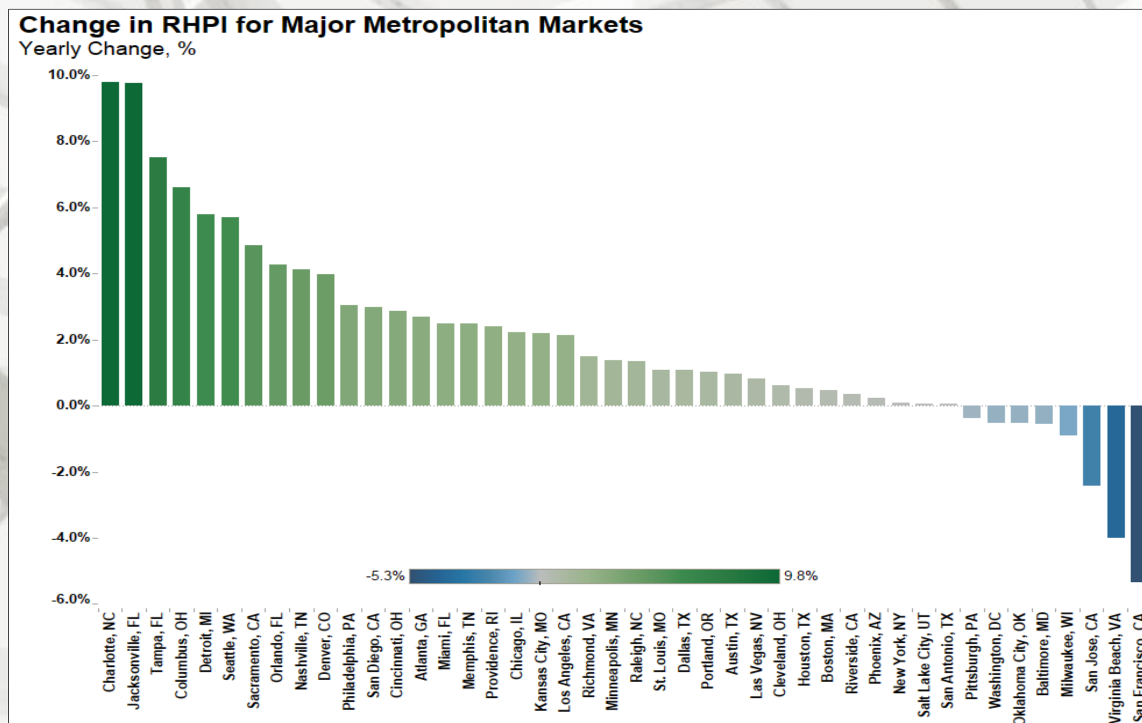
U.S. Home Affordability Drops to 8-Year Low in Q4 2016

"…29 percent of U.S. county housing markets were less affordable than their historic affordability averages in the fourth quarter, up from 24 percent of markets in the previous quarter and up from 13 percent of markets a year ago to the highest share since Q3 2009 – when 47 percent of markets were less affordable than their historic affordability averages.

Rapid home price appreciation and tepid wage growth have combined to erode home affordability during this housing recovery, and the recent uptick in mortgage rates only accelerated that trend in the fourth quarter. The prospect of further interest rate hikes in 2017 will likely cause further deterioration of home affordability next year. Absent a strong resurgence in wage growth, that will put downward pressure on home price appreciation in many local markets" – Daren Blomquist, Senior Vice President, ATTOM Data Solutions

Source: http://www.realtytrac.com/news/home-prices-and-sales/q4-2016-u-s-home-affordability-index/; 12/20/16

Housing Affordability



Affordability Improves Nationally Based on Wage Growth, Although Not for Many Major Markets

"While we have yet to see the impact of the 'Trump Bump' and Yellen's increase in mortgage rates on unadjusted house prices, I expect there to be an impact early next year. In 2013, we saw the significant slowing effect the 'taper-tantrum' had on unadjusted house prices. We expect unadjusted prices to respond similarly to the recent increases in mortgage rates, though to a lesser degree this time. While mortgage rates above 4 percent reduce affordability, accelerating wage growth and the expected slowdown in unadjusted price appreciation are both beneficial for affordability. I expect the net effect on consumer house-buying power to remain modest." – Mark Fleming, Chief Economist, First American

Source: http://www.realtytrac.com/news/home-prices-and-sales/q4-2016-u-s-home-affordability-index/; 12/26/16

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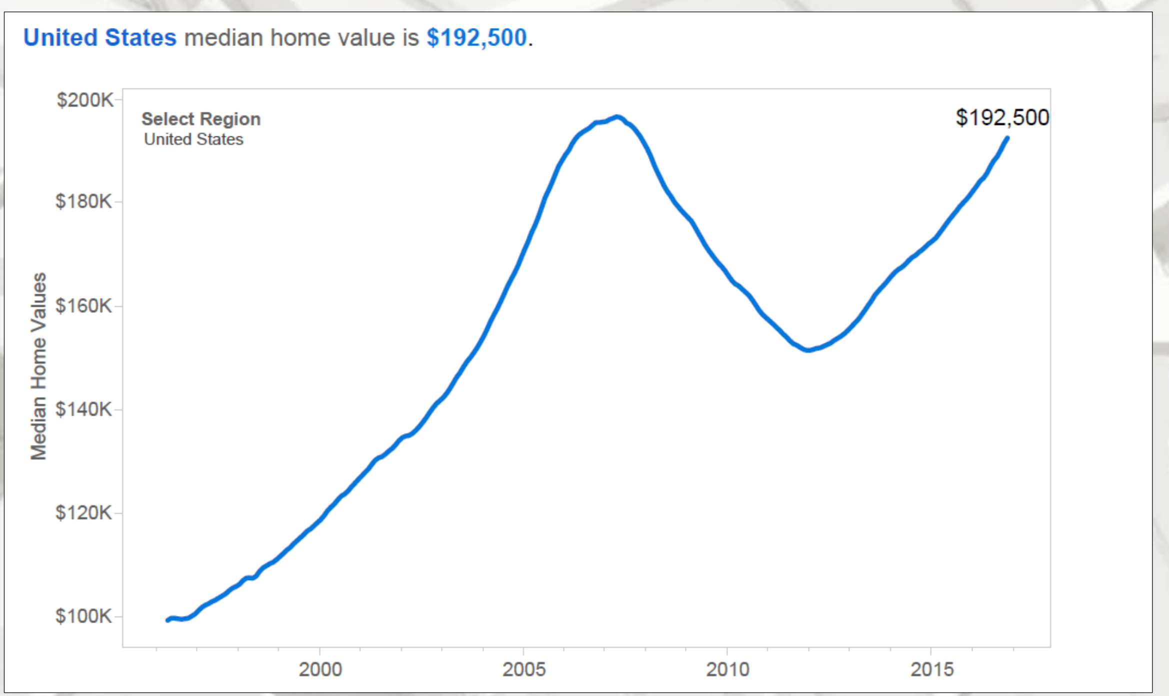
Housing Affordability



Home values Growing at Fastest Pace Since 2006

"In November, median U.S. home values rose 0.6 percent from October and 6.5 percent year-over-year to a Zillow Home Value index of $192,500, according to the November Zillow Real Estate Market Reports, the 52nd consecutive month of annual growth and the fastest pace since August 2006. In each month between January and August, the annual pace of U.S. home value growth was fairly consistent, never growing slower than 5.6 percent and never higher than 5.9 percent in any given month. But beginning in September, the annual U.S. growth rate has noticeably accelerated – to 6 percent in September, 6.3 percent in October and now 6.5 percent." – Svenja Gudell, Chief Economist, Zillow

Sourcehttp://www.zillow.com/research/november-2016-market-report-13992//; 12/22/16

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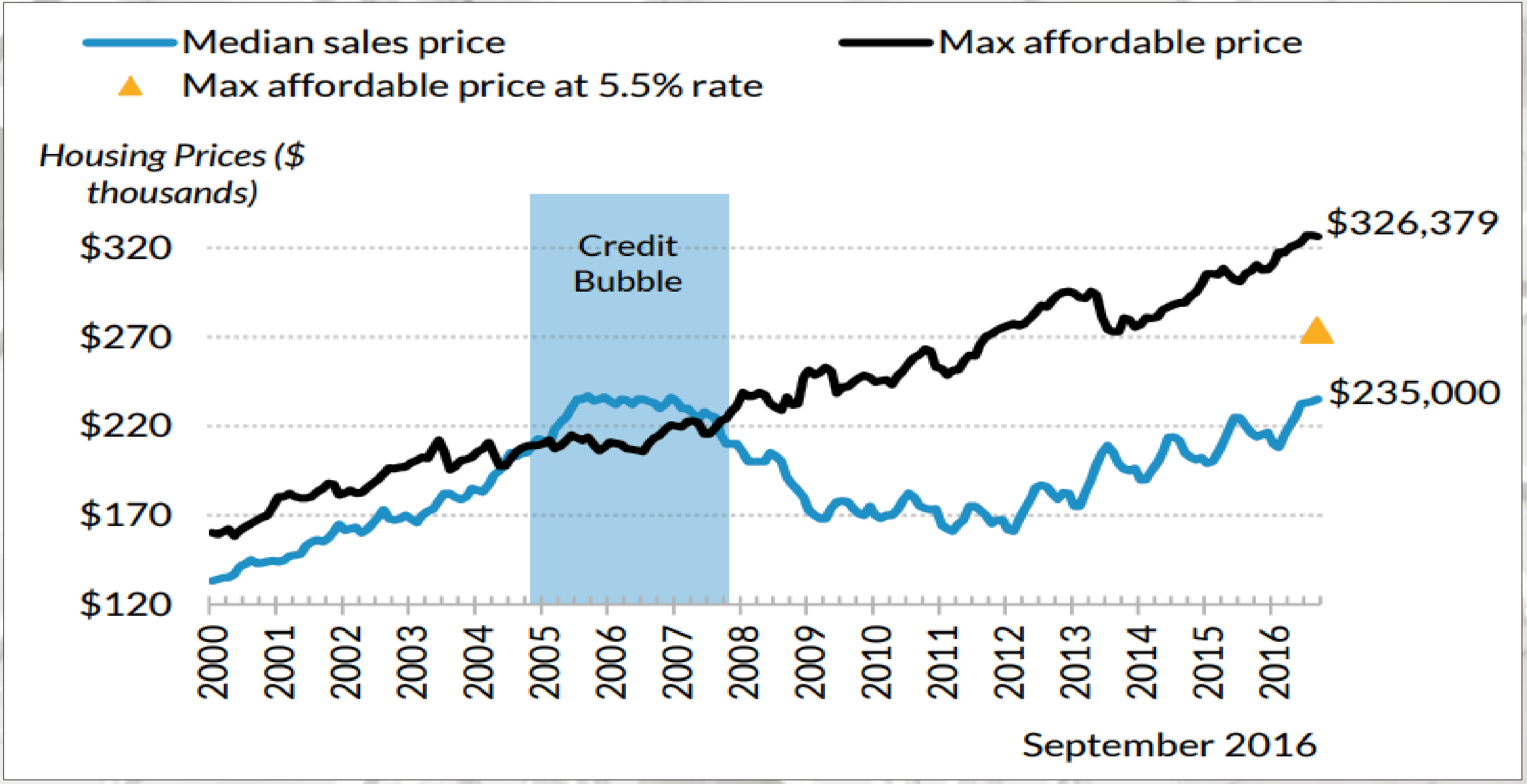
Housing Affordability



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 5.5 percent, affordability would be at the long term historical average.” – Laurie Goodman et al., Codirector, Housing Finance Policy Center

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

Source: http://www.urban.org/sites/default/files/publication/86696/december_chartbook_final.pdf; 12/21/16

Summary

In summary:

November's housing data were mixed. New SF starts were negative and new SF permits were barely positive. New SF sales increased; yet, the lower-priced categories (< $300,000) remain far less than their historical level of sales. These lower-price tier categories need consistent improvement for the new construction to drive the overall housing construction market forward and upward. Existing sales increased very slightly. Total new housing projections are not dissimilar from 2016; however, SF starts are projected to be greater than 2106.

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, though incrementally rising;
2) As a result, housing affordability is good for most of – but not all of the U.S.;
3) 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 – according to some analysts;
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) Debt: Corporate; personal; government – here and globally.
6) Will apparent global bank problems such as Duestche (Germany) and Monte dei Paschi di Siena (Italy) affect the global economy?
7) Other global uncertainties.

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