



# Personal Insight V13.2 Technical Release Notes

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## Executive Summary

Following the 2013 launch of Personal Insight V1.0 (beta), our development stage entry in the personal lines data marketplace, our development team greatly expanded the scope and detail of PL V13.2 (beta), reflecting the needs of our personal lines development partners. The release of PL V13.2 also marks the synchronization in the naming convention for our Commercial and Personal database products.

Clients required additional detail on the upper end of the homeowners market, on the age distribution of households, and on the written and unwritten premiums—and our development team responded:

### National in scope, additional metrics

- The Housing Units report for Personal Insight V13.2 covers all 50 U.S. states and the District of Columbia, up from V1.0’s six-states.
- We report written *and* unwritten premiums for five coverage types: homeowner, dwelling, condominium, farmowner, and renter, enabling users to estimate the headroom in homeowners by detailed market segment.
- We report the average market value and number of vehicles per housing unit and tabulate the number of units by eleven age of householder categories.



### **Making more granular dimensions**

- We greatly expanded the number of income, rent, and value categories reported in V1.0, increasing granularity in high-income, high-value, high-rent segments.

### **Improving currency without losing accuracy**

Home price estimates published in the Census 5-year American Community Survey are among the most accurate available covering small areas, by a diverse array of characteristics such as income and age. We took great strides to take these estimates consistent with the reporting year of the data, currently 2011.

Stay tuned! We will move the product out of beta with the June 2014 release of Personal Insight V13.2 (the product versioning will align with our Commercial Insight products). That version will report 2012 exposure, premium, and growth, with new metrics, including the percentage of owner-occupied units with a mortgage—another key measure requested by our development partners.

### **Who to Contact for more information**

Please contact our Client Services department at [ms@marketstance.com](mailto:ms@marketstance.com) / 888-777-2587 or your Regional Relationship Director if you have any questions or service needs. We value your business, and thank you for your continued support!



## Expanded scope, granularity, and metrics

Personal Insight V13.2 (beta) marks a major expansion from the six-state pilot V1.0 (beta) that we previously released.

Guided by our clients, our development team produced a V13.2 Personal Insight product that has more of what our clients demanded – more detailed dimensions, national scope, expanded metrics, including our first estimates of the homeowners' market, and greater accuracy.

Please contact MarketStance for the Personal Insight V13.2 data dictionaries for Housing Units and Growth Rates reports.

## Residential premiums written and unwritten

Written and unwritten residential premiums are the highlight of V13.2, a natural extension of the written premiums per unit reported previously in our V1.0 beta pilot. Figure 1 highlights a striking feature of the homeowners' market: by our estimate, nearly half (46 percent) of the unwritten premiums consist of uninsured owner-occupied units.

While many observers of the homeowners market would readily agree that rental units make-up the predominant share of the market, likely fewer appreciate that owners comprise such a large fraction of the uninsured—46 percent of the premium potential and 20 percent of the uninsured units (Figure 1).

**Figure 1: Uninsured units and unwritten premiums—renter, homeowner, condo**

Coverage type	Total uninsured occupied housing units (millions)	Pct. uninsured occupied units	Unwritten premiums (billions)	Pct. unwritten premiums
<b>Renter</b>	27.8	81%	5.7	54%
<b>Homeowner</b>	5.8	17%	4.2	40%
<b>Condominium</b>	0.9	3%	0.6	6%
<b>Total</b>	<b>34.5</b>	<b>100%</b>	<b>10.5</b>	<b>100%</b>

*Source: MarketStance Personal Insight Housing Units Report, V13.2 (April 2014)*

Census data reflected the strong correlation between properties owned free and clear with no mortgage or other loan secured by the property and the unit being uninsured.

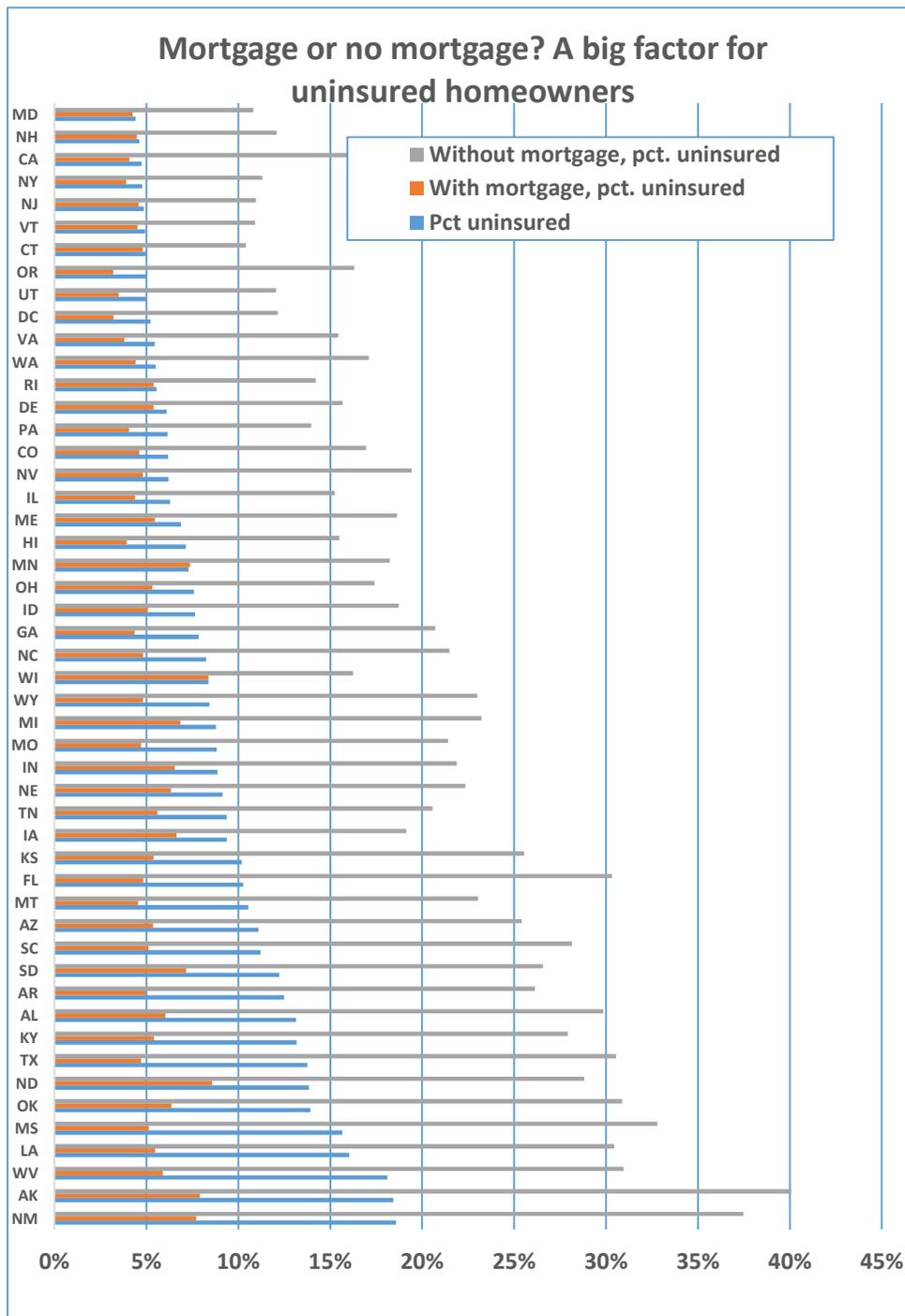
However, it may come as some surprise just how

prevalent Census data report the lack of insurance is, by state, illustrated in Figure 2, below.

Disaster-prone coastal states such as Texas and Florida have relatively high incidences of uninsured owner-occupied residences, driven by the relatively large fraction of un-mortgaged units combined with the unusually high cost of coverage in CAT-prone states.



**Figure 2: Mortgage or no mortgage? A big factor for uninsured homeowners**



In addition to providing the first estimates of the uninsured marketplace for each major homeowners' coverage type, the development team produced highly accurate results in this first national edition of our personal lines product.

Figure 3, below, compares the exposures and premiums reported in V13.2 to the exposures and premiums reported to the National Association of Insurance Commissioners by carriers in their most recent (2010) homeowners' insurance report, supplemented by the report by Citizens to the Florida Office of Insurance Regulation (FLOIR).

Our V13.2 exposures and premiums were highly consistent

Source: MarketStance Personal Insight Housing Units Report, V13.2 (April 2014); ACS PUMS (2011).

with the other industry sources -- 63.3 million units and 67.5 billion in premiums (CY 2011) versus 64 million house years and 63 billion in homeowners' premiums reported by NAIC/FLOIR.



The imbalance related to the slight difference in the year covered (2011 in MarketStance versus 2010 in the NAIC/FLOIR report) and that the condominium unit owners' coverage reported in Census data substantially exceeded that reported by NAIC/Citizens.

While the condo exposures were relatively close, differing by about 600,000 units, the premiums differed a lot more. A significant share of that difference in condo premiums involved the fact that premiums paid by occupied condominium units as reported to the Census American Community Survey included flood and earthquake, whereas the NAIC/FLOIR by definition excluded these premiums from this particular report.

**Figure 3: Personal Insight vV13.2 exposures and premiums versus NAIC/FLOIR**

	MarketStance Personal Insight V13.2, CY 2011 estimates			NAIC/FL Citizens, CY 2010 reports		
	Exposures (million units)	Residential Written Premium (\$B)	Residential Written Premium per Unit (\$)	Exposures (million house- years)	Written Premium (\$B)	Premium per house year (\$)
<b>Homeowner</b>	63.3	61.7	975	64	59.3	906
<b>Condominium</b>	4.4	3.2	718	5	1.9	379
<b>Renter</b>	11.1	2.6	238	9.7	1.8	185
<b>Total</b>	78.7	67.5	857	79	63	795

*Source: MarketStance Personal Lines Housing Units Report, V13.2 (April 2014); NAIC; Florida OIR (2010)*

### Age of householder

Personal Insight V13.2 enables users to focus on housing units within specific age ranges, which is an important feature for many personal lines segmentations, where the age of the buyer helps define the market, the product, and the marketing approach.

We created 5-year increments from 15-20 years through 64 years, adding a senior category for householders aged 65 and above. We are happy to report that the additional detail came at little cost in loss of accuracy, given the wealth of reliable data produced by the Census Current Population Survey (CPS). The result on a national level largely mirrors the 2011 (CPS), with minor differences reflecting the disparity in the household sample size of each survey (Figure 4).



Figure 4: Age of householder, MarketStance Personal Insight &amp; Census CPS

Head of Householder Age (years)	Percent of Occupied Housing Units (%)		Number of Occupied Housing Units	
	Personal Insight V13.2	2011 Current Population Survey	Personal Insight V13.2	2007-2011 ACS
15-19	0.40	0.65	5,152,947	5,209,524
20-24	4.10	4.52		
25-29	7.38	7.86	39,973,142	39,883,503
30-34	8.18	8.63		
35-39	9.22	8.71		
40-44	10.00	9.20		
45-49	11.03	10.30		
50-54	10.73	10.37	45,158,186	45,125,832
55-59	9.58	9.64		
60-64	8.06	8.75		
65+	21.34	21.37		
<i>Source: MarketStance Personal Lines, V13.2 (April 2014); U.S. Census Bureau Current Population Survey Table 14, "Households by Type and Age of Householder" (2011); U.S. Census Bureau ACS Summary File (2007-2011), "Age of Householder by Household Income in the Past 12 Months (In 2011 Inflation-adjusted dollars)"</i>				

### Market value and number of vehicles

In Personal Insight V1.0, housing market values and the number of vehicles were solely dimensional. That is, we did not directly report them in any form. In V13.2 they retain their dimensionality and we added average vehicle and market value estimates to the list of metrics in the housing units report.

### More granularity in dimensions

Personal Insight V13.2 responded to user needs by introducing more granular breaks of housing unit values, income, and monthly rent.

To make these dimensional changes possible, we joined the U.S. Census Bureau ACS summary file and PUMS data sets in a manner which

allowed certain frequencies and totals to be preserved, but also allowed greater flexibility in the categorical breaks. In the end, more granularity was added where necessary in all three of these dimensions and in the case of the market value of a housing unit dimension, taken away where unnecessary, without losing accuracy.



Figure 5: Housing value categories by Personal Insight version

MarketStance Personal Insight V1.0	MarketStance Personal Insight V2.0
<\$10,000	<\$30,000
\$10,000 - <\$20,000	
\$20,000 - <\$30,000	
\$30,000 - <\$40,000	\$30,000 - <\$70,000
\$40,000 - <\$50,000	
\$50,000 - <\$60,000	
\$60,000 - <\$70,000	
\$70,000 - <\$80,000	
\$80,000 - <\$90,000	\$70,000 - <\$100,000
\$90,000 - <\$100,000	
\$100,000 - <\$200,000	\$100,000 - <\$125,000
	\$125,000 - <\$150,000
	\$150,000 - <\$175,000
	\$175,000 - <\$200,000
\$200,000 - <\$250,000	\$200,000 - <\$225,000
	\$225,000 - <\$250,000
\$250,000 - <\$500,000	\$250,000 - <\$275,000
	\$275,000 - <\$300,000
	\$300,000 - <\$350,000
	\$350,000 - <\$400,000
	\$400,000 - <\$500,000
>\$500,000	\$500,000 - <\$750,000
	\$750,000 - <\$1,000,000
	>\$1,000,000

In V13.2, the market value per housing unit became much less granular at the lower end of the market (<\$100,000) and much more granular at the upper end (>\$100,000) (Figure 5). In V1.0, ten category breaks were used to segment all of the households with a market value less than \$100,000.

We consolidated these into three categories in the latest version, because only 26.8 percent of the owner-occupied units are valued at less than \$100,000.

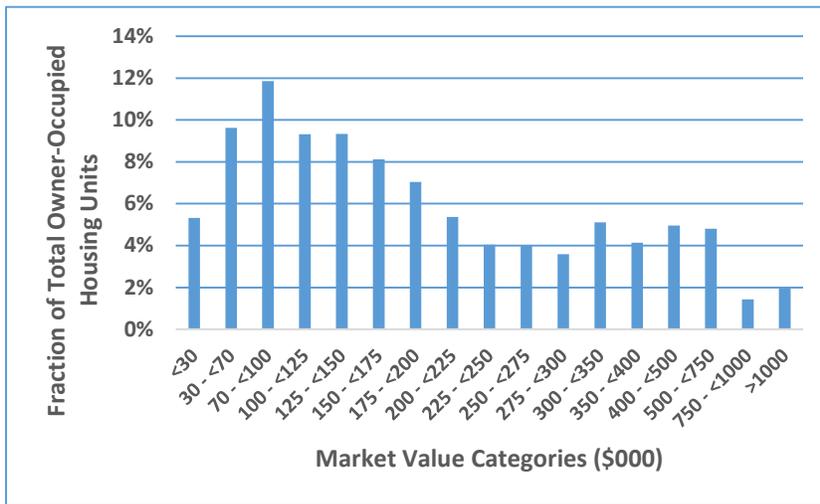
At the upper end of the market, in contrast, the four market value categories employed in Personal Insight V1.0 were not adequate to represent the diversity of values in the remaining 73 percent of the housing market. We replaced the prior categories with fourteen breaks in the latest version of

Personal Insight.

In all, Personal Insight V13.2 reports data in seventeen categories, segmenting values greater than \$500,000 in three ranges. This marks a significant expansion of categories in Personal Insight V1.0, which had only fourteen value categories and grouped all of the households with market values greater than \$500,000.



**Figure 6: Housing values by category**



Source: MarketStance Personal Insight, V13.2 (April 2014)

**Expanded income and rent segments**

We expanded segmentation of household income and monthly rent.

Personal Insight V1.0 grouped all units with household income above \$100,000 in the same category. Though reasonable in general, in wealthier counties such as Fairfield, Connecticut, where these households comprised about 42 percent of

all households in 2011, this segment was far too broad.

V13.2 breaks that too broadly defined segment into three segments: those with income ranging from \$100,000 to \$149,999; \$150,000 to \$199,999; and \$200,000 and above. In Fairfield County, each segment currently represents between 10 and 16 percent of households—making this a more useful segmentation than we had previously reported.

At the lower end of the income distribution, we segmented the V1.0 income ranges from \$10,000 to less than \$19,999 and \$20,000 to \$34,999 into finer ranges containing no more than 11 percent of the total occupied housing units in a given state (Figure 7).

**Figure 7: Household income segmentation by version**

MarketStance Personal Insight V1.0	MarketStance Personal Insight V2.0
<b>&lt;\$10,000</b>	
\$10,000 - <\$20,000	\$10,000 - <\$15,000
\$20,000 - <\$35,000	\$15,000 - <\$25,000
	\$25,000 - <\$35,000
<b>\$35,000 - &lt;\$50,000</b>	
<b>\$50,000 - &lt;\$75,000</b>	
<b>\$75,000 - &lt;\$100,000</b>	
<b>&gt;\$100,000</b>	\$100,000 - <\$150,000
	\$150,000 - <\$200,000
	>\$200,000

We expanded our segmentation of renter occupied units by rent paid in a similar manner. In V1.0 all renter-occupied housing units with rents greater than \$1,500 were segmented into two categories: \$1,500-\$2,000 and \$2,000 and above. For V13.2 we expanded this to four more evenly distributed rent segments (Figure 8).



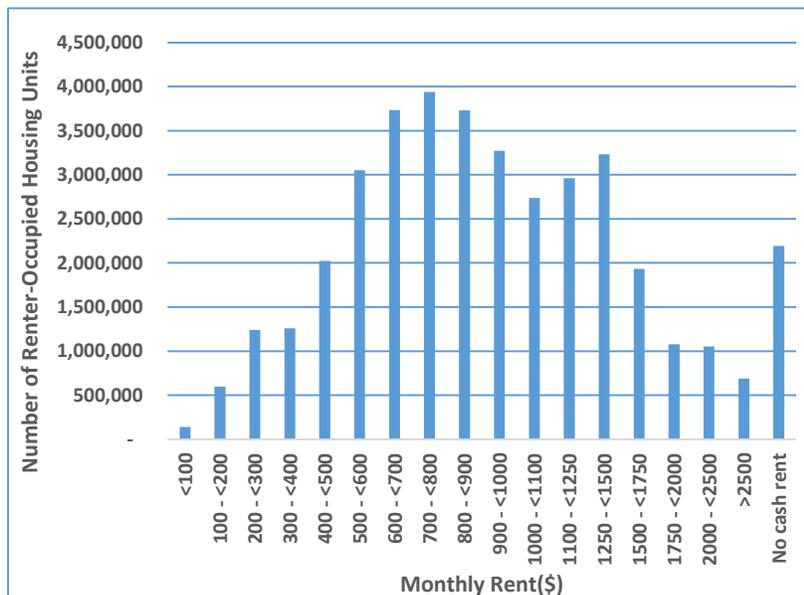
Figure 8: Monthly rent segmentation by version

MarketStance Personal Insight V1.0	MarketStance Personal Insight V2.0
<\$100	
\$100 - <\$200	
\$200 - <\$300	
\$300 - <\$400	
\$400 - <\$500	
\$500 - <\$600	
\$600 - <\$700	
\$700 - <\$800	
\$800 - <\$900	
\$900 - <\$1000	
\$1000 - <\$1250	\$1000 - <\$1100
	\$1100 - <\$1250
\$1250 - <\$1500	
\$1500 - <\$2000	\$1500 - <\$1750
	\$1750 - <\$2000
>\$2000	\$2000 - <\$2500
	>\$2500

We made even more consequential improvements in the mid-tier rental units. Personal Insight V1.0 grouped renter-occupied units with monthly rents from \$1,000 to \$1,250. Nearly 16 percent of those paying cash rent were located in this segment, easily making it the largest of any category.

In V13.2 we report units rented for \$1,000 - \$1,100 separately from units rented for \$1,100 - \$1,250, with each segment containing no more than about 8 percent of the renter-occupied housing units paying cash rent nationwide (Figure 8).

Figure 9: Renter-occupied units by monthly rent



Source: MarketStance Personal Insight, V13.2 (April 2014)

**Trending source data**

With the release of Personal Insight V13.2, MarketStance improved the Census-based estimates of CY 2011 housing values released with Personal Lines V1.0.

Our V13.2 Personal Insight product continues to be powered by the American Community Survey (ACS) 5-year summary file and public use micro (PUMS) data, now with greatly improved estimates of housing market values.

However, for V13.2 we adjusted Census data using federal housing finance agency (FHFA) price indices for metro areas and states to more accurately reflect the collapse of house prices. This is necessary because the Census multi-year files either contained no trend, or, in the case of the summary file data, implemented a wage-inflation factor that tended to even further distort average values.



As Figure 9 illustrates our V13.2 estimates reflected average values that were much closer to the U.S. Census Bureau 2011 1-year ACS summary file values than those that we had stated previously.

**Figure 10: Average market values Personal Insight and Census**

State	Average Market Value of Housing Unit (\$)			
	MarketStance Personal Insight V1.0	MarketStance Personal Insight V13.2	2007-2011 ACS	2011 ACS
CT	399,451	362,453	374,746	375,202
FL	270,396	195,323	249,610	207,657
MA	407,224	380,455	400,606	385,974
NJ	407,811	366,996	403,277	374,614
NY	388,956	358,769	372,318	375,707
PA	199,222	196,445	208,517	199,301

*Source: MarketStance Personal Lines, V1.0 (November 2013); MarketStance Personal Lines, V13.2 (April 2014); U.S. Census Bureau ACS Summary File (2007-2011, 2011), "Aggregate Value (Dollars) By Mortgage Status", "Tenure"*

In contrast to the collapse of house prices and average values in recent years, rent and income values reported by the Census in multi-year data series in general follow the mild positive trend of wage and price inflation. As a consequence the

values expressed in V13.2 are much closer to those stated previously.

**Figure 11: Housing units by household income**

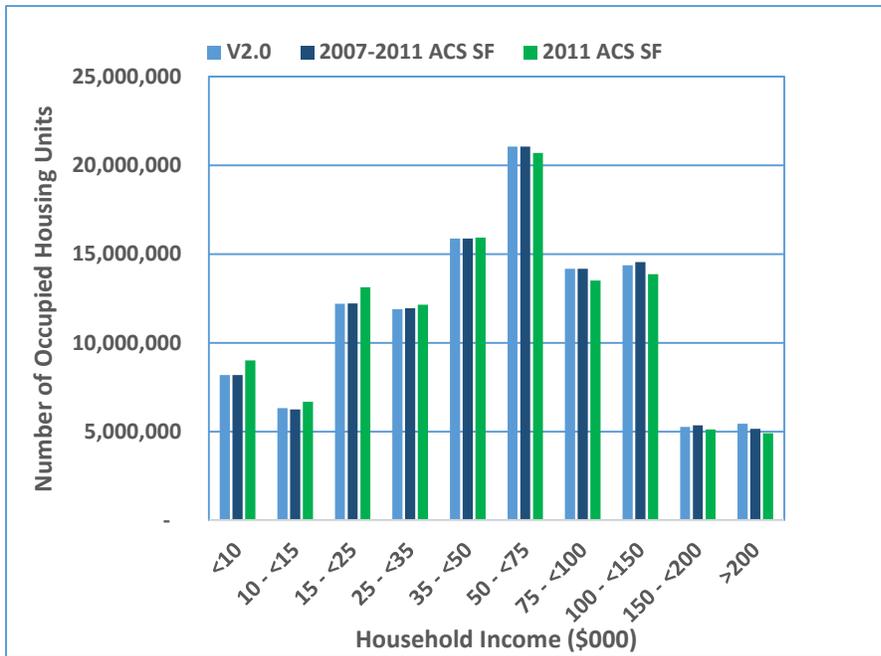


Figure 11 shows the distribution of the number of housing units in our ten household income categories, illustrating our alignment with Census summary file estimates within those same categories.

After trending, our data reported an average household income amounting to \$72,400 for the entire country, compared to averages reported by the five year summary file (\$72,600) and

the one year summary file (\$69,800).



The monthly rent, which previously had been reported as contractual rent in V1.0, has been redefined in the latest version as a gross rent and now includes the monthly fuel, electricity, water, and gas costs.

**Figure 12: rental units by monthly rent by version**

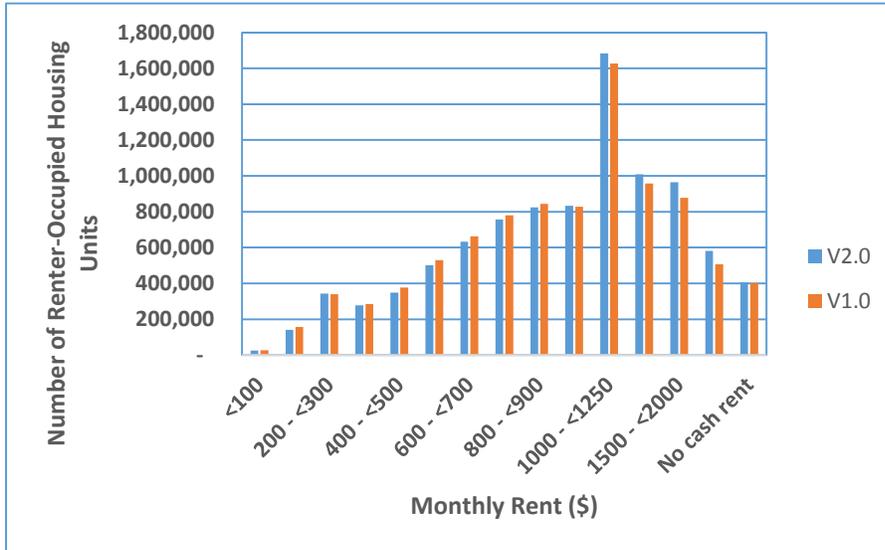


Figure 12 illustrates the alignment between version 1.0 and V13.2 using the monthly rent categories used in V1.0.

Due to the positive trend inflation of rents projected from the 2006-10 source data period and the definitional change of the rent category, more housing units fell in higher rent ranges in the latest version when compared to V1.0.

Source: MarketStance Personal Insight, V1.0 (November 2013); MarketStance Personal Insight, V13.2 (April 2014)

### Who to contact for more information

Please contact our Client Services department at [ms@marketstance.com](mailto:ms@marketstance.com) / 888-777-2587 or your Regional Relationship Director if you have any questions or service needs. We value your business, and thank you for your continued support.