

# Fair Market Estimation – Using Auxiliary Data and Non-Probability Samples to Calculate Fair Market Rents

2017 AAPOR Presentation

May 21, 2017



ICF:

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Randy ZuWallack

Davia Spado

# Thank You

- **Sonoma County Community Development Commission**
- **Santa Rosa Housing Authority**
- **San Mateo County Department of Housing**
- **San Francisco County Housing Authority**
- **Housing Authority of the County of Marin**
- **Alameda County Community Development Agency Housing and Community Development Department**
- **Vermont State Housing Authority**



# Background on Fair Market Rent Surveys



# Fair Market Rent Surveys

- **Fair Market Rent (FMR) is the established rental value of a private property in a market area, including “essential” utilities (gross rent).**
- **The Department of Housing and Urban Development (HUD) uses FMRs to determine payment standard amounts for those in need of housing assistance.**
- **HUD calculates the FMR for a geographic region by using data from the American Community Survey (ACS).**
  - Gross rent of two-bedroom units are calculated
  - Housing subsidy is usually set at the 40<sup>th</sup> percentile of the two-bedroom gross rents
    - Adjustment factors are applied to calculate the FMR for other bedroom number units

# Fair Market Rent Surveys

- **For geographic regions with insufficient data, HUD commissioned random digit dial (RDD) Computer-Assisted Telephone Interviewing (CATI) FMR Surveys to obtain the market rent data. These surveys were halted in 2012.**
- **Local Public Housing Authorities (PHAs) may commission FMR surveys and submit the results to HUD to appeal the ACS calculated 40th percentile rent.**
  - No guarantee that survey data will be significantly different from the HUD FMR.
  - Since 2013, ICF has conducted 8 FMR Surveys – in all cases calculated Survey FMR has been significantly higher than ACS FMR – differences ranging from 12% to 33%.



# Fair Market Rent Surveys

## ▪ Challenges w/ FMR Calculations and Surveys

- Adjustments made to ACS data
  - Adjustment needed for subsidized housing
  - ACS data from previous years is being used to project future rents
  - Trend adjustments made through the use of Consumer Price Index (CPI) and the national trend adjustment are not always reflective of specific rental markets
- Increasing survey costs

# Purpose of this research effort



# Purpose

- **Evaluate alternate options for FMR Calculations and FMR Survey Methodology**
- **Approach**
  - Evaluate the efficacy of non-probability samples to estimate 40<sup>th</sup> percentile rents by comparing non-probability sample data with probability sample data in same region
  - Compare rental data collected by auxiliary data sources (e.g., rental listing websites like Zillow.com) to FMR Surveys and ACS calculations
- **Results will provide actionable next steps for improving FMR estimation and amending FMR Survey methodology that will reduce cost for appealing PHAs allowing them to better serve populations in need.**





# Non-Probability vs. Probability



# Study Designs

- **Conducted in Sonoma County, CA**
- **Probability**
  - ABS Mail Survey with rental flag oversample
  - Protocol (four contact)
    - Prenotification letter
    - First Survey Packet
    - Reminder Postcard
    - Second Survey Packet
  - Administered from January to February 2017
  - 1,588 completes total, 1,465 completes used for analysis
- **Non-Probability**
  - Panelists were recruited from mfour – a mobile market research organization. Panelists received the survey via the mfour’s mobile app “Surveys on the Go”. Survey content was identical to that of the ABS mail survey.
  - Administered from March to April 2017
  - 58 completes total, 46 completes used for analysis
    - Due to low completes, only exploratory analyses performed



# Results

- **Exploratory Analysis – interpret results with caution**
  - 1 and 2 bedroom median and mean gross rents were comparable
  - Median adjusted rents were comparable
  
- **Comparability suggests there may be value in tracking rental prices through the use of non-probability studies**
  - May be better in larger metropolitan areas with greater respondent populations, which could also allow for statistical analyses if enough completes are collected.

Sample		Median	Median Adjusted	Mean	N	Std. Deviation
Non-Probability	1 bedroom	\$ 1,233.00	\$ 1,581.00	\$ 1,347.70	10	\$ 446.38
	2 bedrooms	\$ 1,674.00		\$ 1,603.29	24	\$ 428.01
	3 bedrooms	\$ 1,149.50		\$ 1,485.92	12	\$ 647.43
	<b>Total</b>	<b>\$ 1,607.50</b>		<b>\$ 1,517.11</b>	<b>46</b>	<b>\$ 496.53</b>
Probability	1 bedroom	\$ 1,269.00	\$ 1,599.00	\$ 1,386.85	405	\$ 706.96
	2 bedrooms	\$ 1,630.00		\$ 1,673.42	675	\$ 545.48
	3 bedrooms	\$ 2,148.00		\$ 2,130.82	385	\$ 632.65
	<b>Total</b>	<b>\$ 1,654.00</b>		<b>\$ 1,714.40</b>	<b>1465</b>	<b>\$ 675.24</b>

# Auxiliary Data in FMRs



# Current HUD FMR Calculation Methodology

- 5-year ACS data is used to establish the base rent for the FMR calculation

## Sonoma County, CA

ACS 2014 Adjusted Standard Quality Gross Rent – 2 BR (5-yr)	\$1,226.00
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2017 Survey FMR

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Auxiliary data may improve adjustments

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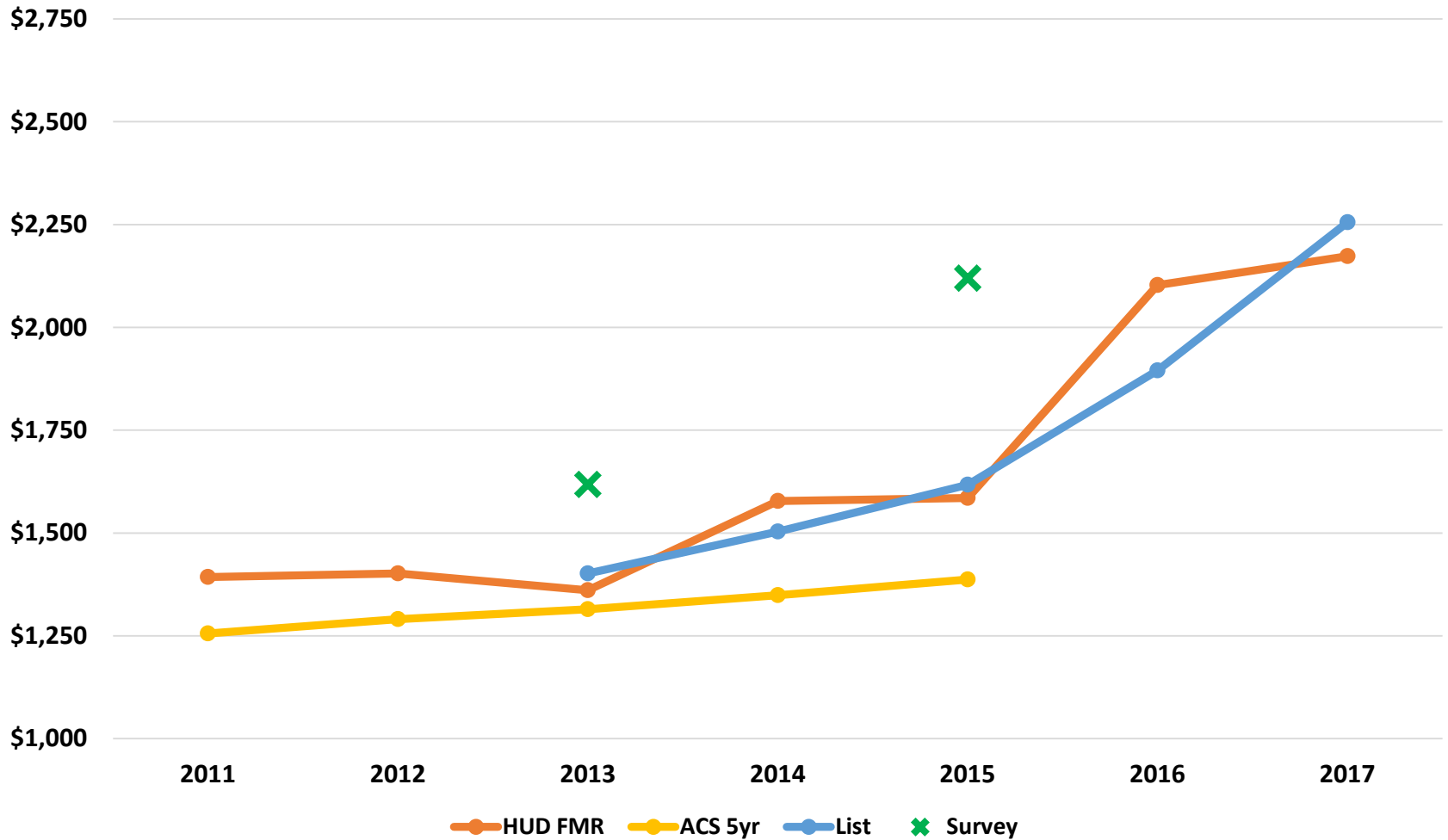
**2017 Survey FMR** **\$1,774.00**



# Trend Comparisons



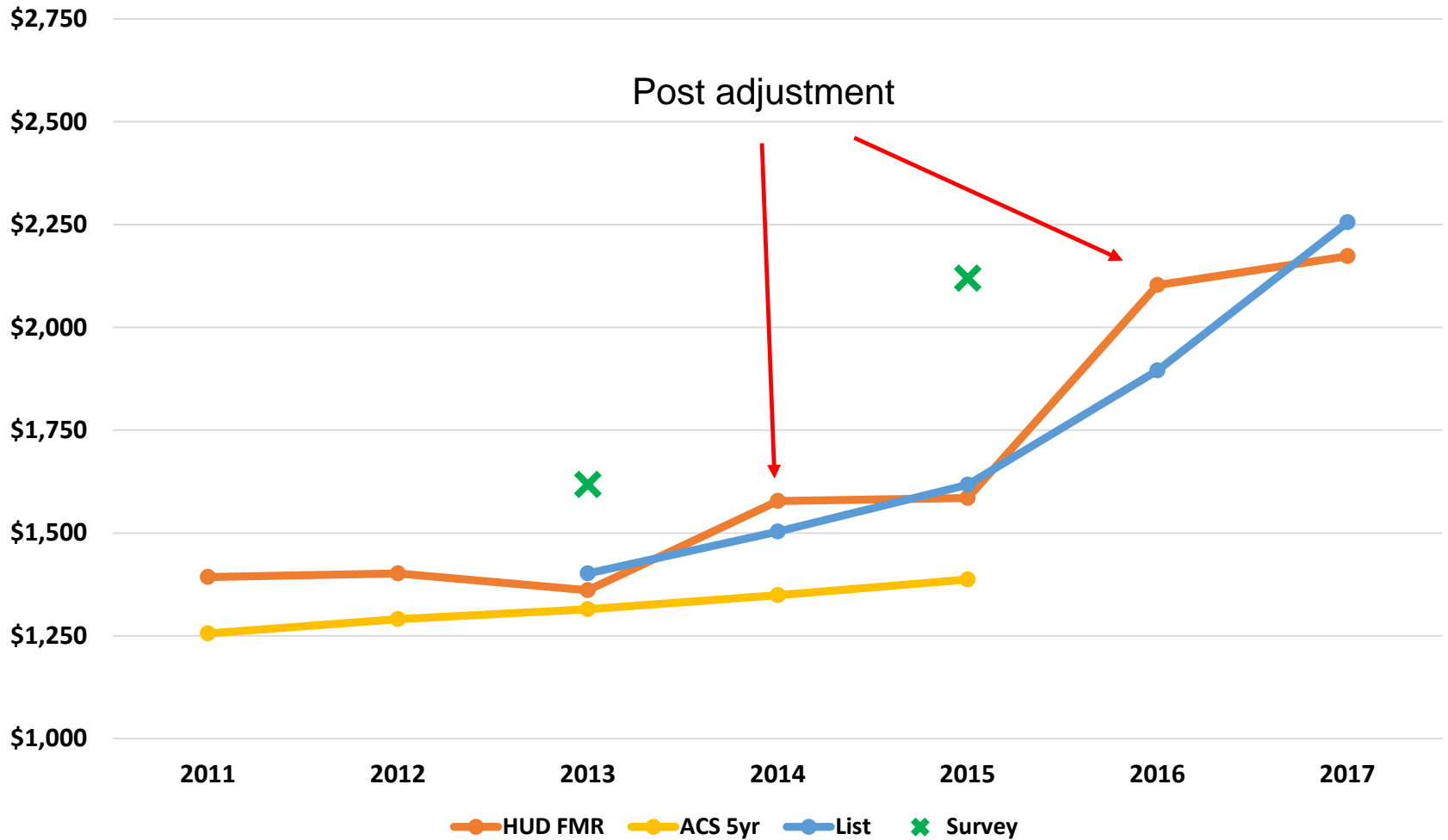
## Oakland-Fremont, CA HUD Metro FMR Area



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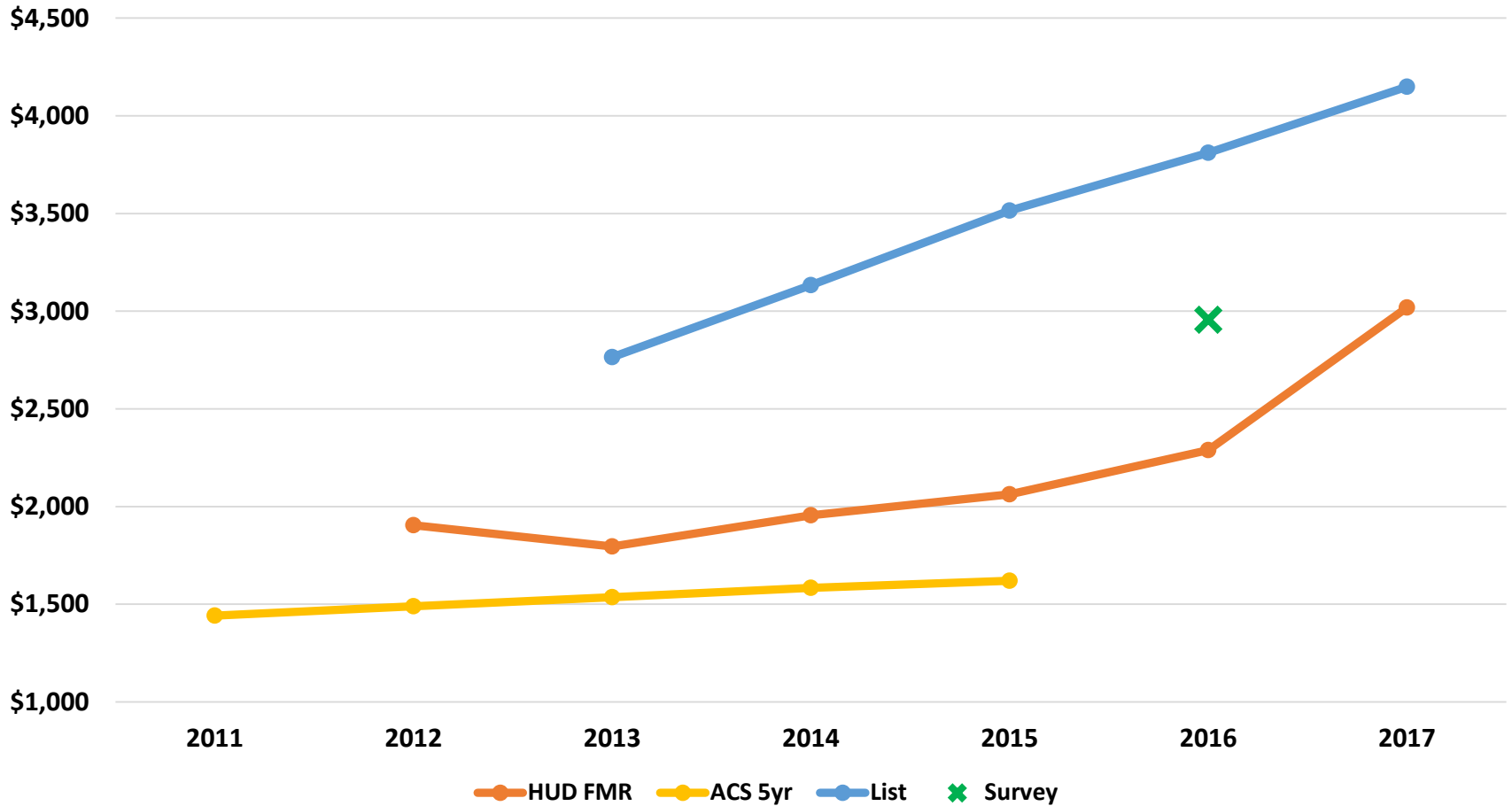
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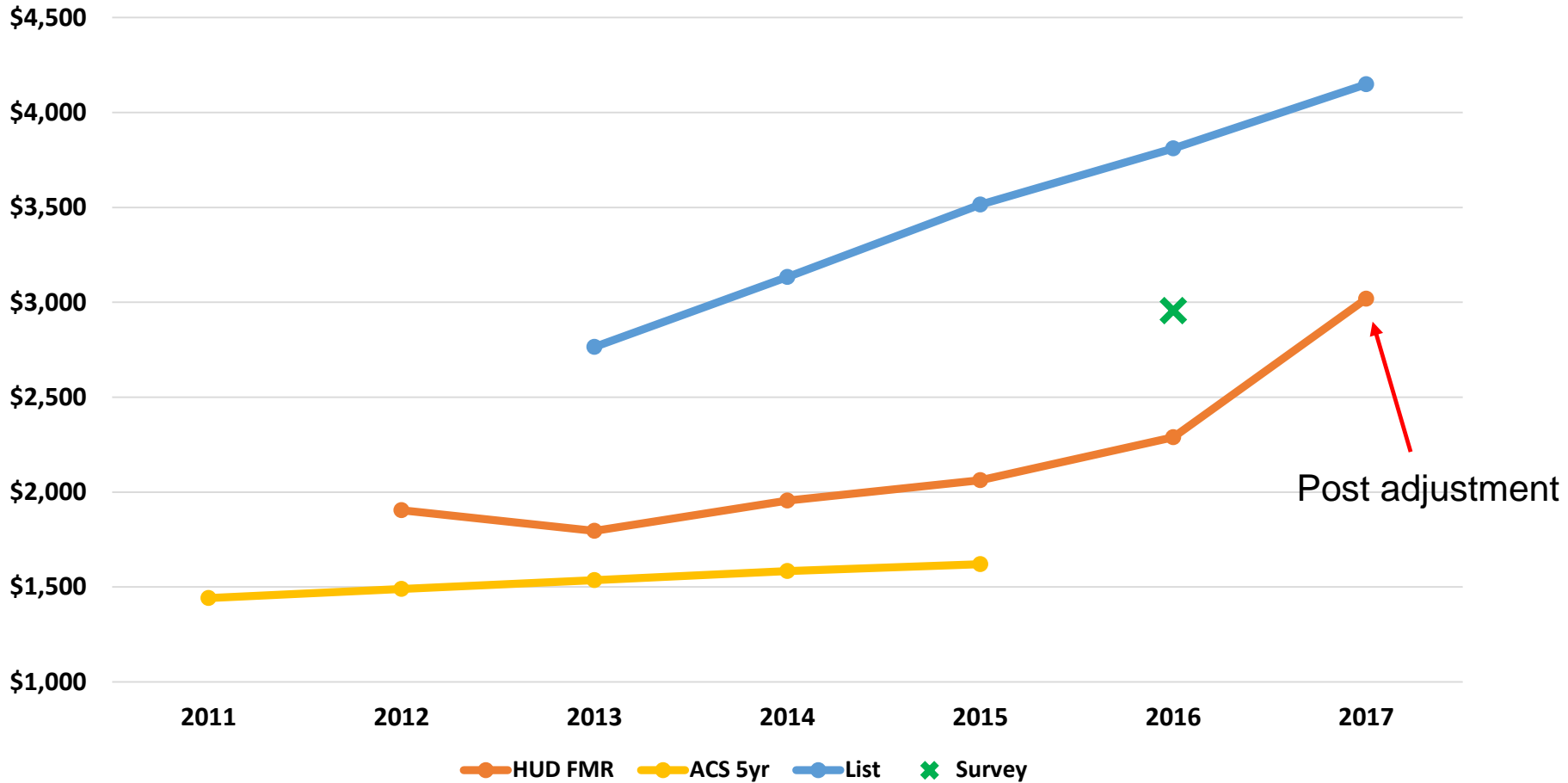
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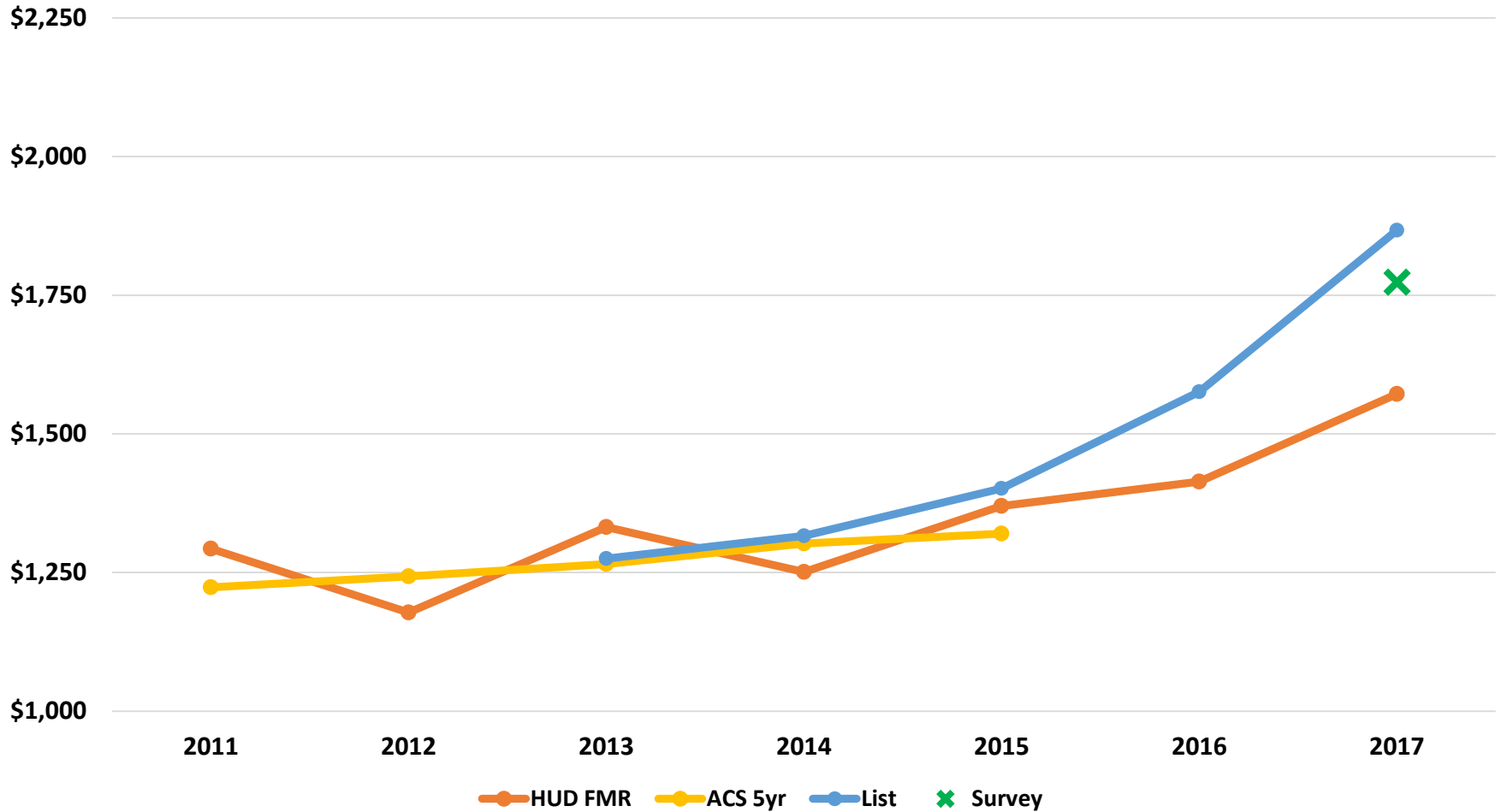
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# Trend Comparisons



## Sonoma County, CA





# Rental Listings Adjustment (RLA)

- How do adjustments made based on rental listing trends compare to CPI and national trend adjustments?
  - Used data acquired from Zillow.com
  - Rental Listings Adjustment (RLA) is the recent mover adjustment multiplied by the ratio of listing price for recent movers of the current year to the listing price for recent movers of the base rent year

$$\text{Rental Listings Adjustment} = \text{Recent Movers (ACS)} \times \frac{\text{Listing Price Recent Movers (current)}}{\text{Listing Price Recent Movers (previous)}}$$

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Data comes from auxiliary source



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San Francisco, CA HUD Metro FMR Area		
ACS 2013 Adjusted Standard Quality Gross Rent – 2 BR (5-yr)		\$1,637.00
Recent mover Adjustment	x	1.2690
2013 Recent mover – 2BR estimate	=	\$2,077.35
2013 - 2014 Trend adjustment (CPI for rental costs and utilities)	x	1.0533
2014 – 2016 National rent trend adjustment 2016 RLA	x	1.0457
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RLA is similar to survey estimate

Oakland-Fremont, CA HUD Metro FMR Area		
2015 HUD FMR	=	\$1,585.00
2015 Survey FMR	=	\$2,103.00
2015 RLA FMR	=	\$1,935.79

} Comparable

## RLA appears to compare better with larger metropolitan areas



# Conclusions & Future Implications



# Conclusions

## ▪ **Non-Probability vs. Probability**

- Exploratory analysis reveals some comparability
- Offers opportunity to track rental market trends at low cost
- Limited by panelist numbers

## ▪ **Auxiliary Data**

- May adjust better for local market variation than CPI and national trend adjustments
- Limited by number and location of listings
  - Fewer listings could skew actual market variation
  - In Sonoma County majority of listings were located in southern portion of county nearer San Francisco; hence higher FMR calculated when compared to survey data
- Analysis was performed in California which has experienced more extreme rental increases over the years

## ▪ **Results do not offer a viable alternate survey methodology or calculation**

- Results do provide additional opportunities to track rental trends that can be used to support the need for a FMR Survey



# Thank You

**Please contact Thomas Brassell with any questions**

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