

Appendix A: Data Notes, Methodologies, and Sources

Appendix A describes the data and methodological underpinnings of *Out of Reach*. Following a description of each subject, a link to the primary data source is provided. In some instances, supplementary material is also cited. Information on how to calculate and interpret the data can be found in the sections “Where the Numbers Come From” and “How to Use the Numbers,” which immediately follow the introduction at the front of the report.

Fair Market Rent Area Definitions

Each year, HUD determines Fair Market Rents (FMRs) for metropolitan and rural housing markets across the country. In metropolitan areas, HUD tries to use the most current Office of Management and Budget (OMB) metropolitan area definitions to define housing market boundaries for its FMR areas. Since FMR areas are meant to reflect cohesive housing markets, simply adopting the OMB definitions for administrative purposes is not always preferable. Also, significant changes to area definitions can affect current recipients. Thus, in keeping with guidance to all federal agencies from OMB, HUD modifies the boundaries in some instances for purposes of program administration.

Reacting to OMB’s sweeping post-census overhaul of metropolitan area definitions in 2003, HUD developed FY06 and FY07 FMR areas that incorporated these new definitions, but modified them if a county (or town) to be added to an FMR area under those definitions had 2000 rents or incomes that deviated

more than 5% from the newly defined metropolitan area.¹ HUD (and *Out of Reach*) refers to unmodified OMB-defined areas as Metropolitan Statistical Areas (MSAs) and modified areas as HUD Metro FMR Areas (HMFAs).

FY10 FMR areas incorporate the most recent (November 2008) OMB update of metropolitan area definitions. The only substantive difference between the FY09 and FY10 FMR areas is the reclassification of 3 areas that were previously listed as non-metropolitan areas as metropolitan areas. These are: Cape Girardeau-Jackson, MO-IL MSA (comprised of Alexander County, IL; Bollinger County, MO; and Cape Girardeau County, MO), Manhattan, KS MSA (comprised of Geary County, Pottawatomie County, and Riley County, KS), and Mankato-North Mankato, MN MSA (comprised of Blue Earth County and Nicollet County, MN). There were also five MSA name changes to reflect the emergence of principal cities within those areas, but these include no changes to their underlying geographic components.

In cases in which an FMR area crosses state lines, this report provides an entry for the area under both states. While the Housing Wage, FMR, and Area Median Income (AMI) values apply to the entire FMR area and will be the same in both states, other data such as the number of renter households and the

¹ See Appendices A and B in *Out of Reach 2006* for additional information on HUD’s methodologies and their effects on FMR area definitions.

minimum and renter wages apply only to the portion of the FMR area within that state's borders.

HUD provides an online tool that illustrates the rationale behind each FMR area definition and the calculation of each FMR. HUD also publishes PDF and Excel files that list the counties and towns included in each area and their FY10 FMRs. These resources are available at www.huduser.org/datasets/fmr.html.

Fair Market Rents

Since FY05, data from Census 2000 have provided the foundation for HUD's calculation of Fair Market Rents. From FY05 until FY07, FMRs were updated from year to year based on either the Consumer Price Index (CPI) or periodic Random Digit Dialing (RDD) surveys. Since FY08, however, information from the American Community Survey (ACS) – an annual survey conducted by the U.S. Census Bureau that replaced the “long form” of the decennial census in 2010 – has provided more recent and more localized data on rental cost trends.

The way in which ACS data are used to develop FMRs depends on the size of the FMR area and the subsequent number of survey responses that it yields. For most areas, data on rent levels from the 2005 ACS are compared to Census 2000 data, and a 2001-05 update factor is calculated. If the area is large enough, the data are drawn from the specific FMR area; but for most, the update factors are based on rent data from more populous geographies (e.g., a metropolitan area, a portion of the state, or the entire state) of which they are a constituent part. Regardless of its origins, the update factor is used to project “base rents” from Census 2000 to 2005 intermediate rents.

The methodology differs somewhat for a handful of the largest FMR areas. For areas with enough recent movers responding to the survey, ACS data from 2005 are used to set 2005 intermediate rents rather than to update data from the last census.²

HUD uses a similar methodology and more recent ACS data to project intermediate rents to 2007. In the majority of cases, 2007 ACS data are simply used to trend the 2006 intermediate rents forward one year. The update factor is based on data from the FMR area itself if the ACS generated enough survey responses to develop a reliable rent figure; otherwise, the update factor is based on the change in rents at the state-level. And again, for some of the largest FMR areas, ACS data are used to directly determine the 2007 intermediate rents rather than to update previous estimates.

Regardless of the methodology used to develop them, 2007 intermediate rents are trended through 2008 using local or regional CPI data and then increased at an annual rate of 3% for five quarters to project FMRs to April 1, 2010.³

Many RDDs conducted between 2001 and 2006 are not incorporated into current FMRs because ACS data are thought to be more reliable. However, RDDs conducted since 2006 are

² See Appendix A in *Out of Reach 2007-2008* and an overview provided by HUD (www.huduser.org/datasets/fmr/fmrover_071707R2.doc) for more detailed information on HUD's incorporation of ACS data into the calculation of FY08 Fair Market Rents.

³ Documentation on the development of the FMR for each County and Metropolitan Area can be accessed at www.huduser.org/portal/datasets/fmr/fmrs/docsys.html&data=fmr10

incorporated into the FY10 FMRs if they are significantly different than the ACS-based estimates. The findings from RDDs conducted in 2008 in two rental markets impacted by Hurricanes Katrina and Ike (New Orleans, LA and Pearl River County, MS) were incorporated into the “revised final” FY09 FMRs which were released after *Out of Reach* was published last year and are also reflected in the FY10 FMRs. The results from Pearl River showed an increase in market rents over the published FY09 FMRs, while the results from New Orleans showed that market rents in New Orleans are lower than the published FY09 FMRs. According to HUD, this indicates that the rental market has stabilized leading to the elimination of the FMR bonus that was applied to the New Orleans area in FY06 after Katrina.⁴ An RDD was also conducted in Hattiesburg, MS, but no significant change was found, so the FMRs for this area remain the same.

The results of two RDD surveys that were conducted in 2009 in Reno-Sparks, NV and Ward County, ND were also incorporated into the “revised final” FY10 FMRs released in March 2010 and are included in *Out of Reach 2010*. The RDD for Reno-Sparks, NV indicated a significant decline in the FMR, while the survey for Ward County indicated a significant increase in the FMR.

The methodological shift in calculating FMRs – from a reliance on CPI inflation factors and RDDs to the utilization of ACS data – is widely seen as an improvement and is expected to produce better estimates of local rents. For the roughly 2,500 FMR areas nationwide, the two-bedroom FMR is 2.3% higher, on average, than in FY09. However, this methodology can create more year-

⁴ See *Out of Reach 2009* for more information about changes in FMRs to areas effected by Hurricane Katrina.

to-year variability and does produce a lower two-bedroom FMR in 72 instances.⁵

As in previous years, this edition of *Out of Reach* compares an area’s current FMR with its Census 2000 base rent. Census 2000 base rents for the current FMR area definitions, which are available through HUD’s FMR Documentation System, make it possible to calculate the percentage increase in FMRs over the last ten years.⁶

Appendix B contains excerpts from HUD’s Notice of Final Fair Market Rents and includes a link to the full document.

40th and 50th Percentile FMR Designation

According to an interim rule (65 FR 58870) published in 2000, HUD is required to set FMRs at the 50th percentile rent, rather than the 40th, in large metropolitan areas with concentrated poverty. This rule was established to expand rental opportunities by making units in less-impooverished areas affordable to Housing Choice Voucher holders. Once designated, the FMR area retains its 50th percentile rent for three years, at which time HUD reviews it for continuing eligibility.

Four of the 14 FMR areas with a 50th percentile voucher payment standard in FY09 were reviewed in preparation of this year’s FMRs. Of these, 2 were deemed ineligible and thus assigned 40th

⁵ Excludes areas that have lower FMRs because HUD dropped its voucher payment standard from the 50th percentile to the 40th percentile.

⁶ This calculation is not influenced by changes in an area’s designation as a 40th or 50th percentile FMR area and therefore represents the actual increase in rents over the ten-year period.

percentile rents in FY10, either because their voucher tenants were no longer concentrated in high-poverty areas or because there was no evidence that the 50th percentile FMR was having the desired effect of moving voucher holders to less impoverished areas.

HUD determined that 2 of the reviewed areas continue to be eligible for 50th percentile FMRs. The other ten areas were not yet up for review and will continue with 50th percentile FMRs. An additional five areas that were not designated as 50th percentile FMRs in FY09 were evaluated in FY10 and all five of these have been designated as 50th percentile areas as of October 1, 2009 and will be reviewed again in 3 years. An asterisk (*) is used to denote the 17 50th percentile areas in *Out of Reach*.

The last page in this appendix lists the FMR areas currently eligible for the 50th percentile rent and also explains why the former 50th percentile areas were deemed ineligible.

National, State, and Nonmetro Fair Market Rents

HUD calculates FMRs for metropolitan areas and nonmetro counties, but not for states, combined nonmetro areas, or the nation. The FMRs for these larger geographies provided in *Out of Reach* are calculated by NLIHC and reflect the weighted average FMR for the counties included in the larger geography. The weight used for FMRs is the number of renter households within each county from Census 2000. This methodology causes some of the National, State and Nonmetro statistics to be subject to rounding issues. For instance if you are using the “How to Use the Numbers” section of this report to do your own calculation of the income needed to afford a 2 bedroom FMR,

you may get an answer that is slightly different from the published statistic due to rounding.

HUD Area Median Income (AMI)

At the time of the original release of *Out of Reach 2010*, HUD had not yet published its AMIs for FY10, because it was revising its “hold harmless” policy, which affects the income limits in a significant number of counties and metropolitan areas. This policy essentially acted as a ratchet on income limits, allowing them to increase but not decrease overtime. For more information on this policy and the potential effects of removing it, go to www.huduser.org/portal/datasets/il.html.

In order to provide readers with these important data, the original release of *Out of Reach* included estimated AMIs. NLIHC came to this estimate by calculating the change in the published HUD AMIs from FY08 to FY09 and using this change factor to project forward to the estimated 2010 AMIs. A cap of 5% was placed on how much an AMI could go up or down, to smooth the estimates. The average change that resulted was an increase of 4%.

On May 14, 2010, HUD published its FY10 AMIs and this version of *Out of Reach* replaces the NLIHC estimated AMIs with HUD’s official AMIs. HUD calculates the AMI for families at the metropolitan level for more urbanized areas and at the county level for nonmetropolitan areas.⁷ The Census definition of “family” is two or more persons related by blood, marriage or

⁷ Documentation on the development of the AMI for each County and Metropolitan Area can be accessed at www2.huduser.org/portal/datasets/il/il10/index_mfi.html

adoption residing together. This family AMI value relates to the universe of all families and is not intended to apply to a specific family size.

As with updates to the FMRs, HUD is now using ACS data to develop income estimates.⁸ For most areas with a population of 20,000 persons or more, update factors based on both local and state income estimates from the ACS are compared to Census 2000 and are used to develop an income estimate for 2008; for less populous areas without ACS estimates and for areas where the estimates are deemed too statistically unreliable, only state income growth is used to update census income to 2008. The 2008 estimate is then projected to April 1, 2010, using an estimate of inflation and assuming 3% growth for five quarters.

Based on the incomes provided by HUD and applying the assumption that no more than 30% of income should be spent on housing costs (see below), *Out of Reach* calculates the maximum affordable rent for households earning the median income and 30% of the median (extremely low income). These calculations are presented in this book, and calculations corresponding to 50% and 80% of AMI are included in the online publication. It is important to note that these are straight percentages and do not include adjustments HUD uses in calculating its income limits for federal housing programs.

The median incomes for states and combined nonmetropolitan areas reported in *Out of Reach* reflect the average of local AMI

⁸ HUD used three-year ACS estimates (2006-08) to develop FY10 median incomes and income limits. When HUD developed FY10 FMR estimates, only one-year estimates from 2007 were available.

data weighted by the total number of households from Census 2000.

A comprehensive list of the counties and towns included in FY10 income limit calculations can be found at www2.huduser.org/portal/datasets/il/il10/area_definitions.pdf.

The methodology for calculating median family income estimates and a discussion of HUD's adjustments to subsequent income limits are provided in *FY2010 Income Limits Briefing Material*, available at www2.huduser.org/portal/datasets/il/il10/IncomeLimitsBriefingMaterial_FY10.pdf.

Affordability

Out of Reach is consistent with federal housing policy in the assumption that no more than 30% of a household's gross income should be consumed by gross housing costs. Spending more than 30% of income on housing is considered "unaffordable."⁹

Although *Out of Reach* explicitly addresses affordability in the rental housing market, housing affordability problems are not unique to renters. *The State of the Nation's Housing: 2009*, published by Harvard University's Joint Center for Housing Studies (www.jchs.harvard.edu/publications/markets/son2009/)

⁹ The Housing and Urban-Rural Recovery Act of 1983 made the 30% "rule of thumb" applicable to all current rental housing assistance programs. See Pelletiere, D. (2008). *Getting to the heart of housing's fundamental question: How much can a family afford?* Washington, DC: National Low Income Housing Coalition.

index.htm), includes an analysis of the affordability problems faced by homeowners.

Prevailing Minimum Wage

The federal minimum wage on January 1, 2010, was \$7.25 per hour. *Out of Reach* incorporates the federal minimum wage in effect *at the time of publication*.

According to data from the U.S. Department of Labor, the District of Columbia and 13 states had implemented a state minimum wage higher than \$7.25 by January 1, 2010. In place of the lower federal rate, *Out of Reach* incorporates the prevailing minimum wage in these states. While there are no upcoming plans to increase the federal minimum wage, some states may decide to implement a higher minimum wage in 2010.

Among the statistics included in *Out of Reach* are the number of hours and subsequent full-time jobs a minimum wage earner must work to afford the FMR. If the reader would like to calculate the same statistics using a different wage, a simple formula can be used for the conversion:

$$\frac{[\text{hours or jobs at the published wage}] * [\text{published wage}]}{[\text{alternative wage}]}$$

For example, if one must work 69 hours per week to afford the FMR assuming a wage of \$7.25, the same FMR would be affordable in 61 hours assuming a wage of \$8.25 ($69 * \$7.25 / \8.25). For further guidance, see *Out of Reach's* "Where the Numbers Come From" page or contact NLIHC research staff.

The Department of Labor (www.dol.gov/esa/minwage/america.htm) provides further information on state minimum wage laws.

Average Renter Wage

Recognizing that the minimum wage reflects the earnings of only the lowest income workers, *Out of Reach* also calculates an estimated mean renter hourly wage. This measure reflects the compensation that a typical renter is likely to receive for an hour of work by dividing average weekly earnings by 40 hours, thus assuming a full-time workweek. Earnings include several non-wage forms of compensation like paid leave, bonuses, tips, and stock options.¹⁰

The estimated mean renter hourly wage is based on the average weekly earnings of private (non-governmental) employees working in each county.¹¹ Renter wage information is based on 2008 data reported by the BLS in the Quarterly Census of Employment and Wages. For each county, mean hourly earnings are multiplied by the ratio of median renter income to median total household income in Census 2000 to arrive at an estimated average renter wage. In 13 cases, this results in an upward adjustment. Nationally, however, the median renter household

¹⁰ Thus this measure is different from the Estimated Renter Median Household Income provided online, which reflects an estimate of what renter households are earning today and includes income not earned in relation to employment.

¹¹ Renter wage data for 29 counties are not provided in *Out of Reach* either because the BLS could not disclose the data for confidentiality reasons or because the number of employees working in the county was insufficient to estimate a reliable wage.

earned only 65% of the overall median household income in 1999.¹²

In roughly 5% of the counties, this downward adjustment to reflect the lower income of renters results in an hourly wage that is below the federal 2008 minimum wage. One likely explanation is that workers in these counties average fewer than 40 hours per week, but the mean renter wage calculation assumes weekly compensation is the product of a full-time workweek. For example, mistakenly assuming earnings from 20 hours of work were the product of a full-time workweek would underestimate the actual hourly wage by half, but it would also accurately reflect the true earnings of renters under the assumption of a full-time schedule.

Like last year, the estimated mean renter hourly wage reported in *Out of Reach* has been adjusted to the same “as of” date assigned to FMRs and AMIs by HUD (April 1, 2010, for this fiscal year) and uses the same methodology that HUD uses to project its income estimates. Because annual average values calculated from BLS data might be considered “as of” July 1 for the calendar year for which they are reported, the data are projected to year-end 2008 using a national inflation factor. An annual rate of 3% is then used to grow renter wages for five quarters to April 1, 2010.¹³

¹² NLIHC’s tabulations of 2006 ACS data indicate that the average hourly wage reported by renter households was roughly 77% of the average overall wage.

¹³ Following HUD’s methodology for developing FY09 AMIs, a 3% growth rate was used to trend average renter wages from year-end 2008 to April 1, 2010.

Wage data from the Quarterly Census of Employment and Wages are available through the Bureau of Labor Statistics at www.bls.gov/cew/home.htm.

Working Hours

Calculations of the Housing Wage and of the number of jobs required at the minimum or mean renter wage to afford the FMR assume that an individual works 40 hours per week, 52 weeks each year, for a total of 2,080 hours per year.

Seasonal employment, unpaid sick leave, temporary lay-offs, and job changes prevent many individuals from maximizing their earnings throughout the year. According to Current Employment Statistics data from early 2010, the average wage earner in the U.S. worked 33.8 hours per week, or roughly 1,760 hours per year.¹⁴ And in related research, NLIHC finds that 29% of renter households that earn wage or salary income do not work as many as 40 hours per week, on average.¹⁵

These statistics should remind the reader that not all employees have the opportunity to translate an hourly wage into full-time, year-round employment. For these households, the Housing Wage underestimates the actual hourly compensation that a worker must earn to afford the FMR. Conversely, some households include multiple wage earners or single individuals that average more than 40 hours per week at work. For these, a

¹⁴ Bureau of Labor Statistics. (2010, March). *The employment situation: February 2010*. Washington, DC: U.S. Department of Labor.

¹⁵ Wardrip, K. & Pelletiere, D. (2007). *Research note #07-03: Putting the Housing Wage to the test*. Washington, DC: National Low Income Housing Coalition.

home renting at the FMR would be affordable even if each worker earned less than the area's stated Housing Wage. For an expanded report on hours and earnings as reported by the Bureau of Labor Statistics, see *The Employment Situation: February 2010* at <http://www.bls.gov/news.release/pdf/empst.pdf>.

Putting the Housing Wage to the Test, a research note in which NLIHC explores the working characteristics of renter households and challenge the 40-hour per week assumption of our signature statistic, is available at www.nlihc.org/doc/ResearchNote_12-07.pdf.

Supplemental Security Income (SSI)

Out of Reach compares rental housing costs with the rents affordable to individuals receiving Supplemental Security Income (SSI) payments. The numbers in *Out of Reach* are based on the maximum federal SSI payment for individuals in 2010, which is \$674 per month. *Out of Reach* calculations include supplemental payments that benefit all individual SSI recipients in the following six states because the payments are centrally administered by the Social Security Administration (SSA): California, Massachusetts, New Jersey, New York, Rhode Island, and Vermont.

Supplemental payments provided by an additional 40 states are excluded from *Out of Reach* calculations. For some, these payments are administered by the SSA but are available only to populations with specific disabilities, in specific facilities, or in specific household settings. For the vast majority, however, the supplements are administered directly by the states, so the data

are not readily available. The only five states that do not supplement federal SSI payments are Arkansas, Mississippi, North Dakota, Tennessee, and West Virginia. Residents of Puerto Rico can not receive federal SSI payments.

Since SSI payments are set at the state level, the published version of *Out of Reach* calculates the difference between each state's average two-bedroom FMR and the rent that is affordable for SSI recipients. Readers can calculate this gap for any geography by subtracting the rent affordable to an SSI recipient from the area's FMR.

Information on SSI payments is available through the Social Security Administration at www.socialsecurity.gov/ssi/index.htm. Information on state supplements can be found at <http://www.socialsecurity.gov/pubs/statessi.html>.

The Technical Assistance Collaborative, Inc., publishes a biennial report comparing Fair Market Rents with the incomes of SSI recipients. Recent editions of *Priced Out* can be found at http://www.tacinc.org/publications_.php.

Additional Data Available Online

Data available in the print version of *Out of Reach* are limited in an effort to present the most important information clearly. Additional data can be found online at www.nlihc.org/oor2010/.

The *Out of Reach* methodology was developed by Cushing N. Dolbeare, founder of the National Low Income Housing Coalition.

Eligibility for 50th Percentile Fair Market Rent

In FY09, Fair Market Rents (FMRs) were set at the 50th percentile rent in 14 FMR areas where voucher tenants were concentrated in high-poverty areas. Compared with the typical 40th percentile rent, this higher voucher payment standard would provide tenants with housing options in less-impooverished areas. In setting FY10 FMRs, HUD reevaluated many of these areas and determined that 1 should have their FMR reduced to the 40th percentile payment standard because at least the same proportion of tenants continued to live in high-poverty areas (denoted below as “failed to deconcentrate”). In one other area no longer eligible for the 50th percentile FMR, the share of tenants in concentrated poverty has decreased sufficiently that the higher rent standard is no longer warranted (“concentration below threshold”). Ten areas will keep their 50th percentile designation. For FY10, five areas that were not designated as 50th percentile FMRs in FY09 were evaluated for this year and it was determined that all five met the qualifications for designation. These five areas are 50th percentile areas effective October 1, 2009 for a three-year period.

No Longer Eligible for 50th Percentile FMR

Failed to Deconcentrate

Dallas, TX HMFA

Concentration Below Threshold

San Diego-Carlsbad-San Marcos, CA MSA

Areas Eligible for 50th Percentile FMR in FY10

Baltimore-Towson, MD MSA

Grand Rapids-Wyoming, MI HMFA

New Haven-Meriden, CT HMFA

Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA

Washington-Arlington-Alexandria, DC-VA-MD HMFA

Remains Eligible for 50th Percentile FMR

Albuquerque, NM MSA

Bradenton-Sarasota-Venice, FL MSA

Chicago-Naperville-Joliet, IL HMFA

Denver-Aurora, CO MSA

Fort Lauderdale, FL HMFA

Hartford-West Hartford-East Hartford, CT HMFA

Houston-Baytown-Sugar Land, TX HMFA

Kansas City, MO-KS HMFA

Milwaukee-Waukesha-West Allis, WI MSA

Richmond, VA HMFA

Tacoma, WA HMFA

West Palm Beach-Boca Raton, FL HMFA