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" (page 6) and "How to Use the Numbers" (page 7).

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 FMR areas in 2005 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).

FY12 FMR areas incorporate the most recent (December 2009) OMB update of metropolitan area definitions. There have been no definition changes published by OMB since FY11, so the FY12 area definitions remain the same as the prior year.

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

[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.

FAIR MARKET RENTS

Prior to FY12, data from Census 2000 provided the foundation for HUD's calculation of FMRs. For most areas, data on rent levels from the ACS were compared to Census 2000 data, and an update factor was calculated to project Census 2000 base rents to an intermediate rent estimate.

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 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 FY12, HUD fully completed a transition to using the American Community Survey (ACS) as the baseline for calculating FMRs, instead of relying on the decennial census. With the release of the 2005-2009 five-year ACS data, updated data are available for all FMR areas, including areas with populations of less than 20,000, for the first time since the 2000 Decennial Census.

As it is not possible to easily identify recent movers in the five-year ACS data, base rents are determined using the standard quality two-bedroom gross rent estimates from the five-year ACS data, expressed as a 2009 figure. Then, a recent mover adjustment factor is applied to the base rents. Local area rent survey results are used as base rents when the survey results indicate rents that are statistically different from the ACS-based rents. In the development of the FY12 FMRs, local area rent surveys conducted in 2010 were used for the Williamsport, PA and Pike County, PA HMFAs.

The rent estimates determined using ACS data are trended through 2010 using local or regional CPI data and then increased at an annual rate of 3% for 15 months to project FMRs to April 2012.

While the *Out of Reach* printed book highlights the two-bedroom FMR, the online version of the report includes a broader data set covering the zero- to four-bedroom FMRs. The focus on the two-bedroom FMRs reflects HUD methodology. HUD finds that the two-bedroom rental units are most common and the most reliable to survey, so the two-bedroom units are utilized as the primary FMR estimate. The two-bedroom FMR estimates are then used to calculate and set FMRs for units of other sizes.

Prior editions of *Out of Reach* compared an area's FMR with its Census 2000 base rent. This made it possible to calculate the percentage increase in FMRs over the last eleven years. Due to the shift in the methodology used to develop the FY12 FMRs, FMRs are not comparable between FY12 and prior years.

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 FY12 FMRs. These resources are available at www.huduser.org/datasets/fmr.html.

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 interim rule (65 FR 58870) published in 2000, HUD is required to set FMRs at the 50th percentile rent, rather than the 40th percentile, in large metropolitan areas with concentrated poverty. This rule was established to expand rental opportunities by making units in more expensive 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.

In FY11, 18 areas were designated as 50th percentile FMRs, and 11 of these areas will maintain their 50th percentile designation for FY12. Ten additional areas have now been designated as 50th percentile FMRs as of October 1, 2011. These FMR areas include 9 areas that failed to deconcentrate when evaluated for the FY09 FMRs but are now eligible for 50th percentile status again. One new area, Sacramento-Arden-Arcade-Roseville, CA HMFA, is participating for the first time.

An asterisk (*) is used to denote the 21 50th percentile areas in *Out of Reach*.

The last page in this appendix lists which FMR areas are currently eligible for the 50th percentile rent.

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 the American Community Survey (2006-2010), released in December 2011.

AREA MEDIAN INCOME (AMI)

On December 1, 2011, HUD published its FY12 AMIs, used in this edition of *Out of Reach*. HUD calculates the AMI for families at the metropolitan level for more urbanized areas and at the county level for nonmetropolitan areas. The Census definition of "family" is two or more persons related by blood, marriage or 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.

In 2011, HUD updated the methodology used to calculate family AMIs due to the availability of new five-year ACS data. That year, HUD discontinued use of Census 2000 data in the production of FY11 AMIs.

The five-year (2005-2009) ACS data, which are available for nearly all areas of geography, are used to calculate the FY12 AMIs. Because new five-year ACS data had not been released in time for the December 1, 2011 AMI release date, HUD used the same five-year (2005-2009) ACS data as FY11 for the basis in the development of the FY12 MFIs.

In select cases where the one-year 2009 ACS is available, HUD uses the one-year data if the resulting estimate is significantly different from the five-year AMI. The 2009 AMI estimates are trended from 2009 to midpoint of 2012 using a factor of 3%.

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, combined nonmetropolitan areas and the nation reported in *Out of Reach* reflect the average of local AMI data weighted by the total number of households provided by the five-year ACS (2006-2010).

A comprehensive list of the counties and towns included in FY12 income limit calculations can be found at http://bit.ly/zmWLvJ (PDF).

The methodology for calculating median family income estimates and a discussion of HUD's adjustments to subsequent income limits are provided in *FY 2012 HUD Income Limits Briefing Material*, available at http://bit.ly/w2ARkS (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."[2]

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: 2011*, published by Harvard University's Joint Center for Housing Studies (www.jchs.harvard.edu/publications/markets/son2011.htm) includes an analysis of the affordability problems faced by homeowners.

PREVAILING MINIMUM WAGE

The federal minimum wage on January 1, 2012, was $7.25 per hour; this wage was effective as of July, 2009. *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 18 states had implemented a state minimum wage higher than $7.25 by January 1, 2012. In place of the lower federal rate, *Out of Reach* incorporates the prevailing minimum wage in these states. Some local municipalities have a minimum wage that is higher than the federal rate, but this local rate is not incorporated into *Out of Reach* data.

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 such as a higher local minimum wage, a simple formula can be used for the conversion:

[hours or jobs at the published wage] *
[published wage] / [alternative wage]

For example, one would have to work 131 hours per week to afford the zero-bedroom FMR in San Francisco if the minimum wage in that location was equivalent to the national rate of $7.25. However, the same FMR would be affordable in 93 hours under the higher local minimum wage of $10.24[3] (131 * $7.25 / $10.24). For further guidance, see "Where the Numbers Come From" (page 6) or contact NLIHC research staff.

The Department of Labor (www.dol.gov/whd/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.[4]

The estimated mean renter hourly wage is based on the average weekly earnings of private (non-governmental) employees working in each county.[5] Renter wage information is based on 2010 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 the American Community Survey (2006-2010) to arrive at an estimated average renter wage. In 23 cases, this results in an upward adjustment, but in all others it leads to a downward adjustment.

In roughly 14% of counties, this downward adjustment to reflect the lower income of renters results in an hourly wage that is below the federal 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 (see next section). As it was 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, 2012, 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 2010 using a national inflation factor. An annual rate of 3% is then used to grow renter wages for five quarters to April 1, 2012.[6]

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 wage 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 as well as vacations prevent many individuals from maximizing their earnings throughout the year. According to Current Employment Statistics data from January 2012, the average wage earner in the U.S. worked 34.5 hours per week.[7] And in related research, NLIHC finds that 29% of renter

[2] 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, D.C.: National Low Income Housing Coalition.
[3] $10.24 is the 2012 local minimum wage in San Francisco. www.sfgsa.org/index.aspx?page=411
[4] Please note 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.
[5] Renter wage data for 30 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.
[6] Following HUD's methodology for developing FY12 AMIs, a 3% growth rate was used to trend average renter wages from year-end 2010 to April 1, 2012.
[7] Bureau of Labor Statistics. (2012). *The employment situation: January 2012*. Washington, D.C.: U.S. Department of Labor.

households that earn wage or salary income do not work as many as 40 hours per week, on average.[9]

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 home renting at the FMR would be affordable even if each worker earned less than the area's stated Housing Wage, as long as their combined wages exceed the Housing Wage.

For an expanded report on hours and earnings as reported by the Bureau of Labor Statistics, see *The Employment Situation: December 2011* at www.bls.gov/news.release/empsit.nr0.htm

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 2012, which is $698 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, Nevada, New Jersey, New York, and Vermont.

Supplemental payments provided by an additional 39 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 six states that do not supplement federal SSI payments are Arkansas, Arizona, North Dakota, Mississippi, Tennessee, and West Virginia. Residents of Puerto Rico cannot 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.ssa.gov/oact/cola/SSIamts.html. Information on state supplements can be found at www.ssa.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 www.tacinc.org/resources/data/pricedout.

[9] Wardrip, K. & Pelletiere, D. (2007).

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/oor/2012.

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 FY12, Fair Market Rents (FMRs) were set at the 50th percentile rent in 21 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-impoverished areas. Eleven of these FMR areas were also designated as 50th percentile rent for FY11. Additionally, nine areas failed to deconcentrate when evaluated for FY09, but are now reinstated as 50th percentile FMRs. Lastly, one newly qualified area, the Sacramento-Arden-Arcade-Roseville HMFA, was found to qualify for the 50th percentile designation effective October 1, 2011.

REMAIN ELIGIBLE FOR FY12 50TH PERCENTILE FMR

Baltimore-Towson, MD MSA
Bergen-Passaic, NJ HMFA
Fort Lauderdale, FL HMFA
Grand Rapids-Wyoming, MI HMFA
Hartford-West Hartford-East Hartford, CT HMFA
Houston-Baytown-Sugar Land, TX HMFA
New Haven-Meriden, CT HMFA
North Port-Bradenton-Sarasota, FL MSA
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD MSA
Washington-Arlington-Alexandria, DC-VA-MD HMFA
West Palm Beach-Boca Raton, FL HMFA

NEW AREAS ELIGIBLE FOR 50TH PERCENTILE FMR IN FY12

Austin-Round Rock-San Marcos, TX MSA
Fort Worth-Arlington, TX HMFA
Honolulu, HI MSA
Las Vegas-Paradise, NV MSA
Orange County, CA HMFA
Phoenix-Mesa-Glendale, AZ MSA
Riverside-San Bernardino-Ontario, CA HMFA
Sacramento-Arden-Arcade-Roseville, CA HMFA
Tucson, AZ MSA
Virginia Beach-Norfolk-Newport News VA-NC MSA