U. S. Department of Housing and Urban Development

Special Attention of:

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Regional Directors, Field Office Directors,
Economists, Public & Indian Housing
Division Directors, Multifamily Hub Directors,
Multifamily Program Center Directors

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Cross References:

Subject: Estimated Median Family Incomes for FY 2005

        This memorandum transmits median family income and
income distribution estimates for Fiscal Year 2005. They
are calculated for each metropolitan and nonmetropolitan
area using the Fair Market Rent (FMR) area definitions
applied in the Section 8 Housing Choice Voucher Program.
The estimated median family income for the United States
for FY 2005 is $58,000.

        The Fiscal Year 2005 HUD median family income estimates are
based on 2000 Census data on family incomes updated to 2005
using Census P-60 median family income data, Census American
Community Survey data on changes in state median family incomes,
and local Bureau of Labor Statistics wage data. Attachment 1
provides an explanation of the methodology used to develop these
estimates. Attachment 2 provides median family income estimates
for states. Attachment 3 provides metropolitan area and
nonmetropolitan county estimates of median family incomes.
Attachment 4 provides the area definitions used for income
limits.

        Please note that the use of the HUD median family
income estimates and income limits is subject to individual
program guidelines covering definitions of income and
family, family size, effective dates, and other factors.
If you have any questions concerning these matters, please
refer them to your Field Office economist.

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HUD 21B (3-80)
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HUD median family income estimates are also available at the Department's World Wide Web site, which provides a menu from which you may select the year and type of data of interest (**http:\\www.huduser.org\datasets\il.html**).

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Dennis C. Shea
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  Policy Development and
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Attachments

ATTACHMENT 1

HUD METHODOLOGY FOR ESTIMATING FY 2005
MEDIAN FAMILY INCOMES
(ECONOMIC AND MARKET ANALYSIS DIVISION,
OFFICE OF ECONOMIC AFFAIRS, PD&R)

FY 2005 HUD estimates of median family income are based on 2000 Census data estimates updated with county-level Bureau of Labor Statistics (BLS) earnings data, Census American Community Survey (ACS) state-level data, and Census Current Population Survey (CPS) data. Separate median family income estimates (MFIs) are calculated for all Metropolitan Statistical Areas (MSAs), Primary Metropolitan Statistical Areas (PMSAs) and nonmetropolitan counties.

HUD has begun to increasingly rely on Census American Community Survey (ACS) data as the basis for calculating median family income estimates. The ACS surveys were initiated in 2000, but the first full-scale annual survey of approximately three million households started in 2005. The 2005 survey will provide data in 2006 that can be used to estimate median family incomes for most metropolitan areas, and subsequent surveys will eventually provide estimates for all but the smallest non-metropolitan counties. HUD's FY 2004 income estimates used ACS state-level data as a control on local median family income changes. Based on research, the FY 2005 HUD median family income estimates are even more reliant on ACS data.

The income adjustment factors used to update the 2000 Census-based estimates of MFIs are developed in several steps. Census CPS and ACS survey data are used to develop national and state level estimates of change in median family incomes. Annual data on median family incomes are available at the national and regional level from the CPS. State-level ACS income data are now available for calendar years 2000 through 2003. CPS P-60 national data were used to cover the period between the 2000 Census and the first ACS data. In previous years, BLS local area wage data were used as an indicator of relative income change within states, but these indicators were constrained so that they equaled the CPS changes at the CPS Census Divisional level. Retrospective analysis of the 1990-2000 period showed that BLS average wage changes had larger differences with median family income changes than in the previous decade and that, by themselves, they were not the best available predictor of local changes in median family incomes. Based on statistical testing, HUD concluded that a combination of state ACS and local BLS data offered the best approach to calculating local median family income estimates until more localized ACS data begin to be available in 2006.

The Census, ACS, and CPS estimates are based on different samples, have different timing, use somewhat different methodologies, and produce somewhat different estimates.[1] The year-to-year income change factors derived from these data sets (e.g., the national CPS

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[1] The national MFI from the Census was $50,046; the March 2000 CPS produced a MFI estimate of $48,952; and the first ACS survey, which collected data during the course of 2000 and effectively represented a measurement a year after those of the other surveys, had a MFI estimate of $49,628.

MFI from one year to the next) should, however, be reasonably consistent over time. The decennial Census has the largest samples, but is only available every 10 years and may be more subject to non-response bias. The 2000-2004 ACS had relatively large samples, provides annual estimates, and should be less subject to non-response bias than the Census. The 2000-2004 ACS has larger sample sizes than the CPS and, therefore, produces more accurate estimates.

Estimates of income need to be associated with a point in time. This poses the need to attribute an "as of" date to estimates when such dates are not explicitly defined. The 2000 Census income data, for instance, are based on questions regarding total income for 1999. For most households, income for a year is based on an income stream with at least some changes during the year. For purposes of estimation, HUD assumes that the 2000 Census income estimates have an "as of" date of mid-1999. For the same reason, it assumes that March CPS income estimates, which are based on responses to questions about the previous year's total income, also relate to the middle of the previous calendar year.

ACS estimates present a more complex timing issue, because they are based on samples drawn throughout a year that ask about income for the previous 12 months. Adjustments are made to incomes collected prior to December to make them approximate December reporting. Income figures collected in January are inflated by the CPI change from January to December of that year, the February changes are inflated from February to December, etc. If median income changes during the year (which are not known when the estimates are done) exactly paralleled the CPI changes, an ACS-based median family income estimate would approximate a median family income estimate based on surveying all respondents in December. That, in turn, means that the ACS income data have an approximate "as of" date of the middle of the year if median incomes changed at the same pace during the course of a year.

The importance of the "as of" assumptions becomes less important over time. After the initial income estimates are produced, annual updates are estimated using the same data sources. Any estimation error or bias associated with the "as of" assumptions affects only the first year a data series starts to be used. The impact of this type of bias cannot be measured but, since it is a fixed amount and incomes increase over time, the effect should be modest. The potential for bias is further mitigated by the fact that the CPI and CPS changes for the period in question were very similar at the national level.

The step-by-step normal procedures used to develop FY 2005 estimates are as follows:

1. The 2000 Census was used to estimate what are treated as mid-1999 local median family income estimates.

2. The March 2000 and 2001 CPS surveys, which provided what were effectively mid-1999 and mid-2000 median family income estimates, provided an estimate of change in median family income levels at the national level that was applied to 2000 Census-based local median family income estimates to update them from mid-1999 to mid-2000. The national change in median family

incomes for this period was 3.58 percent. (Multi-state Census Division CPS changes could have been used in place of a national factor, but research suggests that it is questionable whether this would have improved estimation accuracy if used only for one year.)

3. The 2000 and 2003 American Community Surveys were used to estimate the change in State MFIs for the mid-2000 to mid-2003 period. The ACS income change factors for each State for the 2000-2003 period were calculated as follows:

$$\frac{\text{ACS MFI (2003)}}{\text{ACS MFI (2000)}} = \text{3-year increase factor for ACS Median Family Income}$$

4. State and Local (metropolitan areas and nonmetropolitan counties) BLS average wage changes for all employees for the 1999-2002 period were calculated:

$$\frac{\dfrac{\text{BLS Wages (2002)}}{\text{BLS Employees (2002)}}}{\dfrac{\text{BLS Wages (1999)}}{\text{BLS Employees (1999)}}} = \text{3 year BLS wage increase factor}$$

5. Local area update factors were derived using local BLS average wage changes in conjunction with State level Income changes. They were combined according to the results of research done on the determinants of income change between 1990 and 2000.[2]

     17% * Local BLS Average wage change)
        + (83% * ACS State Income Change) = Local Update Factor

6. A state level factor was generated using the same formula, as follows:

     (17% * State BLS Average wage change)
        + (83% * ACS State Income Change) = State Update Factor

7. A state ACS control factor was developed that adjusted for differences between the step 6 update factor and the actual ACS state change factor for the same period. Changes in BLS-reported average wages, even though they lead to changes in family income, are not a direct measure of changes in family income and require adjustment if being used for that purpose. This was done as follows:

$$\frac{\dfrac{\text{ACS State MFI (2003)}}{\text{ACS State MFI (2000)}}}{\text{State Update factor}} = \text{State control factor}$$

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[2] In ten low-population counties with suspect wage changes, which in the past have typically been associated with reporting errors, BLS wage increases/ decreases were constrained to fall within the 99th percentile of the BLS wage change distribution.

Generated in Step 6

8. Local area update factors were adjusted with the state control factor as follows:

Local update factor (step 5)
 * State control factor (step 7)
  = Adjusted local update factor

9. Convert the step 1 median family income estimate to an April 1, 2005 estimate as follows:

Step 1 median family income
* Step 2 mid-1999 to mid-2000 CPS factor
* Step 8 adjusted local update factor
* 1.035 (3.5% annual trending) * 1.75 years
= FY 2005 Median Family Income estimate

Median Family Income estimates are frozen if they would otherwise be less than the previous year's estimate (held harmless).

FY 2005 MEDIAN FAMILY INCOMES FOR STATES, METROPOLITAN AND
NONMETROPOLITAN PORTIONS OF STATES

| | ----- FY 2005 Estimates ------ | | | ------ 2000 Census Estimates ------ | |
	TOTAL	METRO	NONMETRO	TOTAL	METRO	NONMETRO
ALABAMA	48,650	52,750	41,300	41,657	45,164	35,360
ALASKA	72,400	78,700	68,200	59,036	63,682	55,205
ARIZONA	53,300	55,200	40,950	46,723	48,376	36,156
ARKANSAS	45,300	51,200	40,000	38,664	43,441	34,709
CALIFORNIA	62,500	63,100	49,100	53,024	53,613	41,644
COLORADO	65,400	67,850	53,900	55,870	57,935	46,019
CONNECTICUT	77,100	77,400	71,250	65,521	65,764	60,555
DELAWARE	67,350	71,450	55,100	55,258	58,619	45,203
Dist. of Columbia	55,750	55,750	0	46,283	46,283	0
FLORIDA	52,550	53,350	43,200	45,625	46,330	37,429
GEORGIA	58,400	64,900	46,350	49,280	54,766	39,106
HAWAII	64,200	67,750	56,950	56,961	60,118	50,547
IDAHO	50,850	56,650	47,700	43,490	48,459	40,788
ILLINOIS	63,300	66,950	49,400	55,545	58,721	43,314
INDIANA	57,800	59,800	52,750	50,261	52,010	45,872
IOWA	57,650	63,800	53,550	48,005	53,128	44,599
KANSAS	56,650	64,600	48,050	49,624	56,597	42,113
KENTUCKY	48,000	57,600	40,100	40,938	48,890	34,627
LOUISIANA	47,550	50,050	39,900	39,774	41,866	33,358
MAINE	52,550	60,150	48,650	45,179	51,714	41,836
MARYLAND	75,250	76,800	59,050	61,875	63,172	48,565
MASSACHUSETTS	74,400	74,900	63,250	61,663	62,061	52,405
MICHIGAN	61,300	64,850	49,500	53,457	56,559	43,163
MINNESOTA	66,950	73,700	54,350	56,872	62,604	46,161
MISSISSIPPI	40,700	48,900	36,500	37,405	44,946	33,657
MISSOURI	56,100	63,300	44,450	46,045	51,663	36,860
MONTANA	48,150	51,600	46,400	40,488	43,392	39,034
NEBRASKA	57,400	65,800	50,150	48,032	55,027	41,952
NEVADA	59,550	59,650	59,050	50,849	50,921	50,427
NEW HAMPSHIRE	68,000	74,300	60,300	57,577	62,753	51,278
NEW JERSEY	77,800	77,800	0	65,370	65,370	0
NEW MEXICO	46,200	52,800	39,100	39,425	45,010	33,393
NEW YORK	60,100	61,150	49,900	51,691	52,584	42,901
NORTH CAROLINA	53,000	57,500	45,200	46,335	50,236	40,075
NORTH DAKOTA	54,100	61,750	49,150	43,656	49,842	39,664
OHIO	57,950	59,400	51,800	50,037	51,307	44,740
OKLAHOMA	47,400	52,250	41,050	40,709	44,837	35,250
OREGON	58,600	63,300	48,300	48,680	52,058	40,728
PENNSYLVANIA	57,400	59,500	48,450	49,184	50,870	41,534
RHODE ISLAND	64,550	63,950	73,150	52,780	52,256	59,815
SOUTH CAROLINA	52,400	55,400	46,300	44,227	46,647	39,189
SOUTH DAKOTA	49,850	57,550	46,150	43,234	49,920	40,018
TENNESSEE	50,300	54,750	42,950	43,517	47,366	37,145
TEXAS	53,000	55,500	42,400	45,862	47,951	36,724
UTAH	57,450	60,000	49,300	51,022	53,316	43,819
VERMONT	58,850	69,200	55,800	48,625	57,181	46,100
VIRGINIA	65,150	71,800	48,950	54,169	59,706	40,703
WASHINGTON	61,500	64,400	49,900	53,761	56,492	42,818
WEST VIRGINIA	44,400	50,400	40,600	36,484	41,545	33,174
WISCONSIN	60,800	64,750	54,400	52,912	56,360	47,342
WYOMING	55,250	55,800	54,950	45,685	46,159	45,472
US	58,000	61,200	46,900	50,046	52,754	40,491