

National Health and Aging Trends Study
Round 12 Income Imputation (Interval Regression Methodology)

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Overview

The National Health and Aging Trends Study (NHATS) asks participants to report their total income for the prior calendar year. In Round 12, the Income and Assets (IA) section asks about sources of income and total annual income from all sources for participants (and their spouse/partners, as applicable) in 2021. For those who do not report an exact value, information is collected in broad categories.

In order to facilitate the use of these income data by the research community, we have developed a set of income variables that include imputed values for those with missing income information. We provide 20 values to facilitate the use of multiple imputation variance estimators and analysis techniques (see, for example, Rubin 1996). Our approach draws upon interval regression analysis.¹

This technical paper describes the Round 12 income imputation methodology. A separate technical paper describes the methodology for prior rounds. Imputed values are available in a separate data file included in the NHATS public use data zip file.

Extent of Missing Data for Total Income

Table 1 shows the percentage of Round 12 participants that require imputation and the reason. Nearly three-fourths of respondents (72.0%) did not require imputation because they provided an exact value of total income; 14.5% reported a categorical value (within a bracket); and 12.6% reported neither. In addition, <1% of respondents provided values that were considered outliers (extremely low or high values that were inconsistent with previously reported values) and hence imputed.

Table 1. Percentage of NHATS Participants Requiring Income Imputation and Reason, Round 12

Reason for Imputation	n	% missing
% Not imputed: exact value reported	4,245	72.0%
% Imputed: bracket response only	853	14.5%
% Imputed: missing exact value and bracket response	744	12.6%
% Imputed: other	58	<1.0%
Total	5,900	100.0%

Imputation Approach

For purposes of imputation, we transformed income reports to log income (after adding \$1). For respondents missing an exact value (or reporting an outlier value suspected to be misreporting)², we used multiple imputation by chained equations (MICE) to impute missing

¹ Previously, NHATS provided on each SP file 5 imputations prepared using a hot-deck methodology. To allow a more substantial number of imputations (n=20) to be produced, NHATS has switched to an interval regression methodology. Imputations based on the interval regression approach are being released in a separate file for each prior round. Beginning in Round 12 only the interval regression imputation will be provided.

² Cases with reported income <\$200 and >\$900,000 were confirmed to be substantially different from reports in prior rounds and therefore imputed.

covariates and then missing income. We used interval regression in Stata to impute income, which fills in the missing values of partially observed (censored) income (that is, within a range).

We ran models separately for groups that we formed based on available covariates. Altogether six imputation groups were formed:

- Continuing sample persons (SPs) with a spouse/partner who completed the entire interview (non-breakoff);
- Continuing SPs without a spouse/partner, non-breakoff;
- Continuing SPs who did not complete the interview (breakoff);
- New SPs with a spouse/partner, non-breakoff;
- New SPs without a spouse/partner, non-breakoff; and
- New SPs who did not complete the interview (breakoff).

To implement the interval regression approach, we specified a lower and upper limit for all cases. For cases with an exact value, we added \$1 to the reported value, and specified the lower and upper limits to be the log-transform of that amount (essentially assigning the reported value to each imputation). For cases with only categorical information, we used the log-transformed upper and lower amounts of the bracket (plus \$1) as limits. Cases with only an upper limit (e.g., income < \$40,000) received \$1 as their lower limit. Cases with only a lower limit (e.g., income > \$145,000) received a missing value for their upper limit, which can take any positive value above the lower limit. For low-end outliers (<\$200) inconsistent with prior rounds, we assumed that the exact value was in the <\$40,000 category. For cases missing both sources of income (exact value and categorical information) and for high-end outliers (>\$900,000) inconsistent with prior rounds, the lower limit was specified as \$1 and upper limit set to missing.

Before releasing the data, we transformed reported and imputed values back to the original (non-logged) dollar scale.

Variables Used in Imputation

Here we provide an overview of covariates included in the imputation models. See the Appendix Table for details about which covariates were included for each of the six imputation groups.

1. Sources of income: We include a series of variables indicating whether the respondent (and his/her spouse/partner, if applicable) has each source (yes/no). Sources include Social Security and/or Railroad Retirement payments; Supplemental Security Income; Veteran's Administration payments; and whether they worked for pay last month.
2. Sources of wealth (some of which may generate income): We include a series of variables indicating whether the respondent (and his/her spouse/partner, if applicable) has each source. Sources include: pension plans that were a job-related or union benefit; other retirement plans such as 401K plans, 403B plans or IRAs; mutual funds or stocks; any bonds; checking account; savings account; certificates of deposit (CDs);

whether they own their home (and home value), rent their home or have some other arrangement; and whether they own a business, a farm, or any other real estate besides their home.

3. Other income-related predictors: whether they usually pay off all credit card balances every month or don't have any credit cards and amount of balances owned; whether they have medical bills that are being paid over time; whether they receive or provide financial gifts to children or other relatives either regularly or just every so often as needed (and the amount of financial help provided to children or other relatives); whether they received food stamps, other food assistance such as Meals-on-Wheels, and / or gas, electricity, or other energy assistance; whether they have enough money for rent or mortgage, utilities and / or medical or prescription drug bills; and whether they live in Section 8 public housing or housing for low-income seniors.
4. Respondent characteristics: age, race/ethnicity, gender, educational attainment, current marital status, if there has been a change in marital status change from last round (continuing SPs only), total income from the last round (reported or average of 20 imputations for continuing SPs only), residential care status, whether the SP responded for themselves or had a proxy respondent, and interviewer observations about the home condition. Census division and metro/non-metro residence are also included as geographic indicators related to the complex sample design of NHATS.

Income Imputation Procedure

For each imputation group, we estimated multiple imputations by chained equations (MICE) first to fill in missing values for covariates (starting with the least missing) and then for logged income. Interval regression was used to impute 20 values of logged income. For each imputation group, we specified 20 burn-in iterations (i.e., the number of iterations before the first set of imputed values is drawn). Final imputed variables were transformed back to a non-logged dollar scale.

We incorporated the NHATS survey design into imputation models as follows (Reiter 2006). NHATS weights were included in the imputation model (using a pweight statement). Because we could not directly account for strata and cluster variables in the imputation strategy, we included SP's census division and a metro/non-metro residence indicator as controls.³

³We considered other approaches—e.g., adding a variable for each strata by cluster combination or imputing separately by each unique cluster (Heeringa, West & Berglund, 2017). However, the NHATS' complex sample design has too many cluster/strata combinations to implement these approaches (56 strata and two clusters per stratum).

Income Imputation Variables

The Round 12 income imputation file includes 20 values of income. In addition, a flag variable indicating which cases have imputed (vs. reported) values is included along with a derived variable indicating the reason for imputation.

Table 3. Imputed variables included in NHATS

Variable name	Label	Description
ia#toincimif	R# F IMPUTED TOTAL INC FLG INTERVAL	Flag indicating imputation
ia#dtoincimi1- ia#dtoincimi20	R# D IA50 IMPUTED TOTAL INC1-20 INTERVAL	Includes reported \$ amount, imputed values for missing \$ amounts and reported bracket amounts
ia#dtoincimreas	R# D IMPUTED TOTAL INC REASON	Derived variable indicating reasons for imputation: 1 Not imputed: exact value reported 2 Imputed: bracket response only 3 Imputed: missing exact value and bracket response 4 Imputed: other

Descriptive Statistics for Income

The Round 12 NHATS Imputed Income file includes data for all 6,327 participants. Those who completed a living SP interview (n= 5,900; with r12dresid 1, 2, or 4) have reported or imputed values and the remaining SPs without a living SP interview (n=427; following the NHATS convention, cases with r12dresid values of 3,5,6,7 or 8 were set to inapplicable (-1) or missing (-9)).

The weighted mean for Round 12 is \$71,980 and weighted median is \$50,000. For context, Table 4 includes weighted descriptive statistics for all rounds in which income information was collected.

Table 4. Weighted descriptive statistics, Total Income, NHATS Rounds 1-12 (in dollars)

	Reference Year	Ages	n	Mean	Standard error	25 th percentile	Median	75 th percentile
Round 1	2010	65+	7,609	46,540	1,335	17,320	32,000	59,610
Round 3	2012	67+	4,884	52,732	1,700	18,980	35,269	68,985
Round 5	2014	65+	7,576	57,744	1,841	20,400	40,000	74,000
Round 7	2016	67+	5,566	60,411	2,135	22,000	41,741	76,602
Round 9	2018	69+	4,460	61,986	2,058	22,889	44,048	80,000
Round 11	2020	71+	3,388	64,366	2,664	24,289	47,000	80,000
Round 12	2021	65+	5,900	71,980	2,305	25,000	50,000	92,784

Note. Weighted means and standard errors were computed using “mi estimate: svy” command. Median and other percentile measures were computed using the “_pctile” command for the

average of the 20 imputed variables. Final analytic weights were used in these analyses. Excludes participants living in a nursing home in the year enrolled in NHATS. Total income is for individuals and their spouse/partners (if applicable).

Using Imputed Income in Analyses

For each round, 20 sets of imputed variables were generated. To adjust coefficients and standard errors for the variability between imputations following the combination rules by Rubin (1987), users can use the “mi estimate” command in Stata to run estimations on the imputed dataset.

Below is an example of Stata code that may be used to estimate unweighted and weighted mean income using NHATS Round 12.

```
*merge income imputation file with SP file
use NHATS_Round_12_Interval_Inc_Imp_File, clear
merge 1:1 spid using NHATS_Round_12_SP_File
drop _merge

*generate an income variable which includes only non-imputed income values
gen ia12totinc2 = ia12totinc
replace ia12totinc2 = . if ia12dtoincimreas != 1

*save it to a new dataset
save newdataset, replace

*use this new dataset for analysis
use newdataset, clear

*use mi import to import data that include reported income and additional imputed income
variables
mi import wide, imputed (ia12totinc2 = ia12dtoincimi1 ia12dtoincimi2 ia12dtoincimi3
ia12dtoincimi4 ia12dtoincimi5 ia12dtoincimi6 ia12dtoincimi7 ia12dtoincimi8 ia12dtoincimi9
ia12dtoincimi10 ia12dtoincimi11 ia12dtoincimi12 ia12dtoincimi13 ia12dtoincimi14
ia12dtoincimi15 ia12dtoincimi16 ia12dtoincimi17 ia12dtoincimi18 ia12dtoincimi19
ia12dtoincimi20) drop
mi set wide

*estimate unweighted mean income of all caregivers of NSOC IV Round 11
mi estimate: mean ia12totinc2

*estimate weighted mean income of NHATS Round 12
mi svyset w12varunit [pweight=w12anfinwgt0], strata(w12varstrat) singleunit(centered)
mi estimate: svy, subpop(if r12dresid == 1 | r12dresid == 2 | r12dresid == 4 ): mean ia12totinc2
```

References

Heeringa, S. G., West, B. T., & Berglund, P. A. (2017). *Applied survey data analysis 2nd edition*. CRC press.

Reiter, J. P., Raghunathan, T. E., & Kinney, S. K. (2006). The importance of modeling the sampling design in multiple imputation for missing data. *Survey Methodology*, 32(2), 143.

Rubin, D. B. 1987. *Multiple Imputation for Nonresponse in Surveys*. New York: Wiley

Rubin, D.B. 1996. Multiple imputation after 18+ years. *Journal of the American Statistical Association*, 91(434), 473-489.

Appendix

Table 1. Variables used in Round 12 income imputation models for each imputation group.

Sources of income							
Variable name	Label	Continuing SP with spouse/partner	Continuing SP without spouse/partner	Continuing SP Breakoff	New SP with spouse/partner	New SP without spouse/partner	New SP Breakoff
ia12recsspa1	R12 IA1 SP REC SOCIAL SECURITY	Yes	Yes	No	Yes	Yes	No
ia12recsspa2	R12 IA1 SPOUSE PART REC SOC SEC	Yes	No	No	Yes	No	No
ia12recsspa3	R12 IA1 NO SOC SECURTY PAYMNT REC	No	No	Yes	No	No	Yes
ia12recssils1	R12 IA4 SP RECEIVD SSI LAST MONTH	Yes	Yes	No	Yes	Yes	No
ia12recssils2	R12 IA4 SPOUSE PRT REC SSI LST MO	Yes	No	No	Yes	No	No
ia12recssils3	R12 IA4 NO SSI RECEIVD LAST MONTH	No	No	Yes	No	No	Yes
ia12rvapayls1	R12 IA5 SP REC PAY FRM VA LAST MO	Yes	Yes	No	Yes	Yes	No
ia12rvapayls2	R12 IA5 SPOUS PA REC VA PAY LSTMO	Yes	No	No	Yes	No	No
ia12rvapayls3	R12 IA5 NO VA PAY REC LAST MONTH	No	No	Yes	No	No	Yes
pa12workfrpay	R12 PA17 EVER WORK FOR PAY	Yes	Yes	Yes	Yes	Yes	Yes
lf12huswifwrk	R12 LF13 HUSB WIFE PARTN PAY WORK	Yes	No	No	Yes	No	No
Sources of wealth							
ia12penjobou1	R12 IA6 SP HAS PENSION PLAN	Yes	Yes	No	Yes	Yes	No
ia12penjobou2	R12 IA6 SPOUSE HAS PENSION PLAN	Yes	No	No	Yes	No	No
ia12penjobou3	R12 IA6 NO PENSION PLAN	No	No	Yes	No	No	Yes
ia12iraothac1	R12 IA7 SP HAS IRA OTH RETIRE ACC	Yes	Yes	No	Yes	Yes	No
ia12iraothac2	R12 IA7 SPOUSE HAS IRA OTHR ACC	Yes	No	No	Yes	No	No
ia12iraothac3	R12 IA7 NO IRA OTHR RETIRE ACCT	No	No	Yes	No	No	Yes

ia12mutfdstk1	R12 IA8 SP OWNS MUTUAL FUND STOCK	Combined into a single variable: whether SP or spouse/partner of SP own any mutual fund or bonds	Combined into a single variable: whether SP own any mutual fund or bonds	Combined into a single variable: whether SP own any mutual fund or bonds	Combined into a single variable: whether SP or spouse/partner of SP own any mutual fund or bonds	Combined into a single variable: whether SP own any mutual fund or bonds	Combined into a single variable: whether SP own any mutual fund or bonds
ia12mutfdstk2	R12 IA8 SPOUSE OWNS FUNDS STOCK						
ia12mutfdstk3	R12 IA8 SP SPOUSE OWN FUNDS STOCK						
ia12mutfdstk4	R12 IA8 NO FUNDS OR STOCK OWNED						
ia12ownbond1	R12 IA12 SP OWNS BONDS						
ia12ownbond2	R12 IA12 SPOUSE OWNS BONDS						
ia12ownbond3	R12 IA12 SP SPOUSE OWN BONDS						
ia12ownbond4	R12 IA12 NO BONDS OWNED						
ia12bnkacccd1	R12 IA10 SP OWNS CHECK ACCT	No	Yes	No	No	Yes	No
ia12bnkacccd2	R12 IA10 SPOUSE OWNS CHECK ACCT	No	No	No	No	No	No
ia12bnkacccd3	R12 IA10 SP SPOUSE OWN CHECK ACCT	No	No	No	No	No	No
ia12bnkacccd4	R12 IA10 NO CHECK ACCT OWNED	No	No	Yes	Yes	No	Yes
ia12bnkacccd5	R12 IA10 SP OWNS SAVINGS ACCT	Combined into a single variable: whether SP or spouse/partner of SP own any saving account or CD	Combined into a single variable: whether SP own any saving account or CD	Combined into a single variable: whether SP or spouse/partner of SP own any saving account or CD	Combined into a single variable: whether SP or spouse/partner of SP own any saving account or CD	Combined into a single variable: whether SP own any saving account or CD	Combined into a single variable: whether SP or spouse/partner of SP own any saving account or CD
ia12bnkacccd6	R12 IA10 SPOUSE OWNS SAVING ACCT						
ia12bnkacccd7	R12 IA10 SP SPOUSE OWN SAVNG ACT						
ia12bnkacccd8	R12 IA10 NO SAVINGS ACCT OWNED						
ia12bnkacccd9	R12 IA10 SP OWNS CDS						
ia12bnkacccd10	R12 IA10 SPOUSE OWNS CDS						
ia12bnkacccd11	R12 IA10 SP SPOUSE OWN CDS						
ia12bnkacccd12	R12 IA10 NO CDS OWNED						
hp12ownrenttot	R# HP1 OWN RENT OR OTHER	Yes:	Yes:	Yes:	Yes:	Yes:	Yes:
hp12homevalue	R# HP4 PRESENT VALUE OF HOME	1 own – home value < 200,000	1 own – home value < 200,000	1 own – home value < 200,000	1 own – home value < 200,000	1 own – home value < 200,000	1 own – home value < 200,000
hp#homvalamt	R# HP4A HOME VALUE AMOUNT	2 own – home value >= 200,000	2 own – home value >= 200,000	2 own – home value >= 200,000	2 own – home value >= 200,000	2 own – home value >= 200,000	2 own – home value >= 200,000
		3 rent or other arrangement	3 rent or other arrangement	3 rent or other arrangement	3 rent	3 rent	3 rent or other arrangement
					4 other arrangement	4 other arrangement	

ia12realestt1	R12 IA13 SP OWNS REAL ESTATE	No	Yes	No	No	Yes	No
ia12realestt2	R12 IA13 SPOUSE OWNS REAL ESTATE	No	No	No	No	No	No
ia12realestt3	R12 IA13 SP SPOUSE OWN REAL ESTTE	No	No	No	No	No	No
ia12realestt4	R12 IA13 NO REAL ESTATE OWNED	Yes	No	Yes	Yes	No	Yes
Other income-related predictors							
ew12pycredbal	R12 EW1 PAY OFF CREDIT CARD BALAN	Combine into: 1 pay off 2 pay minimum or more than minimum but not entire with less than 4,000 balances 3 pay more than minimum but not entire with 4,000 or more balances 4 don't have credit card	Combine into: 1 pay off 2 pay minimum or more than minimum but not entire with less than 4,000 balances 3 pay more than minimum but not entire with 4,000 or more balances 4 don't have credit card	Combine into: 1 pay off 2 pay minimum or more than minimum but not entire with less than 4,000 balances 3 pay more than minimum but not entire with 4,000 or more balances 4 don't have credit card	Combine into: 1 pay off 2 pay minimum or more than minimum but not entire with less than 4,000 balances 3 pay more than minimum but not entire with 4,000 or more balances 4 don't have credit card	Combine into: 1 pay off 2 pay minimum or more than minimum but not entire with less than 4,000 balances 3 pay more than minimum but not entire with 4,000 or more balances 4 don't have credit card	Combine into: 1 pay off 2 pay minimum or more than minimum but not entire with less than 4,000 balances 3 pay more than minimum but not entire with 4,000 or more balances 4 don't have credit card
ew12crecardeb	R12 EW2 TOTAL CREDIT CARD DEBT						
ew12medpaovtm	R12 EW5 MED BILLS PAID OVERTIME	Yes	Yes	Yes	Yes	Yes	Yes
ew12finhlpfam	R12 EW7 FINANCIAL HELP FRM FAMILY	Yes	Yes	Yes	Yes	Yes	Yes
ew12fingftfam	R12 EW12 FINANCIAL GIFTS TO FAMLTY	Yes, construct a variable with: 1 No gift to family 2 < 4000 gift 3 >= 4000 gift	Yes	Yes, construct a variable with: 1 No gift to family 2 < 4000 gift 3 >= 4000 gift	Yes, construct a variable with: 1 No gift to family 2 < 4000 gift 3 >= 4000 gift	Yes	Yes, construct a variable with: 1 No gift to family 2 < 4000 gift 3 >= 4000 gift
ew12amthlpgiv	R12 EW14 AMOUNT OF HELP GIVEN		No			No	
ew12progneed1	R12 EW15 SP RECEIVD FOOD STAMPS	Combined into one binary variable	Combine into one binary variable	Combine into one binary variable	Combined into one binary variable	Combine into one binary variable	Combine into one binary variable
ew12progneed2	R12 EW15 SP REC OTHR FOOD ASST						
ew12progneed3	R12 EW15 SP REC GAS ENERGY ASST						
ew12nopayhous	R12 EW18 NO MONEY FOR HOUSING						

ew12nopayutil	R12 EW18 NO MONEY FOR UTILITIES	Combined into one binary variable	Combined into one binary variable	Combined into one binary variable	Combined into one binary variable	Combined into one binary variable	Combined into one binary variable
ew12nopaymed	R12 EW18 NO MONEY FOR MEDICAL						
hp12ownrentot	R12 HP1 OWN RENT OR OTHER	Yes: 1 own – home value < 200,000	Yes: 1 own – home value < 200,000	Yes: 1 own – home value < 200,000	Yes: 1 own – home value < 200,000	Yes: 1 own – home value < 200,000	Yes: 1 own – home value < 200,000
hp12homevalue	R12 HP4 PRESENT VALUE OF HOME	2 own – home value >= 200,000	2 own – home value >= 200,000	2 own – home value >= 200,000	2 own – home value >= 200,000	2 own – home value >= 200,000	2 own – home value >= 200,000
hp12homvalamt	R12 HP4A HOME VALUE AMOUNT	3 rent or other arrangement	3 rent or other arrangement	3 rent or other arrangement	3 rent 4 other arrangement	3 rent 4 other arrangement	3 rent or other arrangement
hp12sec8pubsn	R12 HP7 HME SEC 8 PUBL SENOR HOUS	No	Yes	Yes	No	Yes	Yes
Respondent characteristics							
r12dintvwrage	R12 D AGE OF SP AT INTERVIEW	Yes	Yes	Yes	Yes	Yes	Yes
rl12dracehisp	R12 D RACE AND HISPANIC ETHNICITY	Four category: 1 White, non-Hispanic 2 Black, non-Hispanic 3 Others/Missing 4 Hispanics	Four category: 1 White, non-Hispanic 2 Black, non-Hispanic 3 Others/Missing 4 Hispanics	Four category: 1 White, non-Hispanic 2 Black, non-Hispanic 3 Others/Missing 4 Hispanics	Four category: 1 White, non-Hispanic 2 Black, non-Hispanic 3 Others/Missing 4 Hispanics	Four category: 1 White, non-Hispanic 2 Black, non-Hispanic 3 Others/Missing 4 Hispanics	Four category: 1 White, non-Hispanic 2 Black, non-Hispanic 3 Others/Missing 4 Hispanics
r12dgender	R12 D GENDER OF SP	Yes	Yes	Yes	Yes	Yes	Yes
el12higstschl	R12 EL10 HGHST DGREE SCOOOL COMPLD WHEN ADDED	Ordinal categories: 1 <HS 2 HS 3 >HS, <College 4 College+	Ordinal categories: 1 <HS 2 HS 3 >HS, <College 4 College+	Ordinal categories: 1 <HS 2 HS 3 >HS, <College 4 College+	Ordinal categories: 1 <HS 2 HS 3 >HS, <College 4 College+	Ordinal categories: 1 <HS 2 HS 3 >HS, <College 4 College+	Ordinal categories: 1 <HS 2 HS 3 >HS, <College 4 College+
hh12dmarstat	R12 HH1 MARITAL STATUS	No	Yes	Yes	No	Yes	Yes
Marital status change from last round income was collected		No	Yes	Yes	N/A	N/A	N/A

Income from last round which income was collected		Income from Round 11, if missing in Round 11, average of 20 imputed income from Round 11 were used. If not collected in Round 11, treated as missing and get imputed in MICE.	Income from Round 11, if missing in Round 11, average of 20 imputed income from Round 11 were used. If not collected in Round 11, treated as missing and get imputed in MICE.	Income from Round 11, if missing in Round 11, average of 20 imputed income from Round 11 were used. If not collected in Round 11, treated as missing and get imputed in MICE.	N/A	N/A	N/A
r12dresid	R12 D RESIDENTIAL CARE STATUS	Yes	Yes	Yes	Yes	Yes	Yes
is12resptype	R12 IS2 TYPE OF RESPONDENT	Yes	Yes	Yes	Yes	Yes	Yes
ir12areacond1	R12 IR15 LITTER GLASS ON SDWLK ST	Combined into one binary variable	Combined into one binary variable	No	Combined into one binary variable	Combined into one binary variable	Combined into one binary variable
ir12areacond2	R12 IR15 GRAFFITI ON BUILDG WALLS						
ir12areacond3	R12 IR15 VACANT HOUSES OR STORES						
ir12condhome1	R12 IR16 BROKEN WINDOWS IN HOME	Yes, combined into one binary variable	Yes, combined into one binary variable	No	Yes, combined into one binary variable	Yes, combined into one binary variable	Yes, combined into one binary variable
ir12condhome2	R12 IR16 CRUMBLNG FOUNDTN IN HOME						
ir12condhome3	R12 IR16 MISSNG BRCKS SIDNG IN HM						
ir12condhome4	R12 IR16 ROOF PROBLEM IN HOME	Yes	Yes	No	Yes	Yes	Yes
ir12condhome5	R12 IR16 BROKEN STEPS TO HOME						
ir12condhome6	R12 IR16 CONTINUOUS SIDEWALKS						
re12dcensdiv	R12 D SP CENSUS DIVISION	Recoded to four categories	Recoded to four categories	Recoded to four categories	Recoded to four categories	Recoded to four categories	Recoded to four categories
r12dmetnonmet	R12 D METRO / NON-METRO RESIDENCE	Yes	Yes	Yes	Yes	Yes	Yes