American Housing Survey

Listing of Variables Used in CINCH and Rental Dynamics Analysis for New Orleans: 2004–2009

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The following pages define the variables that were used to generate the Components of Inventory Change (CINCH) and rental dynamics tables.

All analysis was carried out at the Census Bureau using American Housing Survey (AHS) files available only to Census Bureau staff members. The variables from the Housing Affordability Data System (HADS) were computed using the Census versions of AHS files, not the AHS public use files (PUF).

Each of the variables defined below is calculated using variables defined elsewhere. Definitions for SAME, INTLOSS, etc., can be found in the companion document, *Weighting Strategy for 2004–2009 New Orleans CINCH Analysis*.[1] This document also explains how the weights were derived.

Definitions for NOINT, OWNRENT, and other variables with IN04_ or IN09_ prefixes can be found in the AHS Codebook or the HADS documentation.[2] The IN04_ and IN09_ prefixes indicate which AHS survey (2004 or 2009) was used for the value of that particular variable.

CONTROL=Control number.

This is the scrambled control number from the AHS masterfile. It is used to preserve confidentiality and to enable longitudinal matches to earlier files. It is a character variable of 12 spaces in length.

IN09_REUAD=Reason unit got added to sample – see AHS Codebook for definition.

IN09_SAMEDU=Same HU as last enumeration – see AHS Codebook for a definition of this variable and see the AHS_FAQ for an explanation of the variable.

BLCINCHWT=Backward-looking CINCH weight.
This is the weight applied to 2009 cases in backward-looking CINCH analysis.
00000-99999

FLCINCHWT=Forward-looking CINCH weight.
This is the weight applied to 2004 cases in forward-looking CINCH analysis.
00000-99999

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[1] Found on the HUD AHS Web site under CINCH files: http://www.huduser.org/portal/datasets/cinch.html.
[2] Found at http://www.huduser.org/portal/datasets/ahs/ahsprev.html#codebooks and http://www.huduser.org/portal/datasets/hads/hads.html.

FLSTATUS=Forward status=status of a 2004 unit in 2009.
    1=in 2004 stock and in 2009 stock, not severely damaged by Hurricane Katrina:
        IF SAME=1 THEN FLSTATUS=1

    2=in 2004 stock and in 2009 stock, severely damaged by Hurricane Katrina but rebuilt:
        IF REBUILT=1 THEN FLSTATUS=2

    3=in 2004 stock but a loss in 2009 due to conversion or merger:
        IF INTLOSS=1 AND (32 LE IN09_NOINT LE 33) THEN FLSTATUS=3

    4=in 2004 stock but a loss in 2009 due to house or mobile-home move out:
        IF INTLOSS=1 AND (IN09_NOINT=31) THEN FLSTATUS=4

    5=in 2004 stock but a loss in 2009 due to nonresidential use:
        IF INTLOSS=1 AND (IN09_NOINT=12 OR IN09_NOINT=14) THEN
        FLSTATUS=5

    6=in 2004 stock but a loss in 2009 due to demolition or disaster not related to Katrina:
        IF INTLOSS=1 AND IN09_NOINT=30 THEN FLSTATUS=6

    7=in 2004 stock but a loss in 2009 due to damage or condemnation:
        IF INTLOSS=1 AND (15 LE IN09_NOINT LE 16) THEN FLSTATUS=7

    8= in 2004 stock but a loss in 2009 due to severe damage from Hurricane Katrina:
        IF INTLOSS=1 AND (IN09_HKDAMGY1=1 AND IN09_ISTATUS=4 AND
        IN09_NOINT=17)) THEN FLSTATUS=8

    9=in 2004 stock but a loss in 2009 for other reason:
        IF INTLOSS=1 AND ((10 LE IN09_NOINT LE 11) OR IN09_NOINT=13 OR
        (IN09_NOINT=17 AND IN09_HKDAMGY1 NE 1) OR (36 LE IN09_NOINT
        LE 37)) THEN FLSTATUS=9

BLSTATUS=Backward status=status of a 2009 unit in 2004.

    1=in 2009 stock and in 2004 stock:
        IF SAME=1 THEN BLSTATUS=1

    2=in 2009 stock and in 2004 stock, severely damaged by Hurricane Katrina but rebuilt:
        IF REBUILT=1 THEN BLSTATUS=2

    3=in 2009 stock but not in 2004 stock; added by conversion or merger:
        IF INTADD=1 AND (6 LE IN09_REUAD LE 8) THEN BLSTATUS=2

    4=in 2009 stock but not in 2004 stock; added by house or mobile-home move in:
        IF INTADD=1 AND (IN04_NOINT=13 OR (4 LE IN09_REUAD LE 5)) THEN
        BLSTATUS=4

5=in 2009 stock but not in 2004 stock; added from nonresidential use:
    IF INTADD=1 AND ((IN04_NOINT=12 OR IN04_NOINT=14) OR
    IN09_REUAD=9) THEN BLSTATUS=5

6=in 2009 stock but not in 2004 stock; added by new construction:
    IF INTNC=1 THEN BLSTATUS=6

7=in 2009 stock but not in 2004 stock; added from temporary losses in 2004 stock:
    IF INTADD=1 AND (15 LE IN04_NOINT LE 17) THEN BLSTATUS=7

8=in 2009 stock but not in 2004 stock, added before Katrina, severely damaged, and
   reconstructed:
    IF INTRECONADD=1 THEN BLSTATUS=8

9=in 2009 stock but not in 2004 stock; added for other reasons:
    IF INTADD=1 AND (IN09_REUAD=10) THEN BLSTATUS=9

The last four variables deal with the concept of rental affordability. Previous rental dynamics studies have classified rents into eight categories based on the ratio of the unit's rent to various income levels. HUD has created a group of data sets, called HADS, which provides various types of affordability-related information on AHS units for different survey years. The eight categories are derived from the HADS documentation. The code makes use of a HADS variable, COSTMEDRELAMICAT, which categorizes units according to these categories. As noted, we created COSTMEDRELAMICAT using the HADS code instead of using the variable from the New Orleans HADS file because the HADS file defined for the AHS PUF was not the Census AHS file that we used.

A unit is considered affordable to the members of a class if the rent of the unit is no greater than 30 percent of the highest monthly income for that class. The eight categories are:

- Nonmarket: either no cash rent or a subsidized rent.

- Extremely low rent (affordable to renters with incomes less than or equal to 30 percent of local area median income).

- Very low rent (affordable to renters with incomes greater than 30 percent but less than or equal to 50 percent of local area median income).

- Low rent (affordable to renters with incomes greater than 50 percent but less than or equal to 60 percent of local area median income).

- Moderate rent (affordable to renters with incomes greater than 60 percent but less than or equal to 80 percent of local area median income).

- High rent (affordable to renters with incomes greater than 80 percent but less than or equal to 100 percent of local area median income).

- Very high rent (affordable to renters with incomes greater than 100 percent but less than or equal to 120 percent of local area median income).

- Extremely high rent (affordable to renters with incomes greater than 120 percent of local area median income).

FLRENT=2004 rent category.

    1=a nonmarket rental unit in 2004:
        IF IN04_OWNRENT='2' AND (IN04_TENURE='3' OR IN04_Assisted=1 OR IN04_RENT=1) THEN FLRENT=1

    2=an extremely low-rent rental unit in 2004:
        IF IN04_OWNRENT='2' AND NOT (IN04_TENURE='3' OR IN04_Assisted=1 OR IN04_RENT=1) AND IN04_COSTMEDRELAMICAT=1 THEN FLRENT=2

    3=a very low-rent rental unit in 2004:
        IF IN04_OWNRENT='2' AND NOT (IN04_TENURE='3' OR IN04_Assisted=1 OR IN04_RENT=1) AND IN04_COSTMEDRELAMICAT=2 THEN FLRENT=3

    4=a low-rent rental unit in 2004:
        IF IN04_OWNRENT='2' AND NOT (IN04_TENURE='3' OR IN04_Assisted=1 OR IN04_RENT=1) AND IN04_COSTMEDRELAMICAT=3 THEN FLRENT=4

    5=a moderate-rent rental unit in 2004:
        IF IN04_OWNRENT='2' AND NOT (IN04_TENURE='3' OR IN04_Assisted=1 OR IN04_RENT=1) AND IN04_COSTMEDRELAMICAT=4 THEN FLRENT=5

    6=a high-rent rental unit in 2004:
        IF IN04_OWNRENT='2' AND NOT (IN04_TENURE='3' OR IN04_Assisted=1 OR IN04_RENT=1) AND IN04_COSTMEDRELAMICAT=5 THEN FLRENT=6

    7=a very high-rent rental unit in 2004:
        IF IN04_OWNRENT='2' AND NOT (IN04_TENURE='3' OR IN04_Assisted=1 OR IN04_RENT=1) AND IN04_COSTMEDRELAMICAT=6 THEN FLRENT=7

8=an extremely high-rent rental unit in 2004:
IF IN04_OWNRENT='2' AND NOT (IN04_TENURE='3' OR IN04_Assisted=1 OR IN04_RENT=1) AND IN04_COSTMEDRELAMICAT=7 THEN FLRENT=8

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BLRENT=Current year (2009) rent category.

1=a nonmarket rental unit in 2009:
IF IN09_OWNRENT='2' AND (IN09_TENURE='3' OR IN09_Assisted=1 OR IN09_RENT=1) THEN BLRENT=1

2=an extremely low-rent rental unit in 2009:
IF IN09_OWNRENT='2' AND NOT (IN09_TENURE='3' OR IN09_Assisted=1 OR IN09_RENT=1) AND IN09_COSTMEDRELAMICAT=1 THEN BLRENT=2

3=a very low-rent rental unit in 2009:
IF IN09_OWNRENT='2' AND NOT (IN09_TENURE='3' OR IN09_Assisted=1 OR IN09_RENT=1) AND IN09_COSTMEDRELAMICAT=2 THEN BLRENT=3

4=a low-rent rental unit in 2009:
IF IN09_OWNRENT='2' AND NOT (IN09_TENURE='3' OR IN09_Assisted=1 OR IN09_RENT=1) AND IN09_COSTMEDRELAMICAT=3 THEN BLRENT=4

5=a moderate-rent rental unit in 2009:
IF IN09_OWNRENT='2' AND NOT (IN09_TENURE='3' OR IN09_Assisted=1 OR IN09_RENT=1) AND IN09_COSTMEDRELAMICAT=4 THEN BLRENT=5

6=a high-rent rental unit in 2009:
IF IN09_OWNRENT='2' AND NOT (IN09_TENURE='3' OR IN09_Assisted=1 OR IN09_RENT=1) AND IN09_COSTMEDRELAMICAT=5 THEN BLRENT=6

7=a very high-rent rental unit in 2009:
IF IN09_OWNRENT='2' AND NOT (IN09_TENURE='3' OR IN09_Assisted=1 OR IN09_RENT=1) AND IN09_COSTMEDRELAMICAT=6 THEN BLRENT=7

8=an extremely high-rent rental unit in 2009:
      IF IN09_OWNRENT='2' AND NOT (IN09_TENURE='3' OR IN09_Assisted=1 OR IN09_RENT=1) AND IN09_COSTMEDRELAMICAT=7 THEN BLRENT=8

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FLAFFORD=Forward rental affordability=affordability status in 2009 of 2004 rental unit.

    1=a nonmarket rental unit in 2009:
      IF IN09_OWNRENT='2' AND (IN09_TENURE='3' OR IN09_Assisted=1 OR IN09_RENT=1) THEN FLAFFORD=1

    2=an extremely low-rent rental unit in 2009:
      IF IN09_OWNRENT='2' AND NOT (IN09_TENURE='3' OR IN09_Assisted=1 OR IN09_RENT=1) AND IN09_COSTMEDRELAMICAT=1 THEN FLAFFORD=2

    3=a very low-rent rental unit in 2009:
      IF IN09_OWNRENT='2' AND NOT (IN09_TENURE='3' OR IN09_Assisted=1 OR IN09_RENT=1) AND IN09_COSTMEDRELAMICAT=2 THEN FLAFFORD=3

    4=a low-rent rental unit in 2009:
      IF IN09_OWNRENT='2' AND NOT (IN09_TENURE='3' OR IN09_Assisted=1 OR IN09_RENT=1) AND IN09_COSTMEDRELAMICAT=3 THEN FLAFFORD=4

    5=a moderate-rent rental unit in 2009:
      IF IN09_OWNRENT='2' AND NOT (IN09_TENURE='3' OR IN09_Assisted=1 OR IN09_RENT=1) AND IN09_COSTMEDRELAMICAT=4 THEN FLAFFORD=5

    6=a high-rent rental unit in 2009:
      IF IN09_OWNRENT='2' AND NOT (IN09_TENURE='3' OR IN09_Assisted=1 OR IN09_RENT=1) AND IN09_COSTMEDRELAMICAT=5 THEN FLAFFORD=6

    7=a very high-rent rental unit in 2009:
      IF IN09_OWNRENT='2' AND NOT (IN09_TENURE='3' OR IN09_Assisted=1 OR IN09_RENT=1) AND IN09_COSTMEDRELAMICAT=6 THEN FLAFFORD=7

8=an extremely high-rent rental unit in 2009:
IF IN09_OWNRENT='2' AND NOT (IN09_TENURE='3' OR IN09_Assisted=1 OR IN09_RENT=1) AND IN09_COSTMEDRELAMICAT=7 THEN FLAFFORD=8

9=an owner-occupied unit in 2009:
IF (IN09_OWNRENT='1') THEN FLAFFORD=9

10=a vacant or seasonal unit in 2009:
IF (IN09_VACANCY GE 6) OR (IN09_OWNRENT=. AND IN09_VACANCY LE 5) THEN FLAFFORD=10

11=a unit not in the 2009 stock:
IF (10 LE IN09_NOINT) THEN FLAFFORD=11

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BLAFFORD=Backward rental affordability=affordability status in 2004 of a 2009 rental unit.

1=a nonmarket rental unit in 2004:
IF IN04_OWNRENT='2' AND (IN04_TENURE='3' OR IN04_Assisted=1 OR IN04_RENT=1) THEN BLAFFORD=1

2=an extremely low-rent rental unit in 2004:
IF IN04_OWNRENT='2' AND NOT (IN04_TENURE='3' OR IN04_Assisted=1 OR IN04_RENT=1) AND IN04_COSTMEDRELAMICAT=1 THEN BLAFFORD=2

3=a very low-rent rental unit in 2004:
IF IN04_OWNRENT='2' AND NOT (IN04_TENURE='3' OR IN04_Assisted=1 OR IN04_RENT=1) AND IN04_COSTMEDRELAMICAT=2 THEN BLAFFORD=3

4=a low-rent rental unit in 2004:
IF IN04_OWNRENT='2' AND NOT (IN04_TENURE='3' OR IN04_Assisted=1 OR IN04_RENT=1) AND IN04_COSTMEDRELAMICAT=3 THEN BLAFFORD=4

5=a moderate-rent rental unit in 2004:
IF IN04_OWNRENT='2' AND NOT (IN04_TENURE='3' OR IN04_Assisted=1 OR IN04_RENT=1) AND IN04_COSTMEDRELAMICAT=4 THEN BLAFFORD=5

6=a high-rent rental unit in 2004:
   IF IN04_OWNRENT='2' AND NOT (IN04_TENURE='3' OR IN04_Assisted=1 OR IN04_RENT=1) AND IN04_COSTMEDRELAMICAT=5 THEN BLAFFORD=6

7=a very high-rent rental unit in 2004:
   IF IN04_OWNRENT='2' AND NOT (IN04_TENURE='3' OR IN04_Assisted=1 OR IN04_RENT=1) AND IN04_COSTMEDRELAMICAT=6 THEN BLAFFORD=7

8=an extremely high-rent rental unit in 2004:
   IF IN04_OWNRENT='2' AND NOT (IN04_TENURE='3' OR IN04_Assisted=1 OR IN04_RENT=1) AND IN04_COSTMEDRELAMICAT=7 THEN BLAFFORD=8

9=an owner-occupied unit in 2004:
   IF IN04_OWNRENT='1' THEN BLAFFORD=9

10=a vacant or seasonal unit in 2004:
   IF (IN04_VACANCY GE 6) OR (IN04_OWNRENT=. AND IN04_VACANCY LE 5) THEN BLAFFORD=10

11=a unit added by new construction:
   IF INTNC=1 THEN BLAFFORD=11

12=a unit not in the 2004 stock but not added through new construction:
   IF INTADD=1 THEN BLAFFORD=12

13=a unit not in the 2004 stock but added after Hurricane Katrina, severely damaged, and subsequently reconstructed:
   IN INTRECONADD=1 THEN BLAFFORD=13

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