

American Housing Survey

**Listing of Programs and  
Variables Used in CINCH and  
Rental Dynamics Analysis for  
2001 and 2003 American  
Housing Surveys**

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# **Listing of Programs and Variables Used in CINCH and Rental Dynamics Analysis for 2001 and 2003 American Housing Surveys**

The following 12 programs have been posted on the AHS website:

- CINCH weights and variables – for each control number, this file contains the weights used in the forward-looking CINCH analysis (FLCINCHWT) and the weights used in the backward-looking CINCH analysis (BLCINCHWT), along with the variables used to identify CINCH status and rental affordability status. These variables are defined in this document.
- FORWARD\_NW\_HADS – the program used to create FLCINCHWT
- BACKWARD\_NW\_HADS – the program used to create BLCINCHWT
- FORWARD\_1 – the program used to generate Forward-looking Table 1.
- FORWARD\_2 – the program used to generate Forward-looking Table 2.
- FORWARD\_3 – the program used to generate Forward-looking Table 3.
- FORWARD\_4 – the program used to generate Forward-looking Table 4.
- BACKWARD\_1 – the program used to generate Backward-looking Table 1.
- BACKWARD\_2 – the program used to generate Backward-looking Table 2.
- BACKWARD\_3 – the program used to generate Backward-looking Table 3.
- BACKWARD\_4 – the program used to generate Backward-looking Table 4.
- FLOOKING\_BLOCKING – the program used to generate the rental dynamic core tables.

The following variables were used to generate the CINCH and rental dynamics tables. The CINCH weights and variables file contains these variables.

FLSTATUS = Forward status = status of a 2001 unit in 2003

1 = in 2001 stock and in 2003 stock (SAME=1).

2 = in 2001 stock but a loss in 2003 due to conversion or merger (INTLOSS=1 AND 32 LE IN03\_NOINT LE 33).

3 = in 2001 stock but a loss in 2003 due to house or mobile home move out (INTLOSS=1 AND IN03\_NOINT = 31).

4 = in 2001 stock but a loss in 2003 due to nonresidential use (INTLOSS=1 AND (IN03\_NOINT = 12 OR IN03\_NOINT = 14)).

5 = in 2001 stock but a loss in 2003 due to demolition or disaster (INTLOSS=1 AND IN03\_NOINT = 30).

6 = in 2001 stock but a loss in 2003 due to damage or condemnation (INTLOSS=1 AND 15 LE IN03\_NOINT LE 16).

7 = in 2001 stock but a loss in 2003 for other reason (INTLOSS=1 AND (10 LE IN02\_NOINT LE 11 OR IN02\_NOINT=13 OR IN02\_NOINT=17 OR 36 LE IN02\_NOINT LE 39)).

BLSTATUS = Backward status = status of a 2003 unit in 2001

- 1 = in 2003 stock and in 2001 stock (SAME = 1).
- 2 = in 2003 stock but not in 2001 stock; added by conversion or merger (INTADD = 1 AND (6 LE IN03\_REUAD LE 8)).
- 3 = in 2003 stock but not in 2001 stock; added by house or mobile home move in (INTADD = 1 AND (INO1\_NOINT = 13 OR 4 LE IN03\_REUAD LE 5)).
- 4 = in 2003 stock but not in 2001 stock; added from nonresidential use (INTADD = 1 AND ((INO1\_NOINT = 12 OR INO1\_NOINT = 14) OR IN03\_REUAD = 9)).
- 5 = in 2003 stock but not in 2001 stock; added by new construction (INTNC = 1).
- 6 = in 2003 stock but not in 2001 stock; added by other reason (includes temporary losses in 2001 stock) (INTADD = 1 AND (10 LE IN03\_REUAD LE 11) OR (15 LE IN01\_NOINT LE 17))).

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. 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:

- Non-market – 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 65 percent of local area median income).
- Moderate rent (affordable to renters with incomes greater than 65 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 = Base year (2001) rent category

- 1 = a non-market rental unit in 2001 (IN01\_OWNRENT = 2 AND (IN01\_TENURE = '3' OR IN01\_ASSISTED = 1 OR IN01\_RENT = 1).
- 2 = an extremely low rent rental unit in 2001 (IN01\_OWNRENT = 2 AND FLRENT NE 1 AND IN01\_COST07RELAMICAT = 1).
- 3 = a very low rent rental unit in 2001 (IN01\_OWNRENT = 2 AND FLRENT NE 1 AND IN01\_COST07RELAMICAT = 2).
- 4 = a low rent rental unit in 2001 (IN01\_OWNRENT = 2 AND FLRENT NE 1 AND IN01\_COST07RELAMICAT = 3).

5 = a moderate rent rental unit in 2001 (IN01\_OWNRENT = 2 AND FLRENT NE 1 AND IN01\_COST07RELAMICAT = 4).

6 = a high rent rental unit in 2001 (IN01\_OWNRENT = 2 AND FLRENT NE 1 AND IN01\_COST07RELAMICAT = 5).

7 = a very high rent rental unit in 2001 (IN01\_OWNRENT = 2 AND FLRENT NE 1 AND IN01\_COST07RELAMICAT = 6).

8 = an extremely high rent rental unit in 2001 (IN01\_OWNRENT = 2 AND FLRENT NE 1 AND IN01\_COST07RELAMICAT = 7).

. = missing.

BLRENT = Current year (2003) rent category

1 = a non-market rental unit in 2003 (IN03\_OWNRENT = 2 AND (IN03\_TENURE = '3' OR IN03\_ASSISTED = 1 OR IN03\_RENT = 1)).

2 = an extremely low rent rental unit in 2003 (IN03\_OWNRENT = 2 AND BLRENT NE 1 AND IN03\_COST07RELAMICAT = 1).

3 = a very low rent rental unit in 2003 (IN03\_OWNRENT = 2 AND BLRENT NE 1 AND IN03\_COST07RELAMICAT = 2).

4 = a low rent rental unit in 2003 (IN03\_OWNRENT = 2 AND BLRENT NE 1 AND IN03\_COST07RELAMICAT = 3).

5 = a moderate rent rental unit in 2003 (IN03\_OWNRENT = 2 AND BLRENT NE 1 AND IN03\_COST07RELAMICAT = 4).

6 = a high rent rental unit in 2003 (IN03\_OWNRENT = 2 AND BLRENT NE 1 AND IN03\_COST07RELAMICAT = 5).

7 = a very high rent rental unit in 2003 (IN03\_OWNRENT = 2 AND BLRENT NE 1 AND IN03\_COST07RELAMICAT = 6).

8 = an extremely high rent rental unit in 2003 (IN03\_OWNRENT = 2 AND BLRENT NE 1 AND IN03\_COST07RELAMICAT = 7).

. = missing.

FLAFFORD = Forward rental affordability = affordability status in 2003 of 2001 rental unit

1 = a non-market rental unit in 2003 (IN03\_OWNRENT = 2 AND (IN03\_TENURE = '3' OR IN03\_ASSISTED = 1 OR IN03\_RENT = 1)).

2 = an extremely low rent rental unit in 2003 (IN03\_OWNRENT = 2 AND BLRENT NE 1 AND IN03\_COST07RELAMICAT = 1).

3 = a very low rent rental unit in 2003 (IN03\_OWNRENT = 2 AND BLRENT NE 1 AND IN03\_COST07RELAMICAT = 2).

4 = a low rent rental unit in 2003 (IN03\_OWNRENT = 2 AND BLRENT NE 1 AND IN03\_COST07RELAMICAT = 3).

5 = a moderate rent rental unit in 2003 (IN03\_OWNRENT = 2 AND BLRENT NE 1 AND IN03\_COST07RELAMICAT = 4).

6 = a high rent rental unit in 2003 (IN03\_OWNRENT = 2 AND BLRENT NE 1 AND IN03\_COST07RELAMICAT = 5).

7 = a very high rent rental unit in 2003 (IN03\_OWNRENT = 2 AND BLRENT NE 1 AND IN03\_COST07RELAMICAT = 6).

8 = an extremely high rent rental unit in 2003 (IN03\_OWNRENT = 2 AND BLRENT NE 1 AND IN03\_COST07RELAMICAT = 7).

9 = an owner occupied unit in 2003 (IN03\_OWNRENT = 1).

10 = a vacant or seasonal unit in 2003 (IN03\_VACANCY GE 6).

11 = a unit not in the 2003 stock (10 LE IN03\_NOINT).

. = missing.

BLAFFORD = Backward rental affordability = affordability status in 2001 of a 2003 rental unit

1 = a non-market rental unit in 2001 (IN01\_OWNRENT = 2 AND (IN01\_TENURE = '3' OR IN01\_ASSISTED = 1 OR IN01\_RENT = 1)).

2 = an extremely low rent rental unit in 2001 (IN01\_OWNRENT = 2 AND FLRENT NE 1 AND IN01\_COST07RELAMICAT = 1).

3 = a very low rent rental unit in 2001 (IN01\_OWNRENT = 2 AND FLRENT NE 1 AND IN01\_COST07RELAMICAT = 2).

4 = a low rent rental unit in 2001 (IN01\_OWNRENT = 2 AND FLRENT NE 1 AND IN01\_COST07RELAMICAT = 3).

5 = a moderate rent rental unit in 2001 (IN01\_OWNRENT = 2 AND FLRENT NE 1 AND IN01\_COST07RELAMICAT = 4).

6 = a high rent rental unit in 2001 (IN01\_OWNRENT = 2 AND FLRENT NE 1 AND IN01\_COST07RELAMICAT = 5).

7 = a very high rent rental unit in 2001 (IN01\_OWNRENT = 2 AND FLRENT NE 1 AND IN01\_COST07RELAMICAT = 6).

8 = an extremely high rent rental unit in 2001 (IN01\_OWNRENT = 2 AND FLRENT NE 1 AND IN01\_COST07RELAMICAT = 7).

9 = an owner occupied unit in 2001 (IN01\_OWNRENT = 1).

10 = a vacant or seasonal unit in 2001 (IN01\_VACANCY GE 6).

11 = a unit added by new construction (INTNC = 1).

12 = a unit not in the 2001 stock but not added through new construction (INTADD = 1).

. = missing.