

MOVER FOLLOW-UP COSTS FOR THE INCOME SURVEY DEVELOPMENT PROGRAM

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INTRODUCTION. The Income Survey Development Program (ISDP) was the research and development phase for the planned Survey of Income and Program Participation (SIPP). The ISDP was intended to examine and resolve design, operational, and technical issues for SIPP [1].

The 11,800 household sample for the 1979 ISDP panel was a multiple frame sample. The sample was distributed among 130 primary sampling units (PSUs) nationwide. The general population (area) sample of approximately 9,300 households was primarily drawn from addresses contacted in the 1976 Survey of Income and Education. The remainder of the area sample was drawn from a reserve file of sample cases maintained by the Census Bureau. Approximately 1,500 households were selected from eligible applicants for Basic Educational Opportunity Grants (BEOGs) for the 1978-79 academic year. Another list sample of 1,000 households was taken from blind and disabled Supplemental Security Income (SSI) recipients as of November 1978 [2].

The ISDP 1979 panel was a quarterly longitudinal survey with a panel of sample individuals interviewed at regular intervals (every 3 months from February 1979 to June 1980). People living in sample units for the initial interview were defined as sample persons and were followed to new addresses if they moved within 50 miles of an ISDP PSU. There was a total of six interview cycles or waves. All persons residing with an initial sample person at a new address were also interviewed. It should be emphasized that the intention was to repeat interviews with the same persons from the first interview, but not necessarily at the same addresses. If part of a sample household moved to another address, later interviews were conducted at both old and new addresses, but if the entire original household moved, interviewers would no longer return to the former sample address. Due to cost considerations, any household which moved more than 50 miles from any ISDP PSU was dropped from the sample [3].

This paper explores the added data collection costs resulting from following movers and will shed some light on those costs in the perspective of the ISDP and reports the results of an analysis from Form ISDP-155, Interviewer's Information Record - Mover's Cost Study - ISDP.

The form provided data on mover follow-up costs in the wave of interview that a household moved. Data tapes from each wave were used in conjunction with form ISDP-155 to provide costs associated with following mover households in subsequent waves. This analysis includes data from all three frame samples that were included in the ISDP 1979 panel: area, SSI, and BEOG.

The major findings of this report indicate that an 8.8 percent per annum growth rate in numbers of eligible households occurred in the sample due to additional households. Over the entire survey there was approximately a 7 percent increase in the number of hours and an 11.4 percent increase in the number of miles charged due to the following of movers. The noninterview rate for the ISDP was approximately 21 percent higher than if ISDP had been designed as a cross-

sectional survey.

Before proceeding to cost determinations, some general characteristics of mover households and persons are presented in section 1.

1. Types of Movers. A mover household is classified by the type of move. The type of move is a function of distance from sample PSUs (>50 miles or <50 miles), within PSU, or new location unknown. Attachment A presents household and person interview rates for those households who moved. The follow-up rate of households which moved was approximately 76 percent, with an eligible person interview rate of 92 percent in interviewed households. The 24 percent not followed is the sum of the following components: 9 percent had new locations undetermined, 7 percent moved more than 50 miles from any ISDP sample PSU and 8 percent were not followed for other reasons. An eligible person was a sample person who moved within the 50-mile mover limit and for whom a new address was found. The entire new household was then eligible for interview. A more detailed descriptive display can be found in attachment B. Attachment A and attachment B classify mover households by whole or additional households. An additional household mover was a household which was either newly created or joined by one or more sample persons from an original sample household. A whole household move was a move in which all members of an existing household moved as a unit and hence, the same household existed after the move as before the move.

The two-digit household number was designed so as to indicate the wave of move (tens digit) and the type of household (unit digit=1 for original households, ≠ for additional households). For example, a third wave original household move would have a household number = 31, and a fifth wave move by an additional household would have a household number = 52-59 depending on the number of splits from the original household.

Table 1 presents the mover rates for persons who moved by sample frame and interviewing wave. These rates have been annualized for comparative purposes.

An analysis using the household number was performed on the final wave ISDP data, which indicated the mover status for all sample households after all six waves of ISDP interviews. This study provided what percentage of additional households were formed, the mover distribution by quarter for original and additional households, and the interview rates for such households.

Table 2 summarizes the household types into original and additional households for the purpose of comparing interview rates. About 91 percent of the households eligible for interview in the sixth wave of ISDP were original households. Eighty-three percent of these original households were interviewed. The overall interview rate of original households is very similar to that of the unmoved original households. Also implied is that after the six waves of ISDP, additional households constituted 9 percent of the sample or rather an 8.8 percent per annum growth of the entire sample due to following additional mover households. The entire number of eligible

households dropped 8.8 percent from Wave 1 to Wave 6 due to the households that moved more than 50 miles from an ISDP sample PSU or moved to unknown locations. The interview rate for additional households is slightly less than that of the original households. The interview rates for additional households in table 2 seem to show greater fluctuation among waves than the rates for original households. As can be seen from table 2, nearly 78 percent of the total Wave 6 ISDP sample households were original households that never moved. The mover distribution of original households by wave is nearly uniform, ranging from 2.5 percent in Wave 2 to 3.4 percent in Wave 3.

The mover distribution of additional households is also relatively constant across waves, excluding Wave 2, ranging from 1.8 to 2.3 percent.

2. Cost of Following Movers. There were two categories of costs for ISDP: first, those costs that could be considered similar to a survey which did not follow movers and secondly, those additional costs incurred by ISDP due to following movers.

Although many surveys do not follow movers, there are certain interviewing and mover follow-up costs in ISDP that could be considered common to other surveys. These common costs include interviewing costs for nonmovers and whole household movers (excluding the cost of determining and locating the new address) who move within a sample PSU or move to another sample PSU. It should be noted that a survey that does not follow movers does interview the replacement household at the original address. This interview cost of a replacement household is considered to be virtually the same as the interview cost of a whole ISDP household which moved within an ISDP sample PSU.

There were two phases of costs for mover households that could be considered additional costs inherent to ISDP from following movers: initial costs and subsequent costs.

A. Initial Costs. The initial costs are associated with locating and following movers during the wave they actually move. These costs are reported in the Interviewer Information Record - Mover Cost Study and are divided into two types: the cost of locating movers and the cost of traveling and interviewing.

1. The cost of locating movers had two components:

(a) The time and mileage spent in determining the new address of a mover; this cost was important for both whole and additional household moves and was available from Form ISDP-155, questions 12.a and 12.b (columns (a) and (b) in attachment B).

(b) Secondly, the traveling time and mileage spent exclusively for discovery of whole household moves; when a whole household move was discovered during a regular interviewing trip in ISDP, no interview was conducted; therefore, the trip was considered extra compared with a non-mover follow-up survey; questions 14 and 15 on Form ISDP-155 provided this information (columns (c) and (d) in attachment B). Since an interview was possible when only part of a household moved (i.e., additional household), the trip was not wasted and not considered additional.

There were also additional households that moved more than once during the ISDP. Some of

these households which moved a second or more times moved completely intact. There were 250 such additional household moves. These moves were similar to a "whole" household move and hence the discovery time was additional. Using form 155 it was possible to determine that 7854 minutes and 1960 miles were charged for discovering addresses of entire additional household moves and should be included in the cost.

The discovery time for whole household moves was multiplied by an arbitrary factor of 1.5 to account for more than one-way costs (2.0 would represent a round-trip). The factor 1.5 was used since an interviewer would normally combine more than one household assignment per trip and represents an attempt to account for handling multiple assignments during a particular trip. These arbitrary factors seem to be reasonable based on the following: the average miles per household follow-up from this study computed based on these factors is almost the same as the average number of miles per household assigned for interview calculated from the entire ISDP sample.

2. The cost of traveling and interviewing also had two major components:

(a) Cost for traveling outside sample PSUs in whole household interview follow-ups; (the within sample PSU travel cost is not considered additional to ISDP). The outside sample PSU travel cost is derived by subtracting the mean minutes per trip of whole household follow-up within a sample PSU from the mean minutes per trip of whole household follow-up within 50 miles of a sample PSU but not inside a sample PSU. The resulting mean per trip is the approximate time spent traveling outside the sample PSUs for a whole household follow-up. This mean is found by using information from form ISDP-155, question 16.c, 17.b, and 17.c or columns (g), (h), and (j) of attachment B. This estimated mean per trip multiplied by the total number of trips for whole households within 50 miles of a PSU but not inside a sample PSU is used to obtain total miles or minutes. A factor of 2.0 (round trip) is also applied since this outside sample PSU travel would generally be for one specific household. A similar operation is performed for the whole households which moved and were followed up beyond 50 miles of a sample PSU. A difference is calculated between the within sample PSU mean minutes and the beyond 50 miles mean minutes follow-up to derive the additional time for travel to interview whole household moves outside a sample PSU.

(b) Traveling and interviewing cost for additional household moves; this component had four parts:

(i) The interviewing cost for additional households is an extra cost. This cost is derived from multiplying the number of persons interviewed in additional households (see attachment A) by the average number of minutes per interview. The average number of minutes per interview is 21.4 as calculated from the interview times recorded on the questionnaire. This interviewing cost is only relevant for minutes computation.

(ii) The second cost to consider is the traveling cost to interview additional households which move within a sample PSU. This item is provided by questions 16.c, 17.b, and 17.c or columns (h) and (j) of attachment B. It is further multiplied

by a factor of 1.5 as described in part 1.b of this section A.

(iii) The third element is the traveling cost for interviewing additional households which have moved outside a sample PSU. This cost estimate is provided from columns (h) and (j) of attachment B. The cost is multiplied by 2.0 since it is assumed that interviewers made special plans for longer trips and did not necessarily combine the drive out with other household visits, but may have stopped at other households on the return.

(iv) The final part of the additional household cost is the time that interviewers spent in preliminary editing of the questionnaire, transcribing control card information to the questionnaire, planning an itinerary, performing searches for the correct addresses, waiting at the new address for respondents, etc. These costs on a per assigned household basis were estimated from information obtained from national summaries of interviewer time sheets. It was calculated that 85 minutes per assigned household was spent for those additional activities. This rate is multiplied by the number of partial households moved, as found in column (e) of attachment B.

B. Subsequent Costs. The subsequent costs are the costs of revisiting and interviewing additional households throughout the remaining waves of the survey. There are three components in these costs:

1. The first cost is the subsequent interviewing in later waves at additional households. This is provided in part by attachment A, the number of persons interviewed in additional households divided by the number of additional households with mover follow-ups. This average number of persons interviewed per additional household is multiplied by the number of minutes per person interviewed, 21.4 as described in A.2.(b)(i), and the total number of additional households to be interviewed in waves after their formation. This number of households is 2,002 and was obtained from the analysis of the number of households moved and followed up from each wave data tape.

2. The second cost to consider is the subsequent visiting traveling cost:

(a) The outside PSU traveling costs for whole households which moved outside a sample PSU are calculated using the mean per trip values obtained from A.2.(a). These means (minutes and miles) are multiplied by the number of trips made to these types of households. The number of such trips is 251 as derived by household number analysis of individual waves. This product is then multiplied by 2.0 as described in A.2.(a).

(b) The cost of traveling for subsequent visits to additional households must be divided into two groups: within sample PSU and outside sample PSU.

(i) The cost of traveling for subsequent visiting to additional households which moved within sample PSUs is determined from attachment B columns (h), (j), and (f) which give the weighted cost per household follow-up for these additional households. This average is multiplied by the number of households revisited in this category, 1859. This cost is multiplied by 1.5 as described in part A.1.(b).

(ii) The cost of traveling for subsequent visiting to additional households outside the sample PSU is calculated using the same corresponding information for moves outside PSUs from

attachment B that was used in B.2.(b)(i) above. This average is multiplied by 143, that is, the number of such revisits. This total is multiplied by 2.0 as described in A.2.(a).

(iii) The final cost for subsequent visiting of households is the transcribing, editing, and other costs from additional household revisits. These costs are described more in detail in part A.2.(b)(iv). The rate of 85 minutes per household assigned is multiplied by the number of additional households that were revisited (2002).

3. Results of the Mover's Cost Study. Some useful percentages can be constructed using the total minutes and miles charged for the entire ISDP and the mover minutes and miles. Overall data collection cost totals from the interviewer's Edit and Performance Reports for the entire ISDP sample were: 11,277,600 minutes charged; 1,932,359 miles charged and 55,684 total assigned households [4].

The additional costs to the 1979 ISDP associated with the locating and interviewing movers are presented in table 3. The costs are calculated according to the components discussed in section 2. Table 3 shows two sets of percentages for minutes and miles by three categories. These categories are household type and distance, place of follow-up and type of cost. The table gives by category the percentages of mover costs to total ISDP costs and secondly, the percentage of the costs to the total mover charges. It can be seen from table 3 that the majority of mover costs were spent on additional household moves. Initial wave of mover costs, including the locating costs, were about equal to the entire subsequent visiting costs. The editing and transcribing, etc., costs represented about one-third of the minutes which exceeded the interviewing time greatly.

Another set of rates showing the percentage increase in costs due to following movers are presented in table 4. The denominators for these percentages are the total costs excluding the costs for following movers.

There was also a noninterview "cost" associated with the ISDP design. Since ISDP followed movers there was to be an expected increase in the noninterview rate. The overall ISDP noninterview rate from Waves 2-6, including the regular type of noninterviews and movers who moved out of sample, was 16.3 percent. If ISDP had been a cross-sectional survey, the approximate noninterview rate would have been 13.5 percent. This 2.8 percent difference between the two rates represents approximately a 21 percent increase over the estimated cross-sectional noninterview rate.

4. Summary. An important feature of the ISDP design was to follow movers throughout the survey. Associated with this design was the opportunity to gather information on the composition of mover households (original or additional), mover interview rates and, for the first time, costs of following movers over an extended period of time. It was the objective of this paper to present data and analysis in response to these opportunities.

In summary, there was approximately a 7 percent increase in the number of hours for data collection and an 11.4 percent increase in the number of miles charged due to the following of movers and interviewing additional households during the entire survey. Of the 751,397 mover-related

minutes charged, 47 percent were due to locating, following, and interviewing of movers during the wave they actually moved; 81 percent of the mover minutes were spent in determining new addresses and follow-up (both initial and revisits) for the additional households.

There were 198,097 total mover miles charged of which 52 percent were from the initial wave of move as opposed to revisits in later waves, and of which 30 percent were spent locating the new addresses of mover households as opposed to follow-up traveling to obtain interviews.

These movers represented about 22 percent of the total sample as of Wave 6. Using dollar cost information from ISDP, the additional hours and miles charged for the data collection activities represented an overall cost increase of approximately 8 percent in the 1979 ISDP Panel [5].

Wave 6 data indicated an 8.8 percent per annum growth of the sample due to following additional households. During the sixth wave original households comprised 91 percent of the sample with an interview rate in the sixth wave of 83 percent.

The estimated increase in the noninterview rate due to the longitudinal design of ISDP as opposed to a cross-sectional design was 21 percent based on Waves 2-6.

5. Limitations. The quality of the data from the Mover's Cost Study was generally good. However, some inconsistencies had to be resolved. It would have been desirable to collect more detailed information so that more cost components could have been provided and fewer factors arrived at arbitrarily.

The rates and estimates represent only data collection activities. We had no means of identifying the additional cost to ISDP for the data processing complexities and other related activities resulting from following these movers, such as additional control costs, processing costs, estimation costs, etc.

Care should be taken in the interpretation and generalization of the rates and estimates due to

the data limitations, editing, assumptions for cost functions and the use of unweighted data from a nonself-weighting sample design. ISDP was primarily a unit sample; generalization to cluster samples such as the Current Population Survey and the National Crime Survey may not be appropriate. Future work could be done to determine if there is any bias in the mover rates due to the oversampling of low and high income groups in the ISDP.

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TABLE 1. Annualized Moving Rates

	<u>Total</u>	<u>Area</u>	<u>SSI</u>	<u>BEOG</u>
<u>Overall Rate</u> ¹	.201	.190	.242	.242
<u>Wave</u> ²				
2	.192	.181	.245	.224
3	.225	.219	.202	.287
4	.195	.179	.225	.282
5	.173	.164	.260	.167
6	.148	.138	.190	.181

¹An adjustment factor of 12/13 was used to produce yearly overall estimates since 2/3 of the sample was 14 months long and 1/3 was 11 months long due to Wave 4 being only 2 months.

²Waves 2,3,5,6 are adjusted to yearly estimates, based on 3 months' data, with a factor of 12/3. Wave 4 is adjusted with a factor of 12/2 since it was only a 2-month wave.

TABLE 2. Household Type and Wave of Move by ISDP WAVE 6 Interview Status

Type of Household		Total	% of Total	Interviewed HH	% Int	NonInt HH	% Non Int
<u>Total Households</u>		10751	100.0	8842	82.2	1909	17.8
<u>Original HH Total</u>		9811	91.3	8133	82.9	1678	17.1
Household Number (HH#)							
11	Original never moved	8368	77.8	6918	82.7	1450	17.3
21	Original - 2nd Qtr move	274	2.5	217	79.2	57	20.8
31	Original - 3rd Qtr move	365	3.4	291	79.7	74	20.3
41	Original - 4th Qtr move ¹	208	2.9	177	85.1	31	14.9
51	Original - 5th Qtr move	309	2.9	266	86.1	43	13.9
61	Original - 6th Qtr move ²	287	2.7	264	92.0	23	8.0
<u>Additional HH Total</u>		940	8.7	709	75.4	231	24.6
22-29	Additional - 2nd Qtr move	130	1.2	93	71.5	37	28.5
32-39	Additional - 3rd Qtr move	221	2.1	154	69.7	67	30.3
42-49	Additional - 4th Qtr move ¹	160	2.3	111	69.4	49	30.6
52-59	Additional - 5th Qtr move	192	1.8	153	79.7	39	20.3
62-69	Additional - 6th Qtr move ²	237	2.2	198	83.5	39	16.5

¹Wave 4 is a 2 month wave, percentages have been adjusted to a 3 month rate for purposes of comparison.

²A special effort was made in Wave 6 to get final interviews from previously noninterviewed HHs, in addition to a shorter questionnaire, this may help explain the relatively low noninterview rate of Wave 6.

TABLE 3. Mover Cost Breakdown

Item	Minutes	Percent of Total Minutes	Percent of Mover Minutes	Miles	Percent of Total Miles	Percent of Mover Miles
<u>Total ISDP Costs</u>	11,277,600	-	-	1,932,359	-	-
<u>Total Mover Costs</u>	751,397	6.66	-	198,097	10.25	-
<u>By Household Type and Distance</u>						
Additional Household < 50m	599,019	5.31	79.72	136,061	7.04	68.68
Whole Household < 50m	109,719	.97	14.61	49,006	2.54	24.74
Household Moves > 50m	17,970	.16	2.39	4,810	.25	2.43
Additional Household	9,069	.08	1.21	1,206	.06	.61
Whole Household	8,901	.08	1.18	3,604	.19	1.82
Household Location Unknown	24,689	.22	3.29	8,220	.43	4.15
Additional Household	1,178	.01	.16	773	.04	.39
Whole Household	23,511	.21	3.13	7,447	.39	3.76
<u>By Phase of Follow-Up</u>						
Initial Wave Costs	355,992	3.16	47.38	102,789	5.32	51.89
Revisit Costs	395,405	3.51	52.62	95,308	4.93	48.11
<u>By Type of Cost</u>						
Determining and Discovering	156,837	1.39	20.87	59,857	3.10	30.22
Additional Household	31,880	.28	4.24	15,063	.78	7.60
Whole Household	124,957	1.11	16.63	44,794	2.32	22.61
Interviewing Additional Household	109,316	.97	14.55	-	-	-
Follow-Up Traveling	216,389	1.92	28.80	138,240	7.15	69.78
Additional Household	199,215	1.77	26.51	122,977	6.36	62.08
Whole Household Outside PSU	17,174	.15	2.29	15,263	.79	7.70
Editing, Transcribing, and Other for Additional Household	268,855	2.38	35.78	-	-	-

TABLE 4: Percentage Increase in ISDP Costs Due to Following Movers

	Minutes	Miles
Total Mover Costs	7.14%	11.42%
Whole Household Moves < 50m from any ISDP PSU	1.04%	2.83%
Additional Household Moves < 50m from any ISDP PSU	5.69%	7.85%
Household Moves > 50m from any ISDP PSU	.17%	.28%
Household Location Unknown	.23%	.47%
Total Additional Households	5.79%	7.96%
Total Whole Households	1.35%	3.46%

Attachment A.

Type of Mover	MOVER HOUSEHOLD/PERSON INTERVIEW RATE						
	HHS with Mover Follow-up	HHS w/out Mover Follow-up	Total Households ¹	HH Follow-up Rate	# Persons Interviewed	Persons Eligible ²	Eligible Person Int. Rate
Total	2483	801	3284	.756	4542	4961	.915
Whole Households	1602	521	2123	.755	2981	3237	.921
Additional Households	881	280	1161	.759	1561	1724	.905
Moves Within Same PSU							
Whole Households	1321	69	1390	.950	2482	2671	.929
Additional Households	669	54	723	.925	1182	1300	.909
Total	1990	123	2113	.942	3664	3971	.923
Moves from Sample PSU to w/in Another Sample PSU							
Whole Households	180	60	240	.750	311	360	.864
Additional Households	148	59	207	.715	262	290	.903
Total	328	119	447	.734	573	650	.882
Moves to Outside Sample PSUs (w/in 50m or >50m)							
Whole Households	101	167	268	.377	188	206	.913
Additional Households	64	92	156	.410	117	134	.873
Total	165	259	424	.389	305	340	.897
Moves w/in 50m of Same PSU but Not in Same PSU							
Whole Households	46	2	48	.958	89	94	.947
Additional Households	31	4	35	.886	55	62	.887
Total	77	6	83	.928	144	156	.923
Moves from Other Sample PSUs to w/in 50m of Sample PSU but Not in Sample PSU							
Whole Households	50	7	57	.877	91	99	.919
Additional Households	32	4	36	.889	62	71	.873
Total	82	11	93	.882	153	170	.900
Moves Beyond 50m of Any Sample PSU							
Whole Households	5	158	163	.031	8	13	.615
Additional Households	1	84	85	.012	0	1	.000
Total	6	242	248	.024	8	14	.571
New Location--Not Determined							
Whole Households	0	225	225	0	0	*	*
Additional Households	0	75	75	0	0	*	*
Total	0	300	300	0	0	*	*

* Cannot be determined.

¹Total Households represent the total number of moves. A HH which moved more than once will be counted as many times as it moved.

²An eligible person is any sample person who moved within the 50 mile limits of an ISDP sample PSU, and for whom a new address was found. When a sample person moved into a new household, the entire household became eligible for ISDP interview. Theoretically, no HH more than 50 miles from an ISDP PSU should have been eligible for interview; however, six HHs were followed up for interview and included among eligibles.

Attachment B

Form 155 Question	Descriptive Results														
	12a	12b	14	15	16c	16c x 17c	16c x 17b								
Column Heading	(a) Miles and Hours Determining New Address	(b) Miles and Hours Determining New Address	(c) Miles To Travel After Discovery of Household Move	(d) Hours To Travel After Discovery of Household Move	(e) No. of HH Moved	(f) No. of HH Moved and Followed Up	(g) Total # of Moves	(h) Total Mover Follow-up Miles	(h)/(g)	(h)/(f)	(i) Total Miles/HH Follow-up	(j) Total Mover Follow-up Min	(j)/(g)	(j)/(f)	(k) Total Min/HH Follow-up
Total	52417	29385	82421	24770	3284	2483	4148	66828	16.11	26.93	40.37	109933	26.52	44.32	66.48
Whole Households	32318	17262	61759	17262	2123	1602	2671	42720	15.99	26.67	40.00	70715	26.48	44.14	66.21
Additional HHs	20099	12123	20662	6416	1161	881	1477	24108	16.32	27.36	41.04	39278	26.59	44.58	66.87
Moves Within Same PSU															
Whole Households	19732	10334	36065	10691	1390	1321	2198	32244	14.65	24.39	36.59	54090	24.59	40.92	61.38
Additional HHs	12081	7180	11190	3705	723	669	1090	15781	14.48	23.59	35.39	25458	23.36	38.05	57.08
Total	31813	17514	47255	14396	2113	1990	3288	48025	14.60	24.12	36.18	79548	24.18	39.96	59.94
Moves From Sample PSU to w/in Sample PSU															
Whole Households	3977	2094	5973	1978	240	180	341	5841	17.13	32.45	48.68	10214	29.95	56.74	85.12
Additional HHs	3933	2262	3974	1116	207	148	292	5404	18.51	36.51	54.77	9795	33.54	66.18	99.27
Total	7910	4356	9947	3094	447	328	633	11245	17.76	34.28	51.43	20009	31.61	61.00	91.50
Moves To Outside Sample PSUs															
Whole Households	4382	2633	6865	2188	268	101	132	4635	35.11	45.89	68.84	6411	48.57	63.48	95.21
Additional HHs	2907	1908	2086	507	156	64	95	2923	30.77	45.67	68.51	4025	42.37	62.89	94.34
Total	7289	4541	8951	2695	424	165	227	7558	33.30	45.81	68.71	10436	44.81	64.18	94.87
Moves w/in 50 mi of Same PSU but Not in Same PSU															
Whole Households	971	641	1389	375	48	46	51	1875	36.76	40.76	61.14	2566	50.31	55.78	83.67
Additional HHs	565	354	458	210	35	31	42	1144	27.24	36.90	55.35	1606	38.24	51.79	77.71
Total	1536	995	1847	585	83	77	93	3019	32.46	39.21	58.81	4172	44.81	54.18	81.27
Moves from Other Sample PSUs to w/in 50 mi of Sample PSUs but not in Sample PSU															
Whole Households	943	547	1554	555	57	50	76	2549	33.54	50.98	76.47	3443	45.30	68.86	103.29
Additional HHs	634	446	339	75	36	32	52	1730	33.27	54.06	81.09	2351	45.21	73.47	110.21
Total	1577	993	1893	630	93	82	128	4279	33.43	52.18	78.27	5794	45.27	70.66	105.99
Moves >50 mi from Any Sample PSU															
Whole Households	2468	1445	3922	1258	163	5	211	42.20	63.30	63.30	402	80.40	80.40	120.60	
Additional HHs	1178	773	3412	1088	75	0	0	49.00	73.50	73.50	68	68.00	68.00	102.00	
Total	4176	2553	5211	1480	248	6	6	260	43.33	64.99	64.99	470	78.33	78.33	117.49
New Location Unknown															
Whole Households	4227	2201	12856	3497	225	0	0	0	0	0	0	0	0	0	0
Additional HHs	1178	773	3412	1088	75	0	0	0	0	0	0	0	0	0	0
Total	5405	2974	16268	4585	300	0	0	0	0	0	0	0	0	0	0

**A factor of 1.5 is multiplied by the miles and minutes per HH follow-up in order to arrive at a total follow-up cost. This 1.5 factor is an average of the multiple of one way travel per trip an interviewer makes in order to follow up a mover outside a PSU.