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SAMPLE SELECTION IN THE SEATTLE AND DENVER INCOME MAINTENANCE EXPERIMENTS

Center for the Study of Welfare Policy

Technical Memorandum 1

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I INTRODUCTION

The Seattle and Denver Income Maintenance Experiments (SIME/DIME) are controlled experiments designed to study the effects of a negative income tax program and manpower subsidies on the behavior of selected samples of families in these two cities. The purpose of the experiments, however, is broader than the stated objective in that it is the desire of the government to extrapolate the effects measured in the experiments to a national population so that more effective welfare programs can be designed.

This technical memorandum discusses the procedures used to select the sample of families for the experiments, presents the results of the selection procedures, and describes the assignment of the families to experimental treatments. Since it was believed that any negative income tax program would affect only the poorer segments of the population, the sample concentrated on poor families. At an early stage it was decided that the sample would not be selected on a purely random basis from a general population mix, but that it would be stratified and confined to emphasize the groups that would most likely be subject to a negative income tax program. Two issues entered into this consideration: (1) in the face of a general support level at or near the poverty line, it could be assumed that high income families--those whose initial preprogram incomes were significantly above the point at which they could receive any benefits from such a program--would not be affected by the program; and (2) it was assumed that only certain family structures would lead to eligibility for the program. Thus, unrelated individuals or individuals living together in households that did not form a nuclear family would not be eligible for the program, and such individuals or groups of individuals could be omitted from the experiment without affecting the generalizable nature of its results.

The experiment was therefore to be confined to groups of individuals in which there could be identified a nuclear family unit comprising either a married couple or a single adult and at least one dependent child. Further conditions were imposed, such as the male or only head of the family should be: black, or Mexican-American, or other white; between the ages of 18 and 58; and physically capable of working.* These racial restrictions were imposed to permit the experimental results to be presented separately for racial groups (if found necessary after data analysis) and to ensure a sufficiently large number in each group to allow estimation of reliable results. Other racial groups were thus omitted to create homogeneous subsamples of sufficient size among the three racial groups being studied. In combination, the three groups studied did in fact comprise most of the racial groups in the poverty population.

Age restrictions were imposed on the sample primarily to eliminate workers nearing the retirement age, because it was felt that the impact of the experiment on retirement and the aged would be conceptually and substantively different, and that a separate study for this group would be necessary. The disabled were omitted because there are and will continue to be special programs for the disabled; furthermore, it was believed that their labor supply responses could not be merged with those of the able-bodied population. Hence, restrictions were imposed on the sample as a combination of experimental requirements to allow for homogeneous populations, consistent with a belief in the restrictions that would exist in a national program.

A further and more crucial limitation was the preexperimental level of family income. These restrictions were imposed solely for purposes of efficiency. The experimental design stated that, in terms of 1970 income, a family of four with one earner could not have more than $9,000 in normal income, and a family of four with two earners could not exceed

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*See SIME/DIME Research Memorandum No. 18, pp. 23-26, for a more complete description of the sample qualifications and unit definitions.

$11,000 in income. These arbitrary restrictions were believed to encompass incomes high enough so that it could reasonably be assumed that families with incomes above these limits would have zero response to the experiment. The initial sample selection process, as we shall see, was designed to obtain for consideration families with annual 1970 earnings approximately 30% above these cutoffs. The cutoffs themselves, however, were made effective only at enrollment. It should be noted that the actual earnings of families selected will differ according to family size and are adjusted to equivalent incomes of families of four members.

In this memorandum we will describe in detail the processes used (1) to acquire the sample of families enrolled in the Seattle and Denver Income Maintenance Experiments, and (2) to assign these families to experimental treatments.* The assignment process includes a determination of which families will receive the various guarantees and which will serve as controls. The remaining sections of this memorandum are devoted to a discussion of the various steps in the process, from the initial selection of areas in the cities of Seattle and Denver in which to carry out the experiment, to the final process of enrolling families in the experiment.

The first step entailed identification of areas in the two cities that had concentrations of low income families. The selection process delineated areas containing about 25% to 30% of the city's housing units. These concentrations were identified to make efficient the later screening and interviewing processes; in other words, to minimize the number of housing units that would have to be screened and investigated in order to select a sample of the required characteristics.†

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*Sample selection, assignment to treatment, and policy decisions on completion rates were made by SRI with the concurrence of DHEW and the States of Washington and Colorado. The interview and enrollment processes were carried out by MPR (Mathematica Policy Research) under subcontract to SRI.

†It might be noted that, if we were conducting a housing study instead of a labor supply-oriented study, this would have been an incorrect procedure because it would imply the selection of low income people living in relatively poor housing while excluding people with the same income who happen to live in better sections of the city.

The next step was screening. This was essentially a door-to-door process of listing every housing unit in the selected areas and then contacting an adult in each one with a short-form interview. This questionnaire was designed to provide basic information for screening the families in order to select a group that seemed most eligible for the experiment. This group of families were then administered a second interview, the preexperimental or baseline interview. The screening interview was believed necessary for efficiency; it was a five-minute interview whereas the later preexperimental interview lasted more than one hour. For cost purposes it was not believed desirable to conduct and then analyze such a huge interview for a population of which nearly 90% would be ineligible for the experiment.

The preexperimental interview was designed to collect detailed information on families to be used in the final selection process and treatment allocation. On the basis of the screening interview, housing units that did not conform to the sample requirements were excluded. Thus households that did not contain an appropriate nuclear family, whose heads were outside the age range, who were not of the appropriate racial groups, or who had family-earned income more than 30% above the cutoff point for the experiment in 1969 in Seattle or in 1970 in Denver, were eliminated. All others were placed in a selection procedure for the preexperimental interview; however, not all those eligible were administered the interview. As will be shown below, in Seattle all those who had passed the initial tests were given the preexperimental interview; but in Denver there was a second selection that excluded even some of the eligible families from further participation. As will be discussed, if it was obvious that the number of families in the eligible group was far in excess of the number needed for the experiment, a random number generation system was used to eliminate otherwise eligible families from receiving preexperimental interviews.

On the basis of the preexperimental interview, detailed data were provided to allow the computation of what was termed "normal income." "Normal income" is essentially just that--the expected income of the

family under normal economic circumstances. The preexperimental interview provided the economic history to allow computation of the screened families' normal income. These data, plus other information on the social structure of the families, permitted the families to be categorized by (1) income, (2) race, and (3) family structure for assignment to treatment.

Assignment was basically a stratification process in which cells (or subgroups) were delineated according to the three categories mentioned above; a mathematical model determined the number of families required in each cell. On the basis of data from the preexperimental interview, eligible families were placed in one of these cells, and a random process was employed to determine which families in the cells would be enrolled in the experiment and to which treatment they would be assigned. In many cases all available families in a cell were assigned to treatment because the assignment model generated a demand for more families than were in fact available; in other cases the random process eliminated some eligible families.

The final step in sample selection was enrollment in the experiment. The person responsible for delineation of treatment--namely, the SRI project leader--informed the MPR subcontract organization of the name, number, and assignment of the families. On the basis of this information, a packet of material was prepared that included an enrollment agreement, a so-called "tax table" that informed the family of its treatment characteristics, and an enrollment interview. The MPR interviewer then made an appointment and visited the family, requesting that family members enroll in the experiment and explaining their rights and obligations. If they accepted, an enrollment interview was conducted. This interview provided further baseline data for analysis as well as essential economic information for initiation of the payment system and generation of the first payment to the family. Subsequent payments to the family were based on monthly income reports submitted to the MPR subcontractor. On the basis of this entire complex process, beginning with approximately 100,000 housing units listed for screening, a final sample of 2,042 family units in Seattle and 2,758 family units in Denver were enrolled in the experiment.

II SAMPLE AREA SELECTION AND SCREENING

The areas from which we selected the SIME/DIME sample were the predominantly low income sections of each city. Following identification of sectors where the median family income was below the national median income level, sampling ratios were established for each such area to achieve the desired number of completed interviews. Each dwelling unit in the selected areas was then listed by address, block, and area. These housing units comprised the sample of households to be contacted for administration of the screening interview (the first phase of the process of selecting potentially eligible families for the experiment).

A description of these activities in Seattle and Denver follows.

Seattle

Sample Area Selection

Through the use of 1960 Census tract maps, special area economic survey data provided by United Good Neighbors, conversations with officials of the Model Cities program, and on-site surveying of potential areas, we identified the low income Census tracts and public housing projects where a median family income was below the $11,000 cutoff in 1969 (approximately the median family income level). Fourteen areas, comprising six noncontiguous sectors of the city and encompassing nearly one-third of the city's housing units, were selected in December of 1969. The selected areas are shaded in the city map as shown in Figure 1.

To make the selection procedure as efficient as possible, sampling ratios were established for each area of the city, and the highest ratio was assigned to sectors expected to yield the largest proportion of eligible family units. The initial sampling ratios in Seattle were 100% in the public housing projects, 50% in the Model Cities area, and 33-1/3% in the remaining locations. In areas where the sampling ratios were less than 100%, the blocks to be included were selected at random.

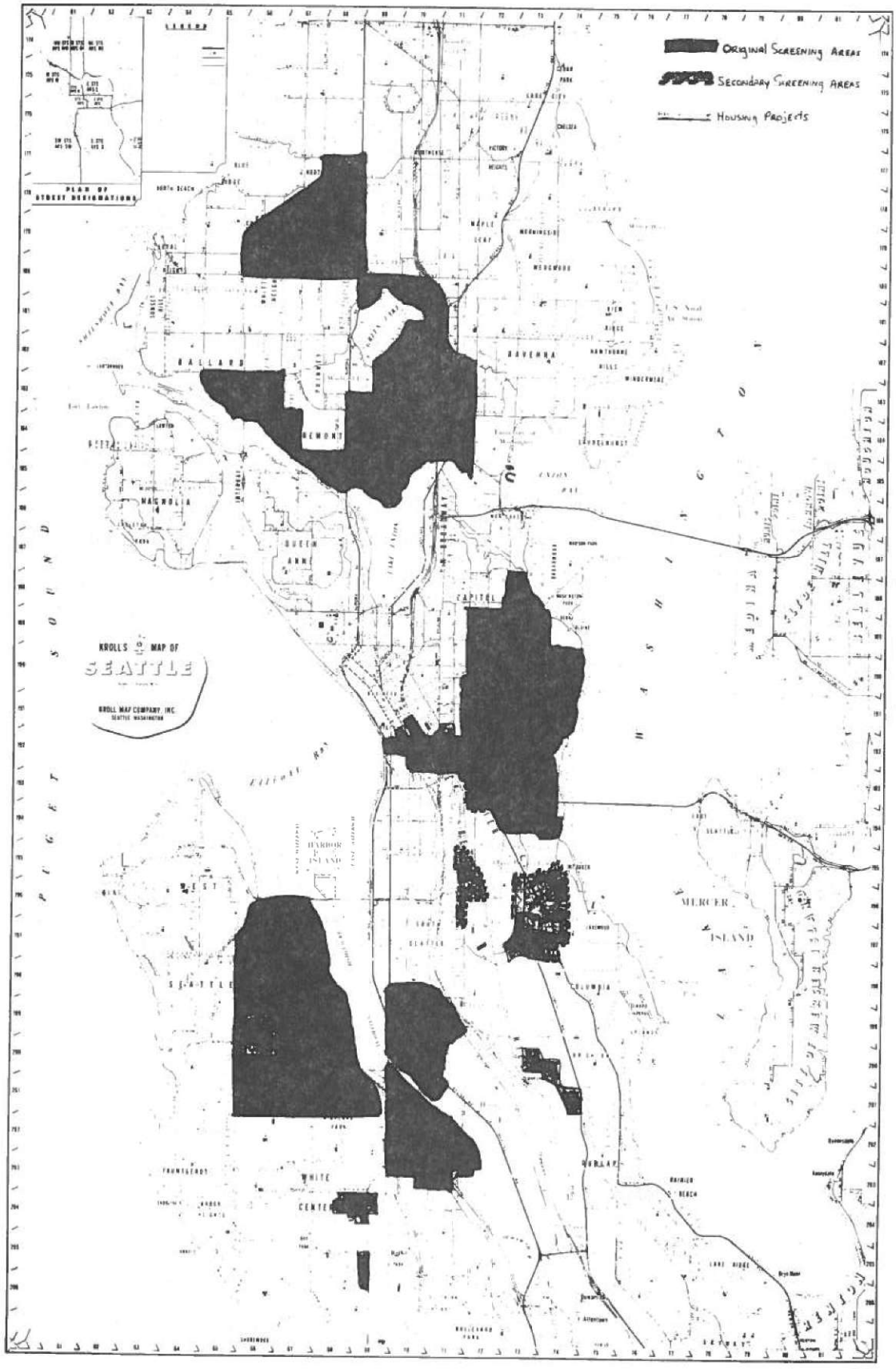

FIGURE 1 SEATTLE SAMPLE AREA

These sampling ratios were subsequently revised when, during the course of the first phase of the screening process (in which data were collected to determine a family's eligibility), it was found that the initial sample areas were yielding an insufficient number of potentially eligible families. It was decided, therefore, to increase the sampling ratios and add a new area to be interviewed (the Mount Baker area). The sampling ratios were augmented to the following: 100% in the Model Cities area, 50% in Delridge and Ballard, and 100% in the area west of the slope in Madrona.

Initial Screening

In preparation for screening, all housing units in the sample areas were listed by area and block number. The listing process entailed the recording of each household's address, block number, and area on an individual "dwelling unit" card (5 x 8 in.). Adults in these "listed" housing units were later contacted by interviewers for administration of the screening interview. Excluded from the listing were commercial properties, rooming houses, hotels, nursing homes, units lacking plumbing facilities, and institutional units. The decision to exclude these housing units was based on the belief that such units were unlikely to house families eligible for the experiment.

A total of 24,168 housing units were listed by MPR to be contacted for administration of the screening interview.* Table 1 presents the entire SIME sample selection process in tabular form, and Figure 2 depicts the entire process graphically. Figure 3 represents a chronological view of the sample selection.

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*Brewster, Alan, "Sample Selection in Seattle (preliminary)," December 29, 1970, subsequently referred to as "Brewster's memo." This 11-page memorandum to the SIME files describes the basic procedures and results of the initial and secondary screening and preenrollment process in Seattle. It is basically a chronological report of the events that occurred from initial selection of areas for inclusion in the SIME sample up through the completion of the secondary preenrollment interviewing phase. Manually compiled statistical results are given at the conclusion of each phase of these sample selection procedures.

Table 1

SELECTION OF THE SAMPLE FOR THE SEATTLE INCOME MAINTENANCE EXPERIMENT

	Initial Listing	Initial Listing Change*	Supplementary Listing	Supplementary Listing Change*	Total
Census Housing Count	N.A.		N.A.		N.A.
SIME Housing Unit Listing	24,168		11,856		36,024
Vacant	2,572	-189	1,131	-2	3,512
Refused Screening Interview	2,709	+367	2,284	-8	5,352
Not Found/Not Complete	3,413	-1,429	1,594	-36	3,542
Terminated	7,486	+738	5,192	+16	13,432
Miscellaneous (duplicates, (unaccounted)		+58		+2	60
Completed Screening Interviews	7,988	+455†	1,655†	+28†	10,126
Coded Screening Interviews on File at SRI	8,050‡	N.A.	N.A.	N.A.	N.A.
Ineligible	3,428				3,428
Eligible for Preexperimental Interview	4,622	455	1,655	28	6,760
Added from Ineligible List	221				221
Selected for Preexperimental Interview	4,843	455	1,655	28	6,981
Moved	647				647
Refused	443				443
Ineligible	789				789
Miscellaneous (duplication, not complete, invalid screening, unaccounted)	413				413
Completed Preexperimental Interviews	2,551	455	1,655	28	4,689
Added from new families who moved into the houses of previously eligible families who had moved out	126				126
Completed Preexperimental Interview§	2,677	455	1,655	28	4,815
Assignment Model					2,186.6
Assigned to Treatment					2,542
Refusals					126
Terminations					84
Moved out of area					106
Moved, not found					138
Miscellaneous					46
Total Enrolled					2,042

*These "changes" represent changes in screening/preexperimental status following a return to some originally incomplete interviews.

†The second set of screening interviews, as well as the return to original units, were combined with preexperimental interviews. Hence, the figures represent completed screening interviews as well as completed preexperimental interviews.

‡The extra 62 coded screening interviews at SRI included some terminated interviews.

§The Documentation Center's count of preexperimental interviews at SRI totals to 4,859.

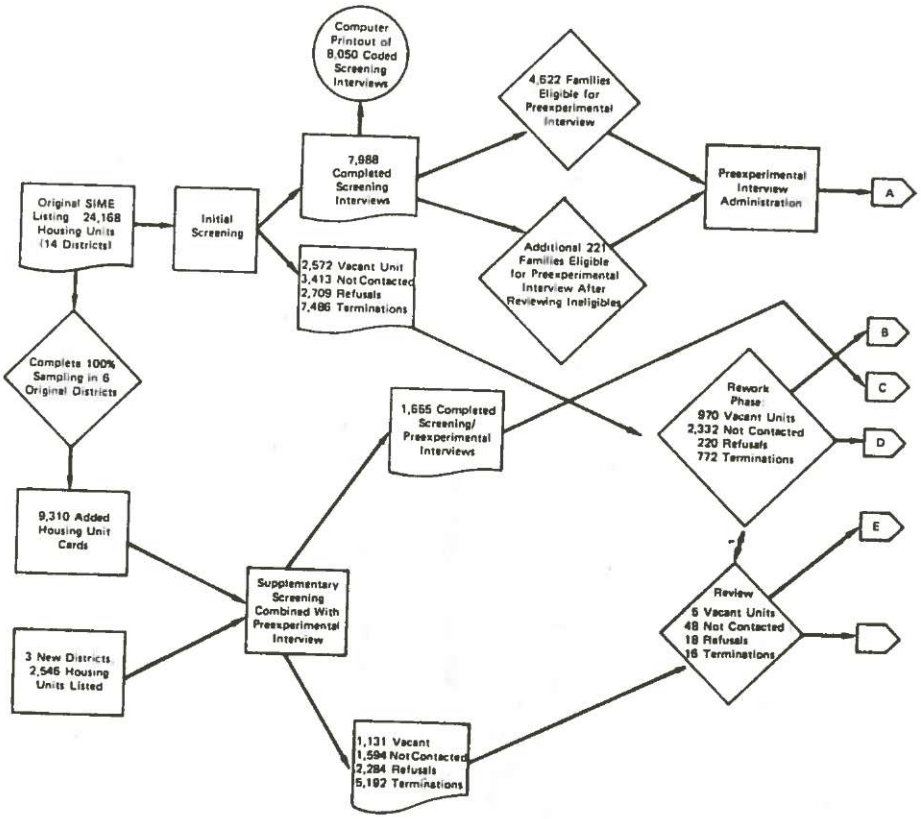

FIGURE 2 SIME SAMPLE SELECTION PROCESS

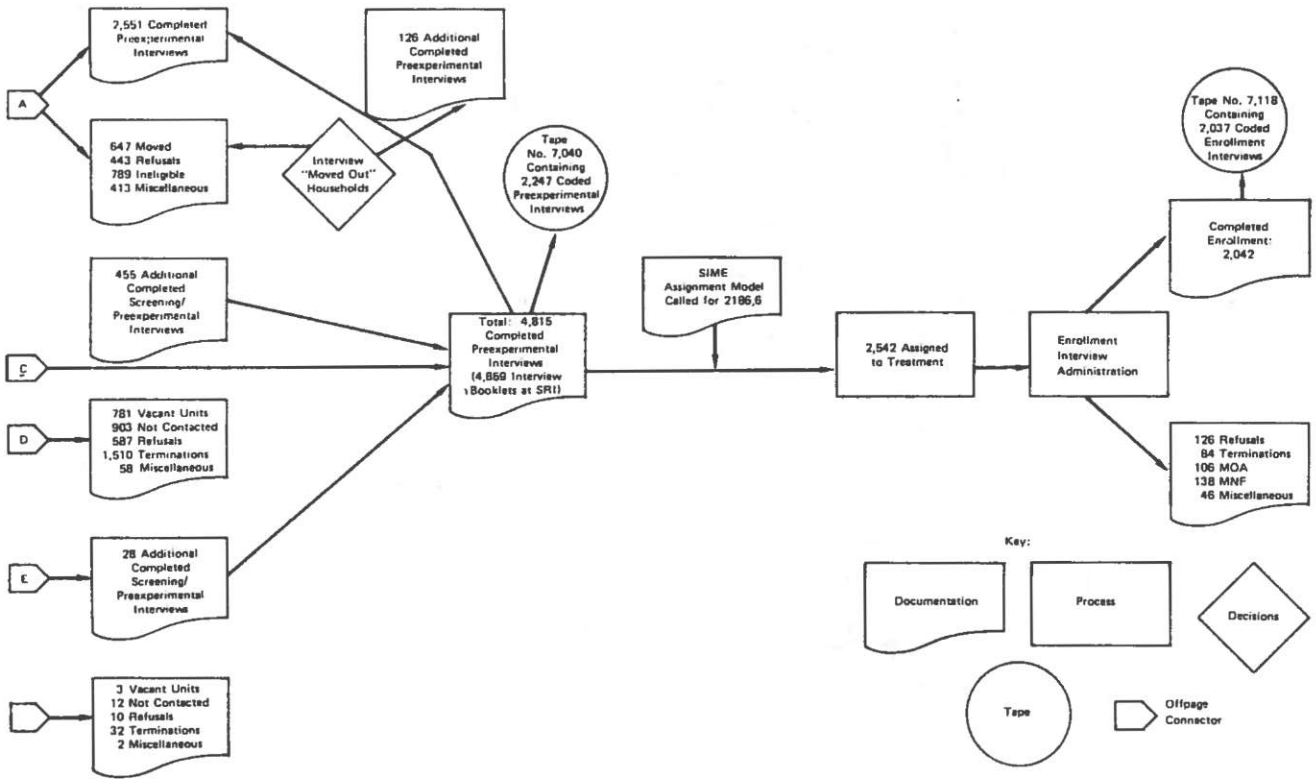

FIGURE 2 SIME SAMPLE SELECTION PROCESS (Concluded)

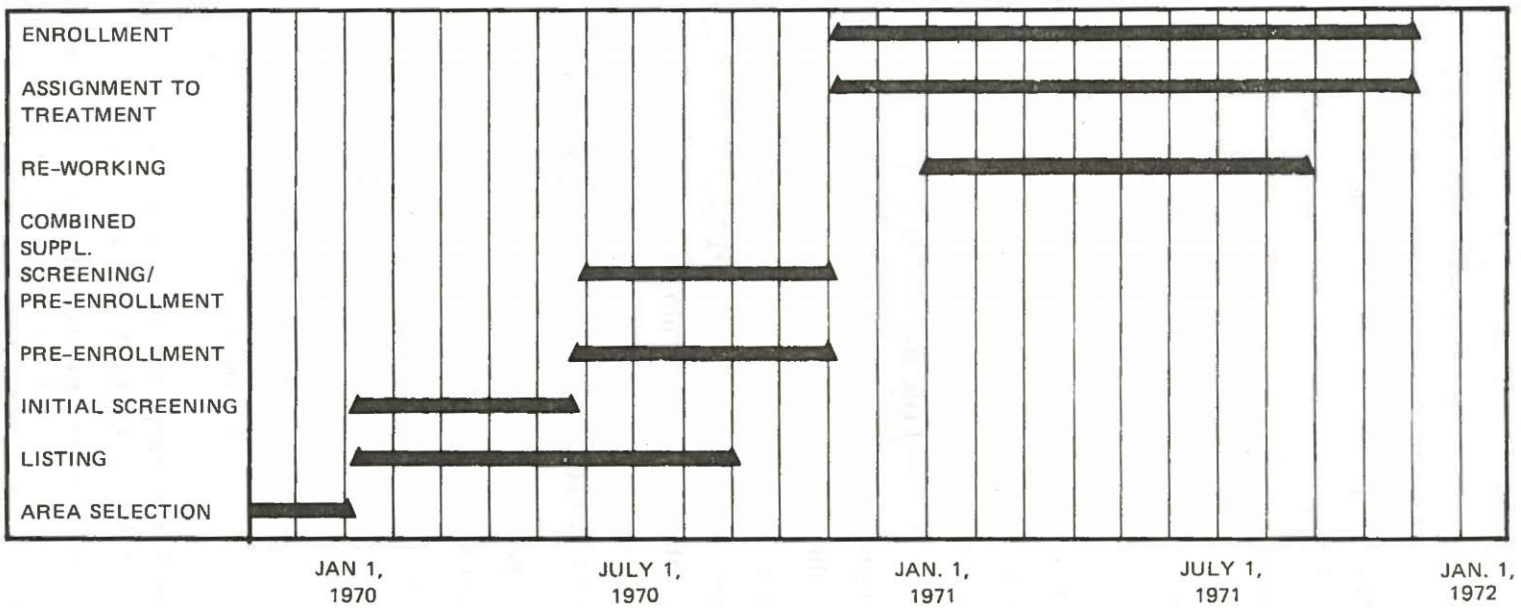

FIGURE 3 SEATTLE SAMPLE SELECTION VIEWED CHRONOLOGICALLY

The screening instrument was the 5-minutes-long short form interview that was used to acquire from each household data that would enable program staff to determine if it was likely an eligible family lived in that housing unit. Data were collected about the composition of the household, including the relationship, age, and sex of each member. For each household member over the age of 16, information was gathered on the number of weeks worked, total earnings in the full year prior to screening, and type of the current or last job, as well as data on the receipt of government transfer payments from various welfare programs (such as AFDC, food stamps, and so on).

In Seattle, the screening process began in January 1970. Of the 24,168 listed housing units where MPR attempted to contact families for screening, 2,572 were found vacant. In other units 2,709 families refused to be interviewed, 3,413 families were either not found at home or could not complete screening, and 7,486 families were terminated because of their ineligibility.* The reasons for terminating an interview at this time were: age of head of household was under 18 or over 58 (1,534), and household consisted only of unrelated individuals (5,952). A total of 7,988 completed screening interviews were obtained at the conclusion of this initial screening process by June 1970. At SRI, 8,050 screening interviews were coded; these include some terminated interviews.†

Because the initial screening in Seattle was found to be yielding too small a sample of eligible families, it was decided to carry out a second, supplementary screening process in hopes of expanding the sample.

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*Brewster's memo. (Reasons for incomplete screening included hostile apartment managers, dogs, false contact, nonexisting address, and so on.)

†Ibid. Also, tabulations from a computer printout of the completed coded screening interviews are in the SRI files, listing the total number of completed coded screening interviews as 8,050. Another computer listing, however, at the SRI Center for the Study of Welfare Policy's Documentation Center totals to 8,128 coded interviews.

Supplementary Screening

In mid-July 1970, interviewers returned to one of the originally selected areas--Mount Baker--where initial screening had not been completed because of insufficient time. Three new areas were added for listing and screening additional families: Beacon Hill, Atlantic Avenue, and Park Lake Homes, a King County Housing Project just south of the Seattle city limits. These additional areas were sampled at a 100% ratio, and 2,546 new listings were obtained.

By mid-August, however, it was clear that still more families were needed for an adequate sample; in particular, the sample was short of black two-parent families. Interviewers then returned to six of the original screening areas--Ballard, Delridge, Georgetown, Greenwood, Southpark, and Wallingford--to sample them at a 100% rate. A total of 9,310 new housing units were listed from these original areas, bringing the total number of housing listings to 11,856 in this supplementary screening process, which occurred from June through October 1970.*

To expedite this supplementary screening, the original screening interview was shortened by eliminating questions on earnings and government transfer payments and was administered in conjunction with the preexperimental interview, which is more detailed than the screening interview and provides specific economic data about the potentially eligible, screened families. This procedure of administering the preexperimental interview immediately after the completed screening interview achieved the desired effect of terminating ineligible families in the field if they did not conform to the characteristics of the required experimental sample.

The results of the supplementary screening process were as follows:

- 1,131 housing units were found vacant
- 2,284 families refused to be interviewed
- 1,594 families either were not found at home or failed to complete the interview

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*Ibid.

- 5,192 families were terminated for the following reasons:
  - Age (1,915)
  - Unrelated individuals (1,823)
  - No dependents (782)
  - Ethnic group not eligible (227)
  - Too high income (106)
  - Too large family (65)
  - Disabled head of household (37)
  - Other (237).

At the end of the second screening process, 1,655 completed screening and preexperimental interviews had been obtained.*

Reworking of Sample

At the conclusion of supplementary screening in October 1970, the selected SIME sample did not meet the requirements of the assignment model: It was short of working female-headed families and two-parent families with less than $1,000 in earned income. These shortages existed for both black and white families, though they appeared especially severe for black families. A reworking of the sample was immediately launched, requiring a return to originally noncompleted screenings in both the initial and supplementary phases. Housing units previously classified "Vacant," and households whose interviews were classified as "Not Found/ Not Complete," "Refused," and even "Terminated" were returned to by interviewers in hopes of obtaining additional completed interviews, particularl with the desired experimental characteristics.

In this reworking phase, the use of the combined screening and preexperimental interview reduced the time and cost factors and expedited obtaining additional eligible families. The sample reworking consisted of four waves of return interviewing: January 1 to July 1, 1971; July 13 through August 9, 1971; August 10 through August 23, 1971; and August 24 through August 31, 1971. The objective of the reworking of the SIME

*Ibid.

sample was to return to all housing units where interviews had not been completed; however, the completion efforts were aborted in August 1971 because of excessive costs.

This reworking of the sample produced an additional 483 completed screening and preexperimental interviews from a total of 4,381 attempts. Table 2 details these results.

From the initial screening phase, a total of 970 previously "Vacant" housing units, 220 "Refusals," 2,332 "Not Found/Not Complete" units, and 772 "Terminated" were returned to by interviewers. These attempts resulted in the "new" statuses of 781 vacancies, 587 refusals, 903 not found or not completed interviews, 1,510 terminations, 58 miscellaneous, and 455 completed screening/preexperimental interviews.* A much smaller number of housing units from the supplementary screening phase were also recontacted, the results of which also appear in Table 2. Five of these vacant housing units were attempted again, as well as 18 previously refused units, 48 not found/not complete units, and 16 terminated interviews. As a result of these recontacts, 3 vacancies, 10 refusals, 12 not found/not completes, 32 terminations, 2 miscellaneous, and 28 completed screening/preexperimental interviews were obtained. Both of these results appear in Table 1 under the columns of "Initial Listing Change" and "Supplementary Listing Change," indicating the "net" change from the original results. These changes are obtained for each category by subtracting the number of attempts in the category from the resulting number in the category in Table 2 (e.g., for the vacant status, 781 - 970 = -189). A total of 483 (455 + 28) completed screening and preexperimental interviews were finally obtained out of a total of 4,381 recontacts during the reworking of the sample phases. The grand total of screening interviews obtained in Seattle was therefore 10,126.

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*Terminations during the "reworking of the sample" were made for such reasons as two heads with no dependents, no English spoken, male head with no female head, and not a dual-headed black family. These later terminations may be termed "eligible terminations" because the families theoretically were eligible for the program but were unwanted in the sample because of an excessive supply already included.

Table 2

RESULTS OF THE REWORKING OF THE SIME SAMPLE

	Total Attempts	New "Changed" Status: Vacant	Refused	Not Found/ Not Complete	Terminated	Miscellaneous	Completed
Previous Initial Listing Status							
Vacant	970	334	39	267	297	9	24
Refused	220	13	54	37	87	2	27
Not Found/Not Complete	2,332	289	402	437	786	41	377
Terminated	772	145	92	162	340	6	27
Subtotal	4,294	781	587	903	1,510	58	455
Previous Supplementary Listing Status							
Vacant	5	0	1	2	2	0	0
Refused	18	2	2	3	3	1	7
Not Found/Not Complete	48	1	7	7	13	1	19
Terminated	16	0	0	0	14	0	2
Subtotal	87	3	10	12	32	2	28
Total	4,381	784	597	915	1,542	60	483

Source: The results of the reworking phase of screening/preexperimental interviewing were obtained at SRI by laboriously examining each housing unit and manually recording a previous and final status for each household unit.

Denver

Sample Area Selection

With one small exception, the 19 areas selected for the income maintenance experiment in Denver (plus four reserve districts) are contiguous, centering on the Model Cities area. (See map of Denver, shown as Figure 4.) On-site surveying, with the assistance of Census tract maps and demographic data, led to the establishment of the sample area boundaries in early 1971. After an initial screening (described later), the sample area was expanded to encompass two new districts containing a heavy concentration of two-parent Black and two-parent White families (Areas 5 and 25 on Figure 4).

The sample ratios were set at 100% in all districts initially selected, and 55,091 dwelling units were listed between April and May of 1971.* Subsequently, half of District 9 was eliminated because of its high percentage of luxury high-rise apartments, and half of Reserve District 18 was included in the sample because of its probability of a high yield of white two-parent families, bringing the total dwelling units listed to 50,934.† This DIME listing, when compared with the 1970 Census Bureau's listing of 51,628 housing units on an area-by-area basis, was found to be accurate in count within 1%.‡

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*Scowcroft, Mary, "Quarterly Report DIME," November 19, 1971, and "Quarterly Progress Report April 1-June 30, 1972," June 30, 1972, subsequently referred to as Mary Scowcroft's Reports, 1971 and 1972. These two progress reports to R. G. Spiegelman outline the procedures of the screening and preenrollment interviewing conducted by Mathematica, starting from the selection of families for DIME up to the completed preenrollment interviews. A brief description of the chronological progress is given, along with manually obtained statistics at the conclusion of each phase of this process of sample selection.

†Mary Scowcroft (1971) identifies 50,934 listings. Also a report entitled "Urban Opinion Surveys (U.O.S.) Housing Count, An Analysis" by Dennis Brachfeld, identifies the total number of U.O.S. listings as 50,934 (although the column totals to 50,933).

‡"Denver Sample Validation Study," by David Harvey and A. Rogers Little, November 8, 1973, cites the comparable Census housing count as 61,300, which, when the 9,672 luxury apartments are subtracted, yields 51,628 Census housing units. Note the 50,974 U.O.S. listing is incorrect; the error is located in the incorrect summing of Districts 20 through 24 from Brachfeld's listing.

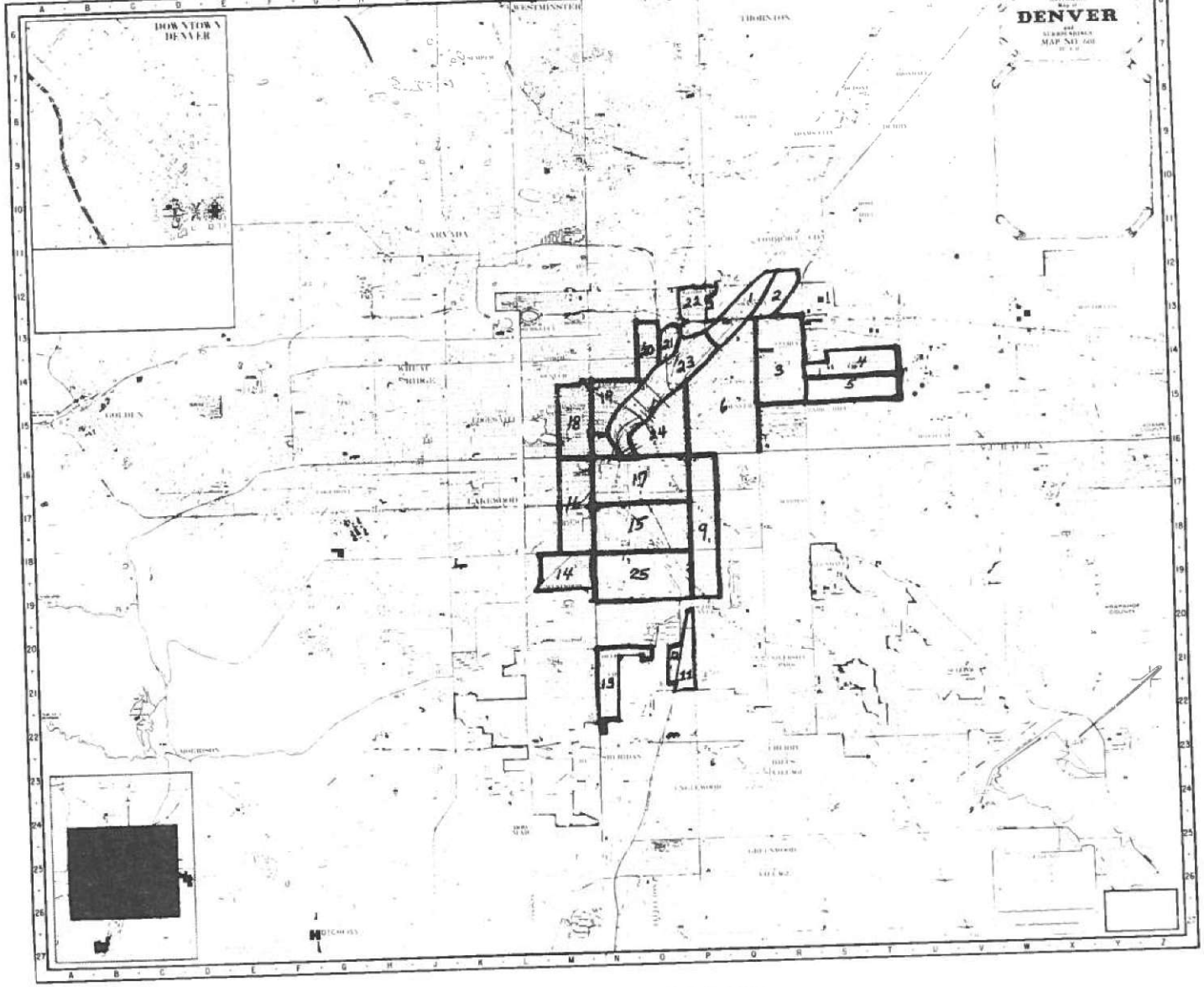

FIGURE 4 DENVER SAMPLE AREA

It was decided at this time that a random 20% of the initial listing would be held in reserve because there were enough housing units to yield the sample size required by the assignment model; consequently, the DIME working sample was reduced to 40,774.* Table 3 presents the entire DIME sample selection process in tabular form, Figure 5 depicts the sample selection process graphically, and Figure 6 shows it chronologically.

Initial Screening

The initial phase of screening began in May 1971. Screening interviews were attempted in the 40,774 housing units listed by DIME earlier in the year. On completion of the first phase of the screening process in August, 4,811 housing units were found vacant, families in 3,865 units were never interviewed because they could not be contacted in seven repeated attempts, and 4,694 families refused to be interviewed, resulting in a total of 27,404 completed screening interviews.† Families who had not been contacted and those who had refused to be interviewed were then contacted during the second phase of this screening process in efforts to obtain additional completions and reduce the refusal rate.

The second phase of interviewing successfully reduced the noncontacts by 38% and the refusals by 52%. At the completion of this second phase of screening, 4,811 housing units remained vacant, 2,416 occupants could still not be contacted, and 2,226 people continued to refuse to be interviewed. A total of 31,321 completed screening interviews were, therefore, obtained upon completion of the initial screening effort.‡ These screening interviews were subsequently keypunched onto cards and the data were mounted

*Scowcroft (1971).

†Ibid.

‡Scowcroft (1972). Also, Spiegelman, R. G., "The Denver Sample of the Income Maintenance Experiment," January 5, 1973, subsequently referred to as "Spiegelman's memo." This memorandum to the Record describes briefly the process of arriving at the final DIME enrollment sample from the initial housing units listed by Mathematica as containing a high proportion of low income families. Primarily, manually calculated statistics are presented rather than a discussion. A discussion of the characteristics of a refusal subsample and a completion subsample from screening data is also presented.

Table 3

CREATION OF THE SAMPLE FOR THE DENVER INCOME MAINTENANCE EXPERIMENT

	Initial Listing	Supplementary Listing	Total
Census Housing Count	51,628	7,317	58,945
DIME Sample Housing Unit Listing	50,934	6,893	57,827
Sample including Supplementary Screening	40,774*	12,807**	53,581
Vacant	4,811	381	5,192
Not Found at Home	2,416	2,226	4,642
Refused Screening Interview	2,226	1,853	4,079
Completed Screening Interviews	31,321	8,347	39,668
Eligible for Preexperimental Interview	11,762	N.A.	N.A.
Selected for Preexperimental Interview	5,910	1,440	7,350
Moved			486
Refused			1,258
Ineligible			591
Miscellaneous (excess 1-parent; duplication, invalid screening; employees of research group)			332
Completed Preexperimental Interviews			4,683
Assignment Model			3,052.9
Assigned to Treatment			3,361
Refusals			246
Terminations			83
Moved Out of Area			111
Not Contacted			157
Miscellaneous			6
Total Enrolled			2,758

* 80% of initial listing.

** 50% of initial screening reserve plus supplementary listing.

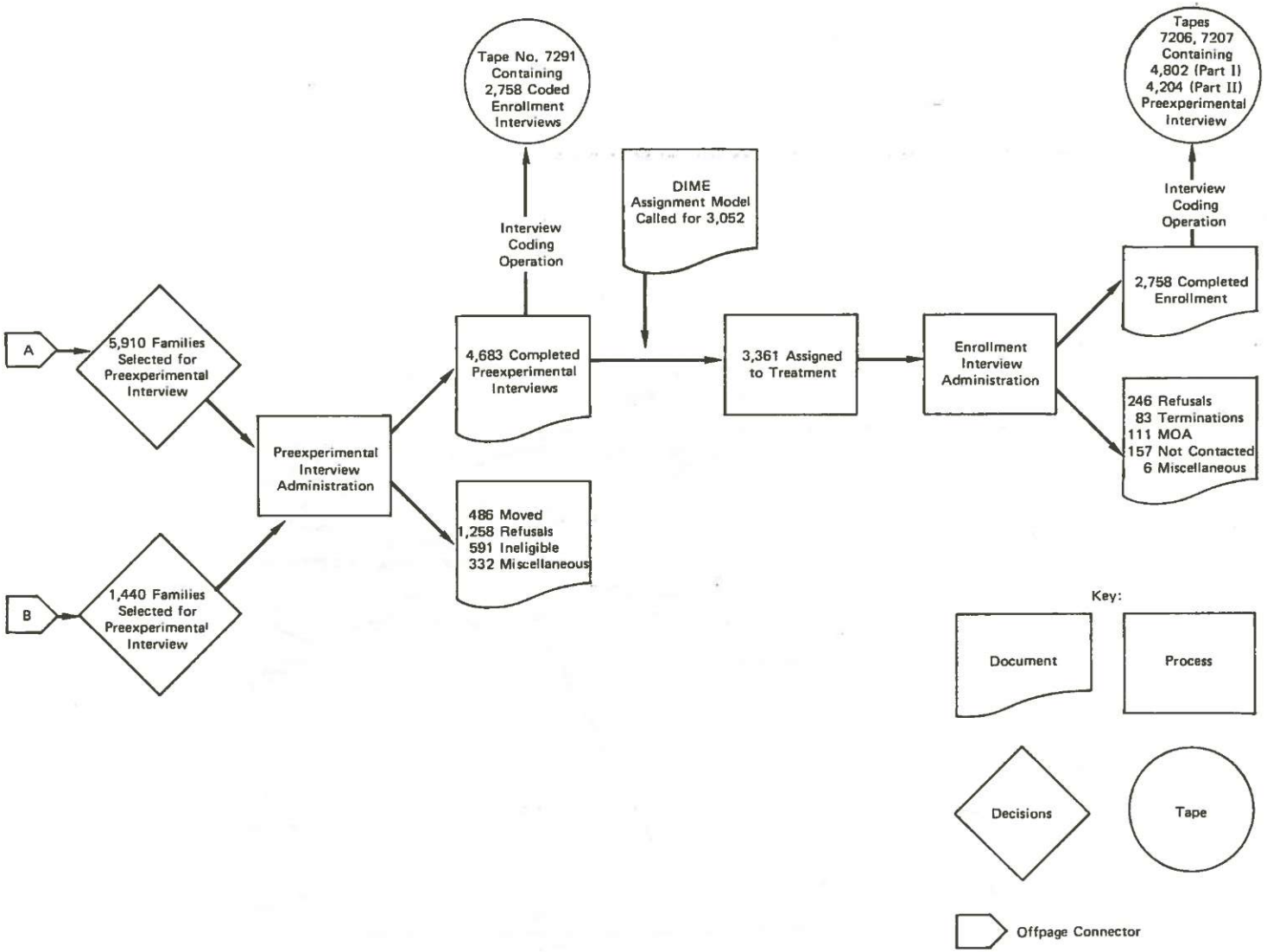

FIGURE 5 DIME SAMPLE SELECTION PROCESS

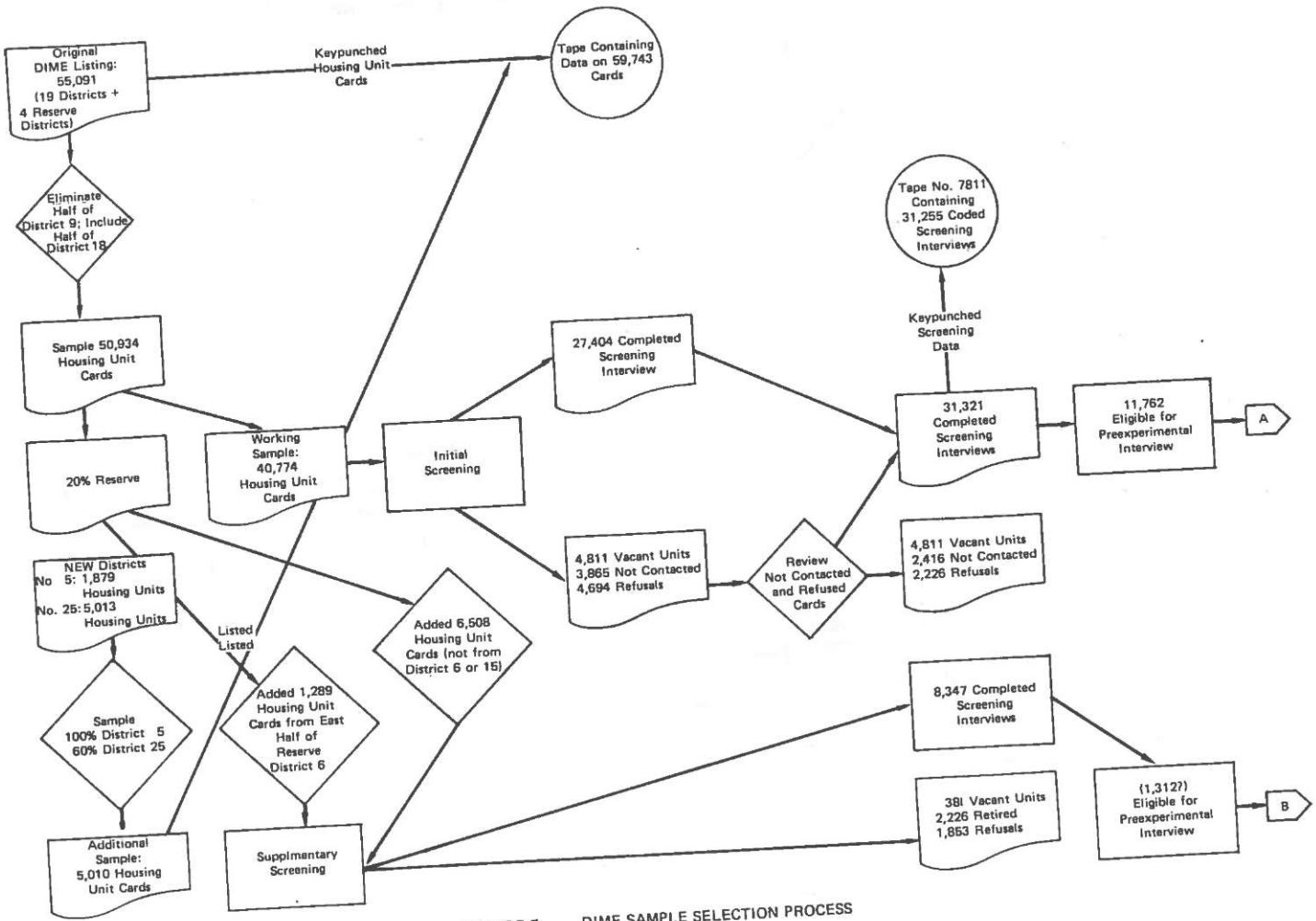

FIGURE 5 DIME SAMPLE SELECTION PROCESS

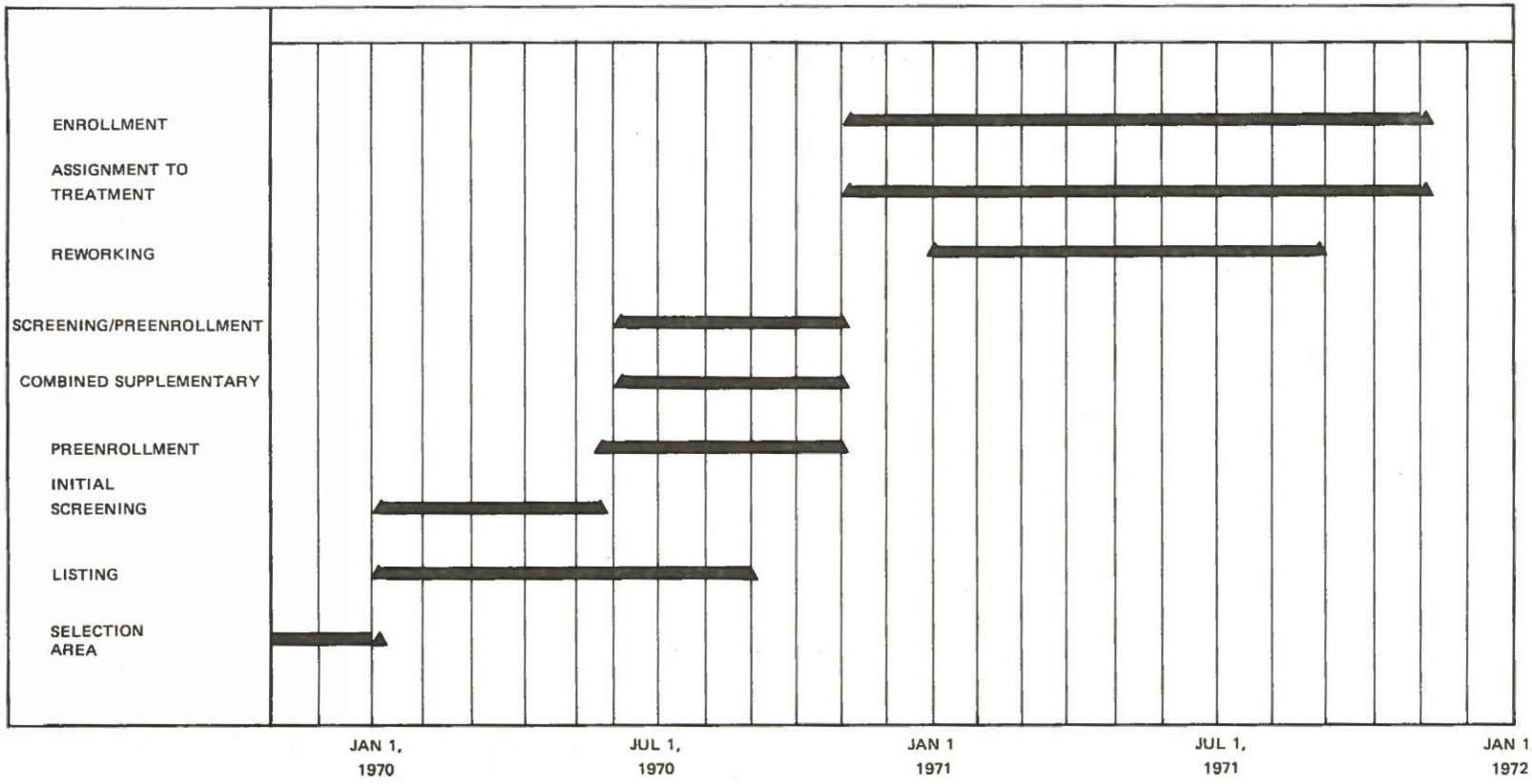

FIGURE 6 CHRONOLOGICAL SELECTION OF SEATTLE SAMPLE

to tape. SRI's Documentation Center now possesses a tape (Tape No. 7811) that contains data for 31,255 of these completed screening interviews.*

These completed interviews were analyzed and a determination was made as to whether the screened households met the sample requirements. Because these eligibility determinations resulted in a sample of eligible households deficient in two-parent black and two-parent white families with incomes below the poverty line, it was decided to augment the initial screening.

Supplementary Screening

Efforts to locate additional black and white two-parent families were initiated by sampling the reserve districts at 100%, except for Districts 6 and 15, which contained primarily black and chicano one-parent low-income families. A total of 6,508 additional dwelling units were listed from the reserve sample and screened.† But with the completion of screening in nearly 70% of reserve districts, it became apparent that there was still a lack of black and white two-parent families.

Two new areas of Denver (Districts 5 and 25) that contain a high concentration of the desired families were then selected and listed, offering a potential 6,892 (1,879 in District 5; 5,013 in District 25) new dwelling units (out of a Census count of 7,317). It was decided, however, to sample 100% in District 5, but only 60% in District 25, which yielded 5,010 dwelling units to be screened.‡ At the same time, the eastern half of Reserve District 6 was also selected, producing an

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*Sloma, Dorothy, Supervisor of SRI's Center for Welfare Policy's Documentation Center, "Update on Final Tapes," dated January 7, 1977. A printout of the data on the tape is also available at the Center.

†Scowcroft (1972).

‡A tape output at SRI's Center for the Study of Welfare Policy contains data for 59,743 dwelling unit cards. The total number according to our report comes to 60,101 (55,091 + 5,010).

additional 1,289 households to be contacted.* A total of 12,807 additional housing units, therefore, were contacted for screening.†

This supplementary screening process, which was completed by mid-April 1972, resulted in 381 vacant housing units being identified, 2,226 households never being interviewed because in four repeated attempts the family could not be found at home, and 1,853 refusals to be interviewed, producing 8,347 completed additional screening interviews.‡ In Denver, therefore, we obtained a grand total of 39,668 completed screening interviews on conclusion of both screening phases.

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*Scowcroft (1972).

†Scowcroft (1972) and Spiegelman's Memo.

‡Scowcroft (1972). These additional screening interviews were not coded.

III PREEXPERIMENTAL INTERVIEWING

To make the final selection of families for inclusion in the SIME/DIME sample and to provide the basis for assigning these families to various treatment cells, we had to collect detailed economic histories of the potential sample members, including earnings and income information, family structure data, and social behavior patterns. For this purpose a preexperimental interview was administered to a subset of the screened households that appeared to meet, or nearly meet, the criteria for inclusion in the experiment. As previously described, it was required that the household consist of a nuclear family, i.e., either a married couple or an adult and at least one dependent child under the age of 21 (under age 18, if married). The male or only head of the family had to be between 18 and 58 years of age, able-bodied, and not currently in the armed forces. Furthermore, if the annual family income reported in the screening interview was more than 30% above the cutoff for inclusion in the experiment, that family was excluded from the preexperimental interview. Even among the eligible families, some were excluded because they possessed a set of characteristics that placed them in a category which was clearly in excess supply.

A detailed description of the preexperimental selection and completion process in Seattle and Denver now follows.

Seattle

Preexperimental Interview Selection

Of the 8,050 coded screening interviews on file at SRI at the end of the initial screening process in Seattle, 3,428 households were determined to be ineligible for the experiment for various reasons:* single individual

*Memo to A. Brewster from M. Gorfinkel, dated 12/9/70, lists the final number of eligible and ineligible families and reasons for ineligibility. A computer output from the final screening tape is also in the SRI files, listing the household ID number along with eligibility information codes.

in household (41); head of household over 58 (451); family too large (over 7 members, 293); head of household disabled (74); income too high (2,035);* sex of head of household indeterminable (10); and ethnic group other than Black or White (524). These exclusions left 4,622 families eligible for the preexperimental interview at the end of this initial selection process. During the supplementary screening process and the reworking phases, of course, the preexperimental interview was conducted immediately following the screening interview, and hence these eligibility questions did not arise at that time.

During administration of the preexperimental interviews to the 4,622 initially selected families, SIME rules of operation began to take shape, and it was decided to increase the number of families eligible for the experiment. To find additional families who would qualify for the experiment, the previously ineligible list of families was examined once again to determine whether some households previously classified "large" might actually be two or more families, or whether some families were receiving disability assistance where the head of the house was not actually disabled, and so on. As a result of this procedure, 221 additional families were obtained, bringing the total to 4,843 "potentially eligible" families for the preexperimental interview.†

Preexperimental Interview Completion

Preexperimental interviews of these 4,843 families were conducted from May through October 1970. The interviews were quite lengthy, requiring from 60 to 90 minutes to administer. Each family responding to the interview was paid $5.00. The results of this preexperimental interviewing process were as follows: 647 families had moved (494 had moved and were not located; 153 were known to have moved outside the Seattle

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*The cutoff was over $8,200 total income, excluding welfare, for 2-member household; $10,500 for 3-members; $11,600 for 4-members; $13,000 for 5-members; $14,300 for 6-members; and $15,000 for 7-member household. These income limits are identified in R. G. Spiegelman's memo to Martin Gorfinkel dated February 19, 1970, "New Procedure for Processing Screening Information."

†Brewster's memo.

area); 443 people refused to be interviewed; 789 people were determined to be ineligible (for the reasons cited previously); and 413 were excluded for miscellaneous reasons, such as duplication (126), interview not completed (134), false screening interview (8), unaccounted for (145). The total number of completed preexperimental interviews obtained, then, was 2,551.* Because of the large number of families who had moved, it was decided to interview the new families who had moved into the houses of previously eligible families who had "moved out." This procedure yielded an additional 126 completed interviews, bringing to 2,677 the completed preexperimental interviews at the end of the initial selection process in Seattle.*

Combined with the 1,655 completed preexperimental interviews from the supplementary screening process in Seattle, plus the 483 completed preexperimental interviews resulting from reworking of the sample, the total number of completed preexperimental interviews obtained in the SIME sample was 4,815. The total number of preexperimental interview booklets at SRI, however, is 4,859.† The difference of 44 is unaccountable at this time. Of the 4,815 completed preexperimental interviews, 2,247 were coded and are on file at SRI.‡ This total represents all the subsequently enrolled families plus some unenrolled families.

Denver

Preexperimental Interview Selection

In Denver, an analysis of the first set of completed screening interviews, which contained information on family structure, ethnic origin, and 1970 annual earnings, disclosed that 18% of the families were ineligible for the experiment because of excessive earnings, 27% were ineligible because of inappropriate family structure, and 20% were deemed

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*Brewster's memo.

†The hand count given by D. Sloma and staff at SRI's SIME/DIME Documentation Center.

‡Dorothy Sloma's "Update on Final Tapes," dated January 7, 1977.

ineligible because of age of the head.* It was determined, therefore, that 11,762 of the screened households were potentially eligible for the DIME program.†

Approximately 50%, or 5,910, of these initial eligible screened households were then selected for the preexperimental interview, based on the needs of the assignment model.‡ Because of this reduction, not more than about 10% of black and chicano one-parent families with no earning potential were selected because of the large number of such families already available for the experiment. Another group sampled at less than 100% were two-parent families of all races with annual normal earnings of between $7,000 and $9,000 (adjusted for differences in family size). Table 4 shows more precisely the selection for the preexperimental interview from initial screening in Denver, indicating also the sampling proportions used. A similar table is not available for Seattle.

Of the 8,347 completed screening interviews obtained at the completion of the supplementary screening process in Denver, 1,440 families were selected for preexperimental interviewing. An eligibility determination was not made at the end of this screening process. A total of 7,350 families, then, were selected to be contacted for administration of the preexperimental interview in Denver.

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*Spiegelman's memo cited above.

†David Harvey's memo to R. G. Spiegelman, "Summary of Sampling Approaches Used for Preenrollment Selection--DIME," dated 11/9/72, presents a table of eligible screenings. The total as presented is 11,760, but the correct total (arithmetically) is 11,762.

‡M. Scowcroft's "Quarterly Progress Report, April 1-June 30, 1972," dated June 30, 1972. [Spiegelman's memo cited above shows a total of 5,638 eligible screenings, which is actually 5,633 (arithmetical correction), to which the 266 terminations after preenrollment have been added to yield 5,899 total eligible families. However, the table shows 5,910. Note that SRI's "A Cross-Sectional Estimation of Labor Supply for Families in Denver 1970," Research Memorandum 24, November 1974, lists this number as 5,904.]

Table 4

ETHNICITY, NUMBER OF HEADS, AND NUMBER OF FAMILIES BY NORMALIZED YEARLY EARNINGS (Selected for Preexperimental Interview from Initial Screening in Denver)

	Number and Ratio* of Families Earning Indicated Amounts						
	$0-$1,000	$1,001-$3,000	$3,001-$5,000	$5,001-$7,000	$7,001-$9,000	$9,001-$11,000	Total
Black							
1 Parent	61	155	196	124	85	--	621
	11%	96%	96%	100%	100%	--	
2 Parents	112	102	231	272	243	245	1,205
	100%	100%	100%	100%	69%	89%†	
White							
1 Parent	93	103	167	131	93	63‡	650
	51%§	100%	100%	100%	100%	62%	
2 Parents	125	118	308	326	257	361	1,495
	100%	100%	100%	70%	44%†	84%†	
Chicano							
1 Parent	58	133	137	85	58	--	471
	6%	100%	100%	100%	100%	--	
2 Parents	266	195	153	228	202	147	1,191
	100%	85%	23%	27%	28%	42%	
Total	715	806	1,192	1,166	938	816	5,633**

*The upper number in each cell is the number of families selected for the preexperimental interview. The lower number is the percentage of the selected number relative to the number available from the screening.

†All 2-parent families with 2 workers were taken in these cells; therefore, the sampling is actually 100% of the families with 2 workers.

‡Not required for the assignment model but accepted for the preexperimental interview in order to find families with lower expected 1971 income.

§Included all families that showed promise of higher expected earnings.

**Excluded 266 households where preexperimental interviews were terminated in the field.

Source: SIME/DIME Research Memorandum 24, "A Cross Sectional Estimation of Labor Supply for Families in Denver 1970," p. 7 (November 1974).

Preexperimental Interview Completion

At the conclusion of the attempts to interview the 7,350 selected families, 486 had moved out of the area, 1,258 refused to be interviewed, 591 were determined ineligible, and 332 were excluded for miscellaneous reasons.* The 332 miscellaneous deletions were explained as follows: Excess one-parent families with incomes of $1,000 or less (233), duplications (74), invalid screenings (20), and Mathematica employees (5). The 591 terminated families were deemed ineligible for the following reasons: ineligible family size (116), graduate students (30), military personnel (49), family composition inadequate (132), overage (114), disabled (106), and ethnic origin unacceptable (44).

These exclusions yielded a total of 4,683 completed DIME preexperimental interviews at the end of April 1972, when preexperimental interviewing was completed.† The preexperimental interview was divided into two parts. SRI tapes contain 4,802 coded preexperimental interviews for Part I, and 4,204 coded preexperimental interviews for Part II.‡ The coding operation for these two parts took place separately; hence the discrepancy in number of interviews coded for the two sections.

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*Scowcroft (1972).

†Scowcroft (1972).

‡Sloma, Dorothy, "Update on Final Tapes" (January 7, 1977).

IV ASSIGNMENT TO TREATMENT AND ENROLLMENT IN THE EXPERIMENT

In SIME/DIME, the sample size and the assignment of families to predetermined treatment cells were simultaneously determined by the use of a nonlinear mathematical program designed to achieve maximum effective use of a given budget allocated to the experiment.* The assignment model assumed that the cost of an experimental observation depends on normal income, race, and family structure treatment.

Normal income was defined as the expected income of the family in the full calendar year prior to the start of the experiment (1970 in Seattle and 1971 in Denver), on the assumption that the family would be facing normal economic circumstances and be working at its normal rate. It included all the earnings of related family members living in the household, plus unearned income from capital. In Denver, unearned income included imputation of income from home equity. Normal income for each family was estimated judgmentally because of the absence of any reliable models to make the assignment. In Denver, a regression that calculated normal income from the observed data was used as one of the tools in the assignment process, but it explained sufficiently little of the variance in income to make total reliance on such a tool inefficient. Information available from the baseline preexperimental interviews used to determine family normal income included the following: (1) for workers, the earnings, hours worked per year, main occupation, and number of weeks of unemployment for each of three years prior to the interview; (2) for persons not working at all during those three years, the wage rate of the last job and the reason for termination; (3) for each person 16 and over, a speculation on whether he/she will work during the ensuing five years;

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*The assignment model is fully described in SIME/DIME Research Memorandum 15, "The Assignment Model of the Seattle and Denver Income Maintenance Experiments," J. Conlisk and M. Kurz (July 1972).

(4) for the family as a whole, information on liquid assets and on equity in the home and other real property.

In Seattle, the procedure for estimating normal income was similar in that it was highly judgmental and rested mainly on earned income in the preceding three years and on unearned income in the preceding year. It differed somewhat in that there was no regression model. Instead, partial reliance was placed on two estimating procedures:

(1) Estimation of full income, which is the family member's potential earnings for a 2,080-hour year, minus involuntary unemployment, correction for part-time work, and for cost of child care.

(2) An estimate of earnings based on an average of the maximum and minimum earnings in the three-year period, 1967 through 1969, with the most recent year given the heaviest weight.*

Each family was placed in one of seven E-level (economic level) categories representing the range of normal income included in the experiment. The following are the categories used for assignment, with incomes normalized to an equivalent income of a family with four members:†

Category 1 (E1) = Less than $1,000
Category 2 (E2) = $1,000 but less than $3,000
Category 3 (E3) = $3,000 but less than $5,000
Category 4 (E4) = $5,000 but less than $7,000
Category 5 (E5) = $7,000 but less than $9,000
Category 6 (E6) = $9,000 but less than $11,000
Category 7 (E7) = $11,000 but less than $13,000 (controls only and assigned later).

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*See unsigned memorandum, "Normal Income Computation for Assignment," dated 3/2/71.

†The conversion to an equivalent income of a four-member family was accomplished by dividing the normal income estimate for the family by a family-size index number, as follows:

Family Size	Index Number
2	.62
3	.83
4	1.00
5	1.12
6	1.23
7	1.32
8	1.38
9+	(Add .04 for each additional member)

Following determination of its E-level, each family was placed into a pool of available families. Families were then randomly assigned (using a table of random numbers) within racial, family structure, duration, and income groups to a treatment or control cell, depending on the requirements of the assignment model. Prior to exercising the assignment model, however, the experiment's budget was allocated by site, experimental duration, family structure, and race. The intersection of these preconditioning variables resulted in twenty separate assignment models, based on the following set of decisions:

(1) Duration

3 years = 75%

5 years = 25%

(2) Family Structure

Dual head = 60%

Single head = 40%

(3) Race*

	Seattle	Denver
Black	50%	33-1/3%
White	50%	33-1/3%
Chicano	0	33-1/3%

(4) Site

Denver:† Black and White = 50%

Seattle: Black and White = 50%.

Thus, there were 8 models for Seattle and 12 models for Denver. Each family was preassigned by site, race, and family structure to one of the submodels. On the basis of the family's E-level and requirements of the

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*200 Black and 200 White null control families were added in Seattle and Denver to allow for intercity comparison, which was not considered in the assignment model.

†A Chicano group was added to Denver, based on assignment results for Blacks.

assignment model,* the submodels allocated the family to one of the 12 financial treatments (including controls); to one of the 4 manpower treatments (including controls); and to a duration. The financial, manpower, and duration cells are as follows:

		Support (in dollars)	Tax Rate	Rate of Decline
A. Financial	F0		Control	
	F1	$3,800	.50	0
	F2	3,800	.70	0
	F3	3,800	.70	.000025
	F4	3,800	.80	.000025
	F5	4,800	.50	0
	F6	4,800	.70	0
	F7	4,800	.70	.000025
	F8	4,800	.80	.000025
	F9	5,600	.50	0
	F10	5,600	.70	.000025
	F11	5,600	.80	.000025
B. Manpower	M0		Control	
	M1		Counseling only	
	M2		Counseling plus reimbursement	50% cost
	M3		Counseling plus reimbursement	100% cost
C. Duration of treatment	Y1		3 years	
	Y2		5 years	

In Seattle, however, all families were originally enrolled for three years. Later (within six months) when the five-year program was approved, some families were randomly reassigned (within the basic family structure, race, and income groups) to the five-year program, including some controls.

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*This assignment process results in a stratified random sample of the population. A stratified random sample differs from a simple random sample and these differences must be taken into account in analysis. A discussion of the analytic problems caused by stratification is presented in Appendix A, Part II. A more complete analysis of the assignment process and its effects is presented in M. Keeley and P. Robins, "The Design of Social Experiments: A Critique of the Conlisk-Watts Assignment Model," Draft Report (February 1978).

In 1974 in Denver, approximately 160 three-year and some control families were reassigned randomly, within the three basic stratification categories, to a twenty-year assignment.

Seattle

Results of the Assignment Model

The assignment requirements for Seattle were revised several times in efforts to obtain the optimal SIME experimental sample. The final assignment model was arrived at in November 1971, the results of which are shown in Table 5, differentiated by ethnicity and number of family heads (G-level), normal family income for 1970 (E-level), and financial treatment status. However, the majority of actual assignments and enrollments in Seattle were made using earlier versions of the model, which allocated a far greater number of observations to control cells. This version is shown in Appendix B, Table B-1.

The number of families required by the final assignment model for SIME was determined to be 2,186.6. The actual number of families assigned to treatment, however, was 2,542.* This difference from the required assignment is accounted for by such reasons as misassignments (families assigned to one income group but later determined to be in another), inability to locate a sufficiently large number of families of a given characteristic to fill certain cells, previous assignments made in accordance with earlier assignment requirement table that differed from the final ones, and enrollment refusals.†

Results of Enrollment in the Experiment

Once families were assigned to treatment cells, they were ready to be enrolled on the income maintenance program. Enrollment in the experiment

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*A 9/24/71 computer listing of enrolled families, assigned families waiting to be enrolled, and so on, identifying the total number of families assigned to treatment as 2,542, has been located in the SIME files.

†R. G. Spiegelman's Memo to Distribution, "Revised Final Assignment Requirements for SIME and DIME," dated 11/12/71.

Table 5

SIME ASSIGNMENT MODEL BY G-LEVEL, E-LEVEL, AND FINANCIAL TREATMENT STATUS
(Total Control and Financial in Parentheses)

	E-Level													
	E1		E2		E3		E4		E5		E6		Total	
	$0-$1,000		$1,001-$3,000		$3,001-$5,000		$5,001-$7,000		$7,001-$9,000		$9,001-$11,000			
G-Level	Control	Financial	Control	Financial	Control	Financial	Control	Financial	Control	Financial	Control	Financial	Control	Financial
Black														
G1 1 Parent	17.9	18.2	25.5	80.7	37.1	94.4	39.8	37.9	48.7	15.8	--	--	169.0	247.0
	(36.1)		(106.2)		(131.5)		(77.7)		(64.5)		--		(416.0)	
G2 2 Parents	8.9	9.3	31.0	36.9	41.0	74.7	61.1	100.6	81.8	52.8	61.7	54.8	285.5	329.1
	(18.2)		(67.9)		(115.7)		(161.7)		(134.6)		(116.5)		(614.6)	
White														
G3 1 Parent	18.5	21.3	27.4	86.5	40.6	106.5	41.3	43.9	51.5	17.0	--	--	179.3	275.2
	(39.8)		(113.9)		(147.1)		(85.2)		(68.5)		--		(454.5)	
G4 2 Parents	6.6	12.6	28.0	47.6	43.1	84.8	63.3	112.6	82.4	61.8	84.4	74.3	307.8	393.7
	(19.2)		(75.6)		(127.9)		(175.9)		(144.2)		(158.7)		(701.5)	
Total	51.9	61.4	111.9	251.7	161.8	360.4	205.5	295.0	264.4	147.4	146.1	129.1	941.6	1245.0
	(113.3)		(363.6)		(522.2)		(500.5)		(411.8)		(275.2)		(2186.6)	

Source: These figures were obtained from calculations performed on the data from Table 6 (pp. 22-31) of SRI's Center for the Study of Welfare' Policy's Research Memorandum 15, "The Assignment Model of the Seattle and Denver Income Maintenance Experiments," July 1972. The three-year and five-year families are combined. The control category was obtained by summing the requirements for treatments M0F0, M1F0, M2F0, M3F0.

entailed an explanation of the program rules to the families, their signing an enrollment agreement, followed by administration of the enrollment interview. As can be seen by the SIME sample selection in Table 1, not all the families assigned to treatment were in fact enrolled in the experiment. Furthermore, not all of the requirements of the assignment model were met even at this stage.

In Seattle, nearly 500 families who had been assigned to treatment were never enrolled in the SIME program. Of the total number of families actually assigned to treatment, 126 refused to be enrolled, 84 were terminated, 106 had moved out of the area, 138 had moved but could not be located, and 46 could not be enrolled for miscellaneous reasons.* The final number of families actually enrolled in the SIME program, then, was 2,042. (The enrollment tape at SRI, however, contains 2,037 coded enrollment interviews.†) A breakdown of the SIME enrolled families by G- and E-levels and treatment status is presented in Table 6. (The No-E category refers to families with unassigned E-levels, primarily secondary families "discovered" at the time of enrollment.)

The final SIME enrollment of 2,042 families falls short of the assignment requirement model of 2,186 families by 143, or 7%. To compare the two in greater detail, Table 7 displays the SIME families enrolled by G- and E-levels, and further differentiated by treatment status, as a percent of those assigned in each category. Examination of the table shows that the enrollment falls short of the assignment requirements in primarily the G2, or two-parent black category (75%) and at the E6 level (71%). The greatest single cell of underenrollment, however, is the G2-E2 group (44%). It should be noted that two-parent Black families was the group of families found to be in short supply throughout the sample selection process, and efforts were made repeatedly to expand

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*The 9/24/71 computer listing cited above contained the enrollment status as of 9/24/71. The final figures, however, were obtained through a telephone discussion with Gary Christophersen in November 1976.

†Sloma, Dorothy, "Update on Final Tapes," dated January 7, 1977.

Table 6

SIME FAMILIES ENROLLED BY G-LEVEL, E-LEVEL, AND FINANCIAL TREATMENT STATUS
(Total Control and Financial are in Parentheses)

G-Level	E-Level: No-E Control	No-E Financial	E1 $0-$1,000 Control	E1 $0-$1,000 Financial	E2 $1,001-$3,000 Control	E2 $1,001-$3,000 Financial	E3 $3,001-$5,000 Control	E3 $3,001-$5,000 Financial	E4 $5,001-$7,000 Control	E4 $5,001-$7,000 Financial	E5 $7,001-$9,000 Control	E5 $7,001-$9,000 Financial	E6 $9,001-$11,000 Control	E6 $9,001-$11,000 Financial	E7 $11,001-$13,000 Control	E7 $11,001-$13,000 Financial	Total Control	Total Financial
Black																		
G1 1 Parent	13	12 (25)	37	51 (88)	48	49 (97)	54	63 (97)	33	41 (74)	25	28 (53)	0	4 (4)	0	0 (0)	190	248 (438)
G2 2 Parents	4	6 (10)	7	11 (18)	12	18 (30)	29	46 (75)	42	80 (122)	64	60 (124)	42	36 (78)	6	0 (6)	206	257 (463)
White																		
G3 1 Parent	7	12 (19)	32	43 (75)	43	61 (104)	34	60 (94)	36	43 (79)	33	24 (57)	3	1 (4)	0	0 (0)	188	244 (432)
G4 2 Parents	6	5 (11)	9	13 (22)	30	30 (60)	48	71 (119)	86	106 (192)	105	86 (191)	63	47 (110)	4	0 (4)	351	358 (709)
Total	30	35 (65)	85	118 (203)	133	158 (291)	145	240 (385)	197	270 (467)	227	198 (425)	108	88 (196)	10	0 (10)	935	1,107 (2,042)

Source: A computer listing from SIME/DIME Master File containing enrollment data, 4/21/78.

Table 7

PERCENTAGE OF SIME FAMILIES ENROLLED IN SIME ASSIGNMENT MODEL BY G-LEVEL,
E-LEVEL, AND FINANCIAL TREATMENT STATUS
(Total Control and Financial are in Parentheses)

G-Level	E-Level: E1 $0-$1,000 Control	E1 $0-$1,000 Financial	E2 $1,001-$3,000 Control	E2 $1,001-$3,000 Financial	E3 $3,001-$5,000 Control	E3 $3,001-$5,000 Financial	E4 $5,001-$7,000 Control	E4 $5,001-$7,000 Financial	E5 $7,001-$9,000 Control	E5 $7,001-$9,000 Financial	E6 $9,001-$11,000 Control	E6 $9,001-$11,000 Financial	Total Control	Total Financial
Black														
G1 1 Parent	207%	280% (244%)	188%	61% (91%)	92%	67% (74%)	83%	108% (95%)	51%	177% (82%)	--	-- --	112%	100% (105%)
G2 2 Parents	79	118 (99)	39	49 (44)	71	56 (64)	69	80 (75)	78	114 (92)	68%	68% (67%)	72	78 (75)
White														
G3 1 Parent	173	202 (188)	157	71 (91)	84	56 (64)	87	98 (93)	64	141 (80)	--	-- --	105	89 (95)
G4 2 Parents	136	103 (115)	107	63 (79)	111	84 (93)	136	94 (109)	127	139 (132)	75	63 (69)	114	91 (101)
Total	164%	192% (179%)	119%	63% (79%)	90%	67% (74%)	96%	92% (93%)	86%	134% (103%)	74%	68% (71%)	99%	89% (93%)

this sample. It is believed that the unexpectedly high occurrence of ineligibility resulting from families splitting between the time of pre-experimental interviewing and enrollment was the primary cause for the shortage. It was ultimately decided that the shortages in these cells were not sufficient to jeopardize the analysis, and further efforts to enroll these families were abandoned.

In terms of overenrollment, the one-parent black sample (G1) was overfilled the most (105%), as was the E1 category (179%). This particular group, G1-E1, represented the cell with the greatest overenrollment (244%).

The results shown in Table 7 are surprising in that they show a tendency for experimental observations within many population groups to be placed in control cells rather than in treatment cells, as required by the assignment model. This apparent anomaly arises because most of the assignment and enrollment in Seattle was accomplished under an earlier version of the assignment model, which tended to place a much higher proportion of the total observations in the control cells. In fact, the final allocation in Seattle represents a compromise between the early and the final version of the assignment model requirements. The early version is presented in Appendix B, Table B-1; Table B-2 shows the enrollment as a percent of the assignment requirements for this early version of the assignment. It can be seen that for this version, there was a strong tendency to overassign families to the financial treatment cells. In total, Table B-2 shows that the enrollment of financial families was 159% of the early assignment, whereas enrollment of control families was only 64% of the assignment.

Thus, in spite of the extremely complex screening and interviewing procedures, the SIME sample still resulted in some significant under- and over-enrollments in certain cells of the final assignment model.

Summary Enrollment Statistics

Because of the large number of stratification criteria for the SIME/DIME sample, a few summary tables of the Seattle enrollment sample are presented below for quick comparison of certain important variables.

Table 8 presents the Seattle enrollment grouped by race for the different manpower and financial treatments. Table 9 gives the enrollment by duration and treatment. Finally, Table 10 presents the Seattle enrollment by the following criteria: one-parent and two-parent families by F-level and E-level.

In Appendix D, the Seattle enrollment is given in its most detailed form--by F, M, G, E, and years levels.

Denver

Results of the Assignment Model

The assignment model employed in Denver is identical to the one used in Seattle for the black and white category assignments, but differs in that the Denver model includes a Chicano ethnic category. Table 11 presents the DIME Assignment Model, differentiated by ethnicity and number of family heads (G-level), normal family income for 1970 (E-level), and financial treatment status (control versus financial). The total number of families required for the optimal DIME sample was 3,052.9.

As in Seattle, assignment of families to treatment was done concurrently with enrollment to achieve the desired number of families. The actual number of families who were assigned to treatment in Denver was 3,361.* Families not assigned to treatment generally fell into two categories: (1) a more detailed investigation of family income disclosed normal income patterns that made the family ineligible, and (2) there was an excess supply of families in a given cell, specifically, one-parent E1's and two-parent E5's.

Results of Enrollment in the Experiment

As was the case in Seattle, not all the families assigned to treatment in Denver were enrolled. The reasons for failure to enroll these

*Spiegelman's report.

Table 8

SEATTLE ENROLLMENT: RACE BY TREATMENT

	Race					
	Black		White		Total	
M0 F0	219	24%*	299	26%	518	25%
M0 FN†	171	18	198	17	369	18
MN‡ F0	177	19	240	21	417	20
MN FN	334	37	404	35	738	36
Total	901	100%	1,141	100%	2,042	100%
F0	396	43	539	47	935	45
F3,800	200	22	225	19	425	20
F4,800	214	23	265	23	479	23
F5,600	91	10	112	9	203	9
Total	901	100%	1,141	100%	2,042	100%
M0	390	43	497	43	887	43
M1	154	17	206	18	360	17
M2	216	23	253	22	469	22
M3	141	15	185	16	326	15
Total	901	100%	1,141	100%	2,042	100%

*Percentages may not total to 100 because of rounding.

†FN = financial group (F1 through F12).

‡MN = manpower group (M1 through M3).

Table 9

SEATTLE ENROLLMENT: DURATION BY TREATMENT

	Duration					
	3 Year		5 Year		Total	
M0 F0	284	20%*	234	36%	518	25%
M0 FN	272	19	97	15	369	18
MN F0	290	20	127	19	417	20
MN FN	557	39	181	28	738	36
Total	1,403	100%	639	100%	2,042	100%
F0	574	40	361	56	935	45
F3,800	321	22	104	16	425	20
F4,800	371	26	108	16	479	23
F5,600	137	9	66	10	203	9
Total	1,403	100%	639	100%	2,042	100%
M0	556	39	331	51	887	43
M1	229	16	131	20	360	17
M2	296	21	173	27	469	22
M3	322	22	4	0	326	15
Total	1,403	100%	639	100%	2,042	100%

*Percentages may not total to 100 because of rounding.

Table 10

SEATTLE ENROLLMENT: ONE-PARENT/TWO-PARENT FAMILIES BY F- AND E-LEVELS

		E-Level																	
		E0		E1		E2		E3		E4		E5		E6		E7		Total	
One-Parent	F0	20	30%*	69	33%	91	31%	68	17%	69	14%	58	13%	3	1%	0	0%	378	18%
Families	F1	5	7	14	6	23	7	20	5	30	6	2	0	2	1	0	0	96	4
G=1,3,5	F2	1	1	13	6	7	2	4	1	3	0	0	0	0	0	0	0	28	1
	F3	0	0	11	5	14	4	10	2	4	0	0	0	0	0	0	0	39	1
	F4	1	1	9	4	7	2	27	7	0	0	0	0	1	0	0	0	45	2
	F5	2	3	13	6	16	5	7	1	1	0	2	0	2	1	0	0	43	2
	F6	4	6	12	5	11	3	16	4	14	3	4	0	0	0	0	0	61	2
	F7	4	6	12	5	10	3	10	2	9	1	28	6	0	0	0	0	73	3
	F8	3	4	10	4	7	2	13	3	12	2	0	0	0	0	0	0	45	2
	F9	1	1	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4	0
	F10	0	0	0	0	6	2	7	1	7	1	12	2	0	0	0	0	32	1
	F11	3	4	0	0	6	2	9	2	4	0	4	0	0	0	0	0	26	1
Subtotals		44	67%	163	80%	201	69%	191	49%	153	32%	110	25%	8	4%	0	0%	870	42%
Two-Parent	F0	10	15	16	7	42	14	77	20	128	27	169	39	105	53	10	100	557	27
Families	F1	1	1	6	2	11	3	17	4	52	11	3	0	1	0	0	0	91	4
G=2,4,6	F2	2	3	2	0	7	2	2	0	17	3	0	0	0	0	0	0	30	1
	F3	3	4	6	2	10	3	19	4	11	2	0	0	0	0	0	0	49	2
	F4	2	3	1	0	3	1	28	7	11	2	0	0	2	1	0	0	47	2
	F5	0	0	4	1	8	2	7	1	2	0	22	5	20	10	0	0	63	3
	F6	0	0	0	0	1	0	11	2	25	5	25	5	0	0	0	0	62	3
	F7	1	1	3	1	4	1	12	3	17	3	32	7	13	6	0	0	82	4
	F8	0	0	2	0	2	0	12	3	25	5	9	2	0	0	0	0	50	2
	F9	0	0	0	0	1	0	2	0	0	0	9	2	16	8	0	0	28	1
	F10	1	1	0	0	1	0	2	0	14	3	24	5	5	2	0	0	47	2
	F11	1	1	0	0	0	0	5	1	12	2	22	5	26	13	0	0	66	3
Subtotals		21	32%	40	19%	90	30%	194	50%	314	67%	315	74%	188	95%	10	100%	1,172	57%
Total		65	100%	203	100%	291	100%	385	100%	467	100%	425	100%	196	100%	10	100%	2,042	100%

*Percentages may not total to 100 because of rounding.

Table 11

DIME ASSIGNMENT MODEL BY G-LEVEL, E-LEVEL, AND FINANCIAL TREATMENT STATUS
(Total Control and Financial in Parentheses)

G-Level	E-Level E1 $0-$1,000 Control	E1 $0-$1,000 Financial	E2 $1,001-$3,000 Control	E2 $1,001-$3,000 Financial	E3 $3,001-$5,000 Control	E3 $3,001-$5,000 Financial	E4 $5,001-$7,000 Control	E4 $5,001-$7,000 Financial	E5 $7,001-$9,000 Control	E5 $7,001-$9,000 Financial	E6 $9,001-$11,000 Control	E6 $9,001-$11,000 Financial	Total Control	Total Financial
Black														
G1 1 Parent	17.9	18.2 (36.1)	25.5	80.7 (106.2)	37.1	94.4 (131.5)	39.8	37.9 (77.7)	48.7	15.8 (64.5)	--	-- --	169.0	247.0 (416.0)
G2 2 Parents	8.9	9.3 (18.2)	31.0	36.9 (67.9)	41.0	74.7 (115.7)	61.1	100.6 (161.7)	81.8	52.8 (134.6)	61.7	54.8 (116.5)	285.5	329.1 (614.6)
White														
G3 1 Parent	18.5	21.3 (39.8)	27.4	86.5 (113.9)	40.6	106.5 (147.1)	41.3	43.9 (85.2)	51.5	17.0 (68.5)	--	-- --	179.3	275.2 (454.5)
G4 2 Parents	6.6	12.6 (19.2)	28.0	47.6 (75.6)	43.1	84.8 (127.9)	63.3	112.6 (175.9)	82.4	61.8 (144.2)	84.4	74.3 (158.7)	307.8	393.7 (701.5)
Chicano														
G5 1 Parent	12.7	18.2 (30.9)	16.5	80.7 (97.2)	24.6	94.4 (119.0)	29.1	37.9 (67.0)	35.6	15.8 (51.4)	--	-- --	118.5	247.0 (365.5)
G6 2 Parents	5.3	9.3 (14.6)	21.3	36.9 (58.2)	28.2	74.7 (102.9)	44.2	100.6 (144.8)	52.1	52.8 (104.9)	20.6	54.8 (75.4)	171.7	329.1 (500.8)
Total	69.9	88.9 (158.8)	149.7	369.3 (519.0)	214.6	529.5 (744.1)	278.8	433.5 (712.3)	352.1	216.0 (568.1)	166.7	183.9 (350.6)	1,231.8	1,821.1 (3,052.9)

Source: "The Assignment Model of the Seattle and Denver Income Maintenance Experiments," SRI's Center for the Study of Welfare Policy Research, Memorandum 15, July 1972.

families were as follows: 246 families refused to be enrolled after having been contacted at least twice; 83 were terminated at enrollment because of a change in family structure that made them ineligible; 111 had moved out of the area after the preexperimental interviews; 157 could not be contacted to complete enrollment; and 157 were not enrolled for miscellaneous reasons.* This attrition resulted in the final enrollment of 2,758 DIME families by August 31, 1972. In all cases where a termination or refusal occurred, a family was replaced by another family with the same characteristics if one was available from those already assigned to treatment. (SRI has 2,758 coded enrollment interviews on tape.†) A differentiation of the DIME enrolled families by G- and E-level and control and financial status, is given in Table 12.‡ (The No-E category refers to secondary families, families with changed E-levels, and so on.)

The DIME enrollment of 2,758 families falls short of the assignment requirement model by 295, or 10%. To compare the two in greater detail, Table 13 views the number of DIME families enrolled as a percentage of the assigned requirements by G- and E-level and further differentiated by treatment status. It appears that the DIME enrollment falls short of assignment objectives primarily for G2 (two-parent black) families with incomes under $7,000, and for G3 (one-parent White) and G4 (two-parent White) families with earnings under $5,000. The greatest single category of underenrollment is the G2-E2 and G4-E1 group (21%).

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*From David Harvey's memo to R. G. Spiegelman, "Report 3 of 3 for a Summary of the Enrollment Process," dated 9/18/72. The miscellaneous category referred to erroneous enrollment.

†Sloma, Dorothy, "Tape Update" cited above.

‡Final figures were obtained from a computer listing in David Harvey's memo to R. G. Spiegelman, "Report 1 of 3 for a Summary of the Enrollment Process," dated 9/15/72. (Control equals MOFO plus MNFO; financial equals MOFN plus MNFN.)

Table 12

DIME FAMILIES ENROLLED BY G-LEVEL, E-LEVEL, AND FINANCIAL TREATMENT STATUS
(Total Control and Financial are in Parentheses)

G-Level	E-Level: No-E Control	No-E Financial	E1 $0-$1,000 Control	E1 $0-$1,000 Financial	E2 $1,001-$3,000 Control	E2 $1,001-$3,000 Financial	E3 $3,001-$5,000 Control	E3 $3,001-$5,000 Financial	E4 $5,001-$7,000 Control	E4 $5,001-$7,000 Financial	E5 $7,001-$9,000 Control	E5 $7,001-$9,000 Financial	E6 $9,001-$11,000 Control	E6 $9,001-$11,000 Financial	E7 $11,001-$13,000 Control	E7 $11,001-$13,000 Financial	Total Control	Total Financial
Black																		
G1 1 Parent	9	25 (34)	25	32 (57)	29	84 (113)	36	96 (132)	40	45 (85)	36	22 (58)	6	0 (6)	1	0 (1)	182	304 (486)
G2 2 Parents	5	5 (10)	2	5 (7)	7	7 (14)	25	43 (68)	47	79 (126)	71	61 (132)	65	46 (111)	7	0 (7)	229	246 (475)
White																		
G3 1 Parent	4	9 (13)	22	28 (50)	13	55 (68)	23	63 (86)	29	39 (68)	35	13 (48)	8	2 (10)	--	-- --	134	209 (343)
G4 2 Parents	3	8 (11)	2	2 (4)	8	17 (25)	30	60 (90)	60	114 (174)	85	86 (171)	57	46 (103)	9	0 (9)	254	333 (587)
Chicano																		
G5 1 Parent	10	13 (23)	23	31 (54)	17	68 (85)	20	55 (75)	27	37 (64)	15	9 (24)	7	0 (7)	--	-- --	119	213 (332)
G6 2 Parents	5	5 (10)	2	5 (7)	24	33 (57)	39	80 (119)	44	109 (153)	52	61 (113)	28	42 (70)	6	0 (6)	200	335 (535)
Total	36	65 (101)	76	103 (179)	98	264 (362)	173	397 (570)	247	423 (670)	294	252 (546)	171	136 (307)	23	0 (23)	1,118	1,640 (2,758)

Source: A computer listing from SIME/DIME Master File containing enrollment data, 4/28/78.

Table 13

PERCENTAGE OF DIME FAMILIES ENROLLED TO TIME ASSIGNMENT MODEL BY G-LEVEL, E-LEVEL, AND FINANCIAL TREATMENT STATUS
(Total Control and Financial are in Parentheses)

	E-Level													
	E1 $0-$1,000		E2 $1,001-$3,000		E3 $3,001-$5,000		E4 $5,001-$7,000		E5 $7,001-$9,000		E6 $9,001-$11,000		Total	
G-Level	Control	Financial	Control	Financial	Control	Financial	Control	Financial	Control	Financial	Control	Financial	Control	Financial
Black														
G1 1 Parent	140%	176% (158%)	114%	104% (106%)	97%	102% (100%)	101%	119% (109%)	74%	139% (90%)	--	-- --	108%	123% (117%)
G2 2 Parents	22	54 (38)	23	19 (21)	61	58 (59)	77	79 (78)	87	116 (98)	105%	84% (95%)	80	75 (77)
White														
G3 1 Parent	119	131 (126)	47	64 (60)	57	59 (58)	70	89 (80)	68	76 (70)	--	-- --	75	76 (75)
G4 2 Parents	30	16 (21)	29	36 (33)	70	71 (70)	95	101 (99)	103	139 (119)	68	62 (65)	83	85 (84)
Chicano														
G5 1 Parent	181	170 (175)	103	84 (87)	81	58 (63)	93	98 (96)	42	57 (47)	--	-- --	100	86 (91)
G6 2 Parents	38	54 (48)	113	89 (98)	138	85 (116)	100	108 (106)	100	116 (108)	136	77 (93)	91	102 (107)
Total	109%	116% (113%)	65%	71% (70%)	81%	75% (77%)	89%	98% (94%)	83%	117% (96%)	103%	74% (88%)	91%	90% (90%)

With regard to overenrollment, the G1 (one-parent black) sample was overfilled the most (117%), along with the E1 category (113%). The greatest degree of overenrollment in terms of a single cell, however, occurred in the G5-E1 group (175%).

Table 13 further reveals an apparent anomaly of overfilling E6 controls while underfilling E6 financials. This stems from the fact that E6 financial families were required to have two earners whereas many E6 controls had only one earner. Otherwise, the general tendency was to fill the financial cells at the expense of some control observations.

Postexamination of the 1971 incomes of families enrolled in DIME indicated that there was reasonable correlation between E-level prediction used in the assignment model and actual income in that year. A chi-square test of association indicated only a remote probability (less than 1%) that the degree of association indicated in Table 14 was due to chance. Table 14 shows that 41% of the families experienced income that placed them in an E-level group equal to that predicted in the assignment process.

In general, the distribution of experienced incomes was flatter than the predicted distribution. It should be remembered, however, that the predictions are of "normal income," and a distribution of actual incomes around the normal level for each individual is to be expected.

Summary Enrollment Statistics

The following tables present a few key summary statistics tables of the Denver enrollment. Table 15 shows the Denver enrollment grouped by race for the diverse manpower and financial treatment categories. Table 16 shows the enrollment by duration in the experiment and treatment. Table 17 shows the Denver enrollment by one-parent and two-parent families and, within these groups, by F- and E-levels. Finally, a detailed set of tables depicting Denver enrollment by F, M, G, E, and years level is given in Appendix E.

Table 14

DISTRIBUTION OF NORMAL INCOME AND 1971 INCOME BY E-LEVEL
FOR DIME FAMILIES

VAR288	VAR231 COUNT / ROW PCT / COL PCT / TOT PCT	0.00	1.00	2.00	3.00	4.00	5.00	6.00	7.00
1.00		24	120	127	58	24	8	0	0
		6.6	33.2	35.2	16.1	6.6	2.2	0.0	0.0
		27.6	82.2	43.3	12.3	4.2	1.7	0.0	0.0
		1.0	5.2	5.5	2.5	1.0	.3	0.0	0.0
2.00		16	15	94	89	26	14	6	0
		6.2	5.8	36.2	34.2	10.0	5.4	2.3	0.0
		18.4	10.3	32.1	18.8	4.6	2.9	2.5	0.0
		.7	.7	4.1	3.9	1.1	.6	.3	0.0
3.00		11	3	50	177	79	25	8	0
		3.1	.8	14.2	50.1	22.4	7.1	2.3	0.0
		12.6	2.1	17.1	37.4	13.9	5.2	3.4	0.0
		.5	.1	2.2	7.7	3.4	1.1	.3	0.0
4.00		13	6	12	110	257	81	16	0
		2.6	1.2	2.4	22.2	51.9	16.4	3.2	0.0
		14.9	4.1	4.1	23.3	45.2	16.9	6.8	0.0
		.6	.3	.5	4.8	11.2	3.5	.7	0.0
5.00		7	1	5	26	138	195	50	3
		1.6	.2	1.2	6.1	32.5	45.9	11.8	.7
		8.0	.7	1.7	5.5	24.3	40.8	21.1	15.0
		.3	.0	.2	1.1	6.0	8.5	2.2	.1
6.00		12	0	4	7	33	116	83	2
		4.7	0.0	1.6	2.7	12.8	45.1	32.3	.8
		13.8	0.0	1.4	1.5	5.8	24.3	35.0	10.0
		.5	0.0	.2	.3	1.4	5.0	3.6	.1
7.00		4	1	1	6	11	39	74	15
		2.6	.7	.7	4.0	7.3	25.8	49.0	9.9
		4.6	.7	.3	1.3	1.9	8.2	31.2	75.0
		.2	.0	.0	.3	.5	1.7	3.2	.7
COLUMN TOTAL		87 3.8	146 6.3	293 12.7	473 20.5	568 24.7	478 20.8	237 10.3	20 .9

Actual

Predicted

RAW CHI SQUARE = 2374.09018 WITH 42 DEGREES OF FREEDOM, SIGNIFICANCE = 0.0000
CRAMER'S V = .41459
CONTINGENCY COEFFICIENT = .71254
KENDALL'S TAU B = .61980

Table 15

DENVER ENROLLMENT: RACE BY TREATMENT

	Race							
	Black		White		Chicano		Total	
M0 F0	188	19%*	180	19%	155	17%	523	18%
M0 FN	207	21	197	21	173	19	577	20
MN F0	223	23	208	22	164	18	595	21
MN FN	343	35	345	37	375	43	1,063	38
Total	961	100%	930	100%	867	100%	2,758	100%
F0	411	42	388	41	319	36	1,118	40
F3,800	222	23	182	19	219	25	623	22
F4,800	209	21	221	23	195	22	625	22
F5,600	119	12	139	14	134	15	392	14
Total	961	100%	930	100%	867	100%	2,758	100%
M0	395	41	377	40	328	37	1,100	39
M1	188	19	187	20	184	21	559	20
M2	239	24	238	25	222	25	699	25
M3	139	14	128	13	133	15	400	14
Total	961	100%	930	100%	867	100%	2,758	100%

*Percentages may not total to 100 because of rounding.

Table 16

DENVER ENROLLMENT: DURATION BY TREATMENT

	Duration					
	3 Year		5 Year		Total	
M0 F0	216	12%*	307	30%	523	18%
M0 FN	339	19	238	23	577	20
MN F0	418	24	177	17	595	21
MN FN	762	43	301	29	1,063	38
Total	1,735	100%	1,023	100%	2,758	100%
F0	634	36	484	47	1,118	40
F3,800	413	23	210	20	623	22
F4,800	415	23	210	20	625	22
F5,600	273	15	119	11	392	14
Total	1,735	100%	1,023	100%	2,758	100%
M0	555	31	545	53	1,100	39
M1	343	19	216	21	559	20
M2	447	25	252	24	699	25
M3	390	22	10	0	400	14
Total	1,735	100%	1,023	100%	2,758	100%

*Percentages may not total to 100 because of rounding.

Table 17

DENVER ENROLLMENT: ONE-PARENT/TWO-PARENT FAMILIES BY F- AND E-LEVELS

		E-Level																	
		E0		E1		E2		E3		E4		E5		E6		E7		Total	
One-Parent	F0	23	22%*	70	39%	59	16%	79	13%	96	14%	86	15%	21	6%	1	4%	435	15%
Families	F1	7	6	20	11	41	11	31	5	21	3	0	0	0	0	0	0	120	4
G=1,3,5	F2	7	6	11	6	25	6	24	4	22	3	0	0	0	0	0	0	89	3
	F3	2	1	14	7	30	8	26	4	9	1	1	0	0	0	0	0	82	2
	F4	1	0	13	7	12	3	14	2	3	0	2	0	0	0	0	0	45	1
	F5	5	4	12	6	19	5	9	1	2	0	6	1	0	0	0	0	53	1
	F6	5	4	4	2	19	5	29	5	23	3	16	2	0	0	0	0	96	3
	F7	4	3	2	1	12	3	18	3	3	0	0	0	0	0	0	0	39	1
	F8	4	3	3	1	12	3	25	4	21	3	1	0	0	0	0	0	66	2
	F9	2	1	2	1	11	3	5	0	0	0	0	0	1	0	0	0	21	0
	F10	3	2	0	0	12	3	16	2	6	0	13	2	0	0	0	0	50	1
	F11	7	6	10	5	14	3	17	2	11	1	5	0	1	0	0	0	65	2
Subtotals		70	69%	161	89%	266	73%	293	51%	217	32%	130	23%	23	7%	1	4%	1,161	42%
Two-Parent	F0	12	12	6	3	39	10	94	16	151	22	208	38	150	48	22	95	683	24
Families	F1	1	0	7	3	4	1	24	4	49	7	2	0	1	0	0	0	88	3
G=2,4,6	F2	3	2	2	1	9	2	23	4	36	5	0	0	1	0	0	0	74	2
	F3	0	0	1	0	15	4	31	5	27	4	0	0	1	0	0	0	75	2
	F4	0	0	1	0	8	2	23	4	18	2	0	0	0	0	0	0	50	1
	F5	4	3	0	0	5	1	9	1	10	1	44	8	29	9	0	0	101	3
	F6	1	0	0	0	2	0	18	3	46	6	34	6	8	2	0	0	109	3
	F7	1	0	0	0	5	1	8	1	17	2	20	3	21	6	0	0	72	2
	F8	2	1	0	0	2	0	21	3	41	6	23	4	0	0	0	0	89	3
	F9	0	0	0	0	5	1	7	1	5	0	9	1	26	8	0	0	52	1
	F10	4	3	0	0	2	0	10	1	26	3	43	7	0	0	0	0	85	3
	F11	2	1	1	0	0	0	9	1	27	4	33	6	47	15	0	0	119	4
Subtotals		31	30%	18	10%	96	26%	277	48%	453	67%	416	76%	284	92%	22	95%	1,597	57%
Total		101	100%	179	100%	362	100%	570	100%	670	100%	546	100%	307	100%	23	100%	2,758	100%

*Percentages may not total to 100 because of rounding.

V A COMPARISON OF THE SIME/DIME SAMPLE SELECTION PROCESS

As our discussions above show, the entire sample selection process in Seattle and Denver, from the initial listing of housing units to the final enrollment of families in the SIME/DIME experiment, entailed a series of complex and detailed procedures that continually excluded families, both eligible as well as ineligible, from the final sample. This weeding out phenomenon ultimately resulted in the enrollment of 5.67% and 4.77% in Seattle and Denver, respectively, of families in the original housing units listed in each of the two sites. Table 18 presents a detailed comparison of the selection process in both sites, including the percentage of original housing listing for each procedure used to exclude families.

As stated earlier in this report, attempts were made (repeatedly, if necessary) to complete a screening interview at each listed housing unit. As shown in Table 18, a percentage of these attempts failed because of vacancies, repeated failures to find someone at home, or refusals. In Seattle, 34% of the attempts failed to result in a completed screening interview; in Denver, 24% were unsuccessful. We believe that the experience gained in Seattle, plus improvement in interviewer organization and management, led to the higher completion rate realized in Denver.

Table 18 shows a vast discrepancy in the percentage of completed screening interviews between the two cities. This discrepancy in large part reflects the differences in screening procedure between the two cities. In Seattle, obviously ineligible families were terminated in the field during screening, a procedure that was not followed in Denver. At the stage when ineligible families were excluded in both sites, i.e., at the point of selection for preexperimental interview, the percentages of screened families selected became similar: 19.38% in Seattle and 12.71% in Denver.

Table 18

SIME/DIME SAMPLE CREATION VIEWED AS PERCENTAGE OF ORIGINAL HOUSING UNIT LISTING

	SIME	DIME
Sample Housing Unit Listing	36,024 100%	57,827 100%
Sample Selected (DIME only)		53,581 92.66%*
Vacant	3,512 9.75%	5,192 8.98%
Not Found/Not Complete	3,542 9.83%	4,642 8.03%
Refused Screening Interview	5,352 14.86%	4,079 7.05%
Terminated (SIME only)	13,432 37.29%	
Miscellaneous	60 0.17%	
Completed Screening Interview	10,126 28.11%	39,668 68.60%
Coded Screening Interviews on File at SRI	N.A.	39,668 68.60%
Ineligible (SIME only)	3,428 9.52%	
Eligible for Preexperimental Interview	6,760† 18.77%	N.A.‡
Added from Ineligible List (SIME only)	221 0.61%	
Total Selected for Preexperimental Interview	6,981 19.38%	7,350 12.71%
Moved	647 1.80%	486 0.84%
Refused	443 1.23%	1,258 2.18%
Ineligible	789 2.19%	591 1.02%
Miscellaneous (duplication, incomplete, false screening, excess 1-parent, employees, unaccounted)	413 1.15%	332 0.57%
Completed Preexperimental Interviews	4,689 13.02%	4,683 8.10%
Added from New Families Who Moved into Houses of Previously Ineligible Families Who Had Moved Out	126 0.35%	
Total Completed Preexperimental Interviews	4,815 13.37%	4,683 8.10%
Assigned to Treatment	2,542 7.06%	3,361 5.81%
Refusals	126 0.35%	246 0.43%
Terminations	84 0.23%	83 0.14%
Moved Out of Area	106 0.29%	111 0.19%
Miscellaneous	184 0.51%	163 0.28%
Total Enrollment	2,042 5.67%	2,758 4.77%

*Percentages are based on the housing unit listing (i.e., for sample selected, 92.66% = 53,581/57,827). (All percentages may not add up because of rounding.)

†The extra 62 coded screening interviews at SRI included some terminated interviews. Note also that 1,655 of these completed screening interviews also represent completed preexperimental interviews because these two followed one another during the second set of interviews.

‡At least 13,202 of the completed interviews were for families eligible for the pre-experimental interview.

An interesting pattern is evident from Table 18--it appears that most of the exclusions of families from the final enrolled sample are intentional, caused by ineligibility or excess supply in a specific category. Exclusions over which we had little control, such as refusals, moves, vacancies, and the like, constituted a much smaller portion of those eliminated from the final sample, as shown in Table 19.* This table shows that such losses were greater in Seattle at the screening stage and greater in Denver at the preexperimental interview stage. After completion of the screening process, then, refusal became a larger problem in Denver than in Seattle.

Table 19

CAUSES OF SIME/DIME SAMPLE LOSS

	SIME (Proportion)		DIME (Proportion)	
Potential Screening Sample	32,512†		49,389‡	
Refusals	5,352	.165	4,079	.084
Not Found at Home	3,542	.109	4,642	.096
Potential Preexperimental	6,981		7,350	
Refusals	443	.063	1,258	.171
Moved or Not Found at Home	647	.093	486	.066
Potential Enrollment	2,542		3,361	
Refusals	126	.050	246	.073
Moved or Not Found at Home	244	.096	268	.080

†(36,024 - 3,512 vacancies).

‡(53,581 - 5,192).

Based on interviewer impressions, some information on the characteristics of the Denver screening refusal population was collected.§ Analysis

*These types of sample loss and attrition may cause bias in the evaluation of the impact of income maintenance. This issue is discussed more fully in Appendix A, Part I.

§R. G. Spiegelman, "The Denver Sample" (1973).

of the refusals of a 5% subsample of the potential screening population, stratified by area, revealed that anywhere from 12% to 53% of the refusals would have been ineligible for the experiment because of excessive income. Nearly 38% would probably have been deemed ineligible because of inappropriate family structure, and 45% were over 58 years of age, thereby ineligible. Thus, it appears that this refusal group was older and had higher incomes than those completing the screening interview.

Appendix A

THE POTENTIAL FOR BIAS DUE TO THE SAMPLE SELECTION PROCESS

Appendix A

THE POTENTIAL FOR BIAS DUE TO THE SAMPLE SELECTION PROCESS

The sample selection and completion process in SIME/DIME raises two separate issues with regard to potential bias:

(1) Does the existence of substantial numbers of terminations, refusals, moves, and failures to locate families in the various stages of the selection process (sample loss), lead to a non-random sample which biases the impact evaluation?

(2) What, if any, are the modeling requirements needed to correct for potential biases introduced by the intentional stratification of the sample?

PART I

Nonrandomness Due to Sample Loss

In estimating an income maintenance impact regression equation of the form $y = az + bz + e$, sample loss can cause bias in the value of "a" (the coefficient of one of the independent variables, x) if the loss is caused by a characteristic that is not explicitly accounted for by the z variables (the other independent variables) and is correlated jointly with x and y (the dependent variable). Terminations due to the failure of an observation to meet explicit requirements of the sample (i.e., race, family structure, income), for example, do not bias the coefficient of x, but do serve to limit the population over which the "a" value is valid. However, the other causes of sample loss, i.e., refusals, moved out of the area, failure to locate the person at home, are potential sources of bias for some analyses. The proportions of the potential sample that these types of attrition represent were given in Table 19 in the main text.

The concern for potential bias, however, is not qualitatively the same for each interviewing level--screening, preexperimental, enrollment. The respondents were not aware of the impending experiment at either the

screening or preexperimental interview stages. In both cases the respondents were informed only that an interview was being conducted to collect information to aid the government in designing policies to help the area's economy. Therefore, there is no a priori reason to expect a correlation between the characteristics associated with refusal at these interviewing levels and experimental response. However, at the time of enrollment, 5% of Seattle families contacted and 7.3% of Denver families refused to join the experiment. These refusals very likely have characteristics correlated negatively with response. The coefficient of the treatment variables would therefore tend to be biased away from zero by such refusals, i.e., the response would be exaggerated because of nonrandom elimination of likely nonresponders from the sample. Hence, it would be wise to test the sensitivity of the analysis results to the potential impact of refusals of persons who may be nonresponders. A reasonable qualification to this hypothesis, it should be noted, would be the case where many of those who refuse are welfare recipients who do not wish to jeopardize their welfare standing by moving to a program of limited duration and unknown credibility. Thus, not all refusals may be caused by potential nonresponders.

On the other hand, sample loss caused by contacted families who have moved and families the interviewers could not find at home certainly biases the composition of the sample toward families who do not move and who stay at home. This bias may affect the results of studies on the impact of the experiment on migration and should be taken into consideration, but there is no a priori reason to expect that these lost observations have characteristics correlated with other responses, such as labor supply or marital status.

Examination of main text Table 19 indicates that there are some differences in the rates of refusals and failures to find at home between Seattle and Denver, and these differences might affect the ability to merge the data from the two sites. However, we believe that the lower refusal and failure-to-find rates in Denver for the screening interview reflect the learning experience and superior management of the interviewing

operation by the subcontractor in Denver (same organization, but different people than in Seattle), and does not reflect any differences in the characteristics of the underlying populations.

For the preexperimental and enrollment interviews, Denver experienced higher refusal rates and lower rates of contacts moved than Seattle. These differences between the two sites may in fact reflect some underlying differences in the characteristics of the two populations. Indeed, the interviewing staffs expressed the belief that the higher refusal rate in Denver reflected a population that was more conservative and less willing to be questioned than the comparable families contacted in Seattle (e.g., there were more large dogs in Denver front yards). Such a characteristic could well translate into a greater aversion to government support programs and lower response to an income maintenance program. The use of site dummy variables should correct for such a tendency, if it exists.

PART II

Analytic Problems Caused by Sample Stratification*

Normal income is a principal stratification criterion of the samples in both sites and, as shown in Figure A-1, the distribution of normal income categories (E-levels) varies by major treatment categories (i.e., support levels). The SIME/DIME assignment model tended to place the lower income families on the low support plan and the higher income families on the high support plan. As a result of the assignment, 95% of the two-parent families on the lowest support level had a normal income under $7,000 (E1 to E4) for a family of four members. The comparable percentages for the other treatment categories are: 45% for the control group, 50% for the medium support level, and 32% for the high support. For single-parent families, the comparable percentages are: 73% for the control group, 93% for the low support, 82% for the medium support, and 73% for the high support level.

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*This section is derived from an unpublished memorandum by Philip Robins, dated January 1976.

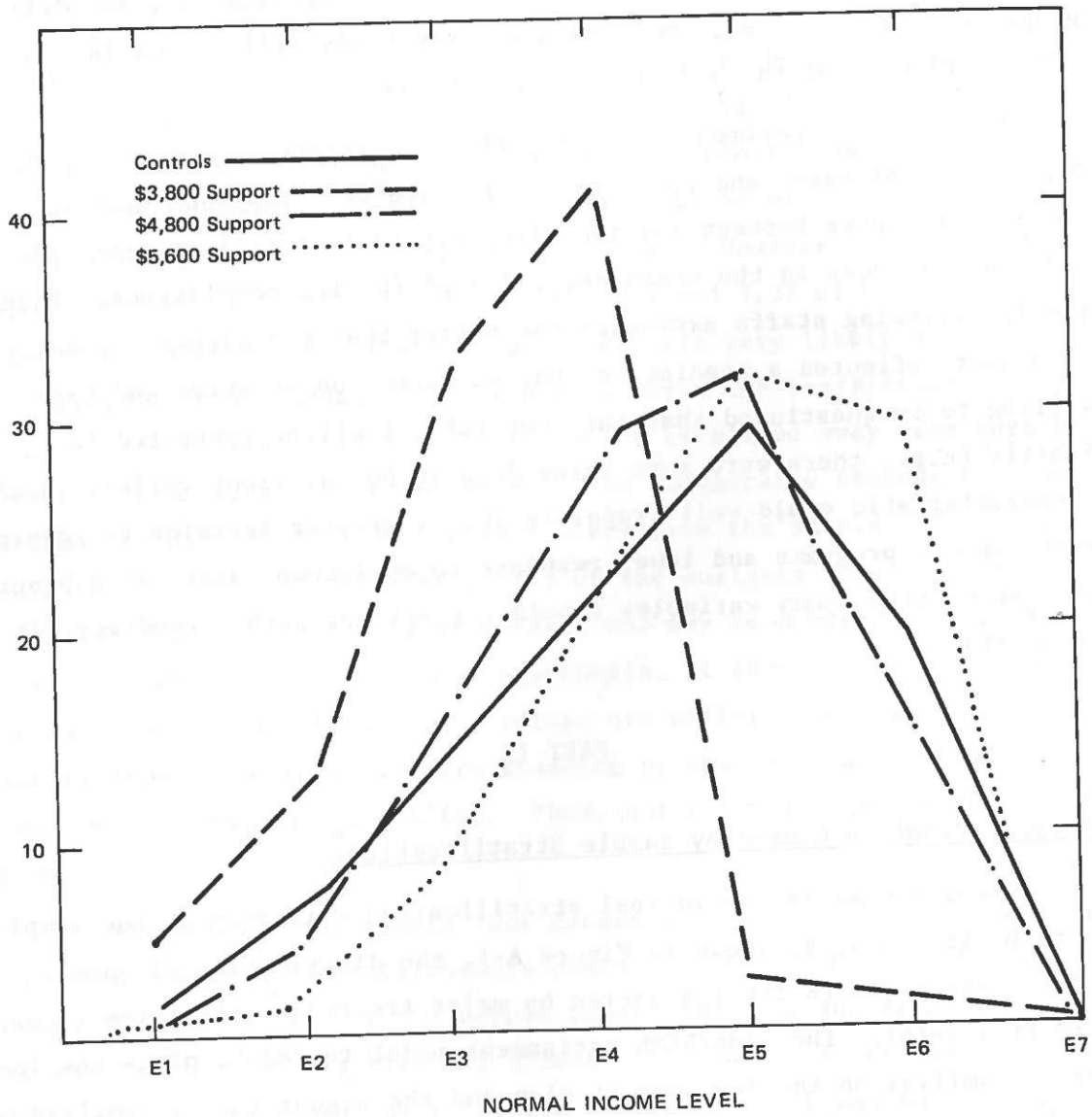

FIGURE A-1 PERCENT OF ORIGINALLY ENROLLED TWO-HEADED FAMILIES IN EACH SUPPORT LEVEL WHO ARE IN EACH NORMAL INCOME LEVEL CATEGORY: BOTH SITES

If normal income affects the value of the dependent variable (e.g., hours of work) in an IM impact regression equation, then normal income dummy variables should be included in the regression to correct for these stratification effects on the dependent variable and to reduce the error variances. Furthermore, if preexperimental normal income affects the individual's or family's response to income maintenance, then normal income dummy variables (or some acceptable parameterization of these dummies) must be interacted with the treatment variables; otherwise, the treatment coefficients will be biased.

The effects of normal income stratification can thus be readily handled by proper modeling of the response function. A more difficult problem arises if there is nonrandom assignment of characteristics that affect response that are not captured by observable variables. Such nonrandom assignment can arise from the selection of the original sample, or it can arise during the experiment because of nonrandom attrition. A test for the effects of nonrandomness may be accomplished by regressing the preexperimental value of a dependent variable on a set of variables that encompass the treatments and the known assignment variables. Any statistically significant preexperimental effect of the treatment variables could presumably arise only because of nonrandom assignment of unobserved variables that affect the dependent variable.

One such test was carried out to explore the effects of nonrandom assignment and attrition on employment status (i.e., being employed on the second Wednesday of the middle month two quarters prior to enrollment). This variable was regressed on the following set of variables: E-level, number of family members, age, site, M-level, support level, tax rate, and duration of experiment. Except for age and number of family members, all variables were specified in dummy form. Separate regressions were run for each G-level; therefore, complete interaction was allowed for race and number of family heads. Tests were performed to determine where the treatment variables had a significant impact.

Tables A-1 through A-6 present the results of the tests. For the originally enrolled sample a statistically significant treatment effect exists only for white husbands (G4H). Thus, the null hypothesis of random assignment within E-level cannot be rejected for 5 of the 6 G-levels.

The individual regression coefficients also reveal some interesting information. For five out of the six groups (in the originally enrolled sample) the five-year coefficient is positive, and in three cases it is statistically significant. This means that, within E-level, persons assigned to the five-year program had a greater probability of working than persons assigned to the three-year program. We are not aware of any assignment procedure that would have led to such a result.* For the group with a statistically significant treatment effect (white husbands), those assigned to the 3800-50 treatment had a much lower probability of working than those assigned to other treatments. The differences are not trivial. For example, holding E-level constant, the probability of work is 20% lower for persons in the 3800-50 treatment than for persons in the 4800-70D. Again, we have no explanation for such a result. Finally, the probability of working increases almost monotonically with E-level, which is, of course, an expected result. For wives, the probability of working jumps dramatically when moving from the E5 to the E6 category. This is reflection of the fact that two-worker families have incomes too high to place them in a category below E6.

Conclusion

The main conclusion to emerge from this brief analysis is that, for most groups, the assignment process appears to have achieved its objective. The main exception is the White husbands category, where some nonrandom assignment apparently occurred. The potential created by such nonrandomness can be corrected in the analyses by including preexperimental labor supply as an independent variable or by using a model of change, i.e., a first difference model.

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*In Seattle, all families were originally enrolled for three years. Later on, when the five-year program was approved, some families were reassigned to the five-year program. The procedure, however, was supposed to have been random.

Table A-1

REGRESSIONS OF PREEXPERIMENTAL EMPLOYMENT STATUS ON ASSIGNMENT AND TREATMENT VARIABLES

Black Female Heads (G1)

	ORIGINALLY ENROLLED SAMPLE	
Assignment Variables	Coefficient	Standard Error
E1 = 1	-	-
E2 = 1	.243***	.048
E3 = 1	.492***	.047
E4 = 1	.595***	.053
E5 = 1	.666***	.059
E6 = 1	.865***	.144
E7 = 1	-.070[a]	.435
Unclassified E-Level = 1	.319***	.074
Number of Family Members	.002	.011
Age	.007***	.002
Denver = 1	.123***	.030
Treatment Variables		
M1 = 1	.015	.042
M2 = 1	-.040	.038
M3 = 1	.013	.044
S3800 = 1	-.023	.047
S4800 = 1	.030	.053
S5600 = 1	.015	.068
T50 = 1	-	-
T70 = 1	-.004	.052
T70D = 1	.018	.056
T80 = 1	-.012	.056
5 Year = 1	.086*	.046
F Ratio for Treatment Effect	.727	
Constant Term	-.190**	.080
R^2	.272	
Mean of Dependent Variable	.514	
Sample Size	876	

*Significant at 10% level
**Significant at 5% level
***Significant at 1% level

[a]Only one person in cell

Table A-2

REGRESSIONS OF PREEXPERIMENTAL EMPLOYMENT STATUS ON ASSIGNMENT AND TREATMENT VARIABLES

Black Husbands (G2H)

	ORIGINALLY ENROLLED SAMPLE	
Assignment Variables	Coefficient	Standard Error
E1 = 1	-	-
E2 = 1	.032	.101
E3 = 1	.316***	.088
E4 = 1	.473***	.086
E5 = 1	.523***	.087
E6 = 1	.570***	.088
E7 = 1	.693***	.148
Unclassified E-Level = 1	.367***	.122
Number of Family Members	.039***	.009
Age	.001	.001
Denver = 1	.165***	.027
Treatment Variables		
M1 = 1	-.035	.037
M2 = 1	.033	.033
M3 = 1	-.001	.041
S3800 = 1	.057	.050
S4800 = 1	-.021	.047
S5600 = 1	.031	.057
T50 = 1	-	-
T70 = 1	.024	.051
T70D = 1	-.011	.055
T80 = 1	.050	.051
5 Year = 1	-.015	.039
F Ratio for Treatment Effect	.869	
Constant Term	.024	.100
R^2	.195	
Mean of Dependent Variable	.770	
Sample Size	864	

* Significant at 10% level
** Significant at 5% level
*** Significant at 1% level

Table A-3

REGRESSIONS OF PREEXPERIMENTAL EMPLOYMENT STATUS ON ASSIGNMENT AND TREATMENT VARIABLES

Black Wives (G2W)

	ORIGINALLY ENROLLED SAMPLE	
Assignment Variables	Coefficient	Standard Error
E1 = 1	-	-
E2 = 1	.152	.119
E3 = 1	.078	.104
E4 = 1	.170*	.101
E5 = 1	.255**	.102
E6 = 1	.589***	.104
E7 = 1	.732***	.174
Unclassified E-Level = 1	.578***	.143
Number of Family Members	.035***	.011
Age	0	.002
Denver = 1	-.035	.032
Treatment Variables		
M1 = 1	.021	.043
M2 = 1	.039	.039
M3 = 1	.027	.048
S3800 = 1	-.046	.059
S4800 = 1	.036	.056
S5600 = 1	.035	.067
T50 = 1	-	-
T70 = 1	-.023	.060
T70D = 1	-.023	.064
T80 = 1	-.040	.059
5 Year = 1	.087*	.046
F Ratio for Treatment Effect	.788	
Constant Term	-.044	.118
R^2	.170	
Mean of Dependent Variable	.396	
Sample Size	864	

* Significant at 10% level
** Significant at 5% level
*** Significant at 1% level

Table A-4

REGRESSIONS OF PREEXPERIMENTAL EMPLOYMENT STATUS ON ASSIGNMENT AND TREATMENT VARIABLES

White Female Heads (G3)

	ORIGINALLY ENROLLED SAMPLE	
Assignment Variables	Coefficient	Standard Error
E1 = 1	-	-
E2 = 1	.227***	.050
E3 = 1	.530***	.050
E4 = 1	.739***	.052
E5 = 1	.718***	.059
E6 = 1	.590***	.131
E7 = 1	-	-
Unclassified E-Level = 1	.314***	.087
Number of Family Members	.009	.013
Age	.003*	.002
Denver = 1	.130***	.031
Treatment Variables		
M1 = 1	-.037	.042
M2 = 1	-.029	.040
M3 = 1	.007	.048
S3800 = 1	-.022	.052
S4800 = 1	-.066	.057
S5600 = 1	.079	.074
T50 = 1	-	-
T70 = 1	.039	.055
T70D = 1	.001	.060
T80 = 1	-.056	.058
5 Year = 1	.046	.046
F Ratio for Treatment Effect	1.112	
Constant Term	-.079	.082
R^2	.352	
Mean of Dependent Variable	.510	
Sample Size	721	

*Significant at 10% level
**Significant at 5% level
***Significant at 1% level

Table A-5

REGRESSIONS OF PREEXPERIMENTAL EMPLOYMENT STATUS ON ASSIGNMENT AND TREATMENT VARIABLES

White Husbands (G4H)

	ORIGINALLY ENROLLED SAMPLE	
Assignment Variables	Coefficient	Standard Error
E1 = 1	-	-
E2 = 1	.262***	.088
E3 = 1	.500***	.082
E4 = 1	.613***	.080
E5 = 1	.713***	.081
E6 = 1	.768***	.083
E7 = 1	.736***	.133
Unclassified E-Level = 1	.476***	.114
Number of Family Members	.028***	.008
Age	0	.001
Denver = 1	.116***	.022
Treatment Variables		
M1 = 1	.021	.031
M2 = 1	-.039	.028
M3 = 1	.014	.034
S3800 = 1	-.146***	.039
S4800 = 1	-.045	.039
S5600 = 1	-.052	.046
T50 = 1	-	-
T70 = 1	.070*	.042
T70D = 1	.096**	.045
T80 = 1	.007	.042
5 Year = 1	.060*	.033
F Ratio for Treatment Effect	2.391***	
Constant Term	.006	.091
R^2	.211	
Mean of Dependent Variable	.761	
Sample Size	1236	

*Significant at 10% level
**Significant at 5% level
***Significant at 1% level

Table A-6

REGRESSIONS OF PREEXPERIMENTAL EMPLOYMENT STATUS
ON ASSIGNMENT AND TREATMENT VARIABLES

White Wives (G4W)

	ORIGINALLY ENROLLED SAMPLE	
Assignment Variables	Coefficient	Standard Error
E1 = 1	-	-
E2 = 1	-.027	.097
E3 = 1	.032	.089
E4 = 1	.056	.087
E5 = 1	.073	.088
E6 = 1	.313***	.090
E7 = 1	.449***	.145
Unclassified E-Level = 1	.127	.125
Number of Family Members	-.022**	.009
Age	0	.001
Denver = 1	.035	.024
Treatment Variables		
M1 = 1	.066**	.034
M2 = 1	-.023	.031
M3 = 1	.046	.037
S3800 = 1	-.057	.043
S4800 = 1	-.024	.042
S5600 = 1	-.089*	.050
T50 = 1	-	-
T70 = 1	.038	.045
T70D = 1	-.032	.049
T80 = 1	-.006	.046
5 Year = 1	.043	.036
F Ratio for Treatment Effect	1.419	
Constant Term	.222**	.100
R^2	.081	
Mean of Dependent Variable	.248	
Sample Size	1236	

* Significant at 10% level
** Significant at 5% level
*** Significant at 1% level

Appendix B

EARLY SIME ASSIGNMENT MODEL

The Seattle SIME assignment model was revised a number of times. The model presented here is the one used for the majority of the assignments and enrollments.

Table B-1

SIME ASSIGNMENT MODEL--EARLY VERSION PLUS SPECIAL CONTROLS

	E1		E2		E3		E4		E5		E6		Total	
	Control	Financial	Control	Financial	Control	Financial	Control	Financial	Control	Financial	Control	Financial	Control	Financial
Black														
G1 1 Parent	25.2	41	44.9	32	57.5	43	70.8	42	114.1	22	0	0	312.5	180
	(66.2)		(76.9)		(100.5)		(112.8)		(136.1)		(0.00)		(492.5)	
G2 2 Parents	22.6	38	50.6	24	72.7	35	96.9	38	118.6	18	48.2	0	409.6	153
	(60.6)		(74.6)		(107.7)		(134.9)		(136.6)		(48.2)		(562.6)	
White														
G3 1 Parent	24	41	47.7	30	58.7	53	73.5	49	115.4	27	0	0	319.3	200
	(65.0)		(77.7)		(111.7)		(112.5)		(142.4)		(0.00)		(519.3)	
G4 2 Parents	22.2	28	52.2	23	69.4	44	96.2	51	115.8	17	69.3	0	425.1	163
	(50.2)		(75.2)		(113.4)		(147.2)		(132.8)		(69.3)		(588.1)	
Total	94	148	195.4	109	258.3	175	337.4	180	463.9	84	117.5	0	1466.5	696
	(242.0)		(304.4)		(433.3)		(517.4)		(547.9)		(117.5)		(2162.5)	

Source: "Assignment to Treatments--Seattle 1970," a computer listing located in SIME files. Also, a memorandum To the Record from R. G. Spiegelman, titled "Assignment of Special Control Group," undated

Table B-2

PERCENT OF SIME FAMILIES ENROLLED TO EARLY SIME ASSIGNMENT MODEL*

	E1		E2		E3		E4		E5		E6		Total	
	Control	Financial	Control	Financial	Control	Financial	Control	Financial	Control	Financial	Control	Financial	Control	Financial
Black														
G1 1 Parent	147%	124% (133%)	107%	153% (130%)	59%	147% (97%)	47%	98% (66%)	22%	127% (39%)	-	- -	61%	138% (89%)
G2 2 Parents	31	29 (30)	24	75 (40)	40	131 (70)	43	211 (90)	54	333 (91)	87	- (162)	50	168 (82)
White														
G3 1 Parent	133%	105% (115)	90%	203% (134)	58%	113% (84)	49%	88% (70)	29%	89% (40)	-	- -	59%	122% (83)
G4 2 Parents	41	46 (44)	57	130 (80)	69	161 (105)	89	208 (130)	91	506 (144)	91	- (159)	83	220 (121)
Total	93%	80% (84%)	93%	145% (96%)	56%	137% (89%)	58%	150% (90%)	49%	236% (78%)	92	- (167%)	64%	159% (94%)

*Early Assignment Model as given in Table A, which includes a special control group assignment.

Appendix C

SOURCES OF DATA

Appendix C

SOURCES OF DATA

The following is a description of the sources used in acquiring information for the report titled "Sample Selection in the Seattle and Denver Income Maintenance Experiments." The description included below generally relates only to that portion of the document that was used for the report.

Seattle

Map of Seattle sample area.

Photocopy of original map in Spiegelman's office; undated.

Brewster, Alan, "Sample Selection in Seattle (preliminary)," December 29, 1970, memo addressed to the SIME files.

An 11-page memorandum describing the basic procedures and results of the initial and supplementary screening and the preenrollment process. Basically, it is a chronological report of the events which took place from the initial selection of areas to be included in the SIME sample up through the completion of the secondary preenrollment interviewing phase.

The selected areas are listed. Sampling ratios are discussed. The listing process is explained, giving the number of families listed, based on the listing sheets. Tabulated results of initial screening and supplementary screening are presented, based presumably on dwelling unit and family information cards and on screening interviews. Tabulated statistics of the preenrollment process is also given, based presumably on the preenrollment interviews.

Research work carried out at SRI by Murarka, Bina, and Wallace, in May and June 1977.

Provided results of "reworking" phase of screening/preenrollment interviewing by examining change in statuses recorded on dwelling unit/family information cards.

Computer printout of the completed coded screening interviews, SRI files; undated.

Total figure is given. Source tape not specified. A second printout exists at SRI's Welfare Policy Documentation Center.

Gorfinkel, Martin, untitled memo addressed to Alan Brewster, December 9, 1970.

Lists the final number of eligible and ineligible families for screening and reasons for ineligibility. A computer output from the final screening tape is also in the SRI files, listing the household ID number along with eligibility information codes. Whereabouts of source tape unknown.

Spiegelman, R. G., "New Procedure for Processing Screening Information, Project 8261," February 19, 1970, memo addressed to Martin Gorfinkel.

Causes of ineligibility for the program are listed.

Sloma, Dorothy, of SRI's SIME/DIME Documentation Center.

Hand-count of number of preexperimental interview booklets at SRI was given.

Sloma, Dorothy, "Update on Final Tapes," January 7, 1977.

Gives number of families on tapes containing the coded interviews (preexperimental and enrollment).

Computer listing dated September 24, 1971, in SIME files.

Gives number of families assigned to treatment. Source tape appears to be some version of the master file.

Spiegelman, R. G., "Revised Final Assignment Requirements for SIME and DIME," November 12, 1971, memo addressed to Distribution.

Presents final assignment model requirements by treatment category, G-level, E-level, and number of years on program. Source data not specified.

SRI's Center for the Study of Welfare Policy Research Memorandum 15, "The Assignment Model of the Seattle and Denver Income Maintenance Experiments, July, 1972.

Explains the assignment model and presents the assignment model requirements for the optimal sample by treatment category, G-level, E-level, and number of years on the program.

Computer listing of the distribution of families enrolled by treatment categories, income (E-level), family structure (G-level) and years on program. Source is the SIME/DIME master file enrollment data, run 4/21/7

"Assignment to Treatments--Seattle 1970," undated, unauthored in SIME files.

Presumably an early version of the Seattle assignment model requirements.

Spiegelman, R. G., "Assignment of Special Control Group," undated memo addressed to The Record.

Listing of a special control group in addition to those specified by the assignment model. Source unspecified.

Denver

Map depicting the selected sample areas.

Photocopied from the original in Spiegelman's office. Undated.

Scowcroft, Mary, "Quarterly Report DIME," November 19, 1970, memo addressed to R. G. Spiegelman.

Sets forth the procedures used by Mathematica in locating and selecting the families to be screened for the Denver Income Maintenance Experiment. Topics covered include:

- Site selection
- Listing--The process of listing is discussed. Statistics are also presented based on (I think) listing sheets and individual cards used by the interviewers. I do not know how the statuses (vacant, refusal, and so on) were tabulated.
- Initial screening--Gives results of initial screening based on (I think) screening interviews. I do not know how the statuses were tabulated.

Scowcroft, Mary, "Quarterly Progress Report April 1st to June 30, 1972," June 30th, 1972, memo addressed to Robert Spiegelman. Also, Scowcroft's earlier "Quarterly Report DIME January 1972-March 1972," dated April 15, 1972, gives some background information.

Describes the supplementary listing and screening process. Gives statistics of final screening based on, I assume, the screening booklets.

Presents statistics on preenrollment completion that are presumably based on the preenrollment interviews. The subheading for these data is "Final Report Preenrollment Interviewing."

Brachfeld, Dennis, "Urban Opinion Surveys Housing Count, An Analysis," undated.

Compares the U.O.S. listing of households with the 1970 Census housing unit count. Concludes that "U.O.S. established four tenths of one percent (.004) more housing units than the 1970 correlated Census." U.O.S. provided data on listing.

Harvey, David L., and Little, A. Rogers, "Denver Sample Validation Study," November 8, 1973.

Detailed report compares "the characteristics of family structure and wage income of the sample population established in the screening process and those established by the 1970 U.S. Census."

Table I depicts a U.O.S. and U.S. Census Dwelling Unit Comparison. (A Census housing count of 61,300 was obtained for the Sample Selection Report from this table; see p. 13 of report.)

References Brachfeld as well as "An Analysis of Screening Dwelling Unit Count Reconciliation," by David Sigle, 1971, internal Mathematica reports, for U.O.S. district dwelling unit count.

Spiegelman, R. G., "The Denver Sample of the Income Maintenance Experiment," January 5, 1973, memo addressed to The Record.

Describes briefly the process of arriving at the final DIME enrollment sample from the initial frame of listed households. Statistics are given, but the sources are not specified. Some figures agree, others disagree with previously cited sources. A discussion of a refusal subsample and completion subsample from screening data is also presented.

Harvey, David," Summary of Sampling Approaches Used for Preenrollment--DIME," November 9, 1972, memo addressed to R. G. Spiegelman.

Describes sampling procedure to arrive at eligible families for preenrollment. Presents table of eligible screenings as well as families selected for preenrollment. Source data are key-punched cards containing screening information.

Sloma, Dorothy, "Update on Final Tapes," January 7, 1977.

Gives number of interviews that appear on tapes containing the different interviews, beginning with preenrollment and enrollment. A tape dump of data coded (in Denver) from dwelling unit cards is also available in the documentation center, as well as a tape dump of the coded screening interviews.

"The Assignment Model of the Seattle and Denver Income Maintenance Experiments," SRI's Center for the Study of Welfare Policy, Research Memorandum 15, July 1972.

Explains the assignment model and gives the assignment model requirements for the optimal sample.

Harvey, David, "Report 3 of 3 for a Summary of the Enrollment Process," September 18, 1972, memo addressed to R. G. Spiegelman.

Outlines reasons for failure to enroll a family. Also presents tabulations of number of families that were not enrolled for the different reasons, as well as number of familes that were enrolled. Source data not specified.

Harvey, David, "Report 1 of 3 for a Summary of the Enrollment Process," September 15, 1972, memo addressed to R. G. Spiegelman.

Presents computer listing of the distribution of number of families enrolled by treatment categories, income (E-level), and family structure (G-level). Source tape not specified.

Computer listing of 12 tables showing the treatment distribution of the initial enrollment by income (E-level) and family structure (G-level). Source is the SIME/DIME Master File enrollment data, run 4/28/78.

SIME/DIME Research Memorandum 24, "A Cross-Sectional Estimation of Labor Supply for Families in Denver 1970," November 1974.

Appendix D

DETAILED SEATTLE ENROLLMENT
BY F, M, E, G, AND YEARS LEVEL

Table D-1

SITE : SEATTLE
G-LEVEL : 1
YEARS ENROLLED : 3

M-LEVEL	F-LEVEL	E-LEVEL E0	E1	E2	E3	E4	E5	E6	E7	TOTL
0	0	6	14	21	11	7	7	0	0	66
	1	2	2	4	4	3	1	2	0	18
	2	0	0	0	0	0	0	0	0	0
	3	0	1	1	0	1	0	0	0	3
	4	0	2	1	2	0	0	1	0	6
	5	1	4	1	1	0	1	0	0	8
	6	1	2	1	3	1	0	0	0	8
	7	1	3	2	1	1	5	0	0	13
	8	1	2	1	3	1	0	0	0	8
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	2	0	0	2
	11	0	0	0	1	0	0	0	0	1
1	0	0	4	2	2	3	4	0	0	15
	1	0	2	1	1	2	0	0	0	6
	2	0	1	1	0	0	0	0	0	2
	3	0	1	1	2	0	0	0	0	4
	4	0	0	0	3	0	0	0	0	3
	5	0	0	1	1	0	0	0	0	2
	6	0	1	1	0	1	0	0	0	3
	7	0	1	1	0	1	2	0	0	5
	8	0	1	0	1	0	0	0	0	2
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	1	1	1	0	0	3
	11	0	0	1	0	0	1	0	0	2
2	0	0	4	5	3	5	1	0	0	18
	1	0	1	3	1	2	0	0	0	7
	2	0	2	1	1	0	0	0	0	4
	3	0	2	1	2	1	0	0	0	6
	4	0	1	1	2	0	0	0	0	4
	5	0	2	0	1	0	0	0	0	3
	6	0	2	1	0	2	1	0	0	6
	7	0	2	2	2	1	4	0	0	11
	8	0	0	0	0	1	0	0	0	1
	9	0	0	1	0	0	0	0	0	1
	10	0	0	1	0	1	1	0	0	3
	11	0	0	0	2	0	0	0	0	2
3	0	1	4	3	3	5	4	0	0	20
	1	0	2	3	4	5	0	0	0	14
	2	0	2	0	1	0	0	0	0	3
	3	0	2	2	1	1	0	0	0	6
	4	1	2	0	1	0	0	0	0	4
	5	0	2	2	1	0	0	0	0	5
	6	1	1	1	3	1	0	0	0	7
	7	0	1	1	1	1	4	0	0	8
	8	0	1	0	0	0	0	0	0	1
	9	0	0	0	0	0	0	0	0	0
	10	0	0	1	1	1	0	0	0	3
	11	1	0	1	1	0	1	0	0	4
TOTAL		16	74	71	68	49	40	3	0	321

Table D-2

SITE : SEATTLE
G-LEVEL : 2
YEARS ENROLLED : 3

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	F7	TOTL
		E-LEVEL								
0	0	0	2	2	7	11	15	12	2	51
	1	0	1	1	0	6	1	0	0	9
	2	1	0	0	0	1	0	0	0	2
	3	2	1	1	2	1	0	0	0	7
	4	0	0	1	3	2	0	0	0	6
	5	0	0	1	1	0	1	3	0	6
	6	0	0	0	2	1	2	0	0	5
	7	0	1	1	1	3	3	2	0	11
	8	0	0	1	1	3	1	0	0	6
	9	0	0	0	0	0	0	2	0	2
	10	0	0	0	0	1	1	0	0	2
	11	0	0	0	0	2	1	2	0	5
1	0	0	0	1	2	5	9	3	0	20
	1	0	1	0	2	3	0	0	0	6
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	1	1	0	0	0	2
	4	0	0	0	2	1	0	0	0	3
	5	0	0	0	0	0	0	1	0	1
	6	0	0	0	1	2	1	0	0	4
	7	0	0	0	1	1	1	0	0	3
	8	0	0	0	1	1	0	0	0	2
	9	0	0	0	0	0	0	1	0	1
	10	0	0	1	0	1	2	0	0	4
	11	0	0	0	1	2	1	2	0	6
2	0	2	0	1	3	5	9	4	0	24
	1	0	1	0	2	3	0	0	0	6
	2	1	1	0	1	0	0	0	0	3
	3	0	1	0	1	1	0	0	0	3
	4	0	0	0	1	1	0	0	0	2
	5	0	0	1	0	0	2	2	0	5
	6	0	0	0	1	3	2	0	0	6
	7	0	2	0	1	2	4	0	0	9
	8	0	0	0	1	1	0	0	0	2
	9	0	0	1	0	0	0	2	0	3
	10	0	0	0	0	2	3	0	0	5
	11	1	0	0	1	0	2	0	0	4
3	0	1	1	2	4	3	8	5	0	24
	1	0	0	0	2	3	0	0	0	5
	2	0	0	0	0	1	0	0	0	1
	3	0	1	1	2	1	0	0	0	5
	4	0	0	1	0	1	0	0	0	2
	5	0	0	1	1	0	1	1	0	4
	6	0	0	1	1	0	2	0	0	4
	7	0	0	0	1	2	4	1	0	8
	8	0	0	0	0	2	1	0	0	3
	9	0	0	0	0	0	0	1	0	1
	10	0	0	0	0	0	3	0	0	3
	11	0	0	0	0	0	2	2	0	4
TOTAL		8	13	19	51	79	82	46	2	300

Table D-3

SITE	SEATTLE
G-LEVEL	3
YEARS ENROLLED	3

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
	0	0	15	9	9	9	8	1	0	51
	1	0	3	3	3	2	0	0	0	11
	2	0	3	1	0	1	0	0	0	5
	3	0	2	2	1	0	0	0	0	5
0	4	0	1	1	2	0	0	0	0	4
	5	0	2	2	0	0	0	0	0	4
	6	0	3	1	1	1	0	0	0	6
	7	1	3	1	2	1	2	0	0	10
	8	1	2	1	1	1	0	0	0	6
	9	0	0	0	0	0	0	0	0	0
	10	0	0	1	0	0	0	0	0	1
	11	0	0	0	1	0	0	0	0	1
	0	1	3	3	3	3	4	0	0	17
	1	2	1	1	1	2	0	0	0	7
	2	0	1	0	1	0	0	0	0	2
	3	0	0	1	0	0	0	0	0	1
1	4	0	1	0	3	0	0	0	0	4
	5	0	1	1	1	1	0	0	0	4
	6	1	1	1	1	1	1	0	0	6
	7	1	1	1	2	2	0	0	0	7
	8	0	2	1	0	1	0	0	0	4
	9	0	0	1	0	0	0	0	0	1
	10	0	0	1	0	1	1	0	0	3
	11	0	0	0	0	0	0	0	0	0
	0	2	0	3	3	5	3	1	0	17
	1	0	2	2	1	4	0	0	0	9
	2	0	2	0	0	0	0	0	0	2
	3	0	1	1	1	0	0	0	0	3
2	4	0	1	1	3	0	0	0	0	5
	5	0	1	1	1	0	0	0	0	3
	6	0	1	1	0	1	1	0	0	4
	7	1	0	2	1	1	2	0	0	7
	8	1	1	2	0	1	0	0	0	5
	9	0	0	0	0	0	0	0	0	0
	10	0	0	1	1	1	0	0	0	3
	11	1	0	1	0	1	0	0	0	3
	0	3	1	5	2	5	6	1	0	23
	1	1	0	2	2	2	0	0	0	7
	2	0	1	1	0	1	0	0	0	3
	3	0	1	3	0	0	0	0	0	4
3	4	0	1	1	4	0	0	0	0	6
	5	1	1	2	1	0	1	0	0	6
	6	0	1	1	2	1	0	0	0	5
	7	0	1	0	1	1	4	0	0	7
	8	0	1	1	1	1	0	0	0	4
	9	1	0	1	0	0	0	0	0	2
	10	0	0	1	1	1	1	0	0	4
	11	0	0	1	1	2	0	0	0	4
TOTAL		18	62	67	58	54	34	3	0	296

Table D-4

SITE : SEATTLE
G-LEVEL : 4
YEARS ENROLLED : 3

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
		F-LEVEL								
0	0	0	4	8	12	28	37	25	2	116
	1	0	1	5	2	10	1	1	0	20
	2	0	1	2	0	2	0	0	0	5
	3	0	1	1	3	0	0	0	0	5
	4	0	1	0	5	2	0	1	0	9
	5	0	1	2	2	0	3	2	0	10
	6	0	0	0	1	5	3	0	0	9
	7	1	0	1	0	3	2	3	0	10
	8	0	1	0	1	3	1	0	0	6
	9	0	0	0	0	0	1	1	0	2
	10	0	0	0	0	1	4	1	0	6
	11	0	0	0	1	1	3	4	0	9
1	0	0	0	2	6	5	10	5	0	28
	1	0	0	0	1	4	1	0	0	6
	2	0	0	0	1	1	0	0	0	2
	3	0	0	1	1	1	0	0	0	3
	4	0	0	0	3	0	0	0	0	3
	5	0	1	0	1	0	3	2	0	7
	6	0	0	0	0	1	2	0	0	3
	7	0	0	0	1	1	1	2	0	5
	8	0	0	0	3	1	0	0	0	4
	9	0	0	0	0	0	2	2	0	4
	10	0	0	0	0	3	1	2	0	6
	11	0	0	0	0	0	1	2	0	3
2	0	0	0	3	4	8	14	6	0	35
	1	0	1	2	2	4	0	0	0	9
	2	0	0	1	0	2	0	0	0	3
	3	0	0	0	1	1	0	0	0	2
	4	0	0	1	2	0	0	0	0	3
	5	0	2	1	0	2	2	3	0	10
	6	0	0	0	2	4	2	0	0	8
	7	0	0	0	2	3	3	2	0	10
	8	0	1	0	1	2	1	0	0	5
	9	0	0	0	0	0	2	0	0	2
	10	0	0	0	0	1	3	1	0	5
	11	0	0	0	1	1	1	2	0	5
3	0	1	1	4	7	15	14	7	0	49
	1	0	1	1	2	7	0	0	0	11
	2	0	0	0	0	1	0	0	0	1
	3	1	1	1	3	1	0	0	0	7
	4	0	0	0	2	0	0	0	0	2
	5	0	0	1	1	0	3	1	0	6
	6	0	0	0	1	2	2	0	0	5
	7	0	0	1	2	2	7	1	0	13
	8	0	0	0	1	1	0	0	0	2
	9	0	0	0	0	0	1	1	0	2
	10	0	0	0	1	1	2	1	0	5
	11	0	0	0	1	1	2	1	0	5
TOTAL		3	18	38	80	131	135	79	2	486

Table D-5

SITE : SEATTLE
G-LEVEL : 1
YEARS ENROLLED : 5

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
	0	5	7	12	8	8	5	0	0	45
	1	0	1	0	0	0	0	0	0	1
	2	0	1	0	0	0	0	0	0	1
	3	0	1	0	1	0	0	0	0	2
0	4	0	0	1	0	0	0	0	0	1
	5	0	0	1	0	0	0	1	0	2
	6	0	0	0	1	1	0	0	0	2
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	1	1	0	0	0	2
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	1	0	1	0	0	2
	11	0	0	0	0	0	0	0	0	0
	0	0	2	2	3	3	1	0	0	11
	1	0	0	1	1	1	0	0	0	3
	2	0	0	1	0	0	0	0	0	1
	3	0	0	0	0	0	0	0	0	0
1	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	1	0	0	1	1	0	0	0	3
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	1	1	0	0	0	2
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0
	11	0	0	1	0	0	1	0	0	2
	0	1	2	3	4	2	3	0	0	15
	1	0	0	1	0	2	0	0	0	3
	2	1	0	0	1	1	0	0	0	3
	3	0	0	1	0	0	0	0	0	1
2	4	0	0	0	1	0	0	0	0	1
	5	0	0	1	0	0	0	0	0	1
	6	0	0	0	1	1	0	0	0	2
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	2	2	0	0	0	4
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	1	0	1	0	0	2
	11	1	0	0	1	1	1	0	0	4
	0	0	0	0	0	0	0	0	0	0
	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
3	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0
	8	0	0	1	0	0	0	0	0	1
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0	0
TOTAL		9	14	26	29	25	13	1	0	117

Table D-6

SITE : SEATTLE
G-LEVEL : 2
YEARS ENROLLED : 5

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
		F-LEVEL								
0	0	1	2	4	8	11	14	13	4	57
	1	0	0	0	1	2	0	0	0	3
	2	0	0	1	0	2	0	0	0	3
	3	0	1	0	0	1	0	0	0	2
	4	1	0	0	2	1	0	0	0	4
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	1	2	0	0	3
	7	0	0	0	0	0	2	0	0	2
	8	0	0	0	1	2	1	0	0	4
	9	0	0	0	0	0	0	1	0	1
	10	0	0	0	0	1	1	0	0	2
	11	0	0	0	0	1	2	3	0	6
1	0	0	1	1	2	3	4	2	0	13
	1	0	0	0	0	1	0	0	0	1
	2	0	0	1	0	3	0	0	0	4
	3	0	0	1	1	0	0	0	0	2
	4	0	0	0	1	0	0	0	0	1
	5	0	0	0	0	0	1	1	0	2
	6	0	0	0	0	1	1	0	0	2
	7	0	0	0	0	0	1	0	0	1
	8	0	0	0	1	1	1	0	0	3
	9	0	0	0	0	0	0	2	0	2
	10	0	0	0	0	0	1	0	0	1
	11	0	0	0	0	0	1	0	0	1
2	0	0	1	1	3	4	5	3	0	17
	1	0	0	0	2	2	0	0	0	4
	2	0	0	1	0	1	0	0	0	2
	3	0	0	1	1	1	0	0	0	3
	4	0	0	0	1	1	0	0	0	2
	5	0	0	0	0	0	1	1	0	2
	6	0	0	0	0	0	2	0	0	2
	7	0	0	0	0	0	0	2	0	2
	8	0	0	0	0	1	0	0	0	1
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	1	0	0	1
	11	0	0	0	0	2	1	3	0	6
3	0	0	0	0	0	0	0	0	0	0
	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	1	0	1
	6	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0	0
TOTAL		2	5	11	24	43	42	32	4	163

Table D-7

SITE : SEATTLE
G-LEVEL : 3
YEARS ENROLLED : 5

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
	0	1	7	17	11	10	7	0	0	53
	1	0	0	0	1	2	1	0	0	4
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	1	0	0	0	0	1
0	4	0	0	0	2	0	0	0	0	2
	5	0	0	0	0	0	0	0	0	0
	6	0	0	1	2	0	1	0	0	4
	7	0	0	0	0	0	2	0	0	2
	8	0	0	0	1	0	0	0	0	1
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	1	1	0	0	2
	11	0	0	0	1	0	0	0	0	1
	0	0	2	3	2	2	2	0	0	11
	1	0	0	1	0	2	0	0	0	3
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	1	0	0	0	1
1	4	0	0	1	2	0	0	0	0	3
	5	0	0	1	0	0	0	0	0	1
	6	0	0	1	0	1	0	0	0	2
	7	0	0	0	0	0	1	0	0	1
	8	0	0	0	1	1	0	0	0	2
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	1	0	1	0	0	2
	11	0	0	0	1	0	0	0	0	1
	0	0	4	3	3	2	3	0	0	15
	1	0	0	1	1	1	0	0	0	3
	2	0	0	2	0	0	0	0	0	2
	3	0	0	1	1	0	0	0	0	2
2	4	0	0	0	2	0	0	0	0	2
	5	0	0	2	0	0	0	1	0	3
	6	0	0	1	1	1	0	0	0	3
	7	0	0	0	0	0	2	0	0	2
	8	0	0	0	1	1	0	0	0	2
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	2	0	0	2
	11	0	0	1	0	0	0	0	0	1
	0	0	0	0	1	0	0	0	0	1
	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
3	4	0	0	0	0	0	0	0	0	0
	5	0	0	1	0	0	0	0	0	1
	6	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0	0
TOTAL		1	13	37	36	25	23	1	0	136

Table D-8

SITE : SEATTLE
G-LEVEL : 4
YEARS ENROLLED : 5

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
	0	4	2	8	13	19	17	14	2	79
	1	1	0	1	0	3	0	0	0	5
	2	0	0	0	0	1	0	0	0	1
	3	0	0	1	0	0	0	0	0	1
0	4	1	0	0	2	1	0	0	0	4
	5	0	0	0	1	0	2	0	0	3
	6	0	0	0	0	3	2	0	0	5
	7	0	0	0	1	0	2	0	0	3
	8	0	0	0	1	3	1	0	0	5
	9	0	0	0	1	0	1	1	0	3
	10	0	0	0	0	1	2	0	0	3
	11	0	0	0	0	1	2	1	0	4
	0	0	1	3	4	5	5	2	0	20
	1	0	0	0	0	2	0	0	0	2
	2	0	0	1	0	1	0	0	0	2
	3	0	0	1	2	1	0	0	0	4
1	4	0	0	0	2	0	0	0	0	2
	5	0	0	1	0	0	2	1	0	4
	6	0	0	0	1	0	1	0	0	2
	7	0	0	1	1	0	1	0	0	3
	8	0	0	1	0	2	1	0	0	4
	9	0	0	0	0	0	1	0	0	1
	10	0	0	0	1	0	0	0	0	1
	11	0	0	0	0	1	1	2	0	4
	0	1	1	2	2	6	8	4	0	24
	1	0	0	1	1	2	0	0	0	4
	2	0	0	0	0	1	0	0	0	1
	3	0	0	1	1	1	0	0	0	3
2	4	0	0	0	2	1	0	1	0	4
	5	0	0	0	0	0	1	1	0	2
	6	0	0	0	1	2	1	0	0	4
	7	0	0	0	1	0	1	0	0	2
	8	0	0	0	0	2	1	0	0	3
	9	0	0	0	1	0	1	2	0	4
	10	1	0	0	0	2	0	0	0	3
	11	0	0	0	0	0	2	2	0	4
	0	0	0	0	0	0	0	0	0	0
	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
3	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0	0
TOTAL		8	4	22	39	61	56	31	2	223

Table D-9

COMPOSITE ENROLLMENT OF ALL SEATTLE FAMILIES BY INCOME LEVEL

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
		E-LEVEL								
0	0	17	53	81	79	103	110	65	10	518
	1	3	8	14	11	28	4	3	0	71
	2	1	5	4	0	7	0	0	0	17
	3	2	7	6	8	3	0	0	0	26
	4	2	4	4	18	6	0	2	0	36
	5	1	7	7	5	0	7	6	0	33
	6	1	5	3	10	13	10	0	0	42
	7	3	7	5	5	8	18	5	0	51
	8	2	5	3	10	14	4	0	0	38
	9	0	0	0	1	0	2	5	0	8
	10	0	0	1	1	5	12	1	0	20
	11	0	0	0	4	5	8	10	0	27
1	0	1	13	17	24	29	39	12	0	135
	1	2	4	4	6	17	1	0	0	34
	2	0	2	4	2	5	0	0	0	13
	3	0	1	5	7	4	0	0	0	17
	4	0	1	1	16	1	0	0	0	19
	5	0	2	4	3	1	6	5	0	21
	6	2	2	3	4	8	6	0	0	25
	7	1	2	3	5	5	7	2	0	25
	8	0	3	2	8	8	2	0	0	23
	9	0	0	1	0	0	3	5	0	9
	10	0	0	2	3	6	7	2	0	20
	11	0	0	2	2	3	6	6	0	19
2	0	6	12	21	25	37	46	18	0	165
	1	0	5	10	10	20	0	0	0	45
	2	2	5	5	3	5	0	0	0	20
	3	0	4	6	8	5	0	0	0	23
	4	0	2	3	14	3	0	1	0	23
	5	0	5	6	2	2	6	8	0	29
	6	0	3	3	6	14	9	0	0	35
	7	1	4	4	7	7	16	4	0	43
	8	1	2	2	5	11	2	0	0	23
	9	0	0	2	1	0	3	4	0	10
	10	1	0	2	2	7	11	1	0	24
	11	3	0	2	5	5	7	7	0	29
3	0	6	7	14	17	28	32	13	0	117
	1	1	3	6	10	17	0	0	0	37
	2	0	3	1	1	3	0	0	0	8
	3	1	5	7	6	3	0	0	0	22
	4	1	3	2	7	1	0	0	0	14
	5	1	3	7	4	0	5	3	0	23
	6	1	2	3	7	4	4	0	0	21
	7	0	2	2	5	6	19	2	0	36
	8	0	2	2	2	4	1	0	0	11
	9	1	0	1	0	0	1	2	0	5
	10	0	0	2	3	3	6	1	0	15
	11	1	0	2	3	3	5	3	0	17
TOTAL		65	203	291	385	467	425	196	10	2042

Appendix E

DETAILED DENVER ENROLLMENT
BY F, M, E, G, AND YEARS LEVEL

Table E-1

SITE : DENVER
G-LEVEL : 1
YEARS ENROLLED : 3

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
	0	2	4	6	10	7	6	1	1	37
	1	0	1	4	3	3	0	0	0	11
	2	2	0	3	1	0	0	0	0	6
	3	0	1	4	2	1	0	0	0	8
0	4	0	0	2	1	1	0	0	0	4
	5	1	1	1	0	0	1	0	0	4
	6	0	1	0	2	3	1	0	0	7
	7	0	0	2	4	0	0	0	0	6
	8	1	1	1	3	1	0	0	0	7
	9	0	0	1	1	0	0	0	0	2
	10	0	0	2	0	0	1	0	0	3
	11	3	1	2	1	1	1	0	0	9
	0	0	3	4	5	5	4	0	0	21
	1	2	1	2	2	0	0	0	0	7
	2	0	1	1	1	1	0	0	0	4
	3	0	1	3	2	0	0	0	0	6
1	4	0	1	1	1	0	0	0	0	3
	5	0	0	0	0	0	0	0	0	0
	6	0	0	1	2	2	1	0	0	6
	7	0	0	1	1	0	0	0	0	2
	8	1	0	1	3	1	0	0	0	6
	9	1	0	0	1	0	0	0	0	2
	10	0	0	1	0	0	1	0	0	2
	11	0	2	1	0	0	0	0	0	3
	0	2	4	4	5	7	5	0	0	27
	1	0	2	2	3	2	0	0	0	9
	2	0	1	2	2	1	0	0	0	6
	3	0	1	2	2	1	1	0	0	7
2	4	0	1	1	1	0	0	0	0	3
	5	0	1	1	1	0	0	0	0	3
	6	0	0	1	2	1	1	0	0	5
	7	1	0	1	2	0	0	0	0	4
	8	0	0	1	1	1	0	0	0	3
	9	1	1	1	1	0	0	0	0	4
	10	0	0	1	1	0	1	0	0	3
	11	1	0	1	1	0	1	0	0	4
	0	0	4	4	3	5	5	0	0	21
	1	2	0	2	3	1	0	0	0	8
	2	1	2	1	1	1	0	0	0	6
	3	0	1	2	2	1	0	0	0	6
3	4	0	1	1	1	0	0	0	0	3
	5	0	1	1	1	0	1	0	0	4
	6	0	0	2	2	1	1	0	0	6
	7	1	0	1	2	0	0	0	0	4
	8	0	0	1	1	1	0	0	0	3
	9	0	0	1	1	0	0	0	0	2
	10	0	0	0	1	1	1	0	0	3
	11	1	0	1	1	0	1	0	0	4
TOTAL		23	39	79	87	50	34	1	1	314

Table E-2

SITE : DENVER
G-LEVEL : 2
YEARS ENROLLED : 3

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
0	0	1	0	3	4	6	11	11	2	38
	1	0	1	0	1	3	0	0	0	5
	2	0	0	0	3	2	0	0	0	5
	3	0	0	1	1	2	0	0	0	4
	4	0	0	0	2	1	0	0	0	3
	5	0	0	0	0	1	1	3	0	5
	6	0	0	0	1	2	2	0	0	5
	7	0	0	0	0	0	1	2	0	3
	8	0	0	0	1	2	2	0	0	5
	9	0	0	0	1	0	1	2	0	4
	10	0	0	0	0	0	2	0	0	2
	11	0	0	0	0	2	2	2	0	6
1	0	2	0	1	3	4	8	8	0	26
	1	0	1	0	0	1	0	0	0	2
	2	0	0	0	1	1	0	0	0	2
	3	0	0	1	1	1	0	0	0	3
	4	0	0	0	1	1	0	0	0	2
	5	0	0	0	0	0	1	1	0	2
	6	0	0	0	0	2	2	0	0	4
	7	0	0	0	1	0	0	2	0	3
	8	1	0	0	0	1	2	0	0	4
	9	0	0	0	0	0	0	1	0	1
	10	0	0	0	0	1	1	0	0	2
	11	0	0	0	0	0	1	2	0	3
2	0	1	1	1	4	7	11	9	0	34
	1	0	0	0	1	2	0	0	0	3
	2	0	0	0	1	1	0	0	0	2
	3	0	0	0	2	1	0	0	0	3
	4	0	0	0	0	1	0	0	0	1
	5	1	0	0	1	0	1	2	0	5
	6	0	0	0	1	3	1	1	0	6
	7	0	0	0	0	1	2	1	0	4
	8	0	0	0	1	2	3	0	0	6
	9	0	0	0	0	0	1	1	0	2
	10	0	0	0	0	1	3	0	0	4
	11	0	0	0	0	0	2	3	0	5
3	0	0	0	1	3	7	12	9	0	32
	1	0	1	0	1	2	0	0	0	4
	2	0	0	0	1	1	0	0	0	2
	3	0	0	0	1	1	0	0	0	2
	4	0	0	0	0	1	0	0	0	1
	5	0	0	0	0	0	2	2	0	4
	6	0	0	1	1	2	1	0	0	5
	7	0	0	0	1	0	1	3	0	5
	8	0	0	0	1	2	1	0	0	4
	9	0	0	0	0	0	0	1	0	1
	10	0	0	0	0	0	1	0	0	1
	11	0	1	0	0	1	1	3	0	6
TOTAL		6	5	9	41	69	80	69	2	281

Table E-3

SITE : DENVER
G-LEVEL : 3
YEARS ENROLLED : 3

M-LEVEL	F-LEVEL	F-LEVEL E0	E1	E2	E3	E4	E5	E6	E7	TOTL
0	0	0	3	2	6	7	5	3	0	26
	1	0	0	4	2	1	0	0	0	7
	2	0	1	1	1	1	0	0	0	4
	3	0	1	1	2	1	0	0	0	5
	4	0	1	2	1	0	0	0	0	4
	5	0	2	0	1	0	1	0	0	4
	6	0	0	1	2	1	1	0	0	5
	7	0	0	1	2	0	0	0	0	3
	8	0	1	1	0	1	0	0	0	3
	9	0	0	1	0	0	0	1	0	2
	10	0	0	0	2	1	1	0	0	4
	11	0	0	1	2	0	0	0	0	3
1	0	0	2	2	2	4	5	0	0	15
	1	0	1	1	0	1	0	0	0	3
	2	1	1	0	1	0	0	0	0	3
	3	0	1	1	0	2	0	0	0	4
	4	0	0	1	1	0	0	0	0	2
	5	0	1	0	1	0	0	0	0	2
	6	0	0	1	1	1	0	0	0	3
	7	2	1	0	1	0	0	0	0	4
	8	0	0	1	2	1	0	0	0	4
	9	0	0	0	0	0	0	0	0	0
	10	0	0	1	1	0	0	0	0	2
	11	0	0	0	1	0	1	0	0	2
2	0	0	3	2	3	3	5	0	0	16
	1	0	1	2	1	1	0	0	0	5
	2	0	0	1	2	1	0	0	0	4
	3	0	1	1	1	1	0	0	0	4
	4	0	1	0	1	1	0	0	0	3
	5	1	0	2	1	0	0	0	0	4
	6	0	0	1	1	1	1	0	0	4
	7	0	0	1	1	0	0	0	0	2
	8	0	0	0	1	1	0	0	0	2
	9	0	0	1	0	0	0	0	0	1
	10	0	0	1	1	0	0	0	0	2
	11	0	1	1	2	1	0	0	0	5
3	0	1	3	0	5	4	6	0	0	19
	1	0	1	1	1	1	0	0	0	4
	2	0	0	1	1	1	0	0	0	3
	3	0	1	1	1	1	0	0	0	4
	4	0	0	1	0	0	1	0	0	2
	5	0	1	0	1	0	0	0	0	2
	6	0	0	0	1	1	1	0	0	3
	7	0	0	1	1	1	0	0	0	3
	8	0	0	1	1	1	0	0	0	3
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	2	0	0	0	2
	11	0	0	1	1	0	0	0	0	2
TOTAL		5	29	43	60	44	28	4	0	213

Table E-4

SITE : DENVER
G-LEVEL : 4
YEARS ENROLLED : 3

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
	0	0	1	2	4	14	15	12	2	50
	1	0	0	0	4	4	1	0	0	9
	2	0	0	0	2	3	0	0	0	5
	3	0	0	1	2	1	0	0	0	4
0	4	0	0	0	1	1	0	0	0	2
	5	0	0	1	0	1	5	2	0	9
	6	0	0	0	1	4	2	0	0	7
	7	0	0	0	1	3	1	3	0	8
	8	0	0	0	2	2	1	0	0	5
	9	0	0	0	1	0	1	0	0	2
	10	0	0	0	1	2	2	0	0	5
	11	1	0	0	0	3	1	5	0	10
	0	0	0	1	3	7	9	5	0	25
	1	0	0	0	1	2	0	0	0	3
	2	0	0	0	1	2	0	0	0	3
	3	0	0	2	1	1	0	0	0	4
1	4	0	0	0	1	0	0	0	0	1
	5	0	0	0	0	1	3	0	0	4
	6	0	0	0	2	3	1	1	0	7
	7	0	0	1	0	2	2	1	0	6
	8	0	0	0	1	1	1	0	0	3
	9	0	0	0	0	0	1	1	0	2
	10	0	0	0	1	3	2	0	0	6
	11	0	0	0	0	1	2	2	0	5
	0	1	0	2	4	9	13	8	0	37
	1	1	1	0	1	3	0	0	0	6
	2	0	0	0	2	2	0	0	0	4
	3	0	0	1	1	2	0	0	0	4
2	4	0	0	0	1	1	0	0	0	2
	5	0	0	0	0	2	2	1	0	5
	6	0	0	1	2	3	1	1	0	8
	7	0	0	0	1	2	3	3	0	9
	8	0	0	0	1	2	1	0	0	4
	9	0	0	0	1	0	2	1	0	4
	10	1	0	0	1	2	4	0	0	8
	11	0	0	0	1	2	2	3	0	8
	0	1	0	0	4	8	11	6	0	30
	1	0	0	0	2	2	0	0	0	4
	2	0	0	0	1	2	0	0	0	3
	3	0	0	1	1	1	0	1	0	4
3	4	0	0	0	1	1	0	0	0	2
	5	0	0	0	0	1	2	2	0	5
	6	0	0	0	1	1	2	0	0	4
	7	0	0	1	1	2	1	1	0	6
	8	0	0	0	0	1	1	0	0	2
	9	0	0	0	0	1	1	1	0	3
	10	1	0	1	0	2	3	0	0	7
	11	0	0	0	1	2	4	3	0	10
TOTAL		6	2	15	58	115	103	63	2	364

Table E-5

SITE : DENVER
G-LEVEL : 5
YEARS ENROLLED : 3

M-LEVEL	F-LEVEL	F-LEVEL E0	E1	E2	E3	E4	E5	E6	E7	TOTL
0	0	1	7	3	2	5	0	1	0	19
	1	0	3	3	1	1	0	0	0	8
	2	2	0	1	1	1	0	0	0	5
	3	0	2	3	2	1	0	0	0	8
	4	0	1	0	1	0	0	0	0	2
	5	0	1	1	0	1	0	0	0	3
	6	0	0	1	1	2	1	0	0	5
	7	0	0	1	1	0	0	0	0	2
	8	0	0	1	1	1	0	0	0	3
	9	0	0	1	0	0	0	0	0	1
	10	0	0	1	1	0	0	0	0	2
	11	0	1	1	1	1	0	0	0	4
1	0	0	5	2	3	2	1	0	0	13
	1	1	2	2	1	1	0	0	0	7
	2	0	1	1	1	1	0	0	0	4
	3	0	0	1	1	0	0	0	0	2
	4	0	2	1	1	0	0	0	0	4
	5	0	0	1	0	0	0	0	0	1
	6	0	1	0	1	1	0	0	0	3
	7	0	0	1	1	0	0	0	0	2
	8	0	0	1	1	1	0	0	0	3
	9	0	0	0	0	0	0	0	0	0
	10	0	0	1	1	0	1	0	0	3
	11	0	0	1	1	0	0	0	0	2
2	0	1	3	3	3	5	2	0	0	17
	1	0	0	2	2	1	0	0	0	5
	2	0	0	2	0	1	0	0	0	3
	3	0	0	3	2	0	0	0	0	5
	4	0	1	1	1	1	0	0	0	4
	5	0	0	1	0	0	0	0	0	1
	6	0	0	0	2	2	1	0	0	5
	7	0	1	1	1	0	0	0	0	3
	8	1	0	1	2	1	0	0	0	5
	9	0	0	1	0	0	0	0	0	1
	10	1	0	1	1	1	1	0	0	5
	11	0	0	1	1	1	0	0	0	3
3	0	2	3	2	3	6	4	0	0	20
	1	0	1	2	1	1	0	0	0	5
	2	1	1	2	0	1	0	0	0	5
	3	1	0	1	1	0	0	0	0	3
	4	0	0	0	1	0	1	0	0	2
	5	0	1	1	0	0	0	0	0	2
	6	0	0	1	1	0	0	0	0	2
	7	0	0	1	1	1	0	0	0	3
	8	0	0	1	1	1	0	0	0	3
	9	0	0	1	0	0	0	0	0	1
	10	1	0	0	1	0	1	0	0	3
	11	0	1	1	1	1	0	0	0	4
TOTAL		12	38	59	50	43	13	1	0	216

Table E-6

SITE : DENVER
G-LEVEL : 6
YEARS ENROLLED : 3

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
	0	0	0	5	11	9	12	8	1	46
	1	0	0	1	1	4	0	0	0	6
	2	0	1	0	2	3	0	0	0	6
	3	0	0	0	4	3	0	0	0	7
0	4	0	0	1	3	1	0	0	0	5
	5	0	0	0	2	0	1	2	0	5
	6	1	0	0	1	2	2	1	0	7
	7	0	0	1	1	1	2	1	0	6
	8	0	0	0	2	6	1	0	0	9
	9	0	0	1	1	1	0	2	0	5
	10	0	0	0	1	2	4	0	0	7
	11	0	0	0	0	4	2	3	0	9
	0	0	0	3	4	5	5	3	0	20
	1	0	0	0	1	2	0	0	0	3
	2	0	0	1	2	2	0	0	0	5
	3	0	1	2	3	1	0	0	0	7
1	4	0	0	1	0	2	0	0	0	3
	5	1	0	0	0	0	1	1	0	3
	6	0	0	0	1	3	1	0	0	5
	7	0	0	1	1	1	1	1	0	5
	8	0	0	0	2	3	1	0	0	6
	9	0	0	1	0	0	0	1	0	2
	10	0	0	0	1	1	3	0	0	5
	11	1	0	0	1	1	1	2	0	6
	0	2	0	2	5	5	7	2	0	23
	1	0	0	1	1	2	0	0	0	4
	2	0	0	1	2	3	0	0	0	6
	3	0	0	1	2	1	0	0	0	4
2	4	0	1	1	3	1	0	0	0	6
	5	0	0	1	1	0	2	2	0	6
	6	0	0	0	0	2	2	0	0	4
	7	1	0	0	1	1	1	2	0	6
	8	0	0	1	2	3	1	0	0	7
	9	0	0	1	1	1	0	2	0	5
	10	1	0	0	1	3	3	0	0	8
	11	0	0	0	1	2	3	1	0	7
	0	0	0	2	5	5	7	3	0	22
	1	0	1	0	1	3	0	0	0	5
	2	0	0	1	2	2	0	0	0	5
	3	0	0	1	2	2	0	0	0	5
3	4	0	0	0	1	1	0	0	0	2
	5	0	0	1	1	0	2	1	0	5
	6	0	0	0	1	2	1	0	0	4
	7	0	0	1	0	1	1	1	0	4
	8	0	0	0	1	2	1	0	0	4
	9	0	0	1	1	1	0	1	0	4
	10	0	0	0	1	2	3	0	0	6
	11	0	0	0	2	0	2	3	0	7
TOTAL		7	4	34	83	102	73	43	1	347

Table E-7

SITE : DENVER
G-LEVEL : 1
YEARS ENROLLED : 5

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
	0	3	4	7	9	9	10	5	0	47
	1	1	0	4	4	2	0	0	0	11
	2	0	0	1	5	3	0	0	0	9
	3	0	1	1	1	0	0	0	0	3
0	4	0	1	0	1	0	0	0	0	2
	5	0	0	2	2	0	1	0	0	5
	6	0	0	2	2	1	2	0	0	7
	7	0	0	0	0	1	0	0	0	1
	8	0	0	0	1	2	0	0	0	3
	9	0	0	0	0	0	0	0	0	0
	10	0	0	1	1	0	0	0	0	2
	11	1	0	0	0	0	0	0	0	1
	0	1	3	2	2	3	3	0	0	14
	1	0	0	1	1	2	0	0	0	4
	2	0	1	1	1	2	0	0	0	5
	3	0	0	1	1	0	0	0	0	2
1	4	0	0	1	0	0	0	0	0	1
	5	1	0	0	0	1	0	0	0	2
	6	0	1	0	1	0	0	0	0	2
	7	0	0	0	0	0	0	0	0	0
	8	0	0	1	1	1	0	0	0	3
	9	0	0	0	1	0	0	0	0	1
	10	1	0	1	0	0	1	0	0	3
	11	0	1	0	0	1	0	0	0	2
	0	1	3	2	2	4	3	0	0	15
	1	0	1	1	1	0	0	0	0	3
	2	0	0	1	1	1	0	0	0	3
	3	1	1	0	2	0	0	0	0	4
2	4	0	0	0	1	0	0	0	0	1
	5	0	0	1	0	0	0	0	0	1
	6	1	1	1	1	0	1	0	0	5
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	1	1	0	0	0	2
	9	0	0	0	0	0	0	0	0	0
	10	0	0	1	1	0	1	0	0	3
	11	0	0	1	1	1	1	0	0	4
	0	0	0	0	0	0	0	0	0	0
	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
3	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	1	0	0	1
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0	0
TOTAL		11	18	34	45	35	24	5	0	172

Table E-8

SITE : DENVER
G-LEVEL : 2
YEARS ENROLLED : 5

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
	0	1	1	0	7	15	21	17	4	66
	1	0	1	2	0	5	0	0	0	8
	2	2	0	0	2	4	0	0	0	8
	3	0	0	1	2	2	0	0	0	5
0	4	0	0	0	1	0	0	0	0	1
	5	0	0	0	1	2	3	0	0	6
	6	0	0	0	1	2	3	1	0	7
	7	0	0	0	0	1	1	0	0	2
	8	0	0	0	0	2	1	0	0	3
	9	0	0	0	1	0	0	2	0	3
	10	0	0	0	0	1	2	0	0	3
	11	0	0	0	0	2	0	1	0	3
	0	0	0	0	2	4	4	5	0	15
	1	0	0	0	1	1	0	0	0	2
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	1	0	0	0	0	1
1	4	0	0	0	0	1	0	0	0	1
	5	0	0	0	1	0	0	1	0	2
	6	0	0	0	0	2	1	0	0	3
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	1	1	0	0	0	2
	9	0	0	0	0	0	0	1	0	1
	10	1	0	0	0	0	2	0	0	3
	11	0	0	0	0	0	1	2	0	3
	0	0	0	1	2	4	4	6	1	18
	1	0	0	0	1	1	0	0	0	2
	2	0	0	1	0	1	0	0	0	2
	3	0	0	0	1	1	0	0	0	2
2	4	0	0	0	1	0	0	0	0	1
	5	0	0	0	0	0	3	1	0	4
	6	0	0	0	0	1	2	1	0	4
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	1	1	1	0	0	3
	9	0	0	0	0	1	0	2	0	3
	10	0	0	0	0	1	1	0	0	2
	11	0	0	0	0	1	1	2	0	4
	0	0	0	0	0	0	0	0	0	0
	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
3	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	1	0	0	1
	6	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0	0
TOTAL		4	2	5	27	57	52	42	5	194

Table E-9

SITE	DENVER
G-LEVEL	3
YEARS ENROLLED	5

M-LEVEL	F-LEVEL	F0	E1	E2	E3	E4	E5	E6	E7	TOTL
	0	3	4	3	4	6	9	5	0	34
	1	0	1	1	1	2	0	0	0	5
	2	0	0	1	2	2	0	0	0	5
	3	0	1	0	1	0	0	0	0	2
0	4	0	0	0	0	0	0	0	0	0
	5	0	1	3	0	0	2	0	0	6
	6	3	0	2	2	1	0	0	0	8
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	1	0	1	0	0	2
	9	0	0	1	0	0	0	0	0	1
	10	0	0	0	1	0	1	0	0	2
	11	0	3	0	0	1	0	1	0	5
	0	0	3	2	2	3	2	0	0	12
	1	0	1	1	1	0	0	0	0	3
	2	0	0	1	1	1	0	0	0	3
	3	0	0	1	0	0	0	0	0	1
1	4	0	0	0	0	0	0	0	0	0
	5	0	1	1	0	0	0	0	0	2
	6	0	0	0	1	1	0	0	0	2
	7	0	0	0	0	0	0	0	0	0
	8	1	0	0	1	1	0	0	0	3
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	1	0	0	0	1
	11	0	0	0	1	0	0	0	0	1
	0	0	4	2	1	2	3	0	0	12
	1	0	1	2	1	0	0	0	0	4
	2	0	1	0	1	0	0	0	0	2
	3	0	0	1	1	0	0	0	0	2
2	4	0	0	0	0	0	0	0	0	0
	5	1	0	1	0	0	0	0	0	2
	6	0	0	1	1	1	1	0	0	4
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	1	0	0	0	1
	9	0	0	1	0	0	0	0	0	1
	10	0	0	0	1	0	1	0	0	2
	11	0	0	0	1	1	0	0	0	2
	0	0	0	0	0	0	0	0	0	0
	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
3	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0	0
TOTAL		8	21	25	26	24	20	6	0	130

Table E-10

SITE : DENVER
G-LEVEL : 4
YEARS ENROLLED : 5

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
0	0	0	0	2	11	12	21	17	7	70
	1	0	0	0	2	4	0	0	0	6
	2	1	1	1	0	2	0	0	0	5
	3	0	0	1	1	1	0	0	0	3
	4	0	0	1	1	1	0	0	0	3
	5	2	0	0	0	2	4	1	0	9
	6	0	0	0	2	6	3	0	0	11
	7	0	0	0	0	0	2	0	0	2
	8	0	0	0	1	2	1	0	0	4
	9	0	0	0	0	0	0	2	0	2
	10	0	0	0	0	1	2	0	0	3
	11	0	0	0	0	1	1	1	0	3
1	0	1	0	0	3	5	6	3	0	18
	1	0	0	0	1	1	0	0	0	2
	2	0	0	0	0	1	0	0	0	1
	3	0	0	1	1	2	0	0	0	4
	4	0	0	1	1	0	0	0	0	2
	5	0	0	0	0	0	1	2	0	3
	6	0	0	0	0	1	3	1	0	5
	7	0	0	0	0	0	0	0	0	0
	8	1	0	0	0	1	1	0	0	3
	9	0	0	0	0	0	0	1	0	1
	10	0	0	0	1	1	1	0	0	3
	11	0	0	0	0	1	1	2	0	4
2	0	0	1	1	1	5	9	6	0	23
	1	0	0	0	1	1	1	0	0	3
	2	0	0	1	0	0	0	0	0	1
	3	0	0	1	0	1	0	0	0	2
	4	0	0	0	1	1	0	0	0	2
	5	0	0	0	0	0	2	1	0	3
	6	0	0	0	1	2	1	0	0	4
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	1	2	1	0	0	4
	9	0	0	0	0	0	2	1	0	3
	10	0	0	0	1	1	2	0	0	4
	11	0	0	0	1	1	2	2	0	6
3	0	0	0	0	0	0	1	0	0	1
	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0	0
TOTAL		5	2	10	32	59	68	40	7	223

Table E-11

SITE : DENVER
G-LEVEL : 5
YEARS ENROLLED : 5

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
	0	3	3	4	6	6	6	6	0	34
	1	0	1	2	2	0	0	0	0	5
	2	0	0	1	0	1	0	0	0	2
	3	0	0	1	1	0	0	0	0	2
0	4	1	1	0	0	0	0	0	0	2
	5	1	1	1	1	0	0	0	0	4
	6	0	0	1	1	0	0	0	0	2
	7	0	0	0	0	0	0	0	0	0
	8	0	1	0	1	1	0	0	0	3
	9	0	0	1	0	0	0	0	0	1
	10	0	0	0	1	0	0	0	0	1
	11	0	0	0	0	2	0	0	0	2
	0	3	0	1	1	2	1	0	0	8
	1	1	1	0	0	0	0	0	0	2
	2	0	0	1	1	1	0	0	0	3
	3	0	1	1	0	0	0	0	0	2
1	4	0	2	0	1	0	0	0	0	3
	5	0	0	0	0	0	0	0	0	0
	6	1	0	1	1	1	1	0	0	5
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	1	1	0	0	0	2
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	1	0	0	0	0	1
	11	0	0	0	0	0	0	0	0	0
	0	0	2	2	2	1	1	0	0	8
	1	0	1	1	0	1	0	0	0	3
	2	0	1	2	0	1	0	0	0	4
	3	0	0	1	1	0	0	0	0	2
2	4	0	0	0	0	0	0	0	0	0
	5	0	0	1	0	0	0	0	0	1
	6	0	0	1	1	1	0	0	0	3
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	1	1	0	0	0	2
	9	0	1	0	0	0	0	0	0	1
	10	0	0	0	0	0	1	0	0	1
	11	1	0	1	1	0	0	0	0	3
	0	0	0	0	0	0	0	0	0	0
	1	0	0	1	0	0	0	0	0	1
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
3	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0
	6	0	0	1	0	1	1	0	0	3
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0	0
TOTAL		11	16	26	25	21	11	6	0	116

Table E-12

SITE : DENVER
G-LEVEL : 6
YEARS ENROLLED : 5

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
	0	0	2	7	8	12	13	9	5	56
	1	0	1	0	1	2	0	1	0	5
	2	0	0	1	1	1	0	0	0	3
	3	0	0	0	2	1	0	0	0	3
0	4	0	0	1	2	1	0	0	0	4
	5	0	0	0	2	0	3	1	0	6
	6	0	0	0	0	1	0	0	0	1
	7	0	0	0	0	0	0	0	0	0
	8	0	0	1	1	2	1	0	0	5
	9	0	0	0	0	0	0	1	0	1
	10	0	0	0	0	0	1	0	0	1
	11	0	0	0	1	1	2	1	0	5
	0	1	0	2	4	2	4	2	0	15
	1	0	0	0	1	1	0	0	0	2
	2	0	0	1	0	1	0	0	0	2
	3	0	0	0	1	1	0	0	0	2
1	4	0	0	1	1	1	0	0	0	3
	5	0	0	1	0	0	2	0	0	3
	6	0	0	0	1	1	1	1	0	4
	7	0	0	0	0	0	0	0	0	0
	8	0	0	0	1	2	1	0	0	4
	9	0	0	1	0	0	0	1	0	2
	10	0	0	0	1	1	1	0	0	3
	11	0	0	0	0	1	1	2	0	4
	0	2	0	3	2	6	4	1	0	18
	1	0	0	0	1	3	0	0	0	4
	2	0	0	1	0	2	0	1	0	4
	3	0	0	0	1	1	0	0	0	2
2	4	0	0	1	1	1	0	0	0	3
	5	0	0	1	0	0	1	2	0	4
	6	0	0	0	1	1	2	0	0	4
	7	0	0	0	0	1	1	0	0	2
	8	0	0	0	1	1	0	0	0	2
	9	0	0	0	0	0	0	1	0	1
	10	0	0	1	0	1	0	0	0	2
	11	0	0	0	1	1	1	2	0	5
	0	0	0	0	0	0	0	0	0	0
	1	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0
3	4	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	1	1	0	2
	6	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	1	0	0	0	1
	8	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0
	11	0	0	0	0	0	0	0	0	0
TOTAL		3	3	23	36	51	40	27	5	188

COMPOSITE ENROLLMENT OF ALL DENVER FAMILIES

M-LEVEL	F-LEVEL	E0	E1	E2	E3	E4	E5	E6	E7	TOTL
	0	14	29	44	82	108	129	95	22	523
	1	1	9	21	22	31	1	1	0	86
	2	7	3	10	20	23	0	0	0	63
	3	0	6	14	21	13	0	0	0	54
0	4	1	4	7	14	6	0	0	0	32
	5	4	6	9	9	7	22	9	0	66
	6	4	1	7	16	25	17	2	0	72
	7	0	0	5	9	6	7	6	0	33
	8	1	3	4	14	22	8	0	0	52
	9	0	0	6	5	1	2	10	0	24
	10	0	0	4	8	7	16	0	0	35
	11	5	5	4	5	18	9	14	0	60
	0	8	16	20	34	46	52	26	0	202
	1	4	7	7	10	12	0	0	0	40
	2	1	4	7	10	13	0	0	0	35
	3	0	4	14	12	8	0	0	0	38
1	4	0	5	7	8	5	0	0	0	25
	5	2	2	3	2	2	8	5	0	24
	6	1	2	3	11	18	11	3	0	49
	7	2	1	4	5	3	3	4	0	22
	8	4	0	4	14	15	6	0	0	43
	9	1	0	2	2	0	1	6	0	12
	10	2	0	4	7	8	13	0	0	34
	11	1	3	2	4	5	8	12	0	35
	0	10	21	25	34	58	67	32	1	248
	1	1	7	11	14	17	1	0	0	51
	2	0	3	12	11	14	0	1	0	41
	3	1	3	11	16	9	1	0	0	41
2	4	0	4	4	11	7	0	0	0	26
	5	3	1	9	4	2	11	9	0	39
	6	1	1	6	13	18	14	3	0	56
	7	2	1	3	6	5	7	6	0	30
	8	1	0	3	13	17	7	0	0	41
	9	1	2	5	3	2	5	8	0	26
	10	3	0	5	8	10	18	0	0	44
	11	2	1	5	11	11	13	13	0	56
	0	4	10	9	23	35	46	18	0	145
	1	2	4	6	9	10	0	0	0	31
	2	2	3	5	6	8	0	0	0	24
	3	1	2	6	8	6	0	1	0	24
3	4	0	1	2	4	3	2	0	0	12
	5	0	3	3	3	1	9	6	0	25
	6	0	0	5	7	8	8	0	0	28
	7	1	0	5	6	6	3	5	0	26
	8	0	0	3	5	8	3	0	0	19
	9	0	0	3	2	2	1	3	0	11
	10	2	0	1	3	7	9	0	0	22
	11	1	2	3	6	4	8	9	0	33
TOTAL		101	179	362	570	670	546	307	23	2758

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30 *Determinants and Changes in Normative Preferences of Spouses,* R. C. Cronkite, May 1977.

31 *Homogamy, Normative Consensus, and Marital Adjustment,* R. C. Cronkite, May 1977.

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38 *The Labor Supply Effects and Costs of Alternative Negative Income Tax Programs: Evidence from the Seattle and Denver Income Maintenance Experiments, Part I: The Labor Supply Response Function,* M. C. Keeley, P. K. Robins, R. G. Spiegelman, and R. W. West, May 1977.

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