Lawrence Berkeley National Laboratory

Recent Work

Title

THE LABOR MARKET PROJECTIONS MODEL -UPDATING CENSUS WITH CURRENT POPULATION SURVEY DATA AT LAWRENCE BERKELEY LABORATORY

Permalink

https://escholarship.org/uc/item/96x6408k

Author

Kwok, L.

Publication Date

1980-08-01



Lawrence Berkeley Laboratory

UNIVERSITY OF CALIFORNIA

Physics, Computer Science & Mathematics Division

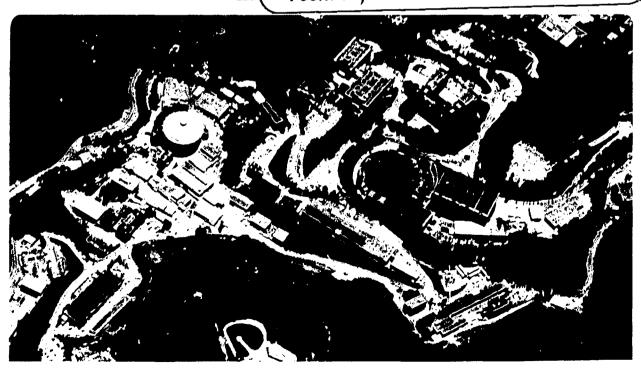
THE LABOR MARKET PROJECTIONS MODEL - UPDATING CENSUS WITH CURRENT POPULATION SURVEY DATA AT LAWRENCE BERKELEY LABORATORY

Linda Kwok

August 1980

TWO-WEEK LOAN COPY

This is a Library Circulating Copy which may be borrowed for two weeks. For a personal retention copy, call Tech. Info. Division, Ext. 6782



Prepared for the U.S. Department of Energy under Contract W-7405-ENG-48

DISCLAIMER

This document was prepared as an account of work sponsored by the United States Government. While this document is believed to contain correct information, neither the United States Government nor any agency thereof, nor the Regents of the University of California, nor any of their employees, makes any warranty, express or implied, or assumes any legal responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by its trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof, or the Regents of the University of California. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof or the Regents of the University of California.

The Labor Market Projections Model Updating Census with Current Population Survey Data at Lawrence Berkeley Laboratory

June 1980

Linda Kwok

Department of Computer Sciences

and Applied Mathematics

Lawrence Berkeley Laboratory

Berkeley, California 94720

Tel. (415)486-6567 or (FTS)451-6567

TABLE OF CONTENTS

1. INTRODUCTION TO LMPM	. 1
2. THE UPDATING METHODOLOGY	. 2
2A. THE UPDATING PROCEDURE	2
2B. AN EXAMPLE OF UPDATING FOR THE STATE OF MAINE	. 3
2C. ASSUMPTIONS AND PROBLEMS OF THE UPDATING METHODOLOGY	4
3. FUTURE DIRECTIONS OF THE UPDATING PROCEDURE	6
4. APPENDICES	
4A. 1970 FOURTH COUNT CENSUS TABULATIONS	8
4B. EXPLANATION OF METHODOLOGY IN TABLES	13
4C. GLOSSARY	14
4D. A SAMPLE OUTPUT	16

In coorperation with the Labor Market Information Division of the Employment and Training Adminstration (LMI-ETA), the Labor Market Projection Model (LMPM) was started at the Lawrence Berkeley Laboratiory (LBL) in the summer of 1975 to provide local CETA planners with 'current' local estimates of persons in need of manpower services. The geographic levels of LMPM include states, SMSAs', prime sponsors and other special jurisdictions. During the course of project development, two independent efforts have been undertaken at LBL.

The first effort produces short-term projections of population, labor force and unemployment by sex, race and age for each area. The population projection is based on a refined cohort component method and integrates data on mortality, fertility, and net migration. Submodels are developed to handle the military and college-student populations. For a detailed description of the projection methodology, see "A User's Guide to the Labor Market Projection Model at Lawrence Berkeley Laboratory" by Esther Schroeder.

The second effort updates selected socio-economic characteristics available at the local level in certain tabulations of the 1970 Fourth Count Census by using data from the March Current Population Survey (CPS) for 1970 and the current year. A description of the March CPS data can be found in 'Microdata from the Current Population Survey -- the Annual Demorgraphic File', Data Access Descriptions No. 37, Bureau of the Census. For a complete and comprehensive description of the survey design and methodology of CPS, see 'The Current Population Survey - Design and Methodology', Techical Paper 40, Bureau of the Census'. This updating effort necessitates a careful comparison of Census data categories with data items in the CPS. The actual updating is done using proportions based upon current year and 1970 CPS values for selected socio-economic characteristics. The updating methodology is detailed in the next section.

Prior to 1978, ten census tabulations were updated. Due to the apparent lack of usefulness of some tabulations, the number of Census tabulations updated was reduced to four in 1979. Several Census tabulations were combined into two new tables to condense information and output size. A complete list of all tabulations being updated is described in Appendix A.

2A. The Updating Procedure

The census updating methodology was developed by the Employment Training Adminstration of the Department of Labor and was implemented at LBL. The following six-step procedure is followed separately for each of four ethnic groups (Total, White, Black and Other).

- (1) Update the "area-file" to account for any recent changes in area definitions. This includes the addition of new areas, deletion of old areas and redefinition (either combining or splitting) of current areas. This step defines all the areas for which data from the 1970 Census are extracted.
- (2) Extract data from the 1970 Fourth Count Census on the selected socio-economic tabulations and for the newly defined areas.
- (3) Tabulate March CPS data to obtain tabulations similiar in concept to those extracted from 1970 Fourth Count Census. This involves careful comparsion of the data definitions used in the 1970 Census and the CPS. Some entries in the Census tables are combinations of several data items.
- (4) Convert each table entry to a percent of either the sum of all table entries or the total population.
- (5) Multiply the percent 1970 Census tables by the corresponding ratios of the percent values of the data items from the most current and 1970 March CPS. The sampling characteristics of the CPS prevent geographic detail of any CPS tabulation to be finer than a State or in some cases, a group of States. Furthermore, the CPS groupings of States vary somewhat from year to year. By comparing the geographic detail of the CPS for 1970 and 1975, a consistent set of 21 groups of States, hence called CPS regions, was defined. The CPS regions are:

Region States

- 1 Connecticut
- Maine, New Hampshire, Vermont, Rhode Island, Massachusetts
- 3 New York
- 4 New Jersey
- 5 Pennsylvania
- 6 Ohio
- 7 Indiana
- 8 Illinois

9	Michigan, Wisconsin
10	Minnesota, Iowa, North Dakota, South Dakota,
	Nebraska, Kansas, Missouri
11	District of Columbia
12	Virginia, West Virginia, Maryland, Delaware
13	North Carolina, South Carolina, Georgia
14	Florida
15	Kentucky, Tennessee
16	Alabama, Mississippi
17	Arkansas, Louisiana, Oklahoma
18	Texas
19	Montana, Idaho, Wyoming, Colorado, New Mexico,
	Utah, Arizona, Nevada
20	Washington, Oregon, Alaska, Hawaii
21	California

(6) Normalize the updated percents so that all entries add up to 100%.

2B. An example of Updating for the State of Maine

The following example illustrates steps (3) to (6) of the six-step updating procedure described above. The methodology for other tables is explained in Appendix B. The data are from Tabulation 90 - "Population 65 Years Old and Over by Poverty Status" for the State of Maine in Region 2 using the 1978 CPS regional data.

(3) Tabulate 1970 CPS and 1978 CPS data for Region 2.

	1970 Census (Maine)	1970 CPS (Region 2)	1978 CPS (Region 2)
Poverty Status			
Above Poverty Level	78,985	955,178	941,451
Below Poverty Level	29,863	198,909	91,746
Total	108,848	1,154,087	1,033,197

(4) Convert tables to percents of total.

		٠	1970 Census (Maine)	1970 CPS (Region 2)	1978 CPS (Region 2)		
Poverty	Status		,				
Above	Poverty	Level	72.56	82.76	91.12		
Below	Poverty	Level	27.44	17.24	8.88		

(5) Multiply the 1970 Census table by the 1978-1970 CPS ratio.

Updated Census Table before Normalization

Poverty Status

Above Poverty Level 79.89 Below Poverty Level 14.13

Total 94.02

(6) Normalize resulting percents to sum up to 100.

Updated Census Table after Normalization

Poverty Status

Above Poverty Level 84.97 Below Poverty Level 15.03

2C. Assumptions and Problems of the Updating Methodology

The basic assumption of the updating procedure is that the proportion of individuals in a given category changes at the same rate from 1970 to the target year as does the proportion measured by CPS. In addition to being limited by this restrictive assumption, the updating methodology suffers severely from the limitations of available data.

An obvious criticism to the procedure is that national and regional CPS data are used to update local data from the 1970 Census. In other words, the CPS and Census tables cover different areas. Even if the assumption of a constant rate of change holds in local areas, it is most unlikely that the local—area change is at the same rate as for the CPS region. This shortcoming is to be corrected somewhat when the State level CPS data are used to do the updating with the 1979 CPS data (see the section below on Future Directions). Yet this problem will remain as fundamental to all updating procedures of this type.

Since Census and CPS data are of a different nature, differences between Census and CPS definitions do exist for various categories. This may also affect the validity of the results. However, utmost care had been taken to resolve all inconsistencies in definition and hopefully this problem is small. All differences between Census and CPS definitions are noted in the glossary in Appendix C.

Another problem is that due to the survey nature of the CPS,

zero cells are occasionally encountered, especially in small categories. Zero cells in the 1970 CPS tables cause an arithmetic problem of division by zero in the updating procedure. This problem is unresovable, and asterisks are currently printed in the corresponding entry in the updated table of percents whenever this occurs. These cells are then treated as zeros during normalization, which clearly distorts the normalization. Therefore, the updating is performed two times - first using the regional CPS data and then using the national CPS data. The national tables should be looked at in case of occurrences of zero cells in the CPS tables.

In addition to data problems inherent in CPS, the 1970 Fourth Count Census has a problem, Disclosure Suppression, that occurs in small categories and in small areas. Currently, asterisks are printed beside the data as the problem arises, and the updating proceeds in the usual way. Because Disclosure Suppression affects relative percents, other entries in the table are also affected. Users are advised to judge such instances cautiously.

It is very difficult, if not impossible, to check how well the updating procedure works. As a preliminary check, users should always ensure that the 1970 Census and 1970 CPS data are in agreement. In addition, users can evaluate the model by comparing the updated estimates with estimates obtained from other independent sources, provided such data sources are available.

From the above discussion, users should, at this point, be fully aware of the many deficiencies of the current updating procedure. The present effort is still judged to be of some value in providing local area information to CETA planners. The basic problem that all CETA planners face is the lack of current local data. The 1970 Census data is 10 years old and out of date. The ESARS (Employment Security Automated Reporting Systems) data include only individuals using Employment Services and they are therefore not representive of the entire labor force. CPS data yield an unbiased sample of the population, but they are limited in geographic coverage. Nevertheless, users should not disparage; in the near future, there are distinct possible inprovements. These are described below.

(1) Starting in 1977, the CPS sample has been expanded to provide State level estimates. State level data are now directly available from the latest CPS. Beginning with the update which uses the 1979 CPS data, the procedure will utilize state level data for all States available in the 1970 CPS. The 30 groups of States available in the 1970 CPS are:

Region	<u>States</u>
1	Connecticut
2	Maine, New Hampshire, Vermont, Massachusetts,
	Rhode Island
3	New York
4	New Jersey
5	Pennsylvania
6	Ohio
7	Indiana
8	Illinois
9	Michigan, Wisconsin
10	Missouri
11	Minnesota, Iowa
12	North Dakota, South Dakota, Nebraska, Kansas
13	District of Columbia
14	Maryland
15	West Virginia
16	Georgia
17	Florida
18	Delaware, Virginia
19	North Carolina, South Carolina
20	Kentucky
21	Tennessee
22	Alabama, Mississippi
23	Louisiana
24	Texas
25 ·	Arkansas, Oklahoma
26 .	Colorado, New Mexico, Arizona
27	Idaho, Montana, Wyoming, Utah, Nevada
28	Oregon

- 29 California
- 30 Washington, Alaska, Hawaii
- (2) When the 1980 Census data become available, probably in mid-1982, the entire updating procedure can be revised so that future updates start with 1980 Census data and use the 1980 CPS along with CPS data from a later year. It is expected that this could be done using State level data from all States.
- (3) There is an effort underway at the Labor Market Information Division of the Department of Labor and LBL to study the feasibility of combining CPS data and ESARS data to produce estimates of subpopulations that satisfy various CETA eligibility requirements. This investigation intends to explore the extent of any reporting bias in the ESARS data discernible at the state level through comparing the ESARS data with CPS data. The estimated reporting bias will then be applied to the local level ESARS data to obtain local estimates corrected for any misrepresentation of the general labor force.

The following Tabulations are extracted from the 1970 Fourth Count Census and updated by the CPS data.

*TAB64 MALES 16 YEARS OLD AND OVER BY WEEKS WORKED IN 1969 AND BY AGE

This table includes all males that are 16 years old or over. They are tabulated according to age (3 levels) and according to weeks worked in 1969 (7 levels).

AGE

- 1) 16-24 years
- 2) 25-64 years
- 3) 65 years old and over

WEEKS WORKED IN THE CURRENT YEAR

- 1) 50-52 weeks
- 2) 48-49 weeks
- 3) 40-47 weeks
- 4) 27-39 weeks
- 5) 14-26 weeks
- 6) 13 weeks or less
- 7) Did not work

*TAB65 FEMALES 16 YEARS OLD AND OVER BY WEEKS WORKED IN 1969 AND BY AGE

This table includes all females that are 16 years old or over. They are tabulated according to age (4 levels) and according to weeks worked in 1969 (7 levels).

AGE

- 1) 16-24 years
- 2) 25-39 years
- 3) 40-59 years
- 4) 60 years old and over

WEEKS WORKED IN THE CURRENT YEAR

- 1) 50-52 weeks
- 2) 48-49 weeks
- 3) 40-47 weeks
- 4) 27-39 weeks
- 5) 14-26 weeks
- 6) 13 weeks or less
- 7) Did not work

*TAB70 EXPERIENCED POPULATION 16 YEARS OLD AND OVER BY OCCUPATION AND SEX

This table includes all civilians who are 16 years

old or over, who are looking for a job, and who have had a full-time job lasting at least two consecutive weeks. They are tabulated by sex (2 levels) and by occupation (10 levels). Please note that the codes for the different occupational categories changed from 1970 to 1973.

SEX

- 1) Male
- 2) Female

OCCUPATION

- Professional, technical and kindred workers and managerial workers
- 2) Sales workers
- 3) Clerical and kindred workers
- 4) Craftsmen and kindred workers
- 5) Operatives including transport
- 6) Nonfarm laborers
- 7) Farm workers, including farm managers,
- 8) Service workers except private household
- 9) Private household workers
- 10)No previous full-time work experience

*TAB81 COUNT OF PERSONS 14 YEARS OLD AND OVER WITH SOME INCOME

This table includes all people who are 14 years old or over and who have some income. They are tabulated according to sex (2 levels) and according to type of income (6 levels). A person may appear in more than one income category if he or she received incomes from more than one source.

SEX

- 1) Male
- 2) Female

TYPE OF INCOME

- 1) Wage and Salary
- 2) Nonfarm Self-employment
- 3) Farm Self-employment
- 4) Social Security or Railroad Retirement
- 5) Public Assistance or Welfare
- 6) Any other income

**TAB83 AGGREGATE NUMBER OF PERSONS IN FAMILIES BELOW POVERTY LEVEL

This table includes all people who are in families with income below the poverty level. The ethnic group is that of the family head. There is no other dimension to this table.

**TAB85 RELATED CHILDREN UNDER 18 BY TYPE OF FAMILY, POVERTY STATUS, AND AGE

This table includes all children under 18 who are related to the family head. Also, to be included in this table, the children have to be in either primary or secondary families, as the poverty level is defined for these families only. They are tabulated according to the sex of the family head (2 levels), according to the family's relationship to the poverty level (2 levels), and according to age (2 levels). The ethnic group is that of the family head.

SEX OF THE FAMILY HEAD

- 1) Male head
- 2) Female head

POVERTY LEVEL

- 1) Above poverty level
- 2) Below poverty level

AGE

- 1) Below 6 years old
- 2) 6 17 years old

*TAB87 CIVILIAN MALE FAMILY HEADS 14-64 BY LABOR FORCE STATUS AND POVERTY STATUS

This table is a count of all civilian males who are family heads and who are under 65 years of age. They are tabulated according to their relationship to the poverty level (2 levels) and according to their labor force status (3 levels).

POVERTY LEVEL

- 1) Above poverty level
- 2) Below poverty level

LABOR FORCE STATUS

- 1) Employed
- 2) Unemployed
- 3) Not in the labor force

*TAB88 FEMALE FAMILY HEADS IN THE LABOR FORCE WITH RELATED CHILDREN UNDER 6 YEARS OLD

This table is a count of all female family heads who have related children under 6 years old.

They are tabulated according to their relationship to the poverty level (2 levels).

POVERTY LEVEL

- 1) Above poverty level
- 2) Below poverty level

**TAB89 UNRELATED INDIVIDUALS BY AGE AND POVERTY STATUS

This table is a count of all unrelated individuals who are at least 14 years old. They are tabulated according to their relationship to the poverty level (2 levels) and according to their age (2 levels).

POVERTY LEVEL

- 1) Above poverty level
- 2) Below poverty level

AGE

- 1) Under 65 years old
- 2) 65 Years and over

**TAB90 POPULATION 65 YEARS OLD AND OVER BY POVERTY STATUS

This table is a count of all persons who are at least 65 years old. They are tabulated according to their relationship to the poverty level.

POVERTY LEVEL

- 1) Above poverty level
- 2) Below poverty level

The following two tabuations are derived from one or more Census Tabulations for ease of information retreival.

**TAB98 RELATED CHILDREN UNDER 18 YEARS OF AGE BELOW POVERTY LEVEL AS PERCENT OF ALL PERSONS.

This table has been derived from Census Table 85.
This table includes only those children in families with income below the poverty level. Thus this table has only two dimensions - sex of family head and age.

SEX OF THE FAMILY HEAD

- 1) Male head
- 2) Female head

AGÉ

- 1) Below 6 years old
- 2) 6-17 years old

**TAB99 PERSONS BELOW POVERTY LEVEL AS A PERCENT OF ALL PERSONS

This table is a combination of Census Tables 83 and 89. The universe here includes all persons in poverty status. The racial breakdown for persons in families pertain to the race of the family head. This table shows whether or not a person is in a family.

TOTAL PERSONS BELOW POVERTY LEVEL

- 1) Persons in families
- 2) Unrelated individuals

* and ** Census tabulations updated prior to 1978

** Census tabulations updated since 1978

APPENDIX B

Explanation of Methodology used in Specific Tables

Tables 64, 65, 70, 81, and 90 are converted to percents using the universe in the title (by race) as a base, i.e. the sum of all lines or rows. Also in Tables 64 and 65, the Census Bureau counts both civilian and military personnel in the term "Males", while the CPS counts only civilians. Therefore, the updated Tables 64 and 65 show only civilian males 16 years and over.

Tables 87, 88, 98, and 99 are converted to percents using total persons in the corresponding geographical region (by race) as a base. These figures are derived from Table 17 of the Census Tables.

Table 98 has been derived from Census Table 85. Percentages are computed using total persons in the geographic region (by race) rather than the universe in the title (by race) as a base. The updated tables of percents are normalized in two steps. First, the major breakdown by age is normalized so that the percentages for the two age groups sum to the percentage of total persons under 18 years old. Then, the breakdown by type of family is normalized so that, for example, the percents for male head under 6 years old and female head under 6 years old sum to percents computed in the first step.

Table 99 has been derived from Census Table 83 and 89. Percentages are computed using total persons in the geographic region (by race) rather than the universe in the title (by race) as a base. The updated tables of percents are normalized so that the percents for persons in families and for unrelated persons, both below the poverty level, sum to the percents for total persons below the poverty level.

APPENDIX C

GLOSSARY

Generally, the terms used in this report are those used by the Bureau of the Census in the Census User's Guide Tabulation. In some cases, however, a precise correspondence of terms was not possible. These exceptions are listed below.

Also listed are the tables where either the concepts used in devising the Census tables are not the same as those used by the CPS or some explanation of the table is needed.

OCCUPATION

"Professional, technical and managerial workers" is defined in the CPS to be the two categories - "Professional, Technical and Kindred Workers" and "Managers, Officials, Proprietors".

"Craftmen, foremen, and kindred workers" is defined in the CPS to be "Craftmen".

"Farm workers" are defined by the CPS to be the two categories "Farm and Farm Managers" and "Farm Laborers and Foremen".

"Service workers, except private household" is equivalent to the CPS term "All Other Service Workers".

"Other" is derived from the Census term "Last worked 1959 or earlier", and the CPS term "No previous full time work experience".

VETERAN STATUS

Korean War and/or World War II is derived from the Census terms "Korean War", "Korean War and World War II", and "World War II", and the CPS terms "Korean War" and "World War II".

LABOR FORCE STATUS

"Employed" is equivalent to the CPS terms "working" and "with a job".

"Unemployed" is equivalent to the CPS term "looking".

"Not in Labor Force" is equivalent to the CPS terms "Housework", "School", "Unable to work" and "Other".

TYPES OF INCOME

APPENDIX C

"Any other income" is composed of the CPS terms "Dividends", "Unemployment Compensation", and "Alimony" and is different from the Census term "All Other Income".

ige factoriste om og som og som Amerikansk skipter og som en skipter komfort og som og skipter og skipter og skipter

APPENDIX D

A SAMPLE OUTPUT

As mentioned earlier, the updating procedure is carried out two times, using the regional and national CPS data respectively. The layout of the updated Tabulations is in a matrix structure with eight different tables arranged as follows.

Table 1	Table 2
Table 3	Table 4
Table 5	Table 6
Table 7	Table 8

Tables 1 to 4 pertain to the updating using regional CPS data, while tables 5 to 8 pertain to the updating using national CPS data. The contents of the various tables are:

Tables 1 and 5 - 1970 Fourth Count Census table

Tables 2 and 6 - Updated percents of the 1970 Tabulation using

1970 and 1978 March CPS data.

Tables 3 and 7 - 1970 CPS data

Tables 4 and 8 - 1978 CPS data

As illustrated, the updating percents are in tables 2 and 6. The other tables of raw data are provided to expose any problem that might have occurred as discussed in the earlier section under "Assumptions and Problems of the Updating Methodology".

The following is a sample output of the Census update using the 1978 CPS data for the State of Maine. The tabulations updated are Tables 90, 98 and 99. Tabulations 17 and 55 of the 1970 Census are printed to provide the base populations for Tables 98 and 99.

CURRENT POPULATION SURVEY, REGION 2

STATE OF MAINE

LAWRENCE BERKELEY LABORATORY UNIVERSITY OF CALIFORNIA

TABULATION 17, PAGE 1

DEPARTMENT OF LABOR
EMPLOYMENT AND TRAINING ADMINISTRATION

AGE AND SEX /1 COUNT OF PERSONS

	\$		4TH COUNT 1970 CENSUS					
			TOTAL	WHITE	BLACK	OTHER		
MALE	•							
. UNDER 3	22 23		25,059	24,858	. 98	103		
3-4			17,946	17,831	37	78		
5 .			9,493	9,413	25	55		
6		-	10,500	10,450	20	30		
7-9			31,507	31,272	114	121		
10-13	*	·	41,437	41,194	111	132		
14		•	14,612	10,577	23	12		
15.	F / 10 1		10,279	10,213	. 25	41		
16			97943	9,902	· 23	18		
17			9,551	9,536	11	4		
. 18		•	9,416	9,365	27	24		
19			8,307	8,174	73	60		
20		•	7,961	7,836	116	9		
21	•		7,752	7,542	168	42		
22-24			21,060	20,749	195	116		
25-29		4.0	29,013	28,767	145	101		
30-34		•	25,308	25,089	. 83	136		
35-39		•	25,832	25,597	94	141		
40-44		3	27,339	27,220	50	- 69		
45-49		•	27,285	27,194	54	37		
50-54		•	26,086	26,837	. 27	22		
55-59			23,121	23,072	31	18		
60-61		•	8,871	8,849	12	10		
62-64			12,742	12,728	10	4		
65-69		()	16,887	16,826	32	29		
70-74			12,991	12,936	35	20		
75 AND	OVER		17,775	17,716	40	19		

¹¹ ALL TABULATIONS NOT OTHERWISE INDICATED REPRESENT 20 PERCENT SAMPLE.

CURRENT POPULATION SURVEY, REGION 2

STATE OF MAINE

TABULATION 17, PAGE 2

LAWRENCE BERKELEY LABORATORY
UNIVERSITY OF CALIFORNIA

DEPARTMENT OF LABOR EMPLOYMENT AND TRAINING ADMINISTRATION

AGE AND SEX /1 COUNT OF PERSONS

	•		4TH COUNT 19	70 CENSUS	
		TOTAL	WHITE	BLACK	OTHER
FEMALE		• .	•		
UNDER 3		24,259	24,063	80	116
3=4		17,247	17,129	55	63
5		9,529	9,477	24	28
. 6		9,956	9,880	36	40
7-9		30,194	29,942	108	144
10-13		39,271	39,033	106	132
14		10,142	10,094	. 19	29
15		10,290	10,259	10	21
16		9,348	9,289	16	43
17		9,934	9,866	38	30
18		8,739	8,691	20	28
19		8,553	8,493	49	11
20		8,451	8,408	18	25
21		7,914	7,868	36	10
22-24		21,198	21,093	35	62
25-29		29,433	29,247	73	113
30-34	•	26,591	26,420	61	110
35-39	· ·	26,807	26,596	107	104
40-44		28,566	28,416	46	104
45-49	1 to	29,541	29,449	. 33	59
50-54	•	27,179	27,130	12	37
55-59	•	25,467	25,386	48	33
64-61		10,229	10,200	14	15
62-64		13,821	13,803	8	. 10
65-69		21,086	21,054	19	13
70-74		17,839	17,802	16	21
75 AND OVER		28,014	27,931	50	33

^{/1} ALL TABULATIONS NOT OTHERWISE INDICATED REPRESENT 20 PERCENT SAMPLE.

APPENDIX D

CURRENT POPULATION SURVEY, REGION 2

STATE OF MAINE

TABULATION 55, PAGE 1

DEPARTMENT OF LABOR EMPLOYMENT AND TRAINING ADMINISTRATION

LAWRENCE BERKELEY LABORATORY UNIVERSITY OF CALIFORNIA

POPULATION 16 YEARS OLD AND OVER IN THE LABOR FORCE BY AGE AND SEX COUNT OF PERSONS 16 YEARS OLD AND OVER IN THE LABOR FORCE

•	4TH COUNT 1970 CENSUS						
	TOTAL	WHITE	BLACK	OTHER			
MALE							
16-17 YEARS OLD	6,461	6,436	15	10			
18-19 YEARS OLD	9,560	9,444	80	36			
20-21 YEARS OLD	11,338	11,824	281	33			
22-24 YEARS OLD	18,643	18,361	182	100			
25-34 YEARS OLD	51,679	51,237	223	219			
35-44 YEARS OLD	50,533	50,210	139	184			
45+64 YEARS OLD	85,002	84,847	100	55			
65 YEARS AND OVER	11,160	11,120	31	9			
FEMALE	-,						
16-17 YEARS OLD	4,727	4,712	10	. 5			
18-19 YEARS OLD	7,870	7,831	19	20			
20-21 YEARS OLD	8,794	8,757	27	10			
22-24 YEARS OLD	19,998	10,970	12	16			
25-34 YEARS OLD	24,144	24,014	61	69			
35-44 YEARS OLD	29,213	29,010	95	108			
45-64 YEARS OLD	54,581	54,448	78	55			
65 YEARS AND OVER	7,489	7,466	19	4			

CURRENT POPULATION SURVEY, REGION 2

STATE OF MAINE

TABULATION 90, PAGE 1

DEPARTMENT OF LABOR EMPLOYMENT AND TRAINING ADMINISTRATION

LAWRENCE BERKELEY LABORATORY UNIVERSITY OF CALIFORNIA

POPULATION 65 YEARS OLD AND OVER BY POVERTY STATUS COUNT OF PERSONS 65 YEARS OLD AND OVER

		70741	4TH COUNT 19	The state of the s	07450			FROM REGIONA	
BOVEDTY STATUS		TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
POVERTY STATUS									
ABOVE POVERTY		78,985	78,788	139	58	84.97	84.72	82.31	*
BELOW POVERTY	LEVEL	29,863	29,762	45	56	15.03	15.28	17.69	*
	•	197	0 REGION 2	CPS ESTIMATES		1978	REGION 2 C	PS ESTIMATES	
		TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
POVERTY STATUS		· · · · · -							
ABOVE POVERTY	LEVEL	955,178	949,832	6,146	. 8	941,451	939,776	1,675	Ø
BELOW POVERTY		198,909	190,992	7,916	ě	91,746	90,313	1,432	,
BCCON FOVERTY	66766	170,707	1701776	77710	v	711140	70/313	11425	ъ.
			4TH COUNT 19	70 CENSUS		1978 PERCENT	S. ESTIMATED	FROM NATIONA	L SAMPLE
		TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
POVERTY STATUS	•								
ABOVE POVERTY	LEVEL	78,985	78,788	139	58	84.52	85.63	84.52	58.45
BELOW POVERTY		29,863	29,762	45	56	15.48	14.37	15,48	41.55
DESON TOTERTY	66766	27,000	277102	43	20	13.40	14421	13940	41433
•	•	1978	NATIONAL CP	S ESTIMATES		1978	NATIONAL CP	S ESTIMATES	
		TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
POVERTY STATUS	,								
ABOVE POVERTY	LEVEL	13,976,374	13,193,778	674,801	107,794	19,154,459	17.780.514	1,213,359	160,585
BELOW POVERTY		4,780,778	4,045,990	688,690	46,098	3,174,156	2,423,060	700.534	50,561
acean intent		7,100,170	7,073,770	0007070		21114120	E1-E31800	1001334	701707

APPENDIX D

CURRENT POPULATION SURVEY, REGION 2

STATE OF MAINE

TABULATION 98, PAGE 1

DEPARTMENT OF LABOR EMPLOYMENT AND TRAINING ADMINISTRATION

LAWRENCE BERKELEY LABORATORY UNIVERSITY OF CALIFORNIA

RELATED CHILDREN UNDER 18 BELOW POVERTY LEVEL AS PERCENT OF ALL PERSONS

•	•							
		4TH COUNT 19	70 CENSUS		1978 PERCENT	S, ESTIMATE	D FROM REGIONA	L SAMPLE
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
TOTAL SUCH PERSONS	49,841	49,268	177	396	6.07	5.74	14.57	21.65
BY AGE	47,041	4.7600	• • •	• • •				
UNDER 6 YEARS OLD	16,109	15,944	57	108	1.16	1.22	1.28	*
				288		4.52	13.29	15.74
6-17 YEARS OLD	33,732	33,324	120	200	4.91	4.52	13,67	13.74
BY TYPE OF FAMILY AND AGE	•				•			
MALE HEAD								
UNDER 6 YEARS OLD	10,821	10,693	50	78	•55	49	*	*
6-17 YEARS OLD	21,463	21,220	55	188	1.92	1.87	4.25	1.40
FEMALE HEAD				,				
UNDER 6 YEARS OLD	5,288	5,251	. 7	30	.61	.73	.20	*
6-17 YEARS OLD	12,269	12,104	65	100	2,99	2,64	9.04	*
O-17 (ERRO OED	14,50	107101	• • • • • • • • • • • • • • • • • • • •	*00		-,-		
	107	A PECTON 2	CPS ESTIMATE	•	1976	REGTON 2	CPS ESTIMATES	
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
*A*** CUCU OFDCOM								
TOTAL SUCH PERSONS	330,218	285,965	39,099	5,152	319,019	265,931	46,010	7,876
BY AGE	· _			•				
UNDER 6 YEARS OLD	125,261		22,271				• • •	0
6-17 YEARS OLD	204,957	182,976	16,828	5,152	245,083	201,720	36,285	7,076
BY TYPE OF FAMILY AND AGE	•							
MALE HEAD								
UNDER 6 YEARS OLD	65,851	65,851	8	0	24,440	23,753	687	ø
6-17 YEARS OLD	128,567	118,684	4,730	5, 152	93,690			961
	120,30.	1107004	77730	21176	137070	00/23/	0,407	,01
FEMALE HEAD	CO	410	22.224		"0 "01	40 454	0 470	_
UNDER 6 YEARS OLD	59,410	37,138	22,271	. 0	49,496	40,458	9,038	0
6-17 YEARS OLD	76,390	64,292	12,098	9	151,393	115,461	29,816	6,115
•				•	1000 penerus		- FDOW HATTON	
		4TH COUNT 19					D FROM NATIONA	
	JTOTAL .		BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
TOTAL SUCH PERSONS	49,841	49,268	177	396	4.84	4.92	5.68	11.71
BY AGE								•
UNDER 6 YEARS OLD	16,109	15,944	57	108	1.55	1.63	1.73	2.57
6-17 YEARS OLD	33,732	33,324	120	288	3.29	3,28	3.95	9.14
BY TYPE OF FAMILY AND AGE						· ,		
MALE HEAD	•				1.	14		
UNDER 6 YEARS OLD	10,821	10,693	50	78	.84	.94	1.24	1.86
			55					
6-17 YEARS ULD	21,463	21,220	>>	188	1.73	1.79	1.17	4.98
FEMALE HEAD			_					
UNDER 6 YEARS OLD	5,288	5,251	7	- 30	.71	.70	. 49	.71
6-17 YEARS OLD	12,269	12,104	65	190	1.57	1.50	2.78	4.15
-	,							
		NATIONAL CP					PS ESTIMATES	
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
TOTAL SUCH PERSONS	9,551,084	5,650,458	3,738,599	162,023	9,840,766	5,881,836	3,724,108	234,817
				· -				

BY AGE	"	• "						•
UNDER 6 YEARS OLD	3,159,065	1,808,040	1,294,735	56,288	3,218,077	1,930,167	1,220,822	67,086
6-17 YEARS OLD	6,392,019	3,842,418	2,443,864	105,735	6,622,689	3,951,669	2,503,286	167,731
BY TYPE OF FAMILY AND AGE			•		•			
MALE HEAD	+		The second secon					
UNDER 6 YEARS OLD	1,808,432	1,189,970	578,159	40,302	1,399,764	1,081,002	270,571	48,190
6-17 YEARS OLD	3,523,705	2,436,522	1,008,932	78,250	2,893,330	2,137,133	648,025	108,171
FEMALE HEAD	1.0							
UNDER 6 YEARS OLD	1,350,633	618,070	716,576	15,986	1,818,313	849,165	950,251	18,896
6-17 YEARS OLD	2,868,314	1,405,896	1,434,932	27,485	3,729,359	1,814,536	1,855,261	59,560

APPENDIX D

CURRENT POPULATION SURVEY, REGION 2

STATE OF MAINE

TABULATION 99, PAGE 1

DEPARTMENT OF LABOR EMPLOYMENT AND TRAINING ADMINISTRATION

LAWRENCE BERKELEY LABORATORY UNIVERSITY OF CALIFORNIA

PERSONS BELOW POVERTY LEVEL AS A PERCENT OF ALL PERSONS

	4TH COUNT 1970 CENSUS				1978 PERCENTS, ESTIMATED FROM REGIONAL SAMPLE			
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
TOTAL PERSONS BELOW POVERTY LEVEL	131,271	130,086	396	789	16.60	16.45	24.45	44.68
PERSONS IN FAMILIES	98,665	97,733	313	619	12.00	11.71	22,68	34.58
UNRELATED PERSONS	32,606	32,353	83	170	4.60	4.74	1.77	*
	19	70 REGION 2	CPS ESTIMATES		197	8 REGION 2	CPS ESTIMATES	
·	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
TOTAL PERSONS BELOW POVERTY LEVEL		935,870	84,368	7,350	1,038,423		73,846	11,364
PERSONS IN FAMILIES		•	72,807		832,997		70,548	11,364
UNRELATED PERSONS	180,276	168,715	11,561	0	205,426	202,128	3,298	9
	4TH COUNT 1970 CENSUS				1978 PERCENTS, ESTIMATED FROM NATIONAL SAMPLE			
•	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
TOTAL PERSONS BELOW POVERTY LEVEL	131,271	130,086	396	789	13.31	12.94	15.01	24,49
PERSONS IN FAMILIES	98,665	97,733	313	619	9.98	9.73	11.47	19.95
UNRELATED PERSONS	32,606	32,353	83	170	3.33	3.21	3,54	4.45
	1970 NATIONAL CPS ESTIMATES			1978 NATIONAL CPS ESTIMATES				
	TOTAL	WHITE	BLACK	OTHER	TOTAL	WHITE	BLACK	OTHER
TOTAL PERSONS BELOW POVERTY LEVEL	28,870,450	20,350,917	8,044,223	475,307	31,053,466	21,123,652		721,701
PERSONS IN FAMILIES		16,434,180	7,237,863	392,914		17,072,240	8,148,972	616,669
UNRELATED PERSONS	4,806,291		807,160	82,393	5,215,584		1,059,139	105,032

This report was done with support from the Department of Energy. Any conclusions or opinions expressed in this report represent solely those of the author(s) and not necessarily those of The Regents of the University of California, the Lawrence Berkeley Laboratory or the Department of Energy.

Reference to a company or product name does not imply approval or recommendation of the product by the University of California or the U.S. Department of Energy to the exclusion of others that may be suitable.

TECHNICAL INFORMATION DEPARTMENT LAWRENCE BERKELEY LABORATORY UNIVERSITY OF CALIFORNIA BERKELEY, CALIFORNIA 94720