

APPENDIX D

SELECTED PROGRESS AND COST TABLES

The purpose of this appendix is to present, in the form of selected statistical tables, additional detail to supplement the presentation in the body of this report. The criteria for the selection of the summary material to be presented here was a judgment as to its value as well as the availability of the information desired.

Subjects covered here include progress of enumeration by weeks, cards punched, pages of publications issued, and summaries of costs. The last table, Table 9, presents an estimated distribution of costs by function. Before using this table, the special note on Table 9 should be read carefully.

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Table 1. --Progress of Enumeration of the 1950 Censuses Enumeration Districts Completed and Persons, Dwellings, and Farms Enumerated by Week April 4 to July 7, 1950

(Cumulative)

Reporting dates	Enumeration districts completed		Persons enumerated		Dwelling units enumerated		Farms enumerated	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Through								
April 4, 1950-----	2,250	1.0	22,504,074	15.1	6,864,814	15.0	519,402	9.2
" 11, 1950-----	23,467	10.2	67,228,000	45.0	20,603,702	45.1	1,826,975	32.3
" 18, 1950-----	83,444	36.3	103,791,600	69.5	31,662,800	69.2	3,149,200	55.7
" 25, 1950-----	139,567	60.8	125,423,416	84.0	38,278,038	83.7	4,134,000	73.1
May 2, 1950-----	180,742	78.7	137,159,524	91.9	42,001,712	91.9	4,780,269	84.6
" 9, 1950-----	202,502	88.2	142,717,400	95.6	44,621,557	97.6	5,129,012	90.7
" 16, 1950-----	214,552	93.4	145,776,364	97.7	44,613,018	97.6	5,362,405	94.9
" 20, 1950-----	219,225	95.5	146,823,305	98.4	44,849,490	98.1	5,438,189	96.2
" 27, 1950-----	224,051	97.6	147,590,494	98.9	45,179,951	98.8	5,492,464	97.2
June 3, 1950-----	226,821	98.8	148,162,316	99.3	45,414,931	99.3	5,531,229	97.8
" 10, 1950-----	228,460	99.5	148,653,043	99.6	45,527,271	99.6	5,606,843	99.2
" 17, 1950-----	229,232	99.8	149,046,007	99.9	45,644,048	99.8	5,631,550	99.6
" 24, 1950-----	229,600	(*)	149,207,524	(*)	45,716,453	(*)	5,647,412	99.9
July 7, 1950-----	229,623	100.0	149,244,349	100.0	45,724,998	100.0	² 5,652,774	100.0
Final count-----	229,623	---	150,697,361	---	45,983,398	---	² 5,382,162	---

*Virtually complete. Calculates to 100.0 percent.

¹ Revised on basis of recount.

² Difference between final farm count and farms enumerated was due to elimination of questionnaires for places not meeting 1950 Census definition of farm.

Source: 1950 Census Progress Reports, Field Division.

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Table 2. --Progress of Enumeration of the 1950 Censuses Summary of Man-Hours Used for Field Work, Excluding Piece-Price Enumeration and Special Projects, by Weeks, February 24 to July 7, 1950

(Cumulative. Figures were underreported in some weeks and were adjusted in subsequent weeks)

Reporting dates	Total man-hours		Supervisors and assistants (man-hours)	Administrative, supply, and payroll clerks (man-hours)	Crew leaders (man-hours)	Hourly enumeration (man-hours)
	Number	Percent				
Through						
Feb. 24, 1950-----	384,430	5.8	244,995	139,435	-	-
March 3, 1950-----	461,486	7.0	282,630	178,856	-	-
" 10, 1950-----	766,187	11.5	335,678	221,323	209,186	-
" 17, 1950-----	1,238,003	18.6	382,228	268,030	587,745	-
" 24, 1950-----	1,759,895	26.5	451,135	347,397	961,363	-
" 31, 1950-----	2,177,768	32.8	457,551	386,146	1,334,071	-
April 7, 1950-----	2,744,719	41.3	500,008	452,100	1,736,147	¹ 56,464
" 14, 1950-----	3,530,507	53.2	587,146	537,117	2,137,362	268,882
" 21, 1950-----	4,250,787	64.0	635,353	605,244	2,495,070	515,120
" 28, 1950-----	4,719,141	71.1	674,150	665,768	2,746,193	633,030
May 5, 1950-----	4,924,788	74.2	698,257	702,174	2,766,738	757,619
" 12, 1950-----	5,360,360	80.8	756,742	777,225	2,936,079	890,314
" 19, 1950-----	5,686,539	85.7	788,652	834,497	3,048,075	1,015,315
" 26, 1950-----	5,906,942	89.0	n.r.	874,235	3,107,124	1,136,931
June 2, 1950-----	6,023,646	90.7	n.r.	n.r.	3,124,558	1,236,201
" 9, 1950-----	6,148,194	92.6	n.r.	n.r.	3,162,361	1,322,946
" 16, 1950-----	6,226,272	93.8	n.r.	n.r.	² 3,157,783	1,405,662
" 23, 1950-----	6,300,693	94.9	n.r.	n.r.	3,174,552	1,463,454
July 7, 1950-----	6,638,184	100.0	874,990	1,066,689	3,187,374	1,509,131

n.r. - Not reported. ¹ Reported as of April 4, 1950. ² Revised count. Source: 1950 Census Progress Reports, Field Division.

Table 3. --Tabulating Cards Punched for the 1950 Censuses of Population, Housing, and Agriculture, by Type

Card type	Total cards punched (1,000)	Cards punched per man-day	Starting date	Completion date
Population:				
Pl card-----	150,600	1,325	8/7/50	7/10/51
Overseas personnel-----	97	755	9/20/51	10/2/51
Territories and possessions-----	2,986	411	3/12/51	11/5/51
Post-enumeration survey-----	37	268	8/21/51	9/8/51
Experimental areas-----	1,783	675	5/7/51	7/10/51
Housing:				
Basic H card-----	45,983	1,064	9/15/50	6/15/51
Territories and possessions-----	620	616	9/18/51	11/5/51
Household card (P-H)-----	¹ 18,000	(¹)	10/7/50	1/31/52
Family card (F)-----	1,216	762	8/3/51	10/25/51
Fertility card (C)-----	568	1,224	10/8/51	11/5/51
Post-enumeration survey-----	29	395	9/14/51	10/10/51
Survey of residential financing-----	101	509	8/3/51	9/13/51
Experimental areas-----	544	516	5/7/51	8/15/51
Agriculture:				
A (East) Land ownership and use-----	3,705	574	7/12/50	6/1/51
A (West) Land ownership and use-----	1,719	602	7/19/50	6/1/51
A Irrigation-----	316	264	7/27/50	6/1/51
C Crops, corn and sorghums-----	3,744	951	7/12/50	5/31/51
E Crops, all, except corn and sorghums-----	29,459	755	7/12/50	6/1/51
F Crops, tree fruits and nuts (Calif.)-----	288	705	1/24/51	4/23/51
G Forest products-----	1,524	620	7/13/50	5/31/51
H Mules, horses, cattle, and dairy products-----	4,453	691	7/12/50	6/1/51
I Hogs and farm slaughter-----	4,510	724	7/17/50	5/29/51
J Sheep and wool production-----	601	245	7/20/50	5/31/51
K Poultry and products-----	4,388	974	7/12/50	5/31/51
N Goats and mohair-----	34	351	7/28/50	6/1/51
B Mortgage debt and taxes-----	1,148	566	7/14/50	6/1/51
L Farm facilities and equipment-----	1,170	625	7/19/50	6/1/51
M Farm labor and expenditures-----	1,152	351	7/13/50	6/1/51
LT Landlord-tenant-----	147	457	7/23/51	9/6/51
Puerto Rico-----	328	614	5/4/51	6/22/51
Irrigation:				
A Works and equipment-----	126	914	4/26/51	6/8/51
B Capital investment, etc-----	125	1,008	4/26/51	6/8/51
C Water delivered and cost, etc-----	125	968	4/26/51	6/8/51
D Water obtained, etc-----	11	n.a.	4/26/51	6/8/51

¹ Reproduced mechanically from selected cards in the Pl and basic H card files.

Source: Records of the Machine Tabulation Division.

PAGES OF PUBLICATIONS

Table 4. --Pages of Publications Issued for the 1950 Censuses of Population, Housing, and Agriculture, by Month and by Type of Report: June 1950 to December 1954

Month of year	All publications	By major group			By type of report		
		Census of Population	Census of Housing	Census of Agriculture ¹	Preliminary releases	Preprint bulletins	Final reports
Total-----	107,318	40,582	31,769	34,967	18,891	28,675	59,752
<u>1950</u>							
June-----	29	29	-	-	29	-	-
July-----	32	30	2	-	32	-	-
Aug-----	126	106	20	-	126	-	-
Sept-----	191	121	70	-	191	-	-
Oct-----	75	23	52	-	75	-	-
Nov-----	805	44	761	-	805	-	-
Dec-----	418	13	401	4	418	-	-
<u>1951</u>							
Jan-----	865	34	715	116	865	-	-
Feb-----	292	20	18	254	292	-	-
March-----	480	116	7	357	480	-	-
April-----	1,418	248	32	1,138	1,418	-	-
May-----	1,918	447	146	1,325	1,918	-	-
June-----	1,501	226	324	951	1,501	-	-
July-----	1,156	142	74	940	1,125	31	-
Aug-----	1,591	289	104	1,198	1,573	18	-
Sept-----	1,515	313	10	1,192	1,437	78	-
Oct-----	1,680	334	61	1,285	1,605	46	29
Nov-----	2,251	213	18	2,020	2,088	163	-
Dec-----	2,959	393	600	1,966	2,045	339	575
<u>1952</u>							
Jan-----	1,193	140	660	393	276	134	783
Feb-----	373	274	91	8	55	274	44
March-----	1,756	487	1,262	7	30	484	1,242
April-----	3,265	292	2,179	794	10	253	3,002
May-----	3,369	707	1,327	1,635	44	578	3,047
June-----	2,362	462	1,286	614	20	568	1,774
July-----	2,410	296	999	1,115	94	155	2,161
Aug-----	1,550	36	890	624	10	32	1,508
Sept-----	3,358	1,293	283	1,782	6	1,374	1,978
Oct-----	2,786	1,164	16	1,606	45	875	1,866
Nov-----	4,085	1,577	74	2,434	63	943	3,079
Dec-----	6,507	2,300	471	3,736	40	1,686	4,781
<u>1953</u>							
Jan-----	3,521	2,642	489	381	32	1,504	1,985
Feb-----	3,742	775	1,681	1,286	3	2,133	1,606
March-----	1,795	434	1,361	-	18	1,777	-
April-----	3,924	1,526	2,398	-	-	3,288	636
May-----	3,940	1,908	1,866	166	-	2,380	1,560
June-----	8,678	2,244	971	5,463	-	4,622	4,056
July-----	4,831	3,726	1,036	69	-	2,235	2,596
Aug-----	6,534	6,135	291	108	-	1,406	5,128
Sept-----	4,781	4,781	-	-	86	494	4,201
Oct-----	1,262	1,262	-	-	-	-	1,262
Nov-----	3,889	1,238	2,651	-	-	110	3,779
Dec-----	3,157	714	2,443	-	-	135	3,022
<u>1954</u>							
Jan-----	3,225	605	2,620	-	-	-	3,225
Feb-----	-	-	-	-	-	-	-
March-----	8	8	-	-	8	-	-
April-----	-	-	-	-	-	-	-
May-----	-	-	-	-	-	-	-
June-----	28	28	-	-	28	-	-
July-----	83	83	-	-	-	-	83
Aug-----	392	-	392	-	-	392	-
Sept-----	168	-	168	-	-	168	-
Oct-----	-	-	-	-	-	-	-
Nov-----	440	-	440	-	-	-	440
Dec-----	304	304	-	-	-	-	304

¹ Includes Censuses of Irrigation and Drainage.

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Table 5. --Cost of the 1950 Censuses: Actual Obligations by Major Program and Fiscal Year, 1947-1953

(In thousands of dollars. Items may not add to totals because of rounding.)

Fiscal year	Total	Census of Population	Census of Agriculture ¹	Census of Housing
Total-----	91,357	50,292	23,314	17,751
1947-----	16	12	4	-
1948-----	186	139	46	-
1949-----	1,853	1,390	463	-
1950-----	48,795	28,809	11,444	8,542
1951-----	26,749	13,708	7,632	5,409
1952-----	10,005	3,941	3,204	2,860
1953-----	3,754	2,293	521	940

¹ Includes Censuses of Irrigation and Drainage.

Source: Records of the Budget and Management Division.

Table 6. --Cost of the 1950 Censuses: Actual Obligations by Divisions and Fiscal Year, 1947-1953

(In thousands of dollars. Items may not add to totals because of rounding.)

Division	Total	1947-1949	1950	1951	1952	1953
Total-----	91,357	2,054	48,795	26,749	10,005	3,754
Population-----	13,355	148	897	8,098	2,572	1,639
Agriculture-----	6,394	100	801	3,071	2,062	361
Geography-----	4,205	1,131	1,812	887	314	61
Field-----	42,393	249	39,927	2,237	91	¹ (112)
Mach. Tabulation-----	17,766	109	1,842	10,439	4,101	1,275
Admin. Service-----	3,515	161	1,512	1,094	486	263
Equipment-----	1,672	48	1,458	162	-	4
Personnel-----	897	54	306	346	124	67
Stat. Asst.-----	741	52	120	239	169	162
Inf. Asst.-----	129	-	74	37	16	2
Budget Office-----	109	2	23	27	33	24
Other ² -----	181	-	24	112	37	8

¹ Credit due to cancelling prior year obligations in excess of 1953 Current Obligations.² Direction and Management and Taxes and Assessments.

Source: Records of the Budget and Management Division.

Table 7. --Cost of the 1950 Censuses: Obligations by Object of Expenditure and Fiscal Year, 1947-1953

(In thousands of dollars. Items may not add to totals because of rounding.)

Fiscal year	Total	Personal services	Travel	Transportation of things, communication, rents and utilities	Printing and reproduction	Other contractual services	Other expenditures
All expenditures---	91,357	75,009	3,847	4,085	3,549	2,013	2,853
1947-----	16	14	2	(*)	-	(*)	(*)
1948-----	186	104	14	1	-	32	35
1949-----	1,853	1,315	117	56	15	194	157
1950-----	48,795	39,949	3,018	1,144	1,765	936	1,984
1951-----	26,749	22,750	693	1,844	693	216	553
1952-----	10,005	8,076	4	855	832	168	69
1953-----	3,754	2,801	(*)	186	245	468	54

*Less than \$500.

Source: Records of the Budget and Management Division.

SPECIAL NOTE FOR TABLE 9

Although based on the same project costs used in recording the Bureau accounts, the classifications and totals shown in this table were formed for special analytical purposes and may differ slightly from the accounting totals. The use of this table will be for purposes of demonstrating the survey patterns, for establishing cost ranges for certain activities rather than specific costs, and for otherwise providing a base for discussing possible changes in cost under alternative procedural adjustments.

In setting up this classification, the following considerations applied:

1. Preparatory Work Including Pretests--This step involved mainly the formulation of the questionnaires to be used and is probably low. Testing was also done in connection with the regular Bureau programs, especially the Current Population Survey and special censuses done at the expense of local communities. These costs could not be included here. Furthermore, since Housing questions were closely linked to the Population questionnaire, and since the Census of Housing was not authorized until July 1949 and the funds were not made available for this Census until October 1949, it was impossible to separate out the preliminary costs of this Census. The preparatory cost for the Population Census therefore, includes much of the preparatory cost for the Census of Housing as well.

The cost of the Information Office program, designed to acquaint the general public with the Census program and prepare them for the enumeration, is also included under this item. Since this was a joint cost, it was distributed among the various censuses in proportion to the direct enumeration charges (item 6).

Items 2 to 5 are shown separately and could be included either as preparatory expense or as enumeration expense, according to the definition desired.

2. Geographic Work for Enumeration--This work included the establishment of correct geographic boundaries for all areas to be shown in the Census, the accumulation and checking of maps covering all territory to be enumerated, the subdivision of this territory into appropriate working units for the enumerators, the description of the boundaries of these working units, the preparation of a number of copies of these maps for proper field control purposes and related work.

Since this was a joint cost, it was distributed among the various censuses in proportion to the direct charges for enumeration.

3. Printing of Field Forms--This included the printing of all questionnaires, instructions, progress report forms, and other forms necessary to expedite the enumeration. Since the Population and Housing schedules were on the front and back of the same form and instructions to enumerators were included in the same booklet, the printing cost of the specific material was divided evenly between the two censuses. A separate printing cost was available for the Agriculture Census. All other costs, which included primarily field forms, were distributed among the various censuses in proportion to direct enumeration charges (item 6).

4. Training of Field Staff--The training program was conducted as a joint operation and this cost was therefore distributed among the other censuses in proportion to direct enumeration charges, except for the Survey of Residential Financing. A separate figure was available for training for the Survey of Residential Financing which took place after the other programs were completed.

5. Field Office Expense Prior to April 1, 1950--The cost included here involved the opening of the district offices and

the additional expense in the area offices, the recruitment, selection, and on-the-job training of the staff, and the steps required preliminary to the beginning of the actual enumeration. This was also a joint cost and was distributed among the Censuses of Population, Agriculture, and Housing (excluding the Survey of Residential Financing) in proportion to the direct enumeration charges.

6. Enumeration--Direct Charges--This item includes all charges which could be directly attributed to a particular census program. It includes direct payment to enumerators for particular questionnaires, and other expense for particular programs such as the irrigation census program.

7. Enumeration--Other Costs--This includes all other field cost not included above. Since this was also an item of joint cost, it was distributed in proportion to the direct charges for enumeration (item 6).

8. Processing (Receiving, Editing and Coding)--This includes all costs between the receiving of the questionnaires from the field and the punching of the tabulating cards. Most of the receiving cost is included with the Census of Population where the forms and the portfolios were checked and distributed to the appropriate units.

It should be noted that in those censuses where considerable mechanical editing was used, the machine processes are included under tabulating, item 10, and the review of the machine processes was considered part of the result work, item 11.

9. Punching--This involved the transfer of the information from the questionnaire to punchcards for purposes of mechanical tabulation. The overhead item which was a joint cost was distributed in proportion to the direct charges.

10. Tabulating--This item includes all work done on electric tabulating machines. It therefore includes mechanical editing and other operations which, strictly speaking, might be considered part of processing, item 8. In certain operations this may have also included the calculation of certain products, ratios, and other derived figures mechanically.

The overhead cost of this item which was a joint cost, was distributed in proportion to the direct charges.

11. Result Work and Preparation for Publication--This item includes all operations after machine tabulation except for the printing of bulletins and final reports. These steps include review of machine sheets for mechanical and substantive errors, the calculation (by hand) of certain percentages, averages, and other derived figures, the preparation of tables in form for publication, the writing of the reports and similar operations. The cost of issuing preliminary multilith releases are also included here since it was difficult to separate out these costs from other result work.

12. Printing of Bulletins and Final Reports--This item includes the amounts paid to Government Printing Office for printing as well as an estimate of the cost of typing pages for the final bulletins and volumes for offset reproduction.

13. Central Purchases, Equipment, Administrative and Other Costs--This item includes the amounts paid for all supplies and equipment purchased centrally for the Bureau for which separate records allotting items to specific programs were not kept. In addition, it includes such costs as the central personnel, budget, administrative service, and research functions.

By the omission of this line from the percentage distribution, this cost is distributed over all programs, in proportion to the other costs.