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ESTIMATING THE ADMINISTRATIVE
COSTS OF A NATIONAL
INCOME MAINTENANCE PROGRAM

Based on

The New Jersey/Pennsylvania
Negative Income Tax Experiment

By

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URBAN OPINION SURVEYS

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Administrative cost estimates for a negative tax system modeled on the New Jersey/Pennsylvania experiment were made in February, 1970, and revised in February, 1971. (See Attachments A and B.) Based on two and a half years experience, the 1970 administrative cost estimate was put at \$75.77 per family. To be conservative, however, the estimate was increased by a third for the February, 1970, OEO Report, "Preliminary Results of the New Jersey Graduated Work Incentive Experiment," for a range of \$72 to \$96 per family. The revised estimate made the following year put administrative costs at \$89.79, well within the original range.

Neither the 1970 nor the 1971 estimate includes overhead, since various companies and agencies calculate overhead at different rates on different bases. The Chamber of Commerce, for instance, puts benefits for government employees at 25 per cent of payroll. "This includes 6.6 per cent for legally-required payments, 5.1 per cent for pensions, insurance, and other agreed-upon payments, and 3.3 per cent for rest periods. Vacations, holidays, sick leave, and other time

not worked is estimated at 7.7 per cent, and bonuses, profit-sharing, and other miscellaneous payments at 1.3 per cent."¹ (Vacations, holidays, sick leave, and other time not worked is included in the personnel cost given in the attached estimates, but other employee benefits are not included.) Mathematica calculates overhead at 35 per cent of payroll when supplies, equipment, space, and other items are covered in the direct costs, as they are here. Adding from 15% to 40% of direct labor would raise the 1971 per case estimates to \$99.97 and \$116.95, respectively.

Following is a discussion of the method used to derive the 1970 and 1971 estimates. The 1970 estimate was based on 700 families. The 1971 estimate, however, gives total costs for both 700 families and 668 families, the size of the currently active sample. Methods of calculation were the same for both the 1970 and 1971 estimates. Figures discussed in the text, however, are for 1971.

¹ Chamber of Commerce of the United States, Employee Benefits 1969, Washington, D.C., 1970, p. 29.

I. FIELD OFFICE ADMINISTRATION

The experiment has approximately 700 experimental families spread over five sites. Each field office is manned by a full or part-time Office Manager with supervision from Princeton and occasional clerical assistance. All other personnel required for administration are assumed to work out of a central office.

In order to estimate field costs, each Office Manager was asked to detail his office activities by type and by time. (See Attachment C for a summary of the combined activities of the five field offices.) Since, for research purposes, each Office Manager has kept a record of the type and number of contacts with the families since the beginning of the experiment, this estimation should be a fairly accurate one. Besides various contacts with the families, most of the remaining time spent by the Office Managers on administrative tasks was clerical. Time spent on functions which were peculiar to the experimental nature of the program, such as special research projects², were not included in the estimate of administrative field costs. Thus, time spent on administrative efforts came to 2.25 field office personnel. At a rate of \$8,000 per year (total, \$18,000), field office personnel costs are put at \$26.95 per family.

² Time required for "normal" research and evaluation, required for any agency, is included.

II. GENERAL ADMINISTRATION

A. Program Direction

Only a small portion of the time spent by supervisory personnel is on direct administration, the remainder being spent on research supervision. Furthermore, since the study involves only 700 families spread over five sites, few economies of scale are enjoyed as would be by a larger, national program.

In order to get a more realistic estimation of the cost of program direction, some economies of scale were built into the estimation of program direction costs. It was assumed that one Director (at \$26,000) would supervise four regional Supervisors (at \$15,000, total \$60,000). Each regional Supervisor, in turn, would supervise three Office Managers, each in charge of 700 families. Total program direction costs (\$82,000) divided by 8,400 families (4x3x700) yielded a per family cost of \$9.76.

B. Audit

The 1970 cost estimate for an audit of program participants was made without practical experience. In 1971, however, a systematic procedure was developed and has been in use for several months. The audit involves investigation of both suspected fraud and a random audit of ten per cent of the

sample. Audit personnel are involved in collecting, coding, and presenting materials to an Audit Review Board of five members set up to rule on the alleged fraud and decide on remedial action if necessary. Audit costs are currently estimated at \$5.03 per family. (See Attachment D for a detailed description of audit costs.)

C. Appeals

The Appeals Panel is a three-man board set up to review disputed issues brought before it by an Office Manager on request of a recipient. No recipient has yet appealed a decision made by the program administrators and thus the cost of \$2.50 per family is only a conjecture.³

D. Payments Personnel

One Payments Supervisor, three full-time Payments Assistants, and a part-time Payments Clerk are responsible for processing Income Report Forms and for disbursing payments to the families. Since the program is experimental, however, some of the time in the payments department is spent on research activities. These activities are not included in the detailed time and activities report seen in Attachment E.

³ It may also be that appeals will be handled outside of a national agency so that no costs are required for this item.

For administrative tasks only, 2.8 persons are required. At an annual salary of \$7,500 (\$21,000 total), this brings the cost per family to \$31.44 for payments administration.

III. SUPPLIES AND SERVICES

A. Rent and Furniture

It was estimated that one regional office could more than handle the field work involved in administering a negative tax system to 700 families. Field office requirements in terms of space and equipment are not large, and the \$250 per month allotment includes rental of space, furniture, office supplies, and public utilities. For 700 families, per family cost for rent and furniture is \$4.49 per year.

B. Central Office Contribution

An allotment of \$50 per month (\$.90 per year per family) was calculated in the cost estimate to cover miscellaneous central office costs such as travel, staff expenses, and supplies sent to the field offices by the central office.

C. Computer Time

An estimated \$2.55 per year in computer costs covers calculation of a bi-weekly check and maintenance of a payments history for each family.

D. Forms and Supplies

Forms, miscellaneous stationery supplies, brochures, reproduction costs, and postage are estimated to cost \$6.17

per family per year. A detailed breakdown of these costs can be seen in Attachment F.

SUMMARY

Substantial care should be taken to avoid confusing the administrative requirements of the experiment with those of a program similar to the Family Assistance Plan, although the programs are similar enough for these estimates to be helpful. If a work test, the administration of Food stamps and health programs, and so forth, are included in the administrative costs of the FAP agency, the costs would rise accordingly.⁴

The estimates here pay some attention to savings incurred from economies of scale. It is very possible, however, that further economies of scale would cut from five to ten per cent from the per case estimates.

It is expected that the administrative experience in New Jersey and Pennsylvania could be extended to a nation-wide program, and that the administration of cash grants only would cost approximately \$90 per year per case. Adding in some overhead charges would bring the per case cost to \$100 to \$115 per year. This could be considered a good starting point for estimating the administrative costs of a national income maintenance program.

⁴In Volume I of the Vermont Family Assistance Planning Papers, Mathematica estimated the annual per case administrative costs at \$121.79. While this estimate used the same data presented here, specific FAP-related tasks were included in the calculations.

ATTACHMENT A

NEGATIVE INCOME TAX STUDY

Administrative Costs

	<u>Cost/Family/Year</u>	<u>Cost/700 Families/Year</u>
I.		
<u>Field Office Administration</u>		
A. Personnel (approximately 2- $\frac{1}{4}$ persons, full-time, @ \$8,000/year) (See Attachment A for detailed description of activities.)	<u>25.71</u>	<u>18,000</u>
II.		
<u>General Administration</u>		
A. Program Direction	9.76	6,835
B. Audit (10% of families @ \$25 each)	2.50	1,750
C. Appeals (1% @ \$250)	2.50	1,750
D. Personnel (approximately 2- $\frac{1}{2}$ persons, full-time, @ \$6,000/year) (See Attachment B for detailed description of activities.)	21.43	15,000
Total General Administration	<u>36.19</u>	<u>25,335</u>
III.		
<u>Supplies and Services</u>		
A. Rent and Furniture (1 office @ \$250/month)	4.29	3,000
B. Central Office Contribution (\$50/month)	.86	600
C. Computer Time	2.55	1,800
D. Forms and Supplies (See Attachment C for detailed description)	6.17	4,320
Total Supplies and Services	<u>13.87</u>	<u>9,720</u>
TOTAL ADMINISTRATIVE COSTS	75.77	53,055

NEW JERSEY/PENNSYLVANIA NEGATIVE INCOME TAX STUDY

ADMINISTRATIVE COSTS - REVISED

		<u>Annual Costs</u>		
	<u>per family</u>	<u>per 668 families</u>	<u>per 700 families</u>	
I.	<u>Field Office Administration</u>			
A.	Personnel (approximately 2.25 persons, full-time, @ \$8,000/year) (See Attachment A for detailed description of activities)	<u>26.95</u>	<u>18,000</u>	<u>18,865</u>
II.	<u>General Administration</u>			
A.	Program Direction	9.76	6,520	6,832
B.	Audit (See Attachment B for detailed description)	5.03	3,360	3,521
C.	Appeals (1% @ \$250)	2.50	1,670	1,750
D.	Personnel (approximately 2.8 persons, full-time, @ \$7,500/year) (See Attachment C for detailed description of activities)	31.44	21,000	22,008
	Total General Administration	<u>48.73</u>	<u>32,550</u>	<u>34,111</u>
III.	<u>Supplies and Services</u>			
A.	Rent and Furniture (one office @ \$250/month)	4.49	3,000	3,144
B.	Central Office Contribution (\$50/month)	.90	600	629
C.	Computer Time	2.55	1,703	1,785
D.	Forms and Supplies (See Attachment D for detailed description)	6.17	4,122	4,319
	Total Supplies and Services	<u>14.11</u>	<u>9,425</u>	<u>9,877</u>
	TOTAL ADMINISTRATIVE COSTS	89.79	59,975	62,853

ATTACHMENT C

FIELD OFFICE PERSONNEL

I. Contacts with Families

A. By Telephone

		<u>Average time per contact (in minutes)</u>	<u>Average number of contacts per month</u>	<u>Total time (in minutes)</u>
1.	Change in family size	5	7.7	39
2.	Late filing, forfeit*	8	7.8	62
3.	Insufficient report: response to problem letters	10	56.0	560
4.	Change of address	5	5.2	26
5.	Request for information on payment	20	16.1	322
6.	Requests for help with Report Form	9	2.0	18
7.	Additional requests by family: money, jobs, housing, etc.	9	14.7	132

Total minutes spent on telephone contacts per month

1,159
= 19.3 hours

* In part, the number of contacts for this category is an artifact of the experiment. In a national program less time would be spent on late filers and forfeits, whereas in an experiment time is spent on these categories to keep the sample intact. Therefore, a corrective factor of .25 was used.

B. By Note

		<u>Average time per contact (in minutes)</u>	<u>Average number of contacts per month</u>	<u>Total time (in minutes)</u>
1.	Change in family size	6	1.8	11
2.	Late filing, forfeit*	11	11.8	130
3.	Insufficient report: response to problem letters	9	5.9	53
4.	Change of address	9	6.4	58
5.	Request for information on payment	-	-	-
6.	Requests for help with Report Form	15	1.4	21
7.	Additional requests by family: money, jobs, housing, etc.	10	4.6	46

Total minutes spent on contacts by note per month

319
= 5.3 hour

* In part, the number of contacts for this category is an artifact of the experiment. In a national program less time would be spent on late filers and forfeits, whereas in an experiment time is spent on these categories to keep the sample intact. Therefore, a corrective factor of .25 was used.

C. At Home

		<u>Average time per contact (in minutes)</u>	<u>Average number of contacts per month</u>	<u>Total time (in minutes)</u>
1.	Change in family size	45	2.5	113
2.	Late filing, forfeit*	45	1.4	63
3.	Insufficient report: response to problem letters	60	17.8	1,068
4.	Change of address	35	2.5	88
5.	Request for information on payment	50	1.1	55
6.	Requests for help with Report Form	45	1.4	63
7.	Additional requests by family: money, jobs, housing, etc.	40	1.7	68

Total minutes spent on home contacts per month

1,518
= 25.3 hours

* In part, the number of contacts for this category is an artifact of the experiment. In a national program less time would be spent on late filers and forfeits, whereas in an experiment time is spent on these categories to keep the sample intact. Therefore, a corrective factor of .25 was used.

D. At the Office

	<u>Average time per contact (in minutes)</u>	<u>Average number of contacts per month</u>	<u>Total time (in minutes)</u>
1. Change in family size	10	1.1	11
2. Late filing, forfeit*	25	.4	10
3. Insufficient report: response to problem letters	18	5.2	94
4. Change of address	8	1.8	14
5. Request for information on payment	20	6.0	120
6. Requests for help with Report Form	13	1.0	13
7. Additional requests by family: money, jobs, housing, etc.	22	5.2	114

Total minutes spent on office contacts per month = 376
= 6.3 hour

TOTAL HOURS SPENT ON CONTACTS WITH FAMILIES 56.2

* In part, the number of contacts for this category is an artifact of the experiment. In a national program less time would be spent on late filers and forfeits, whereas in an experiment time is spent on these categories to keep the sample intact. Therefore, a corrective factor of .25 was used.

II. Other Field Office Functions

	<u>Total time (in hours)</u>
A. Reports	87
B. General Clerical	231
TOTAL HOURS SPENT ON OTHER FIELD OFFICE FUNCTIONS	318
TOTAL HOURS NEEDED FOR FIELD OFFICE ACTIVITIES	374.2

@ 37.5 hours/week (165/month) = 2.25 persons, full-time

Note: The information used to estimate the activities of field office personnel was gotten from the July 1970 to December 1970 "Contact Registers" kept by each field office.

ATTACHMENT D

ADMINISTRATIVE COSTS, AUDIT

<u>Activity</u>	<u>Man days/year</u>
A. <u>11 Percent Random Sample (73 families)</u>	
1. Extraction of information from questionnaires and Income Report Forms	5
2. Work on comparability of income periods of Income Report Forms and questionnaires	2
3. Coding (2.5 hours/family)	26
4. Analysis and preparation of reports	36
B. <u>Audit of Suspected Frauds</u>	
1. Preparation of cases for Audit Review Board	24
2. Meeting of Audit Review Board	18
TOTAL MAN DAYS PER YEAR	111

@ 260 man days per year = .42 man years @ \$8,000/year = \$3360

ATTACHMENT E

PAYMENTS

<u>Activity</u>	<u>Hours per 4-week period</u>
1. Open envelopes, date - stamp, sort	30.0
2. Processing Income Report Form (IRF) Check paystubs with dates on IRF Total gross stubs on adding machine Determine earnings for each earner Note IRF period and weeks covered on adding machine tape Record gross earnings and other income on IRF; attach tape Record income by category in Payments Book (PB) Record total income Put paystubs in envelope Xerox correspondence for field office If question on IRF, send post card to family, write-up memos to field office, xerox copies for field office, and file If change in address or family size, make changes form and copies for field office and Interviewing Department; note in PB, note on address list; change address labels (master and current); determine eligibility, new plan If unit splits, send appropriate forms and make up new pages for PB	165.0
3. Telephone contacts with Field Offices	21.0
4. Telephone contacts with families, Office Interview Form to field office and file	1.5
5. Late list: Checking through PB Check files	12.0

	Typing list	
	Xeroxing - field office and file	
	Checking off as filed and contacting field office	
6.	Forfeit list:	4.5
	Making list	
	Xeroxing - field office and file	
	Sending forfeited IRF's to families	
7.	Replies to Question Memos	13.5
	Notation in PB	
	Pulling memo from question file	
	Recording telephone reply onto memo	
8.	Computer Input	24.0
	Compute deductions	
	Record net total in PB	
	Fill out coding sheet	
	Changes: plan, imputation, payee name	
	Construct new units	
	Updates: missing and incorrect information	
9.	Summary Book	5.0
	Welfare status	
	Attrition	
	Problems with Income Reporting	
10.	Written correspondence to families	4.5
11.	Hand-calculation of payments	7.5
	Computing CGF compared to welfare	
	Computing checks when family switches from welfare to CGF in middle of payment period	
	Reimbursements	
	Overpayments	
12.	Checking wage-payment transaction	18.0
	Entering checks in PB (date, #, amount)	
13.	Separating and tearing apart checks and carbon copies	8.0

14.	Separating, tearing apart check registers; marking off voids	2.5
15.	Typing checks and check registers (all late checks plus a few others); proofreading register	12.0
16.	Alphabetizing checks	4.0
17.	Entering family number on IRF before mailing	8.0
18.	Stamping dates on IRF's	8.0
19.	Stuffing envelopes: Folding IRF Match family # with address label	8.0
20.	Return envelope Postage stamps on envelopes	8.0
21.	Putting checks in envelopes	8.0
22.	Sealing envelopes	6.0
23.	Labeling new set of envelopes after each mailing; xeroxing labels	6.0
24.	Typing up-to-date address lists	2.0
25.	Reading field office diaries and entering appropriate information in PB	4.5
26.	Filing	20.0
27.	Computer Summaries Checking against PB	4.5
28.	Miscellaneous Research projects Monthly Report Missing check problems Special Projects Department Interviewing Department	6.0

TOTAL HOURS PER FOUR-WEEK PERIOD 422.0

@ 37.5 hours/week (150 hours/4 weeks) = 2.8 persons, full-time

ATTACHMENT F

FORMS AND SUPPLIES

	<u>Cost/family/year</u>
1. Income Report Forms @ .06 each ¹	.78
2. Envelopes, paper, card stock, mailing labels, etc.	.69
3. Folders, paper, clips, etc., for family files in office	.10
4. Reproduction Costs	.70
5. Brochures, including Rules of Operation	1.00
6. Postage ²	2.90
 TOTAL COSTS OF FORMS AND SUPPLIES	 6.17

¹Two-part NCR paper, 13/family/year.

²Twenty-six regular mailings to families (bi-weekly checks); eight miscellaneous mailings (calendars, letters, etc.); 13 return mailings from families.