NBSIR 73-120

165

OEC-0-71-2859

THE PROCESS OF FUNDS ALLOCATION UNDER TITLE I OF THE ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965

Sung Kim
Elsie Clark
John Donaldson
Joseph Jordan
Margery King
Eugene McDowell

Technical Analysis Division
National Bureau of Standards
Washington, D.C. 20234

March 1973

Second Interim Report

Prepared for
U.S. Office of Education
Washington, D.C. 20202

TABLE OF CONTENTS

LIST OF TABLES

LIST OF TABLES (Cont'd.)

LIST OF FIGURES

Chapter 1

OVERVIEW

1.1 Introduction

This chapter is intended as a self-contained report indicating the background of this study, describing the nature of the Title I provisions regarding the distribution of funds, and summarizing the highlights of Chapters 2 and 3 concerning distributional issues and alternative possibilities. This study is derived from the Congressional mandate for a study of the various provisions involved with the Title I grant determination and distribution process. The description of Title I provisions emphasizes the process relating to the allocation of funds for local educational agencies (LEAs). The maximum LEA grant is described as the product of the number of eligible children and the amount of the basic grant per child; the allocation actually received by the LEA, however, results from the application of a procedure that reduces the amount of all entitlements to a sum that can be covered by the appropriation. The practical problems of identifying and counting the eligible children for annual grant determination are defined. These include attempting to maintain an accurate, comprehensive, and up-to-date data base. In addition, some of the issues associated with the selection of an appropriate grant per child are mentioned. These include whether the basic grants should reflect regional

differences in the cost of education and/or whether they should be adjusted for areas with special needs, e.g., high concentrations of eligible children.

Consideration of alternative possibilities suggests that the present enumeration of eligibles can be improved by using the so-called Orshansky poverty data from the 1970 census and by using AFDC* data as a multiplicative ratio to update the count of children annually. Inclusion of a term in the basic grant per child to effect a concentration of funds according to the concentration of eligibles is shown to result in a distribution of funds at the county level that is interpreted as more closely complying with the intent of Title I than does the present distribution. Finally, preferential funding practices employed while reducing entitlements are questioned as being without adequate justification,while unconstrained proportional reduction of the entitlements is presented as permitting a seemingly better realization of the distributional intent perceived for Title I.

The summarization contained in this chapter excludes much of the detail and almost all of the technical basis for the statements made concerning the analyses. If the reader desires a more thorough, technical understanding, he is encouraged to read the entire report.

---

* Aid to Families with Dependent Children.

1.2 Background

Title I of the Elementary and Secondary Education Act of 1965 (ESEA) was enacted in recognition of poverty as a national problem requiring extensive action coordinated at the Federal level. One among several national antipoverty programs, Title I is intended to break the self-perpetuating cycle of poverty and ignorance by providing supplementary educational opportunities to so-called "educationally deprived" children — preschool, elementary school and secondary school children whose general and economic backgrounds put them at a disadvantage, with respect to learning, as compared to the majority of other children.

The declaration of National policy in Title I (Sec. 101) identifies two underlying motivations, the special needs of the children and the fiscal burdens of the educational agencies serving these children. The proposed remedial approach is to provide Federal financial assistance to the local agencies, not for general educational needs but for supplemental programs designed to meet the specialized requirements of educationally deprived children:

> Sec. 101. In recognition of the special educational needs of children of low-income families and the impact that concentrations of low-income families have on the ability of local educational agencies to support adequate educational programs, the Congress hereby declares it to be the policy of the United States to provide financial assistance (as set forth in the following parts of this title) to local educational agencies serving areas with concentrations of children from low-income families to expand and improve their educational programs by various means

(including preschool programs) which contribute particularly to meeting the special educational needs of educationally deprived children.

Beyond the statement of National policy, the legislative intent is evidenced in the principles embodied in the law and in the legislative history. For maximum impact, the Title I program is aimed at educationally disadvantaged children in poverty. Many studies* have shown a strong relationship between educational attainment and family personal income. It is thought possible therefore to approach the problem of selection of eligible children from the point of view of either educational attainment or level of income. However, the absence of accepted Nationally uniform measures of educational achievement** limits the program to the selection of eligible children based on economic measures available on a National scale. The provisions of Title I therefore provide for using economic measures as the basis for determining the grants to be made to educational agencies on behalf of the eligible children.

---

* See, for example, Coleman's Equality of Educational Opportunity (1966) or its later extension by Mosteller and Moynihan, On Equality of Educational Opportunity (1972).

** This measurement deficiency as it relates to the development of Title I is discussed in House Report 89-1814, Part 2; August 22, 1966, pp. 28-33. The status of an evolving effort to remedy the situation, the National Assessment of Educational Progress, is reported in the February 1972 issue of Compact (Vol. 6, No. 1), a publication of the Education Commission of the States. It is noteworthy that the assessment has as one of its goals "to make available the first comprehensive data on the educational attainments of young Americans."

The present study examines the provisions that determine the size and distribution of these grants. Public Law 91-230 in Section 102 calls for "a study of the allocation of sums appropriated for the purposes of Title I. . . and of the effectiveness of the various provisions of such title in making funds available to State and local educational agencies . . . ."

The required study, as it has been pursued, has had three facets. First, it has been concerned with the identification, description, and evaluation of the allocation mechanisms and procedures used for the distribution of Title I monies from the National level to the local level. Second, it has sought to address and review the implementation of the law and its administration as it relates to distributional matters. Third, the study has considered alternatives to existing processes and procedures that might improve existing approaches and resolve present problems. The first two facets of the study were completed previously and have already been reported.* The last facet has been the main focus of the analysis effort during the past year and is the subject of this interim report.

* "The Process of Funds Allocation Under Title I of the Elementary and Secondary Education Act of 1965," An Interim Report submitted to the U. S. Office of Education by the Technical Analysis Division in March 1972.

Further analysis of alternatives is still in progress and is expected to be completed with the issuance of a final comprehensive report in June 1973. This interim report, presenting tentative findings from the analysis of alternative procedures, has been prepared to provide information which might be of value to Congressional committee discussions of Title I now in progress. The findings presented here have been limited to those associated with the use of different provisions for determining grants and with the use of different data from the 1970 census.

To this end, this chapter of the report presents a brief review of the relevant provisions of Title I, and a discussion of the issues and problems concerned with the distribution of Title I funds. This discussion identifies open questions and indicates the results of analysis where these are suggestive of possible answers or resolutions to the issues raised. The last portion of this chapter introduces and explores alternative legislative provisions for the determination and distribution of Title I grants. Subsequent chapters of the report deal more thoroughly with these subjects. Chapter 2 discusses the present grant determination process in detail and includes in-depth consideration of problems associated with it. Chapter 3 presents alternatives to various aspects of the present process and examines in detail consequences of their introduction in terms of the distributional effects created.

1.2.1 Description of Grant Determination Provisions. Title I contains three parts relating to authorizations for grants: Part A, the Basic Grant; Part B, the Special Incentive Grant; and Part C, the Special Grant for Urban and Rural Schools with Highest Concentrations of Children from Low-Income Families. Using the grant formulas, the U. S. Office of Education (USOE) computes the allotted amount of Title I funds for each state and for each county or county equivalent political subdivision.* The distribution of funds to school districts within each state is then computed by the state educational agency (SEA), using the most appropriate data and methods in the particular state. A fourth part (Part D) defines administrative procedures including the reduction procedure in case of underfunding. It also provides for reimbursement of the states for their administrative expenses.

1.2.2 The Basic Grant Formula. The formula specified in the legislation for Part A is simple in concept. Each state may receive (for its local educational agencies and for its state-operated institutions) a maximum grant equal to the number of

---

* Continual change in the make-up and number of the Nation's school districts has made annually determining grants to the local level a practical impossibility for the USOE. For example, while in the fall of 1967 there were 22,010 school districts, by the fall of 1970 there were 17,995 districts — 4,015 had "disappeared" in only three years. Thus, although the law stipulates school districts as the basis for grant determination, neither the USOE nor the analysis of this report considers a National distribution below the county level.

eligible children multiplied by a cost factor per child:

Maximum grant = (No. of eligible children) X (cost factor per child)

The formula includes two groups of eligible children: one group administered by the local educational agencies (LEAs), and the other served by various state-operated institutions.

The first group, administered by the local agencies, includes children 5 to 17 years old in families having total annual income less than a specified low-income factor, those in families receiving annual AFDC payments of more than the low-income factor, those living in local institutions for neglected or delinquent children, and those who are being supported in foster homes on public funds.

The second group covered by the grant formula for Part A is composed of the children served by state-operated institutions and programs. These include neglected and delinquent, handicapped, and migratory children. The formula for this group is the same as for the first group. A discussion of state programs will be a part of the final report and is not covered in this report.

The low-income factor refers to a threshold level defining poverty in terms of annual family income. The legislation sets it at $2,000 for FY66 and FY67; $3,000 for FY68 through FY72; and $4,000 for FY73. The low-income factor is subject to modification, however, depending on the amount of the appropriation, and, in fact, has remained at $2,000 since FY66.

The cost factor is made up of two parts: (1) the average per pupil expenditure (APPE) and (2) the Federal percentage. The first is defined as the annual aggregate expenditures of all the LEAs in the particular state plus any direct current expenditures by the state for operation of such agencies, divided by the average number of children in daily attendance. This computation is done for each state and also for the United States as a whole. To compute the maximum grant for a particular state, the average per pupil expenditure for that state or for the United States, whichever is greater, is used.

The Federal percentage is the figure representing a portion of the APPE deemed large enough to provide for a sufficient remedial effect on an eligible child to carry out the intent of the Act. This percentage, established by the legislation at 50 percent, has never been changed.

Approximately 85 to 90% of Title I appropriations, or in the last few fiscal years, about $1.35 billion, is allocated to LEAs under Part A. As such this is the core of the Title I program and is also the focus for this report. The tabulation and computation for determining the maximum entitlement for this group is illustrated as follows:

> Using FY73 data for the state of Delaware, the enumeration of the eligible children in each category for each of Delaware's three counties is shown in the following table.

Children in / County	Low Income Families	AFDC Families	N & D*	Foster Homes	Total
Kent	1159	689	0	224	2072
New Castle	4204	4161	76	618	9059
Sussex	2059	861	0	157	3077
Total	7422	5711	76	999	14208

* Institutions for the neglected and delinquent

The appropriate cost factor is selected: 50% of the state APPE is $498 and 50% of the National average is $429; therefore, the state APPE value is used. The maximum grant to which the LEAs in Delaware are entitled is $7,075,584 which is obtained by multiplying the total number of eligibles, 14,208, by the cost factor $498.

Part B of Title I provides for a special incentive grant under which a state may qualify for additional funding if the "state effort index" exceeds the "national effort index." The state effort index is defined as the ratio of the total expenditure of all non-Federal funds in the state for public elementary and secondary education to the total personal income in the state. The National effort index is the ratio of total non-Federal expenditures in all states to the total personal income in all states. The effort indexes are expressed as percentages.

The formula for Part B specifies that the maximum entitlement for a state shall be $1 per eligible child for each 0.01 percent by which the state effort index exceeds the National effort index. As an example, if a state had an effort index of 6.50% and the National effort index were 4.50% that state would be entitled to a maximum grant

under Part B of $200 for each of the children counted as eligible under Part A. There is a limitation that no single state may receive more than 15 percent of the funds available for the Part B grants.

Part C is a special grant for urban and rural school districts serving areas with the highest concentrations of children from low-income families. This part incorporates two features. The first feature primarily benefits the rural schools by qualifying an LEA if it has eligible children, as counted in Part A, amounting to at least 20 percent of the total of children of school age. The second feature primarily benefits the urban schools by qualifying an LEA if it has at least 5,000 eligibles who constitute at least 5 percent of the total of children of school age. An LEA qualifying under either feature may receive a maximum special grant under this part equal to 40 percent of what it received under Part A.

The states are to be reimbursed for administrative expenditures involved in the proper and efficient performance of their duties under Title I. Each state is to receive 1 percent of the amounts received under Parts A and C, or $150,000, whichever is greater. The funds required for these administrative grants are deducted from the LEA grants.

1.2.3 Reduction Procedure. The allocation rules provide for the maximum grants or entitlements which any SEA or LEA may receive if the program is fully funded. Only in the first year of the program, FY66, were the funds sufficient to meet all entitlements. Every year since then the funding has been less than the entitlements, and the disparity has been increasing. The Act includes a section in Part D covering the procedures by which the grants are to be reduced when the appropriation is less than total entitlements.

The grants for the SEAs are to be paid fully. The grants for the LEAs are to be recomputed with the low-income factor reverting to $2,000. The sum for the LEAs is then ratably reduced taking into account certain complexities involved with ratable reductions for Parts B and C. With the present level of appropriations, this provision restricts Parts B and C to an extremely small share of Title I funds. In view of their minor role, these parts are not considered further in the discussion that follows.* Thus, after the SEAs have been fully funded, the remaining appropriations are distributed among the entitlements of the LEA grants of Part A, the state grants of Part B, and the LEA grants of Part C.

---

* Part B of Title I is discussed in detail in Appendix B of the previously referenced report of March 1972. Part C is reviewed in Appendix A of the present report. The extent of the limitations identified in both appendices suggests that these parts of Title I would be less than satisfactory even if they were to receive more funds.

Although the Part A LEA grants are reduced below their entitlement, each state must receive at least some specified minimum (its floor value) for its aggregate Part LEA allotment. If any state's grant is below the floor, its allotment must be brought up to the floor value by proportionately reducing the allotments to all the other states to make up the difference. The Act, as it now stands, contains a floor provision guaranteeing that each state shall receive Part A LEA grants totaling at least what it received in FY67. The annual appropriation legislation usually contains an overriding provision of a different floor year to be used. For example, for FY71 the floor year specified was FY68

1.3 Distributional Issues and Alternative Possibilities

1.3.1 Time for Change. The enumeration of eligible children depends upon the decennial census. It is time to replace the 1960 census base with the 1970 census which became available in December, 1972. The total number of eligible children as determined from the 1960 census was 4,947,525. This was the number in families with incomes under $2,000. The comparable figure from the 1970 census is 2,645,838 children (in families with incomes below $2,000). When a $3,000 income level is used, the number of children increases to 4,211,888. The comparable totals when the appropriate AFDC data from 1972 are added are:

(1) 8,216,712, from 4,947,525 children in families with incomes below $2,000 (from 1960 census) plus 3,269,187 children in AFDC families above $2,000;

(2) 5,915,025, from 2,645,838 children in families with incomes below $2,000 (from 1970 census) plus 3,269,187 children in AFDC families above $2,000;

(3) 6,268,776, from 4,211,888 children in families with incomes below $3,000 (from 1970 census) plus 2,056,888 children in AFDC families above $3,000.

These values highlight the obsolete quality of the 1960 data, which suggests that some abrupt changes are likely when the new data are substituted for the old in the allocation process.

This impression is reinforced by reference to Table 1.3.1 which lists the Part A LEA allocations by state using the data associated with enumeration possibilities (1), (2), and (3). The allocations are those that result from a total appropriation of $1.5 billion for SEAs and LEAs under Part A when there are <u>no</u> protective floors. These conditions result in allocations directly reflective of the changes in the National distribution of the eligible children which may be expected regardless of the income level used to determine eligibility. This state of affairs, in which many changes are likely to occur, suggests that this may be an opportune situation in which to give consideration to making a variety of adjustments in recognition of problems previously experienced. Much of what follows is offered accordingly.

There has been discussion and public controversy over the identification of the target population for Title I. Issues

Table 1.3.1

State Allocations Resulting from Three Different Enumerations of Eligible Children*

	1960 Census $2000 Income	1970 Census $2000 Income	1970 Census $3000 Income
ALABAMA	34354954.	18537904.	27367928.
ALASKA	2287772.	2926374.	3131438.
ARIZONA	8046941.	8974479.	8994729.
ARKANSAS	20846714.	9923636.	15490508.
CALIFORNIA	110996030.	149220310.	131704954.
COLORADO	10160379.	12032533.	10937980.
CONNECTICUT	11671670.	15880128.	15378965.
DELAWARE	2194075.	2568469.	2213113.
FLORIDA	23971193.	24182928.	29724827.
GEORGIA	40347150.	26492014.	28211465.
HAWAII	3584785.	4479608.	4250135.
IDAHO	2591830.	2597769.	2904475.
ILLINOIS	69165777.	82704724.	74868901.
INDIANA	18665992.	18443175.	15579387.
IOWA	14520039.	10083145.	10074593.
KANSAS	9056003.	8704400.	8473924.
KENTUCKY	32033704.	19481941.	22884767.
LOUISIANA	31148162.	25415706.	32454406.
MAINE	5514818.	5827924.	4261695.
MARYLAND	19271648.	23404745.	20401038.
MASSACHUSETTS	24754480.	31918571.	29163906.
MICHIGAN	51477460.	59942421.	57033750.
MINNESOTA	20780146.	17808715.	18654571.
MISSISSIPPI	35722797.	18563441.	27271824.
MISSOURI	23236699.	18688391.	18844516.
MONTANA	2740174.	2597769.	2939702.
NEBRASKA	7078047.	5987127.	5899065.
NEVADA	781453.	1224366.	1243311.
NEW HAMPSHIRE	1870468.	2280345.	2329511.
NEW JERSEY	43985807.	58044770.	53981521.
NEW MEXICO	7289644.	7949926.	7907543.
NEW YORK	195738781.	258788811.	242533449.
NORTH CAROLINA	51265747.	26705023.	30815763.
NORTH DAKOTA	3979344.	2510745.	2914742.
OHIO	41929700.	47072143.	39865561.
OKLAHOMA	16555483.	13232747.	13959070.
OREGON	8340360.	10242755.	10257969.
PENNSYLVANIA	64630801.	71641130.	67211494.
RHODE ISLAND	4751072.	5696769.	5188782.
SOUTH CAROLINA	29684409.	14503042.	20014540.
SOUTH DAKOTA	5349027.	3457305.	4108925.
TENNESSEE	31098761.	15749158.	24121015.
TEXAS	67297870.	51493943.	58987041.
UTAH	3769378.	4687333.	4695750.
VERMONT	1960534.	1968803.	1980750.
VIRGINIA	31340812.	23153171.	25590339.
WASHINGTON	13370182.	17160022.	15888441.
WEST VIRGINIA	17223015.	9722506.	11149635.
WISCONSIN	17242624.	18062838.	18682474.
WYOMING	1030114.	1022052.	991584.
DIST. OF COLUMBIA	10004088.	12932790.	13178450.

*Assuming appropriation of $1.5 billion for SEAs and LEAs under Part A and the absence of protective floors.

of principle as to "who are the poor" and the like are mentioned but are set aside in favor of more pragmatic questions. These are the empirical problems that result from the requirement that the enumeration be done on an annual basis; that it be extensive, covering the entire nation; and that it be intensive, being as detailed as possible. This can be translated into a set of characteristics that might be used to evaluate the suitability of various methods of enumeration. Desirable attributes are: National uniformity, regional parity, completeness, reliability, and currency (up-to-dateness). National uniformity means that data are available and applicable throughout the Nation; regional parity means that data are adjusted for regional differences in cost; and completeness means that data contain all relevant information in the detail desired and are without gaps. In the material that follows these characteristics are taken into account as different possibilities are considered for the data requirements of the grant determination mechanism, hereafter referred to as the "formula."

1.3.2 <u>Enumerating the Eligible Children</u>. The law in its statement of intent cites children in low-income families as the target population. The present formula calls for the use of census data to identify the number of children in families whose income is below a fixed amount. Based on the census, these data are reasonably uniform, complete, and reliable,

but they become increasingly obsolescent (they are already three or four years old when first put to use). The obsolescence stems from geographic mobility, shifts of the target population due to differences in birth rates, and economic changes. Moreover, these data do not reflect interregional differences in the cost of living. Additionally, these data do not reflect differences in family circumstances, e.g., family size, as these might have a bearing on poverty level.

The present formula relies on AFDC data as the basis for maintaining currency. Up-to-dateness is the major advantage of these data, which otherwise are deficient with regard to the other attributes desired of the formula data. The AFDC data for use by Title I are recorded for a single month every year for programs that vary from state to state. In addition, the data are subject to annual perturbations within states, and their statistical reliability is unverifiable.

The combination in the formula of both the census-determined low-income family count and AFDC count, i.e., adding them together, is a potential source of problems. First, it permits the possibility of double-counting; that is, children counted during the census year as being in families with incomes below the specified amount might in subsequent years also be counted within the AFDC tally, as their family status changes. Second, there are possible errors of omission.

For example, it is possible that a family whose income is above the low-income level during the census year suffers income reductions in subsequent years but fails to receive AFDC payments above the low-income level, and thus children in such families fail to be included in either data count. It is not possible to estimate to what extent the errors of commission (over-counting) balance the errors of omission (under-counting).

There are some alternatives that might tend to ameliorate some of these problematic conditions. First, instead of adding the count of children in AFDC families, the updating or annual adjustment effect can also be achieved by using a multiplying factor which is a ratio of the current year AFDC data for the state divided by the census year AFDC data for the same state. This would avoid some of the difficulties derived from the additive method of combination and also tend to suppress the influence of interstate programmatic differences. Another possibility would be to control the entire updated total by limiting the national total to the values estimated annually by the Census Bureau for the national level of poverty in the United States.

The use of an AFDC ratio adjustment for the enumeration data might be thought to accentuate the annual perturbations evidenced by the AFDC data as they are currently collected for

Title I.* To overcome this difficulty, instead of relying on the data collected for a single month, the data available monthly at the state level could be averaged over a sufficiently large number of months, e.g., 24, to reduce the likelihood of experiencing sizable fluctuations in AFDC counts resulting from seasonal variations or year-to-year program changes.

A more fundamental change is the possible replacement of the present basis for enumerating the children in poverty with the count of children based on the use of the so-called Orshansky index. This index is recognized as the official Federal poverty measure and has the advantage that it defines poverty according to family circumstances, e.g., the number of children in the family, and family subsistance needs.

---

* Reference to the AFDC data of three representative states, for several years in succession, reinforces the notion of year-to-year variation. Idaho typifies states with relatively modest percentage change over the years FY66 to FY72; New Jersey, moderate change; and West Virginia, extreme change. The year-to-year fluctuations for each of these cases is evident.

Title I	Fiscal Year						
AFDC	1966	1967	1968	1969	1970	1971	1972
Idaho	2403	2372	1609	4165	3197	2815	5587
New Jersey	25496	42106	31283	64696	85992	129407	165912
West Va.	82	0	2	12203	10353	15661	14684

Introduction of these various changes has interesting distributional consequences. Table 1.3.2 presents the resulting allocations by state. The underlying conditions as to the amount of the appropriation and the absence of protective floors are the same as those underlying Table 1.3.1. The first column is the same in both tables — for comparison purposes -- showing the allocation using the present method of enumeration. The second and third columns of Table 1.3.2, however, both reflect the use of the AFDC ratio adjustment (instead of the present additive adjustment) and the use of the National totals as control totals. Column two differs from three in that it is based on 1970 census $3,000 low-income data, while column three is derived from 1970 census Orshansky-based data which total to 8,383,602 for FY73 after adjustment. These two methods, although different in principle, result in enumerations whose state-by-state distributions are remarkably similar for FY73. This is readily seen by comparing the last two columns of Table 1.3.3 which lists percentages by state of the eligible children for each of the five methods of enumeration. The Orshansky-based enumeration appears to be advantageous in terms of the desirability criteria mentioned earlier and is used in the remainder of the analyses presented.

1.3.3 <u>Grant Per Child and Concern for Concentration</u>. The

Table 1.3.2

FY73 State Allocations Resulting from Modified Methods of Enumeration*

	1960 Census $2000 Income plus AFDC	1970 Census $3000 Income Adjusted by AFDC Ratio	1970 Census Orshansky Adjusted by AFDC Ratio
ALABAMA	34354954.	37094231.	37921954.
ALASKA	2287272.	3074444.	3138389.
ARIZONA	8046941.	12258123.	12342919.
ARKANSAS	20846214.	24975986.	25096187.
CALIFORNIA	110996030.	94461235.	91995333.
COLORADO	10160379.	11560700.	11403927.
CONNECTICUT	11671670.	10891949.	9714312.
DELAWARE	2194075.	3947065.	3116599.
FLORIDA	23971193.	46059017.	46985911.
GEORGIA	40347150.	45954836.	48118895.
HAWAII	3584785.	3245656.	3326256.
IDAHO	2591830.	3158381.	3400707.
ILLINOIS	69165777.	59094197.	59789922.
INDIANA	18665992.	26025131.	26208727.
IOWA	14520039.	9850622.	10166728.
KANSAS	9056003.	9505008.	9662773.
KENTUCKY	32033204.	27277209.	26108745.
LOUISIANA	31148162.	42511997.	40901040.
MAINE	5514818.	5523719.	6462894.
MARYLAND	19271648.	22291422.	20975022.
MASSACHUSETTS	24754480.	18390756.	18196346.
MICHIGAN	51477460.	48863484.	46536324.
MINNESOTA	20780146.	17607983.	18205506.
MISSISSIPPI	35722797.	37981373.	36403895.
MISSOURI	23236699.	27311082.	27329073.
MONTANA	2740174.	3980095.	3919011.
NEBRASKA	7078047.	6730790.	6692057.
NEVADA	781453.	1736292.	1544199.
NEW HAMPSHIRE	1870468.	2898036.	2905719.
NEW JERSEY	43985907.	35070506.	34261870.
NEW MEXICO	7289644.	9975826.	10157906.
NEW YORK	195738781.	139579371.	131748009.
NORTH CAROLINA	51265747.	43485001.	45914161.
NORTH DAKOTA	3979344.	3251186.	3713596.
OHIO	41929700.	47839807.	43879488.
OKLAHOMA	16555483.	16156370.	16273225.
OREGON	8340360.	10078054.	9263674.
PENNSYLVANIA	64630901.	51511454.	52560130.
RHODE ISLAND	4751072.	3911954.	3713002.
SOUTH CAROLINA	29684409.	35171131.	36561897.
SOUTH DAKOTA	5349027.	4787110.	4761929.
TENNESSEE	31098761.	36490050.	37331275.
TEXAS	67297870.	109578705.	122125299.
UTAH	3769378.	4124761.	4173203.
VERMONT	1960534.	1666159.	1910599.
VIRGINIA	31340812.	35422909.	37196919.
WASHINGTON	13370182.	13269053.	12423343.
WEST VIRGINIA	17223015.	13361981.	12992844.
WISCONSIN	17242624.	18674357.	18366573.
WYOMING	1030114.	1406967.	1394549.
DIST. OF COLUMBIA	10004088.	9211949.	9377815.

* Assuming appropriation of $1.5 billion for SEAs and LEAs under Part A without the protective floor provision.

Table 1.3.3

State Shares of Poverty Children in FY73

Under Five Alternative Estimations

	K_1	K_2	K_3	K_4	K_5
Alabama	2.96%	1.64%	2.42%	3.18%	3.11%
Alaska	.12	.15	.16	.15	.16
Arizona	.69	.79	.79	1.04	1.03
Arkansas	1.80	.88	1.37	2.15	2.12
California	9.34	13.11	11.41	7.62	7.47
Colorado	.86	1.06	.95	.96	.94
Connecticut	.83	1.17	1.12	.73	.66
Delaware	.16	.19	.16	.21	.22
Florida	2.05	2.13	2.61	3.93	3.94
Georgia	3.48	2.35	2.48	3.93	4.04
Hawaii	.28	.36	.34	.24	.25
Idaho	.23	.24	.26	.27	.29
Illinois	5.08	6.33	5.64	4.21	4.26
Indiana	1.55	1.57	1.30	2.13	2.15
Iowa	1.23	.87	.86	.80	.83
Kansas	.77	.76	.74	.75	.80
Kentucky	2.75	1.71	2.00	2.30	2.17
Louisiana	2.68	2.26	2.87	3.64	3.43
Maine	.46	.50	.36	.44	.53
Maryland	1.38	1.73	1.48	1.53	1.46
Massachusetts	2.02	2.71	2.45	1.43	1.43
Michigan	3.88	4.70	4.42	3.57	3.40
Minnesota	1.49	1.30	1.36	1.21	1.26
Mississippi	3.10	1.67	2.44	3.29	3.08
Missouri	1.98	1.63	1.63	2.29	2.27
Montana	.24	.23	.26	.34	.33
Nebraska	.61	.54	.52	.57	.56
Nevada	.07	.11	.11	.14	.13
New Hampshire	.15	.19	.19	.23	.24
New Jersey	2.81	3.87	3.55	2.14	2.11
New Mexico	.63	.71	.70	.85	.85
New York	9.32	12.86	11.91	6.04	5.92
North Carolina	4.41	2.34	2.69	3.68	3.76
North Dakota	.35	.22	.26	.27	.32
Ohio	3.52	4.09	3.41	3.92	3.59
Oklahoma	1.40	1.14	1.2	1.33	1.34
Oregon	.61	.78	.77	.71	.66
Pennsylvania	5.14	5.90	5.47	3.90	4.03
Rhode Island	.37	.46	.41	.29	.28
South Carolina	2.57	1.29	1.78	3.04	3.08
South Dakota	.45	.29	.35	.38	.39
Tennessee	2.68	1.38	2.13	3.12	3.13
Texas	5.81	4.60	5.23	9.46	10.31
Utah	.33	.42	.42	.34	.35
Vermont	.17	.17	.17	.12	.16
Virginia	2.65	1.99	2.20	2.95	3.08
Washington	1.05	1.41	1.29	.99	.95
West Virginia	1.47	.85	.97	1.11	1.07
Wisconsin	1.28	1.37	1.42	1.33	1.33
Wyoming	.09	.09	.09	.12	.12
Dist. of Columbia	.66	.89	.90	.60	.60
	100.00%	100.00%	100.00%	100.00%	100.00%

scope of Title I program coverage is intended to be broad. The programs sponsored by Title I funds are to provide for the special educational needs of children living in poverty. The programs are to supplement, not supplant, the regular educational program. As such, the programs in some areas provide for basic material needs of these children including clothing, dental care, and the like. More often, however, the funds are used to provide remedial programs in reading and mathematics. Nevertheless, the children's needs vary, and appropriate programmatic responses are diversified. This tends to complicate the already complex matter of ascertaining that adequate financial resources are being stipulated in the amount specified for the basic grant per child. Questions of program effectiveness remain a matter of considerable discussion. Satisfaction of the need to establish appropriate cost estimates must await their answer.

Additional problems complicate the cost issue. It is desired to represent geographic differences in the cost of education. These differences are evidently reflected both in interstate and intrastate differences. Other difficulties are introduced when it is suggested that cost differences reflect not just differences in the cost of providing education for a child, but that the differences in cost reflect differences in quality as well. Finally, related to this quality aspect of cost differences is the notion

that differences in cost are likely to result from local fiscal capability. If reflecting cost differences reflects relative differences in the ability of local areas to pay for education, then for Title I to reflect differences in the cost of (compensatory) education would be to work in opposition to the intent of Title I.

The basic issue concerning the concentration of funds, i.e., increasing the basic grant per child in selected areas, is whether areas of greater need have a requirement for a greater share of funds than would otherwise result from a pro rata share based on the relative numbers of eligible children. A corollary issue is whether the degree of an area's need is more clearly evidenced by its level of poverty in terms of per capita income or in terms of the concentration level of poor among the total resident population.

Unfortunately, generally accepted empirical evidence which may be brought to bear in resolving these issues is scanty. The legislation, as stated in Section 101, suggests that such emphasis be given to areas serving high concentrations of disadvantaged children. The present implementation of this intent at the National level has been largely restricted to Part C, a relatively minor part of Title I. In Part C, areas with special needs are defined as those with either a sizable number of eligible children or a significant fraction of their total school age population consisting of eligible children.

Before the amount per child can be adjusted for reasons of concentration, it would be useful to have established an appropriate grant per child based on relevant cost considerations. The breadth of program coverage, however, makes the establishment of such a value difficult, especially in view of the fact that, for some, any amount of funds is viewed as being useful. It suffices to state, nevertheless, that a critical amount has not been demonstrated such that above this value the chances for effective programs are considerably enhanced, and below, considerably reduced. It is noted that $300 has gained some acceptance for this purpose, but there appears to be little empirical justification for selecting this amount.

The importance of empirical information can be somewhat overemphasized, and the matter can quickly become one of principle. With appropriations of about $1.5 billion and a count of eligible children of about 8.4 million, the use of cost factors above $165 per child results in LEA grant entitlements which cannot be fully funded, and reduction of the maximum grant amounts must occur. The issue then becomes whether to divide the limited funds equally among all areas or to discriminate among them according to some notion of differences in costs or perhaps in needs.

Although equal distribution of the funds appropriated for Title I can be achieved by specification of any basic

grant amount per child above $165, applied uniformly throughout the United States, the sum of $300 is used for illustrative purposes because of its somewhat general acceptance as a "reasonable" amount. The actual value chosen is significant only because disadvantaged children administered to by SEAs are currently allotted their maximum grant; it is the LEA children in Part A that are ratably reduced. The effect of this provision is to decrease slightly the amount allotted for each disadvantaged LEA child from $165 to $159. (Note that if protective floors from past distributions are imposed, there is no way to achieve an equal distribution on a per-child basis.)

The other extreme in distributional principles, based on cost discrimination, can be effected by using 50 percent of the state APPE, for each state, if it is assumed that it represents state-by-state differences. The extent of these differences is seen in Table 1.3.4 which presents state APPEs. Although it does reflect interstate differences, it is not clear what differences are being represented. Because of this difficulty, the present formula incorporates a compromise, motivated by the recognition that low APPE does not mean lower cost to provide the same quality of education or more efficient use of resources, but probably signifies less ability to pay for general education; the compromise is to substitute 50 percent of the National APPE when that is

Table 1.3.4

Average Per Pupil Expenditure for
Elementary and Secondary Schools by State

	1970-71 School Year (Apply to FY73 Title I Allocations)
Alabama	$ 529.38
Alaska	1452.28
Arizona	745.96
Arkansas	518.64
California	855.44
Colorado	812.60
Connecticut	1009.48
Delaware	996.42
Florida	781.36
Georgia	644.72
Hawaii	983.74
Idaho	610.16
Illinois	992.62
Indiana	783.42
Iowa	864.84
Kansas	787.22
Kentucky	571.88
Louisiana	716.30
Maine	709.60
Maryland	985.52
Massachusetts	894.22
Michigan	972.08
Minnesota	1005.92
Mississippi	469.60
Missouri	722.12
Montana	801.60
Nebraska	807.28
Nevada	788.18
New Hampshire	770.92
New Jersey	1135.26
New Mexico	689.08
New York	1487.34
North Carolina	611.72
North Dakota	685.34
Ohio	762.84
Oklahoma	623.72
Oregon	957.12
Pennsylvania	909.56
Rhode Island	951.86
South Carolina	571.12
South Dakota	719.04
Tennessee	552.80
Texas	667.80
Utah	664.[illegible]8
Vermont	797.14
Virginia	738.56
Washington	893.96
West Virginia	644.10
Wisconsin	950.56
Wyoming	882.00
Dist. of Columbia	1116.94
National Average	859.88

greater than 50 percent of the state value. This is a compromise in the sense that it is, in principle, between the distributional principles of equal shares, i.e., constant cost, and fully discriminating shares, i.e., variable state APPEs.

The effect of these changes can be best observed when the allocations per disadvantaged child are averaged for the poorest and least poor counties in the United States. When all the counties in the U. S. are divided into five groups containing a like number of counties, based on per capita income, the poorest group averages an allocation of $125 per child when 50 percent of the state APPE is used, $153 per child when the present (state or National) cost choice is used and $165 per child when the same ($300) value is used for all states. On the other hand, the (20 percent) group of counties experiencing the highest per capita income levels receives on the average $192, $175, and $165 per child respectively.* Thus, there is a significant difference in distributional outcomes experienced at the county level according to the choice made for a representative grant amount per child.

---

* These data result from analyses in which SEAs receive a reduced share, and protective floors are not imposed on the aggregate of LEA grants.

Concentration of funds is simply a discriminatory allocation of funds seeking to increase the amounts made available per child based on considerations of need. That this is necessary or desired is a matter for judgment. It is the intent of the discussion that follows to indicate what distributional results might be achieved if it were judged to be desirable to intensify the concentration of funds made available at the county level for Title I purposes beyond what is presently being accomplished by Part C. For the purposes of this discussion the same fraction or percentage definition as used to measure concentration in Part C is used here: the number of eligible children divided by the total number of school age children in the area. The basic grant per child is assumed as $300.

Some results of the analyses seeking to concentrate funds in counties of greatest concentrations of eligible children are shown in Table 1.3.5. The 3,113 counties of the U. S. are divided into five groups according to per capita income. In the lowest income group are counties with concentrations of eligible children of up to 76 percent, while for the highest income group of counties the concentrations of eligibles are generally below 10 percent. The National average is 14.8 percent. The results are in sharp contrast with those resulting from direct variations in the cost factor described above. It would seem that if the

intent of the law with respect to the special needs of areas serving high concentrations of eligible children is to be reflected in the distributional outcomes achieved, then the desirability of introducing into the formula a means for accomplishing this type of funds concentration is worthy of consideration.

Table 1.3.5

Comparison of Allotment Per Pupil: Alternative Concentration Effects with $300 Per Pupil Cost

County Groupings Based on Per Capita Income	Intensity of Desired Concentration Effect*			
	None	Low	Moderate	High
Lowest Income Group	$165	$235	$271	$303
Second Group	165	187	201	212
Third Group	165	165	167	168
Fourth Group	165	159	158	156
Highest Income Group	165	142	133	123

1.3.4 Constraints Imposed by Appropriation Levels. The total of the maximum grants determined by the formula has always exceeded the amount appropriated except for the first year. The condition of underfunding raises the question as to whether there are those who should receive preferential

* The intensity of funds concentration — low, moderate, and high effect — can be quantitatively illustrated. For a county with 15 percent concentration of eligibles, about the National average, the low intensity effect corresponds to a 37.5 percent increase in the basic amount authorized per child; for the medium effect, the increase is 75 percent; and for the high effect, it is 150 percent.

treatment and be reduced less than others. At present two such forms of special treatment are given. First, the grants on behalf of the eligible children administered to by SEAs are fully funded. Second, the previously discussed protective floors are imposed on allocations made to states on behalf of their LEAs. Possible motivations behind these special considerations are that SEA children have unique needs, and that floors are needed to assure continuity of benefits to prior participants and to avoid wide shifts in distributions from year to year.

The effect of fully funding SEA grants is significant in terms of the difference in the grant per child realized by SEAs as opposed to LEAs. In FY71 the difference was $368 per child in SEAs versus $175 per child in LEAs; the difference increased in FY72 as an average of $413 was made available per SEA child and $168 per LEA child. The difference is sizable, and its magnitude appears to be without empirical justification. Moreover, in some cases it is not clear that any difference is justifiable. In particular, this is true of one group of eligible children, those in institutions for the neglected and delinquent, which are found under the jurisdiction of the SEA in some instances and under the purview of the LEA in others. In fact, for FY73 more than half (53 percent) of the 129,929 of these children are in institutions administered

by LEAs. It would seem that if these children had special needs justifying full funding at the state level, the same would apply to those in LEAs; alternatively, the grants in both instances could be ratably reduced. Children in other groups administered to by SEAs remain special cases, each to be decided on its own merits.

It is generally recognized that the presence of the protective floors constrains the realization of distributional outcomes according to national need as reflected in the enumeration data and associated maximum grants, and thus there is little need to emphasize the consequences of the presence of the floors. Of greater interest, and more pertinent, is the extent to which the floors are effective in serving their purpose of continuity. First, it should be noted that the majority of states are not generally at their floor value and that great variations (both up and down) can occur from year-to-year. Second, the floor value applies to the state aggregate of LEA grants; grants actually received by LEAs may still vary even when the state total remains at its floor value. Third, when the floor becomes effective for a state, the effect of the floor is rigid, i.e., it is completely unreflective of current needs as represented by the authorization. These three considerations suggest that the floor provision, as presently implemented, can achieve only limited success in assuring opportunity

easily set aside as being of little value, but many still remain for analysis. A sizable number of these have been considered; others have been arbitrarily by-passed for the present time.

It may be desirable to achieve certain specified distributional characteristics related to the distribution of income and the concentrations of poverty at the county level. The present formula can be improved upon with respect to these characteristics. In particular, alternative formulas created from

(1) the adjusted Orshansky-based enumeration method,

(2) either 50 percent of the state APPE or a constant cost factor, in concert with moderate concentration effect, and

(3) either with floors at the 90 percent level or without,

might offer a direction for such improvements in resolving some of the difficulties that have been associated with the present formula.

for participant continuity and in reducing variations that are inhibiting to proper planning.

There are some alternative responses possible regarding preferential funding for special groups of eligible children and for states which might otherwise suffer reductions in their funding levels. First, some consideration should be given to ratably reducing all groups on an equal basis except where a special need can be demonstrated, so as to avoid inconsistencies of the sort identified. Second, consideration should be given to the possibility of setting floor values at 80 or 90 percent of previous allocation levels to avoid rigidity and to permit gradual reductions that might, in the long run, maintain a more nearly equitable share of the limited funds for each state. Finally, consideration might be given to establishing the floors at the county level within a state when the floor comes into effect for the state.

1.4 Formula Alternatives

The variety of possibilities for enumeration of the eligible children, the various means for representing the cost per child of compensatory education, and the several responses possible under conditions of underfunding all can be combined to create many different alternatives to the present Title I formula. Some of these possibilities are

Chapter 2
EVALUATION OF THE PRESENT FORMULA AND GENERATION OF ALTERNATIVES

2.1 Criteria for Formula Evaluation

The fundamental purpose underlying Title I is the provision of equal educational opportunity. This purpose is extremely ambiguous. There is no universal agreement regarding what constitutes equal educational opportunity. While no final resolution of this ambiguity is attempted in this report, a manageable number of alternative interpretations are developed.

Equality in educational opportunity can be viewed from either the input or the output end of the educational process. Viewed from the input end, the concept attempts to assure "equivalent" educational resources to each child. Viewed from the output end, the concept attempts to assure that each child, upon leaving the educational system, has attained some standard level of achievement. Accomplishment of this concept would require (1) concensus regarding achievement standards and (2) knowledge of how to vary the resources to attain the achievement level. These two concepts are the subject of intense debate at present, and no attempt is made in this study to resolve the problem. As a matter of fact, it is not clear that the Title I allocation mechanism could be formulated to implement the output concept of equality. The present study thus is limited to the input interpretation of equality.

Alternative formulas are based upon the following considerations:

1. The formula should be simple.
2. The formula should be restricted to the use of data that are: uniform, up-to-date, geographically detailed, from official sources, accurate, and administratively feasible.
3. The formula should produce no incentive extraneous to the purpose of Title I.
4. The formula should permit timely allocations to assure program continuity and avoid wasteful spending.

2.2 Overall Formula Structure

The present grant determination process has three major divisions. Before concentrating on Part A as the main focus of this report, Parts B and C are briefly discussed as they relate to the formula structure.

Part B establishes a program of incentive grants. A complete analysis of this program* suggests that Part B should be dropped from Title I for two major reasons: (1) it promotes general education rather than the objectives of Title I, and (2) in order to provide an effective fiscal incentive, it

---

*See Appendix B of the previous interim report submitted in March, 1972.

needs regular funding, independent of Title I constraints. In addition, Part B contains several defects of sufficient seriousness that it cannot, in its present form, fulfill its underlying purpose.

Part C provides grants to LEAs with high concentrations of poverty children.* The motivating concept of Part C is that more dollars are required per child for compensatory education where the concentration of poverty is higher. There is no analytical basis with which to determine whether this is necessary to achieve the objectives of Title I. However, if this concept is acknowledged to be essential, a bonus factor for poverty concentration can be conveniently integrated directly into the formula of Part A. The result would be a single, unified new formula that would no longer contain the separately defined and complex qualification rules of the present Part C. Also, the bonus would be proportional to the degree of poverty concentration, as opposed to the present all-or-none bonus of Part C. From the practical standpoint, this would greatly simplify the administrative problems of Title I allocation, since it would eliminate the costly data collection effort now required for Part C.

The foregoing considerations provide the groundwork for developing a general structure for alternative formulas for Title 1. That general structure is detailed in the remainder of this section.

---

*For discussion of both the practical and theoretical aspects of Part C, See Appendix A.

First, the difference between a Title I "grant entitlement" and the actual "allocation" of funds must be reemphasized. The "grant entitlement" for each geographic region is determined initially, as the product of the number of eligible children, the cost factor or dollar amount per child, and an optional concentration factor.* The sum of all grant entitlements normally exceeds the funds appropriated by Congress for Title I. These entitlements must then be collectively reduced in some fashion so that the total amount of money to be distributed matches the appropriation. Each reduced entitlement is referred to in this report as an "allocation." The set of rules specified in the Title I legislation by which the entitlements are reduced to the appropriation level is referred to in this report as the "reduction process."

Second, the geographic unit that becomes the basis for calculating any entitlement must be defined. The present law specifies that LEAs are to be the regional units for Part A entitlements. However, administrative impracticality has resulted in selecting counties as the regional unit.

Third, the question of currency of data must be resolved, primarily for the enumeration of poor children.

---

*The concentration factor equals the number of eligible children divided by the total number of school-age children.

Proposed formulas are similar in structural aspects to the existing Title I formula, with the major change being the incorporation of a concentration factor. The use of the county as the base regional unit remains the same. However, this study has examined in substantial detail alternative ways of enumerating target children, determining the cost factor, and performing the reduction process.

The formulas considered contain the three components: the number of eligible children (K); a cost factor (M), including a concentration factor; and a reduction procedure (R). These elements are components of the formula that may be varied independently or in combination. It should be recalled that the first two elements may be quantitatively defined, whereas the third element is a complex set of rules. The development of feasible variations for each element is considered in the sections that follow.

2.3 The Eligible Children

It is important to recognize that the children eligible to be counted for purposes of the Title I allocation need not be identical to those who ultimately participate in Title I programs. Ideally, the two groups would be identical. However, it is a recognized fact that no uniform measure of educational disadvantage or deprivation is nationally available. Thus, the allocation of Title I funds on the basis of economic disadvantage has been accepted as satisfying the intent of the law. Various

counts of children from low-income families ("poverty data") are available, some of which are now used for the Title I allocation.

The choice among several types of poverty data is a crucial part of the selection of a new Title I formula. This selection directly affects the question of the fairness of grant allocations among the states and among urban, suburban, and rural regions as well.

There are three basic sources of poverty data that are currently available for the Title I allocation. These are the decennial census, AFDC data, and estimates of the national poverty population made annually by the Current Population Survey (CPS) of the Census Bureau.

Data on children participating in the USDA free lunch program might at some future time be the most useful for Title I, since both programs are directed at the same economically disadvantaged children. In the past, school lunch data were not uniform on a national basis; a recent amendment (PL 92-433) should correct the problem. These data could produce an incentive extraneous to the purpose of Title I; for example, children could theoretically be added to the school lunch count at samll cost to state resources in exchange for a possible greater gain in the Federally provided Title I grant.

The decennial census data provide the number of school age children at the county level below some specified income level. A number of different ways of counting poverty children are possible in the 1970 census, as described later.

AFDC data at the state level are published monthly by the Social and Rehabilitation Service (SRS) of DHEW and the data at the county level may be obtained by a survey of state welfare agencies. Such a survey is the current practice. In the SRS publication, the data apply to all children under 21 whose families receive AFDC payments, whereas the current Title I program applies to children between 5 and 17 (inclusive) from families whose AFDC payments exceed $2,000.

The annual CPS estimate is confined to the national aggregate of the poverty population under 18; estimates for the state or county level are not available.

Each of these basic sources of poverty data lacks one of the characteristics of uniformity, currency, or geographic detail, as shown in the following tabulation:

	Uniform	Current	Geographic Detail
Decennial census	Yes	No	Yes
AFDC	No	Yes	Yes
CPS	Yes	Yes	No

The decennial census data are, of course, fixed for 10 years at a time, although significant demographic and economic changes take place in that length of time. AFDC qualification and

payment standards differ greatly in different states, and thus AFDC data lack interstate uniformity as a measure of poverty. The CPS estimate, as noted above, is only a national total.

The general approach of this analysis (as in the present Title I allocation) is to enumerate the eligible children by a two-stage process: first, beginning with "baseline" data and second, updating them periodically. The decennial census is the appropriate source for the baseline, since it possesses all the desirable attributes except currency. The AFDC and/or CPS data are then available for adjusting the baseline data to keep the enumeration of children current.

There are, then, two main problems in the enumeration: (1) the selection of the most appropriate baseline data from the decennial census, and (2) devising the "best" method of updating. This second problem requires a rather detailed discussion, which is given in Appendix B. The remainder of this section discusses the choice of the baseline and summarizes the development of alternative updating methods.*

*In the present allocation process, the children enumerated on the basis of census and AFDC data are only 93% of the total eligible children (according to the FY73 data). The other children are the 258,917 institutional LEA children and the 380,413 SEA children. These are included in Title I because they presumably have educational disadvantages similar to children in low income families; but, because many of them live in institutions rather than in families, or live in migratory families, they would not be represented in the census data for low income families. In the development of alternative enumeration methods in this study, these SEA and institutional LEA children have been considered a part of the total eligible group under any alternative. Since they are enumerated by an annual survey of the states, they are not involved in the census data nor in the method by which the census data may be updated. Thus, they are not included in the following discussion of alternative enumeration methods, although they are of course included in the analysis of distributional consequences in Chapter 3.

2.3.1 Baseline Data. The 1970 census offers several candidates for the baseline data. (Until now the Title I allocations have been based on the 1960 census. In December 1972, the 1970 census data pertinent to this study became available.) This study has utilized the 1970 census data to identify the number of children aged 5 to 17 years, inclusive, in families below some annual income level representing a poverty threshold. The poverty levels considered by this study are (1) the $2,000 threshold (the threshold presently used in Title I allocations), (2) the $3,000 threshold and (3) the "Orshansky" poverty index.

The Orshansky index is a set of poverty income thresholds developed by Mollie Orshansky of the Social Security Administration, based on Department of Agriculture cost figures for basic nutrition and on several family characteristics*. It was adopted in 1969 as the official Federal definition of poverty by the Executive Office of the President,** and it is the poverty definition reflected in all poverty statistics from the Bureau of the Census. In this report it is referred to as the "Orshansky"

* For the concepts underlying the Orshansky poverty data, as well as for detail, see Orshansky, M., "Counting the Poor: Another Look at the Poverty Profile," Social Security Bulletin, January, 1965, and Current Population Reports, Series P-60, No. 86, published by the Bureau of the Census.

** Executive Office of the President, Bureau of the Budget: "Definition of Poverty for Statistical Purposes," Circular No. A-46, Exhibit L, and Transmittal Memorandum No. 9, August 29, 1969.

index rather than the "poverty" index, to avoid confusion with the several other measures of poverty discussed here.

The Orshansky index was designed to remedy some of the defects in the use of a fixed family income as a poverty threshold. The principal defect regards family size. When using a fixed threshold, for example, a family consisting of one adult and one child has the same poverty threshold as a family of three adults and twelve children. The Orshansky index sets the poverty threshold at different income levels, depending on the family size.

In addition to these three candidates for baseline data, this study has used the 1960 census data with a $2,000 poverty threshold, to allow comparisons with the present Title I allocation method. All four candidates (by state) are included in Appendix B where methods of updating the baseline are discussed in detail.

It is noted here that there is one shortcoming inherent in both the fixed threshold data and the Orshansky data. They do not represent regional variations in the cost of living (except that the Orshansky index differentiates between farm and non-farm families). No interregional cost-of-living index is available for this adjustment.*

*The Bureau of Labor Statistics publishes two cost-of-living indexes, but neither is suitable for this purpose. The Consumer Price Index measures changes in the cost of living over time, but it is not valid for interregional comparisons. The Bureau also publishes a Geographical Comparative Index, but it applies only to urban families with specified characteristics. The Bureau cautions that these indexes are not designed for appraisal of the economic condition of population groups.

An important aspect of the allocation data is the level of geographical detail. Ideally the ultimate targets of Title I—individual children—would be identified by the data, but that is clearly impracticable. Following the principle that an allocation formula should channel the funds as near as possible to the target children, it is reasonable to consider making allocations to LEAs. As it turns out, even this is not practicable, for the following reasons.

The census data and AFDC data are not collected according to geographic units corresponding to the boundaries of LEAs. USOE has developed a cross-reference file for translating LEA areas into census geographic areas (e.g., tracts and enumeration districts). Although this file can produce data useful for many purposes, it is not clear that the file is suitable for producing the basic Title I allocation data. The file does not apply to the 7,000 smaller LEAs in the U.S. Even if the census data could be used for all LEAs, there is at present no way to update those data at that geographic level.

There is a very large number of LEAs and their number changes substantially from year to year (mostly through consolidations). From the autumn of 1967 to the autumn of 1970, the number of LEAs was reduced from 22,010 to 17,995. Maintaining a current cross-reference file for so many LEAs, although not impossible, will be a difficult job subject to many kinds of error. Until its workability has been demonstrated, it is possible that the errors that may gradually appear in the file would outweigh the geographic precision that the file

is intended to provide.

Aside from these practical difficulties, the census data for the less populous LEAs would not be a valid basis for determining the grants to which those LEAs are entitled. The reason for this is that the income data in the census are based on a random sample of 20% of the population. For large populations this sample provides a valid estimate of the income distribution. However, for the populations found in the smaller LEAs, the statistical sampling error can be so large as to invalidate the derived estimates of the poverty population.

If allocation to the LEA level is not practicable, the next level to be considered is the county.* There are about 3,000 counties, and they undergo practially no change from year to year. Census data are available by county, and (as discussed in the next section) county-level data can be updated.

One can consider stopping the Federal allocation process at the state level, and allowing each state to subdivide its aggregate grant to the lower geographic levels. However, federal allocation by formula to the county level affords protection to those LEAs

* In this study, "county" means one of the county or county equivalents defined by Federal Information Processing Standards Publication 6-1, except that Alaska is represented as one county. This definition includes the District of Columbia and independent cities in a few states as counties, and it subsumes Kalawao Co., Hawaii, under Maui Co. as explained in that publication. The reason for aggregating Alaska (which has no counties), rather than using the Alaska Census Divisions, is that the Alaska data pertinent to this study are organized by several irreconcilable geographic subdivisions. By this definition there are 3,113 counties in the U.S.

that are less influential in state politics. That is, if each state is free to choose its own basis for intrastate distribution, that choice will be subject to the political pressures of LEAs that stand to lose or gain according to the choice. Some LEA officials interviewed in the course of this study have expressed concern that the intrastate distribution would be inequitable if the allocation by the Federal formula did not extend at least to the county level.

Two conclusions are apparent in the matters discussed in this section. First, the Orshansky index appears to be the most suitable poverty measure available in the census, because it accounts for factors that are disregarded by a fixed income threshold (principally, family size). Second, the county is the most practicable geographic level for data to be employed in the allocation formula.

2.3.2 Updating the Enumeration. There are two reasons for updating the enumeration. The most obvious is that changes occur in the geographic pattern of poverty. Families move in and out of an area, and these two movements may not balance each other. As time passes, children who were infants or unborn in the census year enter the school age population, while the older children become adults, and these two changes may not balance. Further, the economic condition of a community can change for better or worse.

The other reason for updating is inflation. The income level representing a poverty threshold in one year is too low in later years.

To adjust for these changes, the enumeration could be updated annually, as is the present practice in Title 1. Less frequent adjustments might also be considered adequate, and they would afford greater predictability to the allocations with less administrative expense. This study has assumed that the enumeration will be updated annually. Any annual updating method could also be applied less frequently.

There are at present two sources of data suitable for updating the baseline enumeration data: AFDC and the CPS. There are two aspects of the data to be considered in determining how to use them. First is the ability of the data to reveal the extent of poverty in different places (counties or states); this is the distributional aspect. Second is the ability of the data to be related to the actual number of children enumerated in the census; this is the scale aspect. The scale aspect is illustrated by Figure 2.3.1. According to the CPS Orshansky data, the number of poverty children under 18 decreased by about one-fourth from 1965 to 1971. (Two values are plotted for 1966 and two for 1969 because of changes in the CPS definitions in those years.) A similar trend holds true for the number of children aged 5-17 in families with an annual income below $3,000 (in 1971 dollars).* Although the direction and proportion of the changes

*The CPS gives the estimated number of families under $3,000. That was multiplied by the average number of children 5-17 in such families, according to the 1970 census, to arrive at the number of children plotted in this graph.

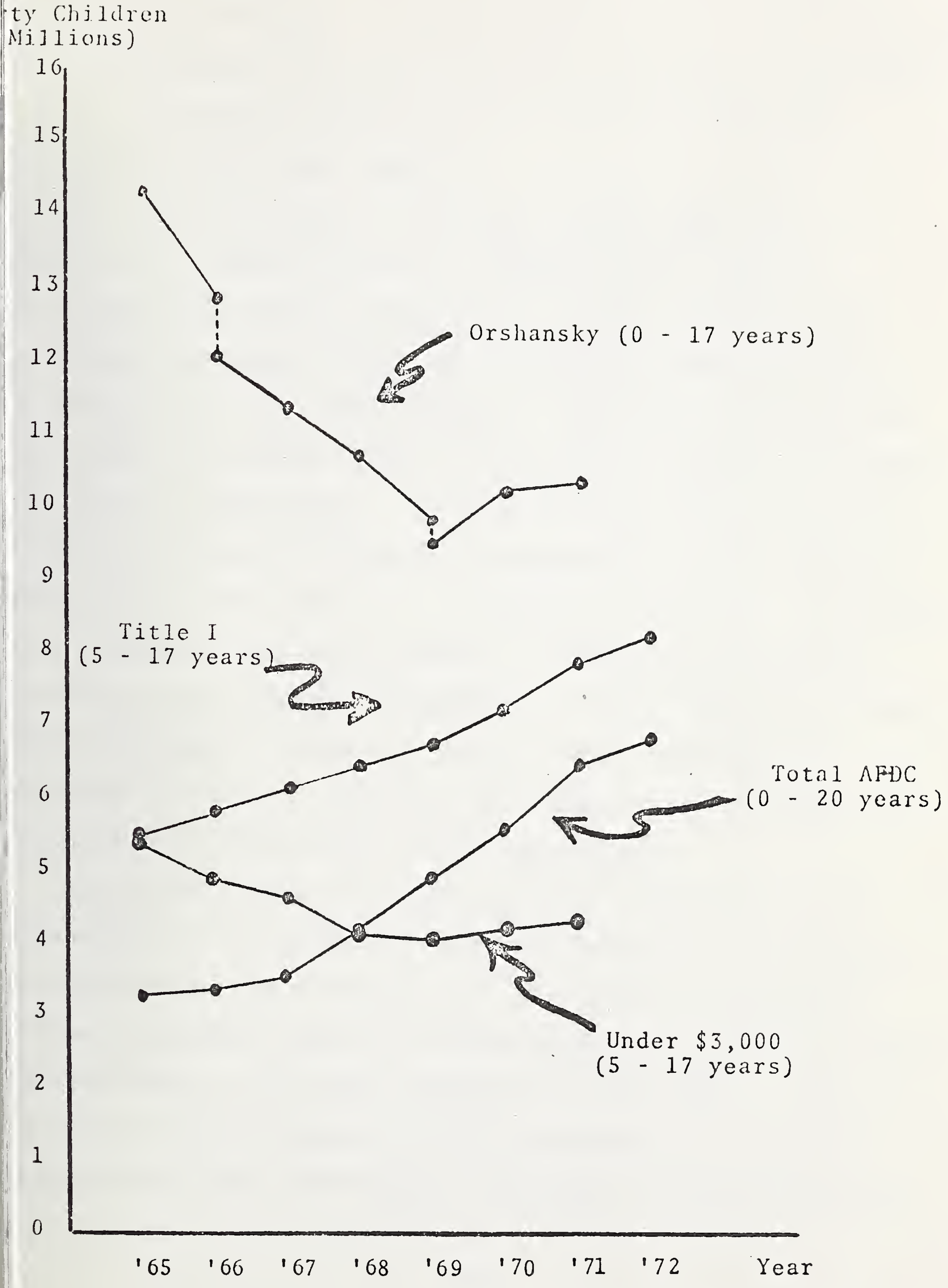


Figure 2.3.1 Comparison of Alternative Poverty Data

in these two measures are consistent, the actual numbers of children are different. This is referred to as a scale difference, and before numbers from these two measures could be meaningfully added, one measure would have to be scaled up or down to correspond to the other measure.

The other two plots in the graph involve AFDC data. First is the number of Title I eligibles which consists of a fixed 1960 census component of 5 million children plus a changing component of children in families receiving over $2,000 per year from AFDC payments. The other plot represents the number of children under 21 years old in families receiving any amount of AFDC money. It is obvious that AFDC data measure something different from what is measured by the CPS Orshansky data, since their trends are in opposite directions. Presumably this indicates that AFDC programs are covering an increasing portion of the Orshansky population. For all future discussion, AFDC "coverage" is defined as the ratio of the number of children in families receiving AFDC payments to the number of children in families below the Orshansky index.

In a formula where the cost factor (see Section 2.4) is independent of the number of children and where the adjustment for underfunding (see Section 2.5) is strictly proportional, the only important aspect of the enumeration is the distribution of the numbers of children (relative to each other). However, if the cost factor depends on the concentration of eligible children or if the underfunding adjustment is non-proportional

(as in the present Title I allocation process), it is imperative that the actual numbers of children be correct.

The AFDC data provide distributional information, i.e., a measure of poverty for each county (although, as mentioned earlier, this measure is not uniformly applied throughout the nation). The annual CPS estimate is not distributional since it is strictly a national total. However, the CPS provides data in the same scale as the decennial census data, i.e., Orshansky and $3,000 data. The AFDC data, on the other hand, are out of scale with the census data. In fact, the coverage ratio just defined is the factor that relates the census scale to the AFDC scale, and the coverage differs from state to state. These observations can be summarized as follows:

	Distributional	Census Scale
AFDC	Yes	No
CPS	No	Yes

This suggests that the AFDC data can be employed to indicate distributional changes in poverty from year to year and that the CPS data can be used to adjust the enumeration to the proper scale. The distributional adjustment represents the changing geographic pattern of poverty, while the scale adjustment reflects inflation (among other things). In the case of Orshansky data, inflation is represented by an annual adjustment of the various family income levels (for various family compositions) according to the Consumer

Price Index. In the case of the $3,000 data, data for different years are expressed as constant dollars (e.g., the buying power equivalent to a dollar in 1971), again by means of the Consumer Price Index.

Two ways of using AFDC data for updating the distributional aspect of the enumeration have been considered in this study: the method presently used in Title I and an alternative method. For reasons detailed in Appendix B, the present method does not make the best use of the data. Briefly, this is because it adds together AFDC and census data that are out of scale with each other, and because the AFDC data are not uniform from state to state due to different coverages in different states. The nonuniformity is aggravated by the fact that it only counts children in families receiving more than $2,000 annually from AFDC.

The alternative method uses a multiplicative updating factor, on the assumption that the change in the Title I eligible population is proportional to the change in the AFDC data. Thus the updated enumeration equals the original census enumeration times the ratio of the most recent AFDC count to the AFDC count in the census year.*

---

*Another approach to the alternative method is to employ an additive updating factor, on the assumption that the difference in the Title I eligible population for two years is equal to the difference in the corresponding AFDC data when adjusted in scale by the coverage ratio of the respective state. The mathematical equivalence of these two alternative approaches is shown in Appendix B.

It is possible that still other valid methods can be developed to use the available data for updating the enumeration. Some methods may result in smoother annual transitions for particular states than do other methods. Such further alternative methods are under investigation.

This method relies on the assumption that the coverage ratio (which the graph shows to be increasing for the nation as a whole) increases proportionately in all states. This is the weakest link in the rationale of the alternative, and there is no way to measure the coverage ratio for a state after the census year since the Orshansky and $3,000 data are not available for states except in the decennial census. If such estimates were available annually at the state level, they could be employed directly and would obviate the use of AFDC data at the state level.

One improvement to the AFDC data used in the alternative is the introduction of values that are 24-month averages. To eliminate seasonal variations, data recorded over the course of the year are used, and the use of two years tends to smooth out year-to-year fluctuations.

A second improvement stems from the fact that the AFDC data used in the alternative do not include that portion relating to unemployed parents. The unemployed-parent component is optional with the states, and about half of the states participate in it. Thus one source of interstate nonuniformity is removed by the exclusion of this component of the data.

After the distributional updating adjustment is accomplished by means of the multiplicative factor, the actual number of children indicated is wrong. For example, the total number of children is 10,533,295. The CPS estimate of the total

number is 8,383,602.* Therefore, the adjusted number of children for each county is multiplied by the ratio of 8,383,602 to 10,533,295. This adjusts the scale without affecting the distribution, and this is referred to as normalizing the data according to the CPS estimate.

As the previous paragraph indicates, the updating is applied to each county's enumeration. In this study the distributive adjustment was actually applied at the state level; that is, a multiplicative adjustment factor based on statewide AFDC data was applied to all counties in the state. For purposes of analysis it was unnecessary to compute the distributive adjustment factor for individual counties, since AFDC qualification standards are relatively uniform among counties in the same state. However, for the actual allocation of grants it would be more important to use county-level data for the adjustment.

The practicability of obtaining such data at the county level is an important consideration. The only county AFDC data available from DHEW are for February of each year, and these data are available only in printed form. Data for the other months are available only as state totals. In order to obtain monthly data for counties, it would be necessary

---

*As explained in Appendix B, this number is derived from the CPS data and the 1970 census data by a simple calculation, rather than taken directly from a CPS publication.

to create a new survey of the states. (The present Title I survey collects only one month's data for each year, and those data are only for families receiving more than $2,000 per year from AFDC.) In the first year, the 3,113 counties' data for 48 months would be required (24 months representing the base year plus the 24 most recent months available nationwide). This would result in about 150,000 items of data--clearly a large data processing job for the states and the Federal government. Even if the county-level adjustment factors were recalculated only in every second year, a 24-month data span would require that data be collected for every year. If the factors were recalculated in every fourth year, data for only two years out of every four would be required.

In order to construct specific enumeration alternatives, several representative combinations of baseline data and updating methods have been assembled. Each baseline candidate, as well as each updating method, is used at least once.

The first enumeration, called K_1, consists of 1960 census data for the $2,000 level, updated by adding the AFDC data above the $2,000 threshold. This is actually the present Title I enumeration. The second enumeration, K_2, is identical except that 1970 census data are used. Enumeration K_3 is like K_2 except that the $3,000 threshold is used (for both the census and the AFDC data). K_4 consists of 1970 census data for the $3,000 level (like K_3), updated by the multiplicative AFDC factor, and normalized to the CPS

estimate for the $3,000 level. K_5 is based on the Orshansky data from the census and, like K_4, is updated by the alternative method, i.e., the distributional aspect is updated by the multiplicative AFDC and the result is normalized to scale by the CPS estimate for the Orshansky poverty level. For a summary of these definitions, see Table 2.3.1.

Table 2.3.1

Definition of Alternative Enumerations

Enumeration Designation	Baseline Data	Updating Process: Distributional	Updating Process: Scale
K_1	1960 Census Data, Families Below $2,000 Income Level	AFDC Data, Families Receiving more than $2,000	—
K_2	1970 Census Data, Families Below $2,000 Income Level	AFDC Data, Families Receiving more than $2,000	—
K_3	1970 Census Data, Families Below $3,000 Income Level	AFDC Data, Families Receiving more than $3,000	—
K_4	1970 Census Data, Families Below $3,000 Income Level	AFDC Data, Multiplicative Factor	CPS Estimate For $3,000 Level
K_5	1970 Census Data, Orshansky Poverty Level	AFDC Data, Multiplicative Factor	CPS Estimate For Orshansky Poverty Level

The number of children, by state, for each of these enumerations is given in Table 2.3.2.

Table 2.3.2

Number of Eligible Children in FY73:
Five Alternative Enumerations

	K_1	K_2	K_3	K_4	K_5
Alabama	243,596	97,058	151,759	142,851	260,764
Alaska	9,519	8,985	10,144	6,669	13,031
Arizona	56,475	46,952	49,409	46,527	86,326
Arkansas	148,158	52,247	86,114	96,691	177,311
California	767,565	775,406	715,253	342,112	626,408
Colorado	70,876	62,662	59,673	43,207	79,101
Connecticut	67,847	69,342	70,449	32,622	55,566
Delaware	13,133	11,267	10,144	9,463	18,694
Florida	168,005	126,165	163,787	176,582	330,585
Georgia	285,784	139,134	155,753	176,474	338,978
Hawaii	22,734	21,131	21,049	10,982	20,956
Idaho	18,827	13,967	16,416	12,158	24,441
Illinois	417,910	374,181	354,460	189,065	356,910
Indiana	127,501	92,951	81,573	95,742	180,212
Iowa	100,863	51,533	54,102	35,918	69,549
Kansas	63,274	45,144	46,132	33,888	67,069
Kentucky	225,893	101,114	125,399	103,266	182,017
Louisiana	219,868	133,378	179,749	163,370	287,654
Maine	38,129	29,788	22,493	19,860	44,516
Maryland	113,123	102,527	93,035	68,845	122,813
Massachusetts	165,739	160,353	153,371	64,322	119,511
Michigan	318,818	277,819	277,079	160,346	285,284
Minnesota	122,434	77,039	85,084	54,106	105,824
Mississippi	254,903	98,695	152,715	147,836	257,860
Missouri	162,311	96,315	102,058	102,853	190,222
Montana	19,681	13,757	16,405	15,176	27,921
Nebraska	50,242	31,656	32,745	25,612	47,142
Nevada	5,665	6,391	6,855	6,394	11,047
New Hampshire	12,630	11,236	12,145	10,112	19,894
New Jersey	230,722	228,610	222,657	95,950	176,518
New Mexico	51,529	41,917	43,763	38,082	71,357
New York	766,028	760,534	746,328	271,103	496,644
North Carolina	362,152	138,280	168,451	165,116	314,927
North Dakota	28,496	13,215	16,191	12,240	26,421
Ohio	289,084	241,899	213,434	176,045	300,742
Oklahoma	115,151	67,688	75,233	59,815	112,264
Oregon	50,259	45,909	48,389	31,831	55,707
Pennsylvania	422,339	348,985	342,937	175,197	337,856
Rhode Island	30,391	27,113	25,890	13,063	23,493
South Carolina	211,199	76,405	111,313	136,378	258,591
South Dakota	37,249	17,300	21,918	17,254	32,822
Tennessee	220,048	81,832	133,221	140,280	262,774
Texas	477,550	271,965	327,728	424,595	864,324
Utah	26,738	24,696	26,000	15,420	29,406
Vermont	13,533	9,814	10,429	5,530	13,066
Virginia	217,986	117,921	137,710	132,258	258,019
Washington	86,544	83,194	80,581	44,331	79,377
West Virginia	120,959	50,037	60,558	49,914	89,368
Wisconsin	105,137	81,270	88,688	59,531	111,548
Wyoming	7,621	5,527	5,656	5,332	10,090
Dist. of Columbia	54,494	52,721	56,371	27,014	50,685
	8,216,712	5,915,025	6,268,776	4,489,323	8,383,602

In summary, this discussion of updating has described one alternative updating method that improves on the method presently used in Title I. The weakest part of this method is its reliance on the assumption that the AFDC coverage ratio changes in the same proportion in all states. Since the coverage itself differs among the states, any assumption regarding the rate at which the coverage changes in suspect.

This reveals a crucial need for more satisfactory data. Such data might in future years be available from the school lunch program. Another potential source is the CPS itself. In order for the CPS to produce valid poverty estimates at the state level, its sampling base would have to be expanded. The cost of doing this would have to be weighed against the benefits. The CPS has many users besides (potentially) Title I. In Title I alone, $1.5 billion per year are distributed without a truly satisfactory data base for updating the interstate distribution of eligible children.

2.4 The Cost Factor

The cost factor is the dollars authorized per child, representing the cost of compensatory education. Ideally, this would be derived from actual cost data, in which case there might be different cost factors for different categories of eligible children. Such data are lacking.

Lack of information, and hence the absence of knowledge on the cost of compensatory education, does not mean that compensatory education is unnecessary for the educationally disadvantaged children. The lack of data indicates either that information regarding compensatory education is not well known as yet or that there still exists a considerable uncertainty about the nature of the correct methods of compensatory education. The methods may range from restructuring the entire educational system (e.g., requiring the complete equality of APPEs) to providing intensive special instruction on an individual basis. In any case, programs associated with Title I have mainly been providing supplemental education within the existing educational framework. Thus, the cost factor in the Title I allocation formula should be interpreted as representing the necessary per pupil expenditure for the supplemental form of compensatory education.

Given that the cost factor is to be viewed as the necessary expense for compensatory education per pupil, there still remains the major question of estimating its value. One alternative is to ignore the cost factor and divide the appropriation strictly in proportion to the number of educationally disadvantaged children. This simple method is based on the assumption that all eligible children shall receive equal services. Unfortunately, a dollar does not buy the same educational service, e.g.,

teacher's time, across the nation. If the provision of equal educational service is to be the goal, a more sensible allocation method might be to apportion the money based on general educational expenses--more specifically, average per pupil expenditure (APPE). The use of APPE provides the perspective necessary to develop the most appropriate cost factor.

The efficacy of the APPE values, however, depends on how they are used. The APPE values contain at least two types of biases: quantity and quality of educational services delivered to the students. The quantity aspect refers to the differences in the amount of school time given to the students such as the number of school days in a year or average hours per day spent at school. The quantity differences in APPE values thus are amenable to adjustment by available data.

The qualitative differences in APPEs, however, are more difficult to evaluate although the high correlation between a region's income and APPE would appear to underscore the general belief that wealthier areas provide better quality education. It does not appear possible, however, to remove qualitative biases in the APPE values.

The APPE values for the states that were actually used in Title I allocations are shown in Table 2.4.1 for the school years 1963-64 and 1970-71 as well as the percentage changes between the two periods. As can be seen in the table, the

Table [illegible].4.1

Average Per Pupil Expenditure for

Elementary and Secondary Schools by State

	(1) 1963-64 School Year (Used in FY66 Title I Allocations)	(2) 1970-71 School Year (Apply to FY73 Title I Allocations)	(3) Percentage Change of (2) over (1)
Alabama	$285.62	$ 529.38	85.34%
Alaska	674.26	1452.28	115.39
Arizona	466.10	745.96	60.04
Arkansas	305.08	518.64	70.00
California	505.34	855.44	69.28
Colorado	477.90	812.60	70.04
Connecticut	508.12	1009.48	98.67
Delaware	532.26	996.42	87.21
Florida	385.58	781.36	102.65
Georgia	311.46	644.72	107.00
Hawaii	422.40	983.74	132.89
Idaho	347.36	610.16	75.66
Illinois	531.38	992.62	86.80
Indiana	460.02	783.42	70.30
Iowa	460.26	864.84	87.90
Kansas	468.90	787.22	67.89
Kentucky	311.34	571.88	83.68
Louisiana	381.00	716.30	88.01
Maine	379.90	709.60	86.79
Maryland	483.06	985.52	104.02
Massachusetts	517.82	894.22	72.69
Michigan	476.68	972.08	103.93
Minnesota	551.50	1005.92	82.40
Mississippi	242.40	469.60	93.73
Missouri	437.62	722.12	65.01
Montana	487.60	801.60	64.40
Nebraska	400.88	807.28	101.38
Nevada	486.54	788.18	62.00
New Hampshire	415.88	770.92	85.37
New Jersey	575.58	1135.26	97.24
New Mexico	468.36	689.08	47.13
New York	731.28	1487.34	103.34
North Carolina	323.48	611.72	89.11
North Dakota	415.58	685.34	64.91
Ohio	441.86	762.84	72.64
Oklahoma	362.58	623.72	72.02
Oregon	545.60	957.12	75.43
Pennsylvania	474.78	909.56	91.56
Rhode Island	502.12	951.86	89.57
South Carolina	265.96	571.12	114.74
South Dakota	431.34	719.04	66.70
Tennessee	292.72	552.80	88.85
Texas	389.98	667.80	71.24
Utah	417.22	664.18	59.19
Vermont	449.30	797.14	77.42
Virginia	358.20	738.56	106.19
Washington	501.86	893.96	78.13
West Virginia	319.12	644.10	101.84
Wisconsin	524.30	950.56	81.31
Wyoming	514.92	882.00	71.29
Dist. of Columbia	518.64	1116.94	115.36
National Average	460.32	859.88	86.80

Source: Data compiled from the SEAs by the National Center for Educational Statistics, USOE.

interstate differences have persisted over the years. In the 1963-64 school year, for example, the highest value (New York) was three times greater than the lowest value (Mississippi) and the same difference was maintained during the 1970-71 school year. If anything, the gap has widened slightly as New York's APPE increased faster than Mississippi's.

The interstate differences in APPE values are much greater than the differences in cost of living. Although the data are not strictly comparable, the "minimum" budget regional cost of living for a four-person family as estimated by the Bureau of Labor Statistics for 1971* shows the New York City minimum budget to be higher than that of Atlanta by 12 percent. On the other hand, the APPE of New York State is higher than that of Georgia by 131 percent. A less extreme example is the difference between Maryland and Louisiana: Baltimore minimum budget is higher than that of Baton Rouge by 14 percent while the APPE of Maryland is higher than that of Louisiana by 38 percent.

The state APPEs, however, are misleading numbers since, strictly speaking, APPEs should be defined with respect to LEAs. It turns out that the APPEs for individual LEAs show about the same degree of difference within a single state as among the states. Table 2.4.2 shows the five highest and the five lowest APPE values for selected states: Delaware,

---

*Autumn 1971 Urban Family Budgets and Geographical Comparative Indexes, Bureau of Labor Statistics, U.S. Department of Labor, April 1972.

Table 2.4.2

The Five Highest and Five Lowest Per Pupil Expenditures
At the LEA Level Within the States of
Delaware, Illinois, Maryland, Mississippi, and Pennsylvania

	Delaware	Illinois	Maryland	Mississippi	Pennsylvania
Highest					
1	$1,195.00	$1,947.81	$1,036.95	$ 825.34	$1,401.17
2	1,007.00	1,626.63	826.39	708.63	1,319.63
3	930.00	1,624.79	819.29	661.32	1,315.21
4	917.40	1,579.91	812.41	651.51	1,162.07
5	887.00	1,546.35	808.81	645.41	1,115.99
Lowest					
1	630.00	496.73	634.99	269.24	528.83
2	672.79	499.01	679.89	321.05	561.84
3	685.00	499.48	694.63	327.85	565.03
4	687.00	500.40	696.73	333.06	571.28
5	702.26	501.48	697.05	339.05	571.87
Ratio of highest to lowest	1.90	3.92	1.63	3.07	2.65

Note: Information furnished by respective SEAs. Delaware figures are for school fiscal year 1971-72; Illinois, 1970-71; Maryland, 1960-70; Mississippi, 1969-70; and Pennsylvania, 1969-70.

Illinois figures apply to the elementary school LEAs only.

Illinois, Maryland, Mississippi, and Pennsylvania. The average of the five highest to the five lowest values within each state show ratios of 1.46, 3.33, 1.26, 2.19, and 2.26, respectively.

In general, the larger the sizes of LEAs relative to the sizes of counties within a state, the smaller the disparities among the highest and the lower APPE values. Thus, the difference between the highest and the lowest values, is smaller for Maryland than Illinois and Pennsylvania: the LEAs are coterminous with the counties in Maryland (24), whereas the LEAs are highly fragmented in Illinois and Pennsylvania (1,175 and 597 respectively). At the other extreme is Hawaii which has only one LEA that encompasses the entire state.

Unadjusted use of the APPE values, therefore, results in giving more money to richer counties whose needs may be smaller than poorer counties. Doing so may amount to accepting the prevailing biases in resource patterns which may be one important cause of educational disadvantage among the poor. It should be admitted nevertheless that, although the existence of qualitative biases in APPE values is apparent, there appears to be no satisfactory way to remove such biases objectively.

The disparities in the APPE values among <u>all</u> the LEAs are considerable, much more so than among the state APPE values that are the basis of the cost factor in the present Title I allocation formula. The fact that the LEA-specific APPE values are not presently used in the Title I allocation process means that the strict adherence to the concept of APPE value in estimating the cost factor is not maintained. Furthermore, two adjustments are made on the APPE values before being incorporated into the present grant allocation formula. The net effect of both is to reduce the presently existing disparities among the APPE values.

The first adjustment is assigning the national average per pupil expenditure (NAPPE) whenever a state's value is less than the NAPPE. This may be viewed as a half-way measure of interstate cost equalization. The second adjustment is less apparent, although its equalizing effects can be greater than those of the first type. It is the use of a state average per pupil expenditure (SAPPE) rather than individual APPEs of respective LEAs. Since variations of APPEs among the LEAs in many states are as great as the variation of state APPEs, the second form of APPE adjustment amounts to an intra-state equalization of the costs of education.

It may be concluded, then, that the use of APPE values in the present allocation formula is not entirely consistent with the assumption of proportional costs between regular and compensatory education. In fact, the effect may be viewed

as more nearly consistent with the assumption of equal cost of compensatory education for all disadvantaged children. During the 1970-71 school year, for example, the number of states above the NAPPE was 19, less than half the states. The natural extension of the argument leads to the use of one uniform cost of compensatory education in the allocation formula. This would amount to extending the cost averaging adjustment, which presently applies within a state, to apply among the states as well.

The actual merits of the assumption of a uniform cost from the educational standpoint cannot be resolved here. Nevertheless, it is possible to pursue the logical implications of such cost factors. A caveat must be stated that although the numerical examples chosen in the following discussions are not entirely devoid of empirical meaning, no significance should be attached to the specific numbers beyond their use for illustration.

For a uniform cost factor, $300 per pupil is used. (Again, no special significance should be attached to the $300 value which is 35 percent less than one-half of NAPPE of the 1970-71 school year.) The $300 may be assumed to consist of two parts, $250 for teacher cost and $50 for supplies such as books and pencils. It will be assumed that the overhead costs such as the costs of building and transportation are zero since compensatory education of Title I consists mainly of programs supplemental to the regular curriculum.

The teacher cost component can be related to per pupil cost in the following equation:

$$\begin{pmatrix}\text{Per pupil}\\ \text{cost}\end{pmatrix} = \begin{pmatrix}\text{Teacher's}\\ \text{salary per}\\ \text{year}\end{pmatrix} \times \begin{pmatrix}\text{Teacher-pupil}\\ \text{ratio}\end{pmatrix} \times \begin{pmatrix}\text{Proportion of}\\ \text{pupil's school}\\ \text{time given to}\\ \text{Title I program}\end{pmatrix}$$

In other words, the per pupil cost is the product of three items on the right-hand side of the above equation. This is an accounting equation that must hold true when appropriate values of per pupil cost, on the left side, and annual teacher's salary, on the right side, are specified; the adjustments must be made to the teacher-pupil ratio and the proportion of pupil's time in order to maintain the equality between the two different dollar amounts.

For ease of subsequent discussion, the items of the equation will be simplified as

(Cost) = (Teacher's salary) x (Teacher-pupil ratio) x (Pupil's time).

The national average teacher's salary of all teachers in public schools in 1971-72 was estimated to be $9,690.*
For ease of illustration, the average teacher's salary is set at $10,000 per year. Since per pupil cost is assumed to be

---

*Rankings of the States, 1972, National Education Association, Washington, D. C., 1972. Table 41, p. 25

It is possible that average teacher's salary is not the right datum since salaries of educational specialists would be more expensive, while salaries of teacher aids would be less expensive.

$250, 40 pupils can be assigned to one teacher. The Title I programs are unlikely to be full time programs; hence, three combinational possibilities between the teacher pupil ratio and pupil's time can be listed as follows.

	Teacher-pupil ratio	Pupil's time
A	1/10	1/4 (quarter time)
B	1/20	1/2 (half time)
C	1/40	1 (full time)

Given the fixed amounts of per pupil cost and teacher's salary, only one of the possible combinations can be chosen. For each combination, improving the teacher-pupil ratio must entail a reduction in child's participation time. In the case of A, for example, if the teacher-pupil ratio is to improve to 1/5, the pupil's time must be reduced to 1/8 or one-eighth of his school time. It is instructive to view the teacher-pupil ratio as a qualitative, and the pupil's time as a quantitative, aspect of the compensatory education program. Then, it is clear that, if the available budget is fixed, quality and quantity are inversely related.

The discussion of fixed cost in terms of a simple accounting relation should be interpreted carefully. First, the equation is not meant to be an empirical cost equation; it is used as a convenient explanatory device relating the logical implications of a fixed cost factor. It does not consider for example, the possible mix of teachers and teaching machines,

although the cost of using the machines can be translated to teacher cost. Second, the equation may be used to calculate roughly the minimum necessary cost of compensatory education since the teacher's service is necessary for the purpose. Third, a school or an LEA can control the teacher-pupil ratio and pupil's time; i.e., the quality and quantity of compensatory education are controllable if "average" teachers are provided to the schools. It is clear that the teacher's salary, or the choice of teachers, becomes the crucial part of the equation; however, schools or LEAs cannot have much control over them. That is, teacher's salary is a given datum to LEAs.

If actual averages for teacher's salary are used in the above equation, LEAs with a high average for teacher's salary must sacrifice either quality or quantity of compensatory education if the fixed cost per pupil is to be maintained. An alternative is to assign a nationally uniform teacher-pupil ratio and pupil's time and let per pupil cost vary. Such an alternative is subject to the same criticism as that of the use of unadjusted APPE values; namely, qualitative differences are not removed. Another alternative is to simply specify a uniform value for teacher's salary and justify such a choice on the basis that every child should receive the same quality of compensatory education. It can be seen that a choice for teacher's salary cannot be based on empirical information available. It can, at best, be based on some ethical principles such as fairness. Finally, the analysis with the

cost equation does not invalidate the consideration of APPE or teacher's salary in estimating the cost factor. The main question still remains how to relate them.

Another possible equalization method, besides a uniform cost factor, would be to assume the costs of compensatory education to be inversely related to APPEs, i.e., providing more money per pupil where the expenditures for regular education are lower and, conversely, less money per pupil where the expenditures are higher. A possible means of implementing such a goal is to provide more money per child where the concentration of eligible children is high since such a concentration ratio and APPE show a high inverse relationship. The idea underlying such an adjustment has already been incorporated in the present Title I allocation formula whereby LEAs with a high concentration of poverty children are assigned additional grants (part C of the present formula).

The rationale for such an adjustment is presumably based on the fact that it costs more to achieve a particular goal of compensatory education when an LEA has a high proportion of poverty children. The per pupil cost would be higher because a child's educational disadvantage is compounded by an impoverished school environment. It is argued by many educators that peer group influence is crucial in a child's education process. If the peer influence is unsatisfactory because of the high concentration of poverty

children, it may be argued that children in such an environment need more educational resources to overcome the compound educational disadvantage. Moreover, high concentrations of poverty are, as a rule, accompanied by low APPE values at the LEA level.

What is the relative difference in concentration ratios of poverty children? Table 2.4.3 compares concentration ratios among the states as well as the counties. Ideally, poverty concentration ratios should be compared at the individual school level, but the necessary data are not readily available even at the LEA level. The state and county comparisons nevertheless should be illuminating.

As Table 2.4.3 shows, the proportion of poverty children in a geographical area varies greatly both among the states and within individual states. The first column compares the poverty concentration ratio (percent of Orshansky poverty children between ages 5 and 17) for the states, using the 1970 census data. Although the national average value of concentration is 14.81 percent, the state average values range from a low of 7.65 percent for Connecticut and New Hampshire to a high of 40.51 percent for Mississippi. In the case of Mississippi, nearly half the school age children belong to the poverty class. As can be observed, the southern states as a group belong to the higher concentration ratio category.

Concentration Ratios of Poverty Children

	State Average	Extreme County Values*	
		Lowest	Highest
Alabama	28.76%	15.47%	72.35%
Alaska	14.24	N.A.	N.A.
Arizona	17.52	10.85	56.16
Arkansas	30.66	12.85	59.52
California	12.42	6.03	25.02
Colorado	12.42	0	53.12
Connecticut	7.65	4.68	10.24
Delaware	11.99	9.68	16.84
Florida	18.76	10.31	49.26
Georgia	23.56	6.92	63.81
Hawaii	10.10	8.43	12.01
Idaho	12.48	3.36	27.58
Illinois	10.82	2.40	52.13
Indiana	9.14	3.97	19.67
Iowa	9.95	5.18	24.70
Kansas	11.79	2.34	25.24
Kentucky	24.33	8.89	71.54
Louisiana	29.42	11.51	66.19
Maine	14.09	8.47	23.71
Maryland	11.26	3.89	27.40
Massachusetts	8.69	5.92	18.31
Michigan	9.30	4.80	33.33
Minnesota	9.35	3.87	30.98
Mississippi	40.51	14.77	76.37
Missouri	14.63	7.25	52.24
Montana	13.07	0	34.28
Nebraska	12.02	0	43.43
Nevada	8.89	0	17.80
New Hampshire	7.65	6.04	11.90
New Jersey	9.06	3.05	16.30
New Mexico	26.15	1.39	52.15
New York	12.49	3.81	27.85
North Carolina	22.96	8.96	55.30
North Dakota	15.71	7.47	43.57
Ohio	9.86	3.95	33.56
Oklahoma	19.30	7.46	52.56
Oregon	10.58	5.03	19.56
Pennsylvania	10.74	3.79	21.87
Rhode Island	11.58	5.90	14.67
South Carolina	28.01	13.37	59.23
South Dakota	18.50	8.01	51.34
Tennessee	24.11	12.40	73.53
Texas	21.34	2.42	70.87
Utah	10.45	2.47	41.14
Vermont	11.14	7.30	22.61
Virginia	17.62	3.44	51.47
Washington	9.65	6.32	22.61
West Virginia	23.77	7.05	47.58
Wisconsin	8.73	4.29	43.86
Wyoming	11.63	4.68	18.65
Dist. of Columbia	22.41	N.A.	N.A.
National Average	14.81		

* County values are not available for Alaska and the District of Columbia. In this study Alaska was treated as a single county.

Source: 1970 census of population.

The next two columns show the lowest and highest ratios among the counties in each state. As to be expected, even greater disparities of poverty concentration exist at the county level. It should be noted that the lowest values for some states such as Alabama and Mississippi are greater than the highest values of other states like Connecticut and New Hampshire. Since LEAs are smaller and as a rule more economically homogeneous than counties, the poverty concentration ratios can be presumed to show even greater disparities at the LEA level. The second and the third column ratios may be viewed as a gross picture of economic disparities existing among the LEAs. In view of such a large disparity, the need for some form of cost adjustment to the high concentration areas appears necessary.

Another way of looking at the disparity of the concentration ratios is comparing the values for some specific county characteristics. One such display is the comparison in terms of city-suburban-rural counties as shown in Table 2.4.4. It is seen in the table that the large cities have uniformly high concentration ratios, the suburbs have low ratios, and the rural counties are generally high, but with extreme variability. In spite of the recognized economic difficulties of the large cities, the truly high concentrations of poverty are found in the rural areas.

Table 2.4.4

Concentration of Poverty Children
in Forty-eight Selected Counties*

City	Conc. Ratio
New York City, NY	20.44%
Bronx, NY	(27.85)
Kings, NY	(23.88)
New York, NY	(25.36)
Queens, NY	(8.17)
Richmond, NY	(5.81)
Philadelphia, PA	19.13
Baltimore (city), MD	24.39
Richmond, VA	23.87
Denver, CO	15.48
Orleans, LA	34.71
St. Louis (city), MO	26.27
San Francisco, CA	16.94

Suburb	
Westchester, NY	5.45
Nassau, NY	3.81
Montgomery, PA	3.79
Bucks, PA	4.55
Montgomery, MD	3.89
Baltimore, MD	4.51
Henrico, VA	5.93
Fairfax, VA	4.77
Jefferson, CO	5.12
Arapahoe, CO	5.67
Jefferson, LA	11.51
St. Bernard, LA	9.93
St. Louis, MO	4.68
Jefferson, MO	7.01
Marin, CA	6.33
San Mateo, CA	5.61

Rural	Conc. Ratio
Allegany, NY	9.96
Columbia, NY	10.40
Cortland, NY	10.08
Crawford, PA	11.84
Greene, PA	21.22
Wayne, PA	10.99
Garrett, MD	26.78
Calvert, MD	24.09
Caroline, MD	22.96
Augusta, VA	15.79
Greene, VA	22.38
Halifax, VA	39.42
Conejos, CO	43.53
Prowers, CO	27.45
Logan, CO	11.14
East Carroll, LA	66.19
DeSoto, LA	50.13
St. Mary, LA	26.52
Pemiscot, MO	48.80
Camden, MO	27.27
Adair, MO	14.41
Humboldt, CA	11.46
Mèrced, CA	19.84
Yuba, CA	18.02

*In each state, one county was chosen that was also a large city (the five boroughs of New York City were treated as a single county), then two suburban counties of large cities were chosen, and finally three rural counties were chosen.

Source: 1970 census of population.

If the diverse effects of high poverty concentration on educational disadvantage are to be acknowledged, the question still remains as to what concrete form cost adjustments should take. (It should be stressed that the necessity for such an adjustment is not an established fact; hence, the relationship between the cost of compensatory education and the poverty concentration cannot be formulated in terms of any accepted basis.) One ready solution would be to raise the per pupil cost. For example, any one of the three items on the right-hand side of the cost equation discussed earlier in this section, may be manipulated singly or in combination. Thus, better teachers may be provided, lower pupil-teacher ratios may be specified or more pupil time may be assigned under compensatory education. The net effect of these possible adjustments is to raise the per pupil cost factor, but the exact form of such adjustments cannot be prescribed with presently available information.

Although many possibilities of adjustment can be entertained, the relationship adopted in this study is a simple one of assuming some fixed weight for concentration ratios, i.e., each county is given a bonus that is proportional to the size of its concentration ratio. Because of the absence of knowledge of this subject, the weight of the concentration factor

vis-a-vis the cost of compensatory education must be a highly subjective choice.* Also, the effect of the concentration ratio on cost is not applied at the state level because the averaging among the counties would dilute the concentration effect. Needless to say, it would be desirable to apply the concept at the LEA level.

In summary, due to the absence of information on the actual costs of compensatory education, three broad configurations of cost of compensatory education may be assumed in comparing the costs among areal units. These are: (1) postively related to the costs of regular education, (2) uniform throughout the nation, and (3) negatively related to the costs of regular education. The choice among them, however,

---

*The relationship between the cost of compensatory education and concentration ratio was formulated in the following linear form

$$M = M' (1+\alpha C)$$

where M' represents the cost per child without considering the poverty concentration effect, C the concentration ratio, α the weighting constant, and M the adjusted cost of compensatory education. Four values of the constant α were used in the course of this study (0, 2.5, 5, and 10), and the results are reported in Chapter 3.

The concept of concentration does not apply to the SEA grants. When a concentration effect is applied, the LEA authorizations are increased. In a proportional reduction process the SEAs would therefore suffer a greater reduction than when the concentration effect is not applied. To prevent this, when there is a concentration effect and a proportional reduction, the authorizations for SEA grants are increased in proportion to the overall increase in the LEA authorizations.

must rest not on an empirical basis but on matters of principle. The situation is different from that facing the choice among the data for enumerating eligible children. For that purpose, the problem is choosing among the available data on the basis of the criteria of uniformity, currency, accuracy, etc. Because of the different nature of decisions required in the choice of a cost factor for the formula, the numerical analyses of grant allocations in Chapter 3 are concerned primarily with comparing the possible distributional outcomes among the areal units under differently assumed configurations of regional costs.

2.5 Adjustment for Underfunding (Reduction Procedure)

Except in the first year of implementation, Title I has consistently faced the problem of appropriation levels which are lower than the levels of entitlement. This condition, known as underfunding, shows no signs of diminishing. It is possible to eliminate underfunding by reducing the cost factor. This would produce an artificial situation wherein the entitlement would be determined <u>after</u> passage of the appropriation. Since there is no advantage of such contrivance, the following discussion assumes the validity of predetermined entitlement levels and the resulting need for a reduction procedure.

The underlying consideration in a reduction procedure is equity: Should all eligibles be reduced in the same proportion or should some receive preferential treatment? In the present Title I allocation procedure, SEA children are fully funded, whereas the LEA children are partially funded. As the extent of underfunding grows, this disparity grows also. The following table shows that the average allotment per SEA child has increased about 70% since FY67, while average allotment per LEA child has been relatively constant.

Average Dollar Allotment Per Child

	FY66	FY67	FY68	FY69	FY70	FY71	FY72
SEA Program	$243	239	263	297	328	368	413
LEA Program	$206	164	168	149	170	175	168

At the national level, the consequence of this non-proportional reduction is small for most children. In a completely proportional reduction, the average allotment per eligible child (SEA and LEA) in FY72 would have been $178. This represents a 6 percent increase for the LEA children and a 57 percent decrease for the SEA children. It is questionable, nevertheless, that SEA chidlren who constitute only 4 percent of the eligibles should receive nearly 10 percent of the funds.

The consequence of underfunding can be viewed as either (1) a reduction in the funds available for each eligible child or (2) a reduction in the number of children who can be benefited at the level indicated by the cost factor. These observations

lead to two potential rationales for the form that a reduction procedure should take.

First, any reduction in the funding per child should be based upon knowledge of benefit-cost functions for the various groups of eligible children. For example, if it were known that a 10 percent reduction in funding for one age group would result in a 5 percent reduction in benefit, and that a 10 percent reduction in funding for a second age group would result in a 20 percent reduction in benefit, then the second group would merit preferential treatment.

Second, any reduction in the number of eligible children to be served would probably rely on intuitive argument. For example, the migrant children might be viewed as especially disadvantaged because, although impoverished, their mobility prevents them from qualifying for welfare programs.

Since detailed knowledge of benefit-cost functions in compensatory education is beyond the state of the art, the first kind of justification for preferential treatment cannot be sustained. Whether a justification of the second type can be supported is entirely a matter of judgment, and not a matter that can be finally resolved here. Thus, the equity consideration seems to require proportionally equal reduction for all children.

However, there are several examples of inequity which should be acknowledged and resolved. Neglected and delinquent children may participate in either LEA or SEA programs,

depending on whether the institutions serving them are administered under local or state auspices. In the enumeration for FY73, 68,865 neglected and delinquent children were counted as eligible for the LEA program, and 61,064 for the SEA program. Obviously, the latter group receives a significantly higher level of funding. This result is due solely to an accident of administrative arrangement.

A parallel example would be the funding for handicapped children. Title I funds are limited to those children in state-operated institutions. Thus, no money is provided to many handicapped children who are served by LEAs.* It should also be mentioned that programs for handicapped children are given additional grants through the Education of the Handicapped Act (PL91-230, formerly Title VI of ESEA). While these considerations may not apply directly to the reduction procedure, they substantiate the inequity of fully funding Title I grants for the handicapped.

One factor which attempts to ameliorate any inequities due to underfunding is the "floor" provision. The floor guarantees some minimum level of funding for each state. In theory, the floor is intended to insulate the eligible child from the vicissitudes of funding levels. In practice,

*The Bureau of Education of the Handicapped, in USOE, estimated for FY72 that there were 6.5 million handicapped children in the nation, of whom 2.8 million were being served in some program. The Title I formula identified 130,782 handicapped children.

however, the floor applies at the state level. One result is that some LEAs receive substantially higher allocations (in proportion to their entitlement) than others. In FY72, the majority of the states (those supported at the floor level) received 39 percent of their entitlements, while New Mexico (supported by a floor level) received 47% of its entitlement.

The need for the floor provision arises when the entitlements of some states increase more rapidly than the total appropriation. Any increase in a state's entitlement depends upon two factors: (1) the increase in APPE and (2) the increase in the AFDC counts. Although the effect of APPE increases has been relatively small, the effects of differential increases in the AFDC data have been the principal cause of the need for the floors.

Any lessening of interstate biases in enumerating the eligible children should, therefore, lessen the need for the floors and reduce the gap between the floor and the actual allotment levels. In particular, changing the enumeration method from the additive AFDC of the present formula to multiplicative AFDC components, as considered for the alternative formula possibilities, should lessen the need for the floor provision. The use of a uniform cost factor would supplement this effect.

Chapter 3

ALTERNATIVE ALLOCATIONS AND THEIR EFFECTS

The allocation of Title I funds to the county level is a responsibility of the USOE. The official allocation is computed annually. Although the computational task is a laborious and lengthy process, a mixture of computer and manual procedures has proved to be satisfactory for program requirements. Early in this study it became apparent that a great many alternative allocations should be examined. In some formula grant programs, it would have been possible to do this by analyzing a small portion of the system. This cannot be done in the case of Title I. It is not possible to simulate the allocation with any sample, because the reduction procedure must work on the total allocation. Accordingly, a major initial effort of this study was spent in developing a computer system which duplicates the official allocation procedure.

The examination of numerous alternative allocations, and the analysis of their effects on the distribution of Title I funds, has been carried out by use of the computerized system. Each computer simulation of the allocation process involves the following:

1. Selection of poverty children data for each of 3,113 counties, from census data.
2. Updating of census data with current AFDC data.
3. Designation of cost values to be used.
4. Determination of concentration of poverty children for each county (only when concentration effects are calculated).

5. Computation of the entitlements for SEAs and counties.

6. Reduction of the computed entitlements as required.

7. Aggregation of final county results for presentation.

To facilitate analysis of the proposed allocations, an arbitrary "standard allocation formula" was developed. This standard formula uses the Orshansky data from the 1970 census for the base enumeration of poverty children. To update the 1970 data, the standard formula then multiplies each county's initial value by the change in AFDC data for that respective state. The county enumerations are then normalized according to the CPS estimates of the national total.

A uniform cost factor of $300 per child is used for the standard formula. The reduction procedure in the standard formula assumes no floors, and proportionally reduces all SEA and county grants from the calculated entitlement to the appropriation of $1.5 billion for the 51 states under Part A. The "standard" entitlement of $300 per child then becomes an allotment of $165 per child.

The distributional results of each proposed alternative are compared to that of the standard formula. Subsequent analyses are presented in terms of change with respect to the standard.

Presentation of actual results for 3,113 individual counties would be impractical. For simplicity, three different methods of displaying results are used. These are:

1. Aggregating all results into 51, equal size, groups of counties (the first and last groups contain 62 counties, the remainder have 61). All counties are ranked in terms of either per

capita income (highest to lowest) or percent of poverty children (lowest to highest).* Results for the first 62 counties are then summarized into the first "pseudo-state," or group. This process continues until all 3,113 counties are aggregated into 51 groups. It should be emphasized, there is no geographic basis of distribution; therefore, each group may contain counties from all over the nation.

2. The same process is carried out at a higher level of aggregation, five equal-size county groupings. The word "quintile" is used in this text to describe these groups.**

3. Summarization by states.

The computer system developed for this study is being maintained through FY73 in anticipation of its subsequent use for other analyses which may be desired.

3.1 Methodology

3.1.1 Conceptual Framework for Analysis. The purpose of the following analysis is to evaluate the allocation effects of the factors that make up the proposed Title I allocation formula. Such evaluations, by showing the numerical magnitudes of the effects, would be valuable in reformulating grant allocation procedures for compensatory education. The effects of the formula are analyzed singly and in various combinations.

---

*Three other criteria were considered but not used. They were income per school enrollment, number of poverty children, and total income deficit. The first criterion is almost identical to per capita income, whereas the latter two were almost identical to each other. The number of poverty children and total income deficit were not used because they were dependent on the county sizes and hence would result in aggregating counties according to population sizes—not a very useful result.

**The term "quintile" is commonly used to denote the end point of a range of one-fifth.

The factors that make up the formula are the following:

1. Enumeration of the eligible children.
2. Cost of compensatory education.
3. Concentration of poverty children.
4. Differential funding between LEAs and SEAs.
5. Presence or absence of the floors.

Each of the factors can be varied, independent of the others, and effects analyzed. The second and the third factors in the above list pertain to the cost of compensatory education, and the fourth and the fifth pertain to the reduction procedure. For ease of presentation, therefore, the five factors have been consolidated into three components: (1) number of eligible children; (2) cost factor incorporating the concentration effect, and (3) reduction procedure. The three components of the formula are designated, respectively, as K (Kids), M (Money), and R (Reduction procedure).

The variations of the three formula components are defined in Table 3.1.1. The first variation of the number of poverty children (K_1) should be read as follows: the number of children from families whose income was below $2,000 in the 1960 census plus the number of children from families receiving AFDC payments above $2,000 as of January 1972. For K_2, the number of children below $2,000 family income is replaced by the newer data from the 1970 census. For K_3, the number of children represents those whose family income was below $3,000 according to the 1970 census, which necessitated the change in the number of AFDC children to those

Table 3.1.1

Components of the Title I Allocation Formula

	<u>K</u> (Number of Poverty Children)
K_1:	\$2,000 (60) + AFDC (72) above \$2,000
K_2:	\$2,000 (70) + AFDC (72) above \$2,000
K_3:	\$3,000 (70) + AFDC (72) above \$3,000
K_4:	\$3,000 (70) x AFDC Ratio [adjusted for CPS estimates]
K_5:	Orshansky (70) x AFDC Ratio [adjusted for CPS estimates]
	<u>M</u> (Cost: 50% of APPE When Applicable)
M_1:	MAX (SAPPE, NAPPE); Concentration Effect: none
M_2:	MAX (SAPPE, NAPPE); Concentration Effect: low
M_3:	MAX (SAPPE, NAPPE); Concentration Effect: moderate
M_4:	MAX (SAPPE, NAPPE); Concentration Effect: high
M_5:	SAPPE; Concentration Effect: none
M_6:	SAPPE; Concentration Effect: low
M_7:	SAPPE; Concentration Effect: moderate
M_8:	SAPPE; Concentration Effect; high
M_9:	\$300; Concentration Effect; none
M_{10}:	\$300; Concentration Effect; low
M_{11}:	\$300; Concentration Effect; moderate
M_{12}:	\$300; Concentration Effect; high
	<u>R</u> (Reduction Procedure)
R_1:	Nonproportional Reduction; Floors for LEA grants
R_2:	Nonproportional Reduction; No floors for LEA grants
R_3:	Proportional Reduction; Floors for LEA grants
R_4:	Proportional Reduction; No floors for LEA grants

receiving annual family assistance above $3,000 payment level. For K_4 and K_5, the children below the $3,000 family income and the Orshansky family income levels, respectively, are multiplied by the changing rates of AFDC children of all payment levels (i.e., not confined to those receiving payments above $2,000 or $3,000 per year) between 1970 and 1972.*

The variations of the cost component are the combinations of three costs and four concentration effects. The three costs are:

1. 50 percent of whichever is greater—state or national APPE: MAX (SAPPE, NAPPE).
2. 50 percent of state APPE: SAPPE.
3. $300 per eligible child: $300.

The concentration effects are classified as none, low, moderate, and high.

The variations of reduction procedure are composed of (1) proportional or nonproportional reduction and (2) the presence or absence of the floors for the LEA grants. The nonproportional mode of reduction fully funds the SEAs while ratably reducing the LEA grants, and the proportional mode ratably reduces both the SEA and LEA grants.

The formula cannot be exercised until the appropriation level and the LEA floor value are specified. The two appropriation levels assumed are $1.5 billion and $1.6 billion. The three floor values for LEA grants are assumed at 80, 90, and 100 percent of FY72 grant level for LEA children.

---

*The numbers of poverty children for K_5 used for analysis in Chapter 3 do not exactly match the K_5 of Chapter 2, for technical reasons. The analytical results presented, however, are only minimally affected.

The selection of the two appropriation levels is based on finding an amount close to the FY72 level which was $1.6 billion. The selection of the three floor values is based on finding suitable values that are consistent with the assumed appropriation levels. When the floor value is defined as 100% of the FY72 grants, the $1.5 billion appropriation level is insufficient to satisfy the floor requirements for the LEAs if the SEAs are fully funded. Hence, 80 and 90 percent values are also included.

In the present analysis, the number of variations assigned to each of the items is as follows:

Enumeration of children	5
Cost of compensatory education	12
Ratable reduction	2
Appropriation level	2
Floor values for LEA grants	4

The total number of possible formula variations is the product of the five numbers, or 960. Computing and analyzing the grant allocations for all the possible variations would be impractical. Through an a priori selection, therefore, 150 variations have actually been computed and analyzed.*

Such a selection process, as well as the selection of the values for the three formula components, involves some subjective judgments on the part of the analysts, a fact that should be kept in mind in interpreting the analysis results.

*The 16 allocation results presented in Appendix C match the K_5 value of Chapter 2. All of the computed allocation results are available for inspection.

When the first variations of the formula components, i.e., K_1, M_1, and R_1, are combined, the result is the present Title I allocation mechanism. It, however, is not used as the standard case against which formula variations are compared because doing so would obscure the various allocation effects that are to be analyzed and evaluated. It is for this reason that the standard case is the combination of K_5, M_9, and R_4. It is a simple case in the sense that every eligible child is allotted an equal amount, the specific level depending solely on the appropriation level and the particular K value. It is equivalent to dividing the appropriation equally among all the eligible children of any particular enumeration, but disregarding all other considerations such as the floors, differential costs, or differential needs. The choice of the standard case thus satisfies the purpose of this study—analyzing the factors affecting the allocation of Title I grants and evaluating their numerical significance.

3.1.2 Aggregation of Counties. The analysis of the effects of different Title I allocations might be made at any of three levels:

1. State.
2. County
3. LEA.

The analysis of the impact at the school district (LEA) level is ruled out, however desirable it may be, since poverty children data are not yet available for LEAs. In some ways, the state level is desirable for analysis, because the state is readily identifiable and because APPE values and floors apply at the state level. In this study, however,

most of the analysis is conducted with respect to counties. This is because counties are more homogeneous units and more closely reflect the conditions of the LEAs. Also, the concentration effect of poverty children is more meaningful at the county level.

As explained earlier, the presentation of results aggregates counties on the basis of two characteristics of relevance to Title I:

1. County per capita income.

2. County per cent of poverty children in its school age population.

These two characteristics are in general inversely correlated. That is, a county with a high per capita income tends to have a low concentration of poverty children, and vice versa.

It is of interest to note how the total population of poverty children is distributed among county quintile groups. On the per capita income basis, the distribution is highly skewed; on the percent poverty children basis, it is not. These distributions are compared in Table 3.1.2:

Table 3.1.2
DISTRIBUTION OF POVERTY CHILDREN BY COUNTY QUINTILES*

Quintiles Ranked By Per Capita Income	Percent of All Poverty Children In This Group	Quintiles Ranked by Concentration of Poverty Children	Percent of All Poverty Children In This Group
1. Lowest Income	16%	1. Highest Concentration	19%
2.	11	2.	23
3.	10	3.	16
4.	17	4.	23
5. Highest Income	46	5. Lowest Concentration	19
All Counties	100%	All Counties	100%

*The data used to rank and group the counties are from the 1970 Census.

This table shows, first, the large numbers of poverty children are found in areas with high per capita income. Such an apparent anomaly merely reflects the fact that many of the large counties fall into the highest per capita income quintile. Along with high per capita income, these counties have concentrations of poverty children. That is, some of the large counties in the highest per capita income quintile are not in the lowest quintile ranked by concentration of poverty children.* (These instances should not be viewed as invalidating the notion of the existence of a basic inverse relationship between the two rankings.**

The calculated allocation results are more generally presented in terms of the per capita income ranking of counties only because:

1. The county rankings by per capita income and percent poverty children show a high degree of inverse correlation.
2. Per capita income is a more unambiguous economic measure.
3. Allotment per pupil is sensitive to a county's economic conditions but not to its number of eligible children _per se_.

In general, counties can not be neatly classified as cities, suburbs, or rural. Thus, the two county statistics do show the distributional consequences among the counties in terms of economic measures but not the effects among the cities, suburbs, and rural regions. To this end, 48

*For example, three boroughs of New York City—Manhattan, Brooklyn, and Bronx—all belong to the quintile having highest per capita income but also belong to the quintile having the second highest percent of poverty children.

**In the case of the 24 counties in Maryland with Washington, D. C. treated as a county, the rank-order correlation coefficient of the two measures was -0.7192. When Washington, D. C., and Baltimore City were excluded the coefficient increased in absolute size to -0.8834.

counties from 8 states are selected and their allotment levels are evaluated. Differences in the distributional effect among cities, suburbs, and rural areas are accomplished only when the concentration factor is added to the cost factor.

3.1.3 Presentation Measure. In most of the analyses, the allotment per eligible child is a more graphic comparison among counties than the total dollars. This is because the allotment per child:

1. Directly relates to the cost of compensatory education.
2. Removes size differences (in terms of the count of poverty children) among counties.

For example, this type of analysis permits a direct comparison of allocation consequences among large urban and small rural counties.

However, when comparing effects of using different means of counting poverty children (values for K), the allotment per child statistic can be misleading. For example, Table 2.3.2 shows that the five population totals vary from roughly 4.5 million to 8.4 million. A change in K can make a proportional change in the dollars per child allotment while the total allotment to a county unit might be unaffected.

3.2 Cost and Concentration Effect

Because the real cost of compensatory education and its pattern of regional variation are not known, the cost factor in the allocation formula has been interpreted as the incremental resources necessary (per pupil) to carry out supplemental compensatory education. Three broad regional cost configurations based on APPE values are discussed in Section 2.4, and their concrete forms are assumed to be

(1) 50 percent of state APPE (SAPPE);

(2) uniform cost of $300; and

(3) additional money in proportion to the size of poverty concentration.

The presently used cost factor (larger of the state or national APPE) is an intermediate case between (1) and (2) above, and will be treated as such in this analysis.

The main purpose of the numerical analysis of the cost factor is to compare the allocation effects of alternative cost assumptions. Since the main focus of the earlier discussion on cost dealt with the regional disparities of APPE according to income measure, the following analysis is concerned with the manner in which economically different regions are affected by alternative cost factors.

3.2.1 Comparison of Costs without Concentration Effect. The first comparison deals with the distributional consequences of using (1) SAPPE, (2) $300 per pupil or (3) MAX (SAPPE, NAPPE), as the cost factor. First, the comparison of allotment per pupil by county quintiles between SAPPE and the $300 value is shown in Table 3.2.1.

The per pupil allotments demonstrate, as expected, the income bias of using SAPPE values. Only the highest income quintile (i.e., 20 percent of the counties) benefits by using SAPPEs rather than a uniform cost factor. This results from the fact that 46 percent of the poverty (Orshansky) children, in terms of the 1970 census enumeration (see Table 3.1.2), reside in the counties belonging to the highest income quintile. The results, therefore, may be interpreted to imply that by

Table 3.2.1
COMPARISON OF ALLOTMENT PER PUPIL: $300 VS. SAPPE

Quintiles Ranked by Per Capita Income	$300*	SAPPE	% Difference**
1. Lowest income	$165	$125	-24%
2.	165	136	-18
3.	165	149	-10
4.	165	154	-7
5. Highest income	165	192	16

Table 3.2.2
COMPARISON OF ALLOTMENT PER PUPIL: $300, MAX, SAPPE

Quintiles Ranked by Per Capita Income	$300	MAX(SAPPE,NAPPE)	SAPPE
1. Lowest income	$165	$153	$125
2.	165	155	136
3.	165	157	149
4.	165	159	154
5. Highest income	165	175	192

*The $165 per pupil allotment under the $300 cost factor is achieved for any other constant cost so long as it is greater than $165. When the reduction procedure is proportional and no floors apply, the formula merely divides the total appropriation equally among the eligibles. The neutrality of a uniform cost carries over if concentration effects are added so long as the reduction procedure is proportional and no floors are applied. In this sense, the choice of any particular uniform cost value is arbitrary.

**The percentage values do not sum to zero since (1) the per child allotment values incorporate the total allotments and the number of children and (2) the quintiles contain unequal numbers of children.

choosing a uniform cost, a large majority of counties would receive higher per pupil allotments. Moreover, the additional amounts to be gained vary according to the economic status of each county group.

The presently used cost factor, MAX(SAPPE,NAPPE), is a compromise case between the use of a uniform cost and SAPPEs. Since income levels and APPE values show close association (i.e., they show high positive correlation), the allocation results of using MAX(SAPPE,NAPPE) as the cost factor are intermediate between the uniform cost and SAPPE results. Such results are presented in Table 3.2.2.

It should be noted that when MAX(SAPPE,NAPPE) is used as the cost factor, the effect of NAPPE results in relatively equal per pupil allotments for four of the quintile groups. It may be inferred that the main beneficiary of using MAX(SAPPE,NAPPE) as the cost factor instead of a uniform cost is the top 20 percent of the counties measured in terms of per capita income.

3.2.2 Concentration Effect. The purpose of incorporating the concentration effect into the cost factor is to channel more funds to the areas with high concentration of poverty children. This amounts to more funds for low income areas. The effect of concentration would be even greater if the initial cost factor favored low income areas. Accordingly, the allocation results should show the greatest monetary increase for low income areas when the concentration effect is incorporated with the uniform cost factor. Table 3.2.3 shows results of adding the same concentration effect to the initial cost factors of $300 per pupil and SAPPE.

Table 3.2.3

Comparison of Adding the Same Concentration Factor to Different Initial Costs

I. $300 Per Pupil

Quintiles Ranked by Per Capita Income	Without Concentration	With Concentration	% Difference
1. Lowest Income	$165	$271	64%
2.	165	201	22
3.	165	167	1
4.	165	158	-4
5. Highest Income	165	133	-19

II. SAPPE

Quintiles Ranked by Per Capita Income	Without Concentration	With Concentration	% Difference
1. Lowest Income	$125	$214	71%
2.	136	171	26
3.	149	156	5
4.	154	151	-2
5. Highest Income	192	163	-15

Three significant points should be noted in Table 3.2.3.

(1) The larger percentage increase in the lowest income quintile relative to the highest income quintile results from the unequal distribution of poverty children in the respective quintiles. If the distribution of poverty children were uniform for all quintiles, the relative changes in the allotment per pupil among the quintiles would exactly cancel out.

(2) The relative strength of concentration effect is similar for both values of initial costs. That is, the distributions of "% Difference" column appear quite similar.

(3) The purpose of the concentration effect is to reallocate the grant money among economically different counties. This phenomenon is not something intrinsic in the way the concentration effect operates; rather, it results from having to divide a fixed amount of grant money. If the supply of total grant money were unlimited, a quite different outcome would occur. Specifically, every county would receive a higher allotment per child compared to the initial situation when the concentration effect is absent; the sizes of additional amount would be proportional to the sizes of concentration ratio. When the supply of total grant money is fixed, introduction of concentration effect is equivalent to a reallocation of the grant money from richer to poorer counties.

3.2.3 Intensity of Concentration Effect. The specific consequences of incorporating a concentration effect into the cost factor were described in the preceding section. What was not described is the possible change in allocations in response to varying the intensity of concentration

effect. More specifically, the importance or relative weight of the concentration effect vis-à-vis a given cost factor can be varied freely so that such consequences should be studied.

The question naturally arises what weight should be attached to the concentration effect. The allocation results of alternative weights given to concentration effect are shown in Table 3.2.4. The table represents the outcomes using three different concentration weights (low, moderate and high) with the \$300 per pupil cost and compares them to the results derived from the same cost without any concentration effect. The designations, low, moderate, and high are arbitrary; what matters is that their relative rankings are maintained.* The \$300 per pupil is chosen because changing allocations are thus easier to compare by quintiles, but similar effects would result for the other costs.

---

*More specifically, the concentration effects can be defined in terms of the cost formula discussed in Section 2.4,

$$M = M'(1+\alpha C)$$

where M is per pupil cost incorporating concentration effect,

M' is cost,
C is concentration ratio of poverty children, and
α is the weighting constant.

The four cases of concentration effect are defined in terms of the weighting constant as,

none: $\alpha = 0$
low: $\alpha = 2.5$
moderate: $\alpha = 5$
high: $\alpha = 10$

It should be stressed that the choice of the specific values for the weighting constant is an arbitrary and subjective one, depending on a preference for desired outcomes.

Table 3.2.4
COMPARISON OF ALLOTMENT PER PUPIL: ALTERNATIVE CONCENTRATION WEIGHTS WITH $300 PER PUPIL COST*

Quintiles Ranked By Per Capita Income	None	Concentration Weight Low	Moderate	High
1. Lowest Income	$165	$235	$271	$303
2.	165	187	201	212
3.	165	165	167	168
4.	165	159	158	156
5. Highest Income	165	142	133	123

In the above table, noticeable changes are confined to the first, the second, and the fifth quintiles, while the third and fourth quintiles are affected only slightly. Still, these numbers are not sufficient to determine what the "appropriate" weight should be. However, numbers like these may be used to choose a desired weight, if the resource needs can be determined independently for those counties belonging to different income categories.

The same information that is presented to Table 3.2.4 is shown in the following three sets of graphs in a more disaggregated form. Each graph compares the percentage difference in allotment per pupil for each of the 51 homogeneous county groups when concentration effect is added to the cost. That is, each point (designated by the integer 1) represents the difference in allotment per pupil (as expressed in percentage value) for those cases with varying levels of concentration versus one without concentration effect. The 51 county groups are placed along the horizontal

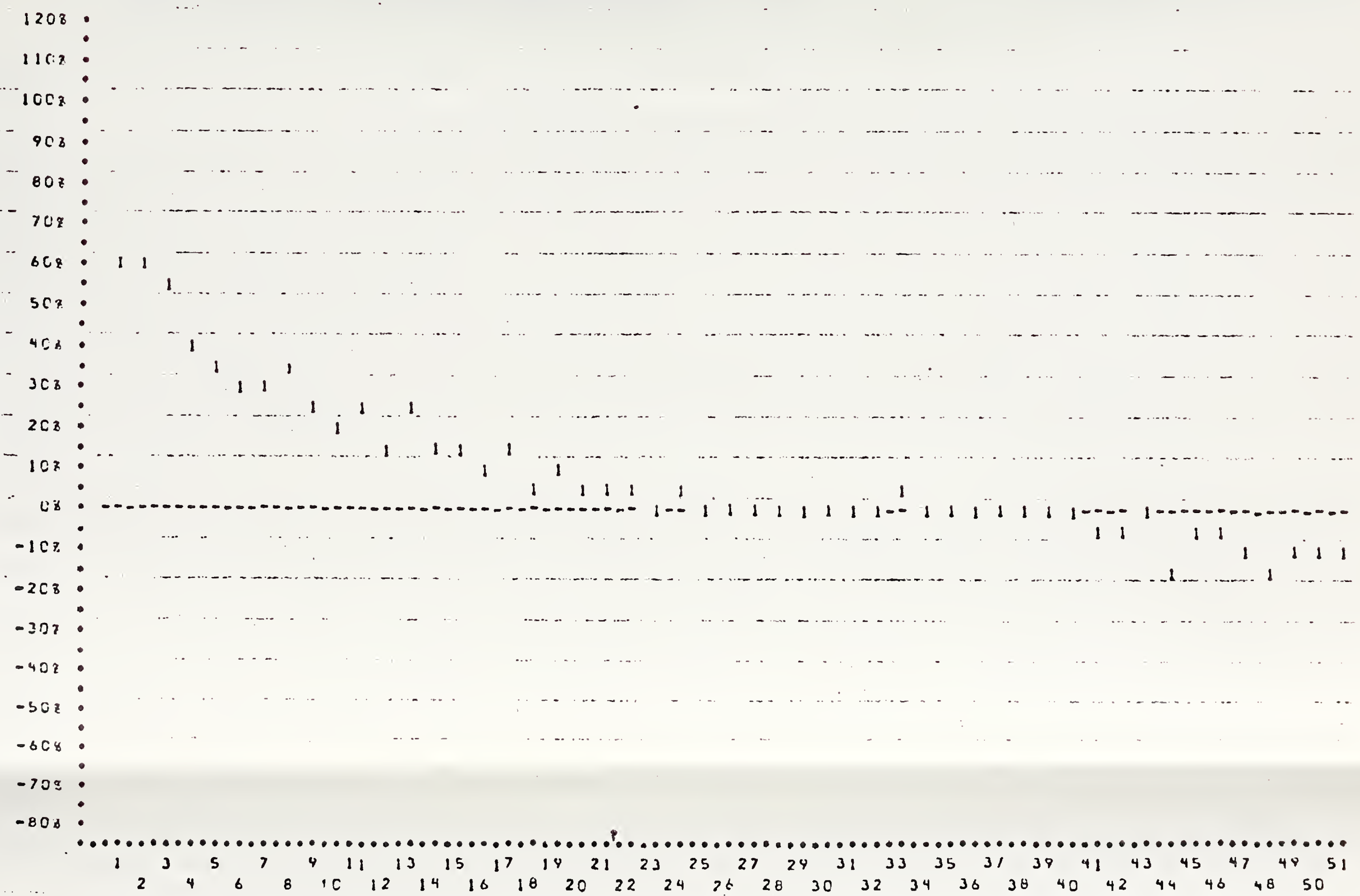
*The concentration effects in terms of SAPPE and $300 per pupil costs presented in Table 3.2.3 correspond to the case of moderate weight.

Comparison of Dollars Alloted Per Child

Concentration Weight: Low

BASE: ORSHANSKY • AFDC RATIO, $300, NO FLOORS
1. ALT.: ORSHANSKY • AFDC RATIO, $300, ALPHA=2.5, NO FLOORS

AVG. $/CHILD FOR BASE: $ CHILD.
AVG. DEVIATION FROM BASE: $ 24./CHILD.



ABSCISSA: COUNTY GROUPINGS RANKED IN ORDER OF INCREASING (L. TO R.) PER CAPITA INCOME

ORDINATE: PERCENTAGE DEVIATION(S) OF DOLLARS PER CHILD, FROM BASE.

Figure 3.2.2

Comparison of Dollars Alloted Per Child

Concentration Weight: Moderate

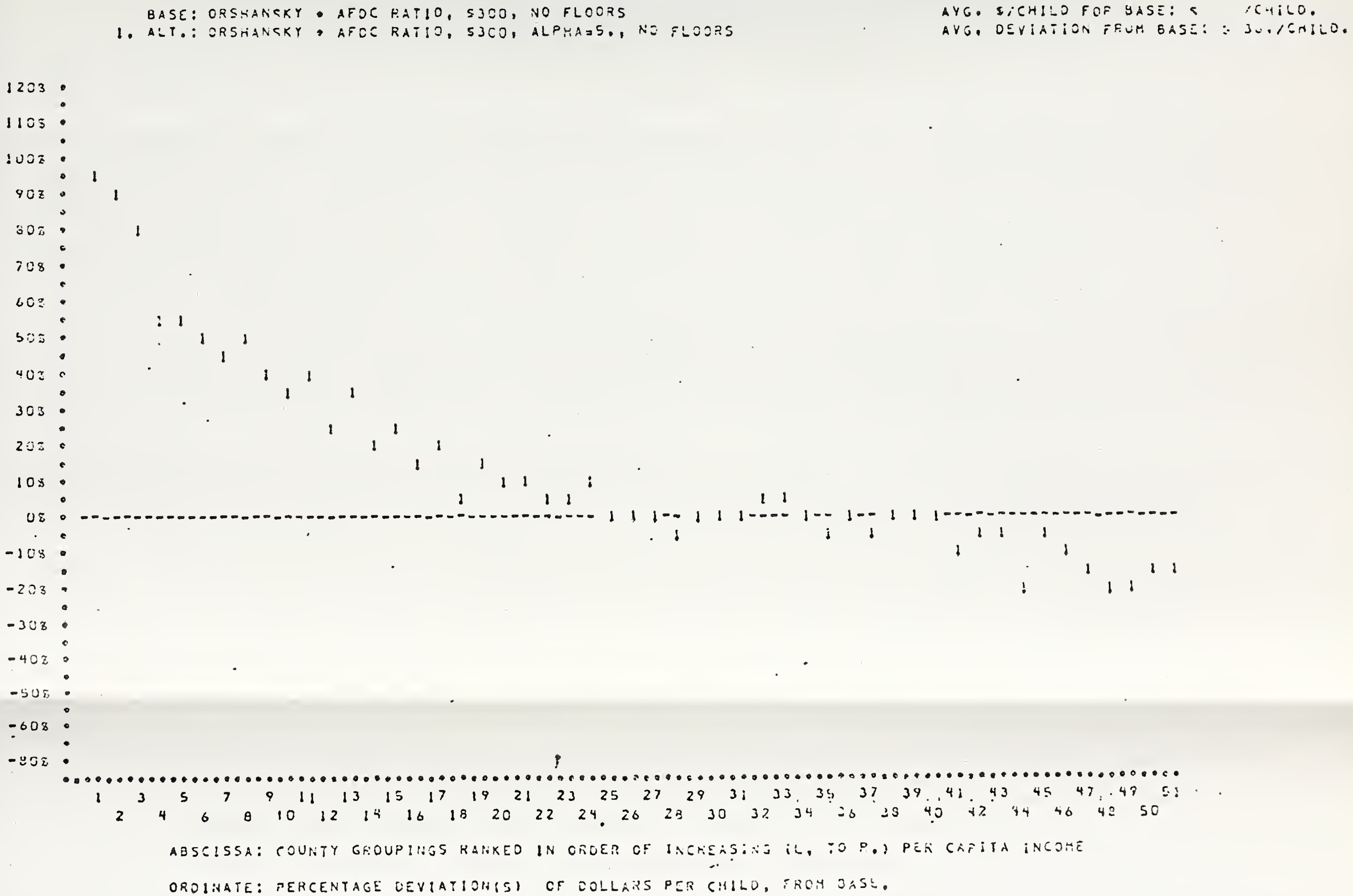


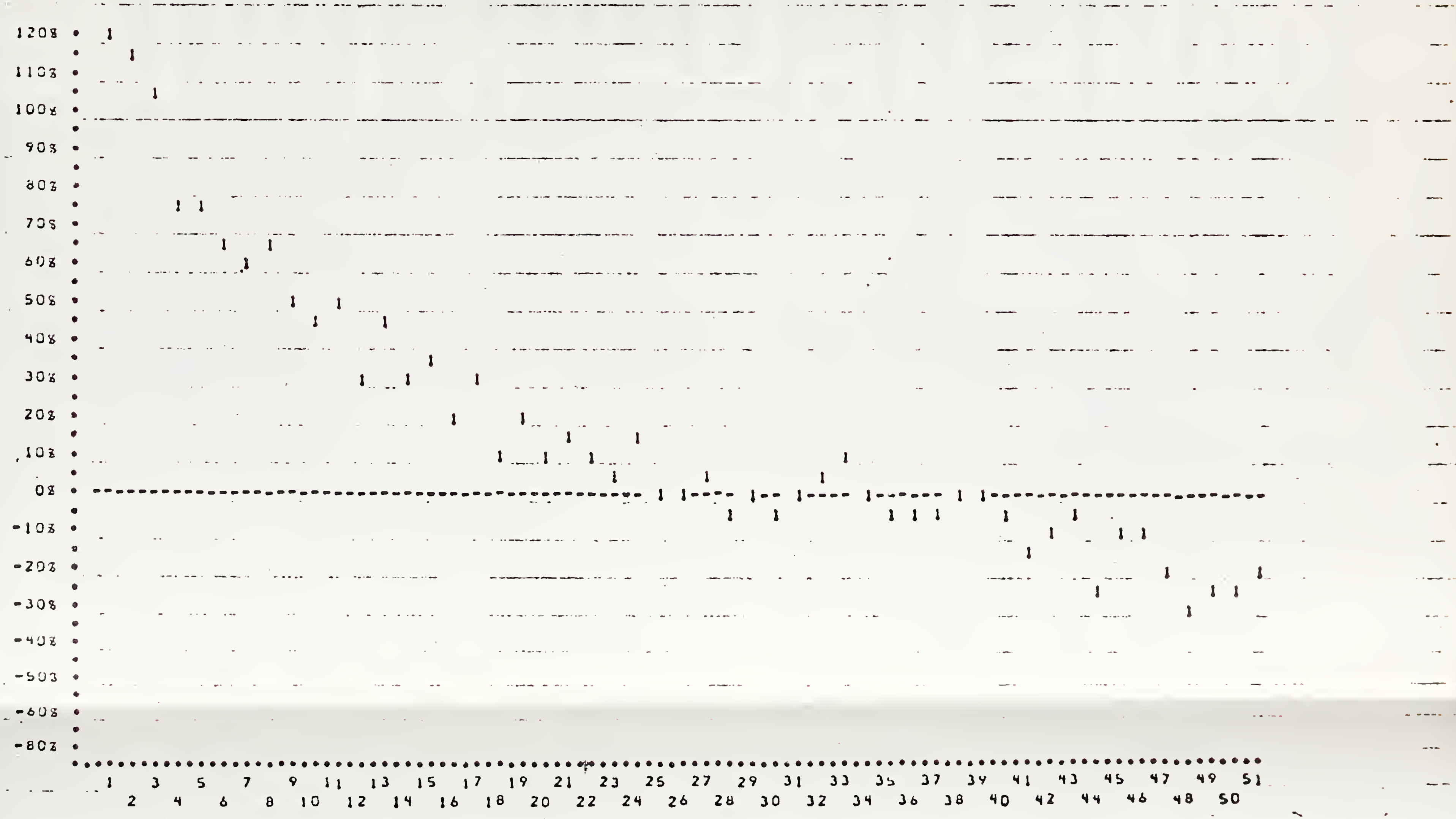
Figure 3.2.3

Comparison of Dollars Alloted Per Child

Concentration Weight: High

BASE:ORSHANSKY • AFDC RATIO, $300, NO FLOORS
1. ALT.:ORSHANSKY • AFDC RATIO, $300, ALPHA=10., NO FLOORS

AVG. $/CHILD FOR BASE: $ ./CHILD.
AVG. DEVIATION FROM BASE: $ 47./CHILD.



ABSCISSA: COUNTY GROUPINGS RANKED IN ORDER OF INCREASING (L. TO R.) PER CAPITA INCOME

ORDINATE: PERCENTAGE DEVIATION(S) OF DOLLARS PER CHILD, FROM BASE.

axis according to the size of per capita income (increasing from left to right). Thus, county group 1 has the lowest average per capita income and county group 51 has the highest average per capita income.

The graphs reveal dramatically the reallocation consequences among the counties when concentration effects are added. The beneficiaries of the concentration effect are the counties with lower per capita income. Their gains are offset by the losses of those counties with higher per capita income. It should be pointed out, again, that the unequal distribution of eligible children among the county groups, i.e., more at the higher income end, gives the impression that there are more gains than losses. Such an impression can be counteracted by noting that the measure compared in the graphs is allotment per child, not total allotment to the counties.

3.2.4 <u>Alternative Interpretation of Concentration Effect</u>. Heretofore, the interpretation attached to the concentration effect has been that the resource needs for compensatory education may be different according to a pupil's educational environment. As the environment becomes unfavorable, the need for resources increases, i.e., the cost of compensatory education rises. The pupil's educational environment is measured by the concentration of poverty children at the county level.

An alternative interpretation of the concentration effect is to assume that the costs of compensatory education are actually known, at least the minimum levels that are necessary to administer some specified form of compensatory education. The concentration effects, under this interpretation, are used to channel more money to specific areas

or counties so that more eligible children can participate in the compensatory educational programs.

If the cost factor is viewed as some minimum necessary cost which is greater than the average allotment per pupil, the number of eligible children being able to participate in the Title I program in any county must be less than the total number of eligible children so long as underfunding of Title I prevails. The maximum number of children that can be accommodated by a given level of allotment to a county can be calculated and be expressed as the program participation rate. As the allotment level rises, so would its participation rate.

The critical assumption regarding this interpretation of the concentration effect is that the cost factor is actually known. The use of the minimum necessary cost concept may prove to be helpful in estimating the cost operationally. For example, a particular program may specify a reading specialist for five disadvantaged children at one-quarter of their school time. The salary of the specialist then becomes the minimum necessary cost for the administration of this particular program.

Table 3.2.5 illustrates the distributions of participation rates for the county quintiles. The same four concentration weights are used and the cost factor is $300 per pupil.

Three observations may be made from the table.

(1) Relatively small losses by the higher income counties can provide more than proportionate benefits to the lower income counties. As in the case of allotment per pupil, differences in the distribution

Table 3.2.5
PROGRAM PARTICIPATION RATES FOR ALTERNATIVE CONCENTRATION WEIGHTS

$300 Per Pupil

Quintiles Ranked by Per Capita Income	None	Low	Moderate	High
1. Lowest Income	55%	73%	90%	101%
2.	55	63	67	71
3.,	55	55	56	56
4.	55	53	53	52
5. Highest Income	55	47	45	41

of eligible children among the quintiles make possible the trade-off of a smaller sacrifice in terms of participation rate by the highest income quintile with a large gain by the poorest two quintiles.

(2) The program participation rate is 101 percent for the lowest income quintile under the high concentration weight. In other words, more than the enumerated eligible children can participate in the programs. It is clear that an upper limit can be set on the size of concentration weight by observing the resulting highest value of participation rate. In this sense, the determination of concentration weights is not completely free.

(3) Since the program participation rate is a more operationally usable concept than allotment per pupil, it may be used as a guideline for fund allocation. For example, some particular level of participation rates may be specified as the program goal for some or all of the county quintiles. The same procedure may be used to find the combinations of

cost factors and concentration weights that best achieve the specified goal, provided that the alternative cost factors to be considered are reasonable estimates of minimum necessary costs.

3.2.5 Concentration Effect: Comparison Among City-Suburb-Rural Counties. The concentration effect is brought out more dramatically in terms of counties in city—suburb—rural comparisons. The following table lists the mean value, as well as the highest and the lowest values, of the allotment per child in each of the classes from the specially selected 48 counties.

Table 3.2.6
ALLOTMENT PER CHILD: CITY—SUBURB—RURAL COMPARISON
CONCENTRATION WEIGHT: MODERATE

	City	Suburb	Rural
Average	$169	$100	$190
Highest Value	196	117	309
Lowest Value	144	91	114

The allotment per pupil is uniformly $165 for all counties when the concentration effect is absent. The substantial decreases for the suburban counties are to be expected. Even the highest value for the suburbs is about the same as the lowest value for the rural counties and well below the lowest value for the cities. Although the highest value comes from the rural counties, the rural county values have greater variation than the city values. In other words, the cities, although representing various geographical regions, are characterized by uniformly high degree of need whereas the needs of the rural areas are more varied.

*The list of counties is shown in Table 2.4.4 of Section 2.4.

3.2.6 Summary. Although concrete data on the costs of compensatory education are lacking, the foregoing analyses bring out certain generalizable patterns in the intercounty allocation effects associated with the alternative assumptions of the cost factor. The main findings are summarized:

1. The allocation effects measured by the allotment per pupil show substantial changes among the counties when the definition of the cost factor is changed.

2. The present version of the cost factor--MAX(SAPPE, NAPPE)--equalizes the per pupil allotment level for about 80 percent of the counties rather than one half as might be expected.

3. If a uniform cost is to be used when underfunding exists, its particular level does not matter. Both 50 percent of NAPPE ($429) and $300 pupil cost factors give essentially the same allotments per pupil to all counties.

4. The concentration effect becomes a redistribution effect when the appropriation level is fixed. Funds are shifted from richer to poorer counties while the intermediate counties are relatively unaffected.

5. Even when using SAPPE, a large enough concentration weight can bring about a significant redistribution of funds among the counties.

6. If minimum necessary costs can be roughly estimated, allocations may be made to satisfy prespecified levels of program participation rate.

7. The concentration effect shifts funds from suburban areas to larger urban and poorer rural areas.

3.3 Reduction Procedure and Floor Effects

3.3.1 <u>Differential Funding Rates for SEAs and LEAs</u>. The number of children administered by SEAs is relatively small in the Title I program. In FY73, they constitute about 4 percent of the total eligible children. Because of their small relative number, the allocation differences of fully funding or ratably reducing the SEA grants have a small effect on the LEA grants. Thus it is easy to overlook the fact that differential funding rates appear to constitute an important inequity in the present Title I funding procedure.

The actual level of appropriation was roughly 40 percent of the authorization in FY72. Since the SEAs were fully funded while the LEA grants were ratably reduced, the SEA share of the total appropriation was about 10 percent, i.e. two and a half times as much per child as the LEA share.

An alternative formula using a uniform \$300 cost factor and full funding of the SEA grants allocates \$300 per SEA child and bout \$160 per LEA child. If the SEA grants are proportionately reduced, all children are allocated about \$165 each.

The problem of differential funding rates cannot be resolved in terms of analysis results. It is sometimes argued that the necessary data for resolving the problem are, once again, the respective costs of compensatory education. It may be stated, nevertheless, that unless some presumption exists for needing the differential funding procedures between the two groups (e.g., in terms of perceived costs), the present procedure is unnecessarily discriminatory.

If a new policy is to be adopted for a uniform reduction rate, however, some form of floors appears necessary for the SEA grants since the required reduction in SEA grants is so large relative to their present share. For example, the aggregate of SEA grants in a state (like the aggregate of LEA grants) could be given a floor of 90% of the previous year's aggregate grant.

3.3.2 Floor Effects. As a general principle, it is reasonable to assume that participation in Title I programs should depend on actual need, not the vagaries of fund availability. Over the years, the funding level of Title I has become progressively lower when compared to the increasing needs expressed by the authorization formula, even though in absolute dollar terms the funding level has increased. The floor provision, therefore, performs the task of protecting the ongoing programs that are threatened by a lower funding level. Since the SEA grants are fully funded by law, the present floor provision applies only to the LEA grants.

The extent of underfunding was so severe in FY72 that 18 states had to be supported by their respective floors. As a result, the formula was ineffective for about one-third of the states.

The major defect of the floor provision as it is defined at present is that the floors are superficial; they do not offer protection to units below the state level, i.e., to counties, LEAs, schools, and individual children. The floor values are defined in terms of state aggregates of allotments for LEAs, but the data used to allocate below

the state level may change. Allotments to LEAs, for example, may change considerably. Logically, it would be preferable to apply the floors at lower geographical levels than the states, for example, the counties. The practical implications of doing so have not yet been worked out.

The analysis of floors presented in this section is done with respect to the states, not counties, because the existing floor provision applies to the states. Effects to be analyzed are the numbers of states supported by their floors, as a result of (1) the appropriation level and and the floor values and (2) the choice of enumeration methods for eligible children. Since the FY73 appropriation level and the definition of floor values are still undetermined, the following three cases are assumed for the purposes of analysis.

	Appropriation	Floor
Case I	$1.5 billion	80 percent of FY72 LEA allotments
Case II	$1.5 billion	90 percent of FY72 LEA allotments
Case III	$1.6 billion	100 percent of FY72 LEA allotments

When the five enumerations of eligible children for FY73 as defined in Section 3.1, are alternatively substituted in the present allocation procedure (i.e. with MAX (SAPPE, NAPPE) as the cost factor, and with SEAs fully funded) the number of states supported by the floors can be tabulated as follows. Except in Case I using K_1 (the present enumeration), the number of states supported by the floors is large. This demonstrates that unless the floor level is much smaller or the appropriation level much higher than those listed here, the substitution of new enumerations

Table 3.3.1
NUMBER OF STATES SUPPORTED BY THE FLOORS

Case	Enumeration Methods K_1	K_2	K_3	K_4	K_5
I	1	24	21	14	16
II	20	33	31	31	31
III	29	38	38	39	41

of eligible children can be negated by the floor. Conversely, those who should be entitled to higher allotments cannot receive their proper shares.

Another way of assessing the influence of the floors is to compare the state aggregate allotments that result with and without the floors. Since the purpose of such a comparison is only to assess the influence of the floors, this demonstration uses Case II of the appropriation and floor levels, and enumeration changes from K_1 to K_2 and from K_1 to K_5. Tables 3.3.2 and 3.3.3 show that the applications of the floors restrict the changes in allotment levels for the states. Described in another way, changing the method for enumerating poverty children does not effect the expected changes in allotment levels so long as the influence of floor provision is retained in the allocation procedure.

Table 3.3.2

Distribution of Allotment Changes Among States
K_2 Substituted for K_1

Change in Allotments (in absolute values)	With Floors	Without Floors
0 - 10%	48	12
11 - 20%	3	17
21 - 30%	0	8
31 - 40%	0	7
41 - 50%	0	7
51 - 60%	0	0
61 - 70%	0	0
Total	51	51

Table 3.3.3

Distribution of Allotment Changes Among States
K_5 Substituted for K_1

Change in Allotments (in absolute values)	With Floors	Without Floors
0 - 10%	38	16
11 - 20%	8	13
21 - 30%	3	13
31 - 40%	2	4
41 - 50%	0	1
51 - 60%	0	2
61 - 70%	0	2
Total	51	51

Appendix A

SPECIAL GRANTS BASED ON THE CONCENTRATION OF POOR CHILDREN: Part C of Title I

Part C of Title I authorizes bonus grants for LEAs that have a concentration of eligible children equal to 20% of the school age population, or that have at least 5,000 eligible children who constitute a 5% or greater concentration. The underlying assumption of this program is that more money per child is necessary where the concentration of eligible children is higher. The following analysis addresses two aspects of Part C: practical considerations, such as administrative problems and the effects of the program in terms of the resultant allocation of funds, and the theoretical or conceptual foundations of the program.

A.1 Practical Considerations

A.1.1 Technicalities. The administrative process for Part C at the Federal level (interpretation of the law, collection and validation of data, and computation of allotments) is extremely burdensome. The computational process itself is considerably more complicated than that for all the rest of Title I. An example of the technical problems is found in the "marginal" LEAs that are eligible pursuant to Sec. 131 (a) (2). These are the LEAs that are not eligible for Part C grants under the defined conditions of the number and percentage

of eligible children, but that "would be eligible" for such a grant if there were "a relatively small increase" in the number of such children, but only provided that the LEA meets unspecified criteria of "urgent need" for financial assistance. In reducing the grants from the authorization level to the appropriation level, each part of Title I affects the others. Part C makes no reference to the grants to SEAs for administrative expenses, and the provisions for those administration grants in Part D do not distinguish between the regular Part C grants and those to the marginal LEAs. Nonetheless, legal opinion has established the practice that the Part C grants to marginal LEAs are to be disregarded in computing the administrative grants, in spite of the fact that the SEA's administrative burden is greater, not less, for grants to marginal LEAs since special justifications in terms of tax effort and other measures of urgent need are required in those cases. Because of this exception, the already complicated reduction procedure for underfunding is made considerably more complex.* The total amount of money

*Although the extent of the complications will not be apparent to the casual reader, no detailed example is provided here. Such an example, together with its explanation, would be longer than this appendix. The complexity of the reduction procedure results in part from a logical circularity in which the administration grants depend on the actual allotment levels of the other grants (under Parts A and C), while at the same time the money available for those allotments depends partly on the administration grants. If the administration grants were proportional to the others, the solution would be relatively simple. However, this is not the case, and since the reduction procedure comprises a set of logical rules as well as mathematical relations, there is no strictly mathematical solution. A description of the reduction process has been provided in the previously cited Interim Report of March 1972.

that was redistributed in FY71 as a consequence of this exception was $1700. Eleven states were affected, so on the average the administration grants were reduced by about $150 per state. Certainly the effect of this technical nicety, in monetary terms, did not justify the complications it added to the administration of the Part C grants.

The previously cited Interim Report of March 1972 stated (p. C-10) that problems of interpretation have been generally settled, although some still arise intermittently. Since that report was written such problems have arisen, one of them in conjunction with Part C. In FY71 and FY72 the funds for administration grants corresponding to Part C grants came from the aggregate Part C allotment and those for Part A came from the aggregate Part A allotment. The practice in FY73 was changed to make the funds for the administration grants for Part C come off the top of the Title I appropriation, thus affecting the amounts available for Parts A, B, and C. However, no change was made in the funding of Part A administration grants. The amount of money involved in this change is less than 1% of the aggregate Part C allotment. In addition to further complicating the allocation of funds, this new exception required that the amount reserved for FY73 Part C administration be an <u>estimate</u>, since the amounts of the Part C grants themselves were not yet known.

A.1.2 Data. The pervasive problem in the administration of Part C, at both the Federal and state levels, is the collection and validation of the required concentration data. Two sets of data seem on first reading to entail no problem, but in fact have been very difficult and expensive to obtain: these are the number of resident children of the LEA and the Part A authorization of the LEA. Generally the only source of hard data on resident children is the decennial census; until now that meant the 1960 census. Thus USOE and the SEAs were faced with the choice of using badly outdated data or estimating the number of resident children in each LEA, for example, from some formula based on enrollment. The fact that LEAs do not in general coincide with census geographic areas means that using the census (either 1960 or 1970) for LEA population data requires costly transformations and is often impracticable. The census mapping project currently underway at USOE will help in this regard, but its coverage excludes about 7,000 of the smaller LEAs.

Obtaining the Part A authorization for an LEA (from which to calculate its Part C authorization) is a problem because, in the allocation of Part A grants, authorizations are only computed to the county level, not to the LEA level. The Part A allotments at the LEA level are computed on a different basis from that used at the county level; the LEA allotments are determined from the county allotments (not from authorizations) by the several SEAs, each according to its chosen method of subcounty allocation. Thus, USOE must

rely on a survey of the states to obtain the data from which it can compute Part A authorizations corresponding to the allotments at the LEA level. Needless to say, the collection and correction of such a volume of data from so many sources produces many mistakes and misunderstandings that must be detected and corrected through a long process.

A.1.3 Results. As a result of these and other data problems, months are required for the allocation of Part C funds. For FY71 (the first year of Part C), the allocation was completed on June 30, 1971, the last day of the fiscal year. The FY72 allocation was completed on August 31, 1972, two months after the fiscal year had ended.

Aside from the tardiness of the allocation, the size of the Part C allotments shows some ridiculous results. While some LEAs do receive sizable grants from this program in FY71 (the largest grant went to New York City: $2.3 million). the average grant (in FY71) was $3,868, and 223 LEAs received grants of $100 or less (in two cases only $2). Although the average grant is far short of the amount needed to hire an additional teacher, it could provide an aide or some additional equipment. However, many of the grants are so small that not only do they provide a useless amount of money for intensifying a program to compensate for the high concentration of poverty, but the administrative cost to the recipient LEA consumes the grant. If the LEA accepts the grant, its personnel must

familiarize themselves with the regulations and guidelines regarding Part C; they must account for Part C funds separately; and they must prepare a comprehensive plan for the use of the Part C grant, setting forth specific objectives and the criteria and procedures to be used for an annual evaluation. Even if the LEA wishes to decline its grant, it incurs some expense in exchanging correspondence with the SEA.

Because of the small size of many of the grants, some states encourage the LEAs entitled to small grants to relinquish them so they can be consolidated into one or more grants of a reasonable size. Consequently the distribution of the Part C grants to LEAs actually can require several months beyond the final allocation by USOE. This additional process in the allocation of grants (which is required not by the law but by reasonableness in using such small grants) represents a substantial cost to the SEAs and LEAs. Some SEAs and LEAs have complained that the administrative burden is costly compared to the relatively small grants involved. Two states in FY71 and four in FY72 declined to participate in Part C, presumably because they felt it was not worth the effort and expense.

In summary, the practical considerations regarding Part C show that the computational complexities and the difficulties of the data collection process have resulted in an administrative nightmare. The grants have finally gotten to the recipients after the fiscal year was over. The administrative burden

at the Federal, state, and local levels has been costly and out of proportion to the amounts of money being distributed; there are instances where the cost to the recipient agency has exceeded the value of the grant itself.

A.2 Theoretical Considerations

There is no body of knowledge that establishes clearly the costs of providing educational services; therefore, there is no factual basis on which to establish whether there is or is not a relation between the needed dollars per child and the concentration of poverty.

Second, if it were assumed that there is such a relation, the direction of the relation is not known, nor even whether it is unidirectional. It can be argued that the needed funding is greater where the concentration is greater, because the children have an additional problem of a worse general social environment compounded with their individual problem of educational deprivation. The same point of view can be argued on the basis that the school faces higher than normal costs in the form of teacher salary bonuses or repairs for vandalism. On the other hand it can be argued that a high poverty concentration leads to reduced costs due to economies of scale and to homogeneity of the school population, while poor children in places with low concentrations are social outcasts, unable to keep up with their peers, and handicapped by futility. One might even adopt both arguments, resulting

in the view that places with very low and very high concentrations need more money per child than places with medium concentrations.

In the third place, if it were assumed, for example, that the needed funding per child increases when the concentration increases, one still would not know whether it increases by the same rate at both ends of the range of concentrations, i.e., whether it is a linear relation.

Finally, if the shape were assumed to be linear, the rate (slope) would not be known, even approximately; it could be 0.1, 1 or 10.

The conclusion indicated by these theoretical considerations (apart from practical problems, which might be corrected) is that there does not appear a factual basis to justify altering the distribution of funds according to the concentration of poverty, much less to indicate in what way to alter the distribution. A less harsh judgment is possible if one is willing to make several assumptions. Some possible implementations of such a judgment are examined in Chapter 3.

The primary assumption that is expressed by Part C is that the per child allotment should be higher in places with high concentrations of eligible children than in places with low concentrations. The present implementation of this concept is crude. An LEA either does or does not qualify; that is, the per child bonus does not reflect varying degrees of concentration. Further, the qualification rule is a "step function" (in mathematical language), involving an abrupt

change at a certain point; an LEA with 4,999 eligible children would need a concentration of 20% in order to qualify, but with one more eligible child it could qualify with a concentration of only 5%. The alternative formulation of a concentration-based grant developed in this report applies in concept to all LEAs and relates the size of the bonus to the degree of concentration.

Appendix B

ENUMERATION UPDATING

This appendix provides technical detail in support of Section 2.3.2, concerning the updating adjustments in the enumeration of eligible children. It is presumed that the reader of this appendix is familiar with that section, which provides a coherent exposition of the concepts of updating. This appendix addresses four topics that require more detailed discussion than is appropriate in Chapter 2. The first section examines a different general approach to updating than that developed in this study, and explains why this alternative approach, although conceptually plausible, is technically impracticable. The second section analyzes the major flows in the present Title I updating methods, because these are some of the important pitfalls that an alternative method shall avoid. The third section is the detailed documentation of the alternative updating method described in Chapter 2. The fourth section discusses the updating of the total school age population data required when a concentration factor is employed in an allocation formula.

B.1 General Approach

The general approach to updating in this study has been to make an adjustment of some base year enumeration in terms of changes in AFDC data. Another approach, that has been considered and rejected, is to adjust for population changes and changes in the income distribution. The population changes would be in-migration, out-migration, births, deaths, and aging of the population (such that young children become

adults). An adjustment for changes in the income characteristics requires projected values of income distribution parameters (such as a median and probit slope, if a log-normal form is used).

Projection models for population and income estimations are necessary in this approach because there is no comprehensive and detailed survey other than the decennial census itself.* Of course, there are some current data, such as CPS data, that can be used to calibrate the projection methods. The Census Bureau, the Bureau of Economic Analysis (Department of Commerce) and several other Federal agencies are concerned with such projections. Even at the state level (not to mention the county level) projections are more in the nature of model development than of standard economic indicators. The state of the art of detailed economic projection at the subnational level is not yet sufficiently advanced to be seriously considered as a basis for allocation of grants. This is particularly so when the required estimate represents one extreme of the income distribution (poverty).

It is for this reason that Title I updating must continue to rely on some direct measure of the poverty population, i.e., AFDC data and, potentially, school lunch data.

---

*Due to the acceleration of social change, the desirability of having a comprehensive census every five years (instead of ten) has often been suggested. Of course, that would be expensive. Title I funds allocation is an example of a Federal function that could be improved with data from such a census.

B.2 Flaws in the Present Method

An analysis of the faults of the present updating method not only shows why it should be discontinued but also suggests the ways improvements can be made.

B.2.1 Data Incompatibility: Non-complementarity. One flaw is that the two principal categories of children -- those from low-income families and those counted under AFDC -- are not complementary groups; that is, one does not begin where the other leaves off. That is illustrated by the following two examples, one in which a poor child would not be counted and one in which a child would be counted twice. The first child's family has an income of $200 from AFDC and $1900 from other sources. Since the total income is greater than $2000, the family is not counted in the census low-income component of the Title I formula. But since its income from AFDC is less than $2000 it is not counted in the AFDC component either. The second example involves a family whose total income reported in the census was below $2000, thus causing the family to be counted by the Title I formula in every year. In some year after the census year, however, the family's income from AFDC alone has risen above $2000, thus eventually qualifying the family under the AFDC component of the formula as well. These examples point to the desirability of updating the count of eligible children in a way that does not rely on adding together two incompatible measures.

B.2.2 Data Incompatibility: Scale Disparity. The use of an additive adjustment for updating involves another flaw in that the numbers of children measured by the updating variable are not necessarily on the same scale as the numbers of children measured by the baseline variable. That is, each variable involves a measure of poverty, and there is no guarantee that the two measures are consistent, particularly if one measure (AFDC) is subject to change during the intercensal years and the other (census) is not. One way to avoid this flaw is to use a multiplicative adjustment,* such as a percentage change. To use the census and AFDC data as an example, the percentage change in AFDC might be taken as an estimator of the percentage change in census data that would be observed if the census were redone in the current year.

B.2.3 Geographic Bias. The present method of updating by adding AFDC data to census data is also invalidated by the large interstate bias in the AFDC data, due to differing qualification standards. (There is also an intercounty bias within some states, but this is less pronounced than the interstate bias.) One way of indicating the interstate bias empirically is by means of the coverage ratio defined in Chapter 2, i.e., the ratio of all school age AFDC children to school age poverty children (based on the Orshansky index). Table B.2.1 shows the coverage ratios for all states, arranged by state median income. (South Carolina is the

*A different approach, involving an additive adjustment, is developed below, in Section B.3.2; it is shown to result in a form mathematically identical to the multiplicative adjustment that was presented in Chapter 2 and that is detailed in Section B.3.1.

Table B.2.1

A.F.D.C. Coverage Ratios*

(Number of A.F.D.C. Children)/(Number of Orshansky Children)

States Ranked by Median Income**

State	Median Income	Ratio*	State	Median Income	Ratio*	State	Median Income	Ratio*
Mississippi	$4658	0.363	Montana	$6766	0.413	Pennsylvania	$7954	0.998
Arkansas	4950	0.227	Dist. of Columbia	6775	0.866	Washington	8171	0.870
South Dakota	5608	0.360	Kansas	6785	0.624	Wisconsin	8217	0.585
Kentucky	5835	0.445	Vermont	6836	0.636	California	8279	1.208
Louisiana	5865	0.513	Texas	6841	0.267	Indiana	8302	0.464
Alabama	5907	0.359	Idaho	6874	0.465	Hawaii	8399	0.884
West Virginia	5919	0.477	Missouri	6942	0.624	Delaware	8451	0.868
Oklahoma	5991	0.574	Iowa	7157	0.643	New York	8510	1.370
North Dakota	5992	0.300	Virginia	7176	0.310	Nevada	8579	0.829
South Carolina	5997	0.197	Colorado	7323	0.673	Massachusetts	8607	1.270
Tennessee	6048	0.415	Arizona	7429	0.468	Ohio	8668	0.710
North Carolina	6179	0.302	Wyoming	7433	0.400	Alaska	8896	0.484
New Mexico	6472	0.480	Rhode Island	7509	1.092	Illinois	8914	0.904
Florida	6476	0.541	Oregon	7575	0.734	Maryland	9130	0.862
Maine	6511	0.729	Utah	7645	0.627	Michigan	9226	0.849
Georgia	6571	0.513	New Hampshire	7719	0.489	New Jersey	9675	1.171
Nebraska	6669	0.491	Minnesota	7838	0.596	Connecticut	9998	1.131

* The age intervals for A.F.D.C. and Orshansky data differ, however, (0-20 and 5-17, respectively); the actual values of the ratios are thus larger than they would be if calculated from data for equal age intervals.

** Median incomes and Orshansky data are based on 1970 census. A.F.D.C. data are the January 1969 through December 1970 data from Tables 7 and 8 of Public Assistance Statistics, NCSS Report A-2, Social and Rehabilitation Service, National Center for Social Statistics, DHEW, published monthly.

lowest, and New York is the highest.) As noted in the table, the actual values shown there are inflated since the available AFDC data cover a larger age span (0-20) than "school age" (5-17). As it turns out, this is of no consequence in the way that the age span enters into the proposed updating method, since an age span adjustment factor would cancel out of the updating equation. (This is explained in Sections B.3.1 and B.3.2.)

A large part of the interstate bias in the AFDC data used in the present updating method is due to the fact that AFDC children are counted only in families receiving more than $2,000 a year from AFDC. When all AFDC children are counted, without regard to the level of payments, the changes over a period of time are more uniform among the states. In Table B.2.2, the first column shows the percentage increase in the number of Title I AFDC children from 1965 to 1971, (used for the FY66 to FY72 allocations). The second column shows the corresponding increase in the total number of AFDC children, aged 0-20. Since these are percentage changes, the difference in age spans should not be important. The degree to which the two statistics differ for each state is the degree to which the two statistics measure different things. One way to see the interstate variation in the practical difference between these two measures is to examine the ratio of one measure to the other, in the last column. Since this ratio differs among the states, it matters whether the first or second measure of increase is used.

Still another source of geographical bias, as well as irregularity over time, is the unemployed-parent component of AFDC. This program is optional with the states; about half of the states participate in it.

Table B.2.2

Percentage Increase in AFDC, 1965 to 1971

	Percentage Increase In (1) AFDC above $2,000	(2) All AFDC	(1) ÷ (2)
Alabama	--*	116%	--*
Alaska	459%	110	4.2
Arizona	216	59	3.7
Arkansas	--	108	--
California	455	168	2.7
Colorado	345	112	3.1
Connecticut	456	70	6.5
Delaware	--	99	--
Florida	--	138	--
Georgia	--	261	--
Hawaii	371	121	3.1
Idaho	133	76	1.8
Illinois	156	95	1.6
Indiana	804	150	5.4
Iowa	194	70	2.8
Kansas	417	95	4.4
Kentucky	--	73	--
Louisiana	6153	127	48.5
Maine	536	184	2.9
Maryland	472	97	4.9
Massachusetts	523	169	3.1
Michigan	608	134	4.5
Minnesota	239	96	2.5
Mississippi	--	61	--
Missouri	214	37	5.8
Montana	280	153	1.8
Nebraska	2082	131	15.9
Nevada	251	173	1.5
New Hampshire	415	208	2.0
New Jersey	551	291	1.9
New Mexico	252	96	2.6
New York	454	131	3.5
North Carolina	594	38	15.6
North Dakota	173	60	2.9
Ohio	345	82	4.2
Oklahoma	158	50	3.2
Oregon	341	195	1.8
Pennsylvania	270	89	3.0
Rhode Island	325	87	3.7
South Carolina	--	137	--
South Dakota	367	75	4.9
Tennessee	--	127	--
Texas	--	277	--
Utah	455	63	7.2
Vermont	904	186	4.9
Virginia	1292	155	8.3
Washington	277	88	3.2
West Virginia	17807	-15	-1187.1
Wisconsin	239	123	1.9
Wyoming	171	81	2.1
Dist. of Columbia	419	198	2.1

*Dash indicates that there were no AFDC children counted at the $2,000 level in 1965. Thus in these cases the percentage increase is either infinite or indeterminate.

The past four years' data for New Jersey, shown in the following tabulation, exemplify the irregularity of the unemployed-parent data.

February of:	(1) Total	AFDC Children (2) Of Unemployed Parents	(1)-(2)
1969	151,000	11,600	139,400
1970	214,000	36,200	177,800
1971	312,000	69,900	242,100
1972	272,000	----	272,000

Between 1969 and 1970 the number of children in the unemployed-parent component in New Jersey more than tripled; in the following year it nearly doubled again. In 1972 the program was dropped in New Jersey. The total number of children shows a large increase in 1970 and 1971, and a decrease in 1972. However, the number of AFDC children, exclusive of the unemployed-parent component (in the last column), shows a comparatively moderate increase in each year. Obviously, the loss of nearly 70,000 children from the AFDC cound in 1972 does not reflect a decrease in poverty. New Jersey was chosen here as an illustration. The unemployed-parent AFDC data for all participating states are given in Table B.2.3.

In general, it seems that the variation in the unemployed-parent component does not reflect the trend in the number of children needing compensatory education. Children of the <u>chronically</u> unemployed <u>do</u> relate to the objectives of Title I, and these children are identified in the census data and to a large extent, in the main AFDC component. Thus, one source of interstate variation in the AFDC data can be removed by excluding the unemployed-parent component.

Table B.2.3

Number of Children (aged 0-20) in
Unemployed-Parent Component of AFDC*

	Feb. '69	Feb. '70	Feb. '71	Feb. '72
California	104,000	119,000	197,000	146,861
Colorado	3,800	3,300	6,700	6,652
Connecticut	850			
Delaware	320	190	500	436
Hawaii	1,000	980	1,600	2,801
Illinois	15,300	16,400	37,300	58,774
Kansas	1,100	1,100	2,900	2,305
Maine	100	520	2,600**	431
Maryland	720	1,300	2,600	2,778
Massachusetts	3,300	10,900	6,200	6,871
Michigan	5,500	8,200	24,700	38,920
Minnesota			2,400	4,934
Missouri	450	660	1,700	
Nebraska	280	290	690	634
New Jersey	11,600	36,200	69,900	
New York	63,400	47,200	64,400	28,142
Ohio	10,200	8,400	18,800	34,409
Oklahoma	1,800	980	1,000	1,531
Oregon	8,100	16,000	18,800	13,515
Pennsylvania	16,400	9,500	10,800	10,989
Rhode Island	1,200	1,200	2,300	2,688
Utah	4,200	4,200	5,700	6,527
Vermont	340	380	1,300	1,425
Washington	6,500	9,200	14,400	17,863
West Virginia	20,200	14,500	14,600	8,147
Wisconsin	3,900			7,255
District of Columbia			640	3,298
Total	284,000	311,000	509,000	408,186
Number of States Participating	25	23	25	24

*Blank indicates that the state elected not to participate in that year. States not listed did not participate in any of these years.

**Apparently an error.

B.2.4 Updating the Poverty Standard. Another part of the updating process is the revision of the definition of poverty, to reflect inflation. The present Title I provisions attempt to accomplish this by changing the $2000 low income factor to $3000 in FY68 and to $4000 in FY73. However, under conditions of underfunding the factor reverts to a lower level, as provided elsewhere in Title I, and in fact the low income factor has remained at $2000 throughout the history of Title I. Consequently, in the census data used for Title I allocations, there has never been an adjustment for inflation. Furthermore, if such an adjustment had materialized, there would have been substantial distributional shifts. This undesirable side effect was explained in the previously cited Interim Report of March 1972, beginning on page C-10.

These considerations point to the need for an effective but smooth inflation adjustment such as the built-in Consumer Price Index adjustment in the CPS data.

B.3 Alternative Method

B.3.1 The Multiplicative Factor. Chapter 2 describes an alternative method of updating, which uses a multipicative adjustment factor on the assumption that the "true" change in the Title I eligible population in each county is best approximated by the ratio expressing the change in the local AFDC data. Symbolically,

$$K_c = K_b \times \frac{W_c}{W_b},$$

where K is the number of eligible children in a county,

W (for "welfare") is the number of AFDC children in the same place,

the subscript c means current, and

the subscript b means as of the time represented by the baseline (census) data.

This avoids the principal objection to the concept of an additive adjustment as presently used in Title I, namely, that the AFDC data as a whole are out of scale with the census data and that the AFDC data for the several counties or states are out of scale with each other due to different coverage in different places. Except for coverage changes that may occur after the base year, the intercounty (and interstate) variation in coverage is eliminated in the ratio W_c/W_b; that is, each county's current AFDC datum is compared only with the same county's base AFDC datum, and not directly with that from any other county or state.

However, if the AFDC coverage changes in that county, W_c reflects a different coverage than W_b, and thus the ratio W_c/W_b is biased in proportion to the coverage change. Chapter 2 observed that at the national level the coverage apparently has been increasing. The normalization process (discussed in detail in Sections B.3.3 and B.3.4) adjusts for the national trend in coverage. But since this adjustment is applied to each county, each county's normalized value is only partially corrected for coverage changes. That is, each county value is still biased in proportion to the ratio of its own coverage change to the national coverage change. Therefore, this residual bias is the major weakness in this updating procedure.

As explained in Chapter 2, the AFDC data used in this method represent children aged 0-20 in all AFDC families, except those in the unemployed-parent component. The bias due to the broader age of the AFDC data (as opposed to the census data) is cancelled out by the W_c/W_b ratio.

As noted in Chapter 2, the AFDC data used in this study are 24-month averages of state totals. The months used for W_c were September 1970 through August 1972, and those for W_b were January 1969 through December 1970 since the census data represent the 1969 incomes of persons enumerated in 1970. The monthly data at the state level are available from the SRS publication cited in Table B.2.1. Data by county are available only for February of each year.* In order to obtain monthly data by county it would be necessary to institute a survey of all the states.

B.3.2 An Additive Approach. As noted in Chapter 2, a different approach to the alternative updating method is to use an additive adjustment, based on the assumption that the arithmetic difference in a county's Title I eligible population for two years is equal to the difference in the corresponding AFDC data when adjusted in scale by the local coverage ratio. Symbolically,**

$$K_c = K_b + (W_c - W_b)\,\frac{K_b}{W_b}\,.$$

*Recipients of Public Assistance Money Payments and Amounts of Such Payments, by Program, State, and County, NCSS Report A-8 Social and Rehabilitation Service, National Center for Social Statistics, DHEW, published annually.

**To update county Orshansky data, 24-month averages of state AFDC data can be applied to the multiplicative method by assuming the constancy of the county shares within a state. Practically, however, only the February AFDC data can be used for the additive method as applied to counties at present.

The ratio at the end multiplies the AFDC increment by the reciprocal of the local coverage in order to adjust it to the scale of K. Since W appears in both the numerator and the denominator of the additive term, no adjustment for the larger age span of W is necessary, i.e., it would cancel out anyway.

But this equation is actually the same as the equation in Section B.3.1 using the multiplicative adjustment. Manipulating the right side of the present equation,

$$K_c = K_b + K_b \times \frac{W_c - W_b}{W_b}.$$

$$K_c = K_b \left(1 + \frac{W_c}{W_b} - \frac{W_b}{W_b}\right)$$

$$K_c = K_b \left(\frac{W_c}{W_b}\right)$$

which is the multiplicative adjustment.

B.3.3 Normalization. The updated distribution is normalized to a national total estimated from the CPS. Since the sampling basis of the CPS is different from that of the decennial census, estimates from those two sources are not strictly comparable. Therefore the actual value derived from the CPS should not be used to normalize a distribution based on the decennial census. On the other hand, the rate of change in the CPS data is applicable to such a distribution since the populations measured by the CPS and census data can be assumed to change at the same rate. Thus the current total of a poverty population can be estimated

by multiplying the decennial census total by the ratio of the current CPS total to the CPS total for 1969. The CPS data labelled 1969 correspond to the 1970 census data since the former refer to the 1969 income of families enumerated as of March 1970, while the 1970 census data refer to the 1969 income of families enumerated as of April 1970.

To scale a distribution up or down such that the resulting distribution has a desired total, it is necessary only to multiply each element by a ratio whose numerator is the desired total and whose denominator is the actual total. The normalization procedure is illustrated in the sample calculations in B.3.4.

B.3.4 Sample Calculations. This section illustrates the alternative updating method and provides data examples and data source citations.

Table B.3.1 shows the state totals of the census data used (at the county level) in this study. The sources of both the 1960 and 1970 census data were special tabulations produced by the Census Bureau under contract to the National Center for Educational Statistics, USOE. In the 1970 census, data on children 5-17 years old in families below the $3,000 level are also available from the Fourth Count computer tapes, a standard census product available to the public. Those data do not exactly match the special tabulation data because the Census Bureau made certain corrections to its basic records (the common source of the Fourth Count and the special tabulation) after the Fourth Count was produced and before the special tabulation was.

Table B.3.1

Children 5 - 17 Years Old in Families
Below Specified Annual Income Levels

	1960	-------------------1970-------------------		
	$2,000	$2,000	$3,000	Orshansky
Alabama	242,522	95,984	151,759	272,146
Alaska	4,796	4,262	6,456	12,393
Arizona	38,851	29,328	46,092	84,014
Arkansas	148,158	52,247	86,114	155,135
California	206,572	214,413	331,209	595,765
Colorado	33,581	25,367	39,618	71,254
Connecticut	20,731	22,226	32,918	55,083
Delaware	7,422	5,556	8,951	17,372
Florida	142,533	100,693	162,886	299,575
Georgia	239,789	93,139	155,733	293,871
Hawaii	8,832	7,229	10,384	19,465
Idaho	12,257	7,397	12,009	23,716
Illinois	147,518	103,780	163,013	302,311
Indiana	76,386	41,836	66,780	123,484
Iowa	71,789	22,459	37,850	72,000
Kansas	40,263	22,133	34,770	64,621
Kentucky	193,559	68,780	120,390	208,462
Louisiana	201,090	114,600	178,552	308,850
Maine	18,408	10,067	16,489	36,308
Maryland	53,716	43,120	66,735	116,951
Massachusetts	47,065	41,679	64,045	116,900
Michigan	124,712	83,713	126,146	220,485
Minnesota	77,280	31,885	51,491	98,936
Mississippi	254,903	98,695	152,715	261,679
Missouri	125,159	59,163	95,193	172,955
Montana	14,106	8,182	13,831	24,998
Nebraska	34,417	15,831	25,413	45,952
Nevada	3,238	3,964	6,417	10,890
New Hampshire	5,932	4,538	7,392	14,286
New Jersey	59,845	57,733	86,145	155,690
New Mexico	37,554	27,942	43,763	80,559
New York	200,060	194,566	292,498	526,402
North Carolina	323,096	99,224	166,805	312,545
North Dakota	23,346	8,065	12,899	27,354
Ohio	151,310	104,125	162,993	273,542
Oklahoma	84,779	37,316	66,465	122,548
Oregon	23,933	19,583	31,382	53,953
Pennsylvania	175,394	102,040	160,892	304,815
Rhode Island	12,083	8,805	13,857	24,482
South Carolina	206,638	71,844	111,118	206,985
South Dakota	30,712	10,763	18,095	33,815
Tennessee	220,048	81,832	133,221	245,157
Texas	398,224	192,639	318,420	636,776
Utah	11,680	9,638	16,438	30,796
Vermont	7,208	3,489	5,627	13,062
Virginia	167,844	67,779	111,847	214,357
Washington	33,072	29,722	45,577	80,172
West Virginia	106,406	35,484	60,468	106,359
Wisconsin	58,446	34,579	56,441	103,895
Wyoming	5,408	3,314	5,408	10,054
Dist. of Columbia	14,854	13,081	20,178	37,193
	4,947,525	2,645,838	4,211,888	7,700,368

Table B.3.2 lists the AFDC ratios, i.e., the multiplicative factors, used for the distributional updating adjustment. Multiplying the Alabama factor by the number of children indicated in the $3,000 census data yields an adjusted number of children:

$$1.20387 \times 151{,}759 = 182{,}698.$$

Similarly, for the Orshansky data:

$$1.20387 \times 272{,}146 = 327{,}628.$$

When this adjustment is made to every state (actually, to every county), the national totals of the adjusted $3,000 and Orshansky data, respectively, are 5,741,561 and 10,533,295. It is known in advance, however, that these totals are greater than the respective totals of the census data for two reasons, i.e., the multiplicative factor represents two effects: (1) the slight general increase in poverty, as indicated by the CPS data, and (2) the considerably greater general increase in AFDC coverage. The normalization process retains the first of these and excludes the second.

To generate the normalizing factor, it is necessary to know two values: the scale from which to normalize, and the scale to which to normalize. The first of these is simply the sum of the distribution at its present adjusted stage. The second is the current number of poverty children, estimated from the CPS and census data.

For the $3,000 level the estimate is calculated as follows. The Census Bureau's Current Population Report, Series P-60, No. 85, p. 31, gives the income distribution for several years in terms of constant

Table B.3.2

Distributional Updating Factors

Alabama	1.20387
Alaska	1.32104
Arizona	1.29100
Arkansas	1.43602
California	1.32104
Colorado	1.39479
Connecticut	1.26744
Delaware	1.35202
Florida	1.38647
Georgia	1.44927
Hawaii	1.35262
Idaho	1.29481
Illinois	1.48333
Indiana	1.83361
Iowa	1.21365
Kansas	1.30400
Kentucky	1.09703
Louisiana	1.17019
Maine	1.54042
Maryland	1.31939
Massachusetts	1.28447
Michigan	1.62567
Minnesota	1.34389
Mississippi	1.23808
Missouri	1.38185
Montana	1.40332
Nebraska	1.28896
Nevada	1.27443
New Hampshire	1.74959
New Jersey	1.42450
New Mexico	1.11290
New York	1.18539
North Carolina	1.26599
North Dakota	1.21356
Ohio	1.38135
Oklahoma	1.15098
Oregon	1.29725
Pennsylvania	1.39261
Rhode Island	1.20567
South Carolina	1.56967
South Dakota	1.21953
Tennessee	1.34670
Texas	1.70539
Utah	1.19969
Vermont	1.25677
Virginia	1.51233
Washington	1.24396
West Virginia	1.05571
Wisconsin	1.34897
Wyoming	1.26087
Dist. of Columbia	1.71221

dollars. The most recent (1971) data are used for the "current" estimate. Now, this CPS report does not give directly the number of children 5-17 years old. It gives the total number of families in the U.S. (53,296,000) and the percentage of them below the $3,000 level (8.3%).* Multiplying these gives 4,423,568 families. The corresponding number of families for 1969 (which corresponds to the 1970 census) is 4,150,197. The ratio of these two numbers is 1.0658692; this ratio expresses the 1969-to-1971 growth in poverty, as measured by the $3,000 income level. When this ratio is multiplied by the 1970 census datum for children 5-17 years old in families below the $3,000 level, the updated estimate for the national total of such children results:

$$1.0658694 \times 4,211,888 = 4,489,323.$$

This is the other value needed for the normalizing factor, which can now be computed as

$$4,489,323/5,741,561 = 0.78189938.$$

---

*Although the percentage figure has only two significant digits, the sampling error of the CPS limits the precision to about that amount, so there would be little point in going back to the unpublished CPS data to get the number of families below $3,000 more directly. In the ensuing calculations, nevertheless, enough significant digits are carried to avoid introducing additional errors in the intermediate steps, since such errors are compounded through the course of the computation. It is the end result of the computation that the accuracy limitations should be reflected; ultimately this means in the grant allotments.

It is evident that the accuracy of the data, including the decennial census and APPE data, may not justify all of the painstaking data manipulation procedures of the past. The implications of this, however, are not self-evident. The technical aspects of this problem are now being investigated.

Multiplying the estimate previously derived for each county (from the AFDC ratio) by this normalizing factor completes the updating process. Illustrating with the total for Alabama:

$$182,698 \times 0.78189938 = 142,851,$$

which is the number given for Alabama under enumeration K_4 in Table 2.3.2 in Chapter 2.

The normalization of the Orshansky distribution is somewhat simpler, because the CPS publication (Current Population Report, Series P-60, No. 86, p. 29) gives the number of poverty children under 18 years old. Dividing the 1971 value by the 1969 value gives:

$$10,344,000/9,501,000 = 1.0887275$$

as the two-year growth in poverty, as measured by the Orshansky index. Multiplying this by the 7,700,368 children indicated in the Orshansky census data yields 8,383,602 as the current national total of such children. Dividing this by the total of the AFDC-adjusted Orshansky data (10,533,295) gives the normalizing factor of 0.7959145, which is then applied to the AFDC-adjusted Orshansky datum for each county. Again using the Alabama total to illustrate, the previously derived 327,628 multiplied by the normalizing factor yields the 260,764 listed for Alabama under enumeration K_5 in Table 2.3.2.

B.4 Total School Age Population

When the concentration of poverty is an element of the cost factor (see Section 2.4), one more updating problem arises. The concentration is defined as the ratio of the eligible children to the total school age

population. In this study the total population data were taken from the census but were not updated since no updating data are presently available. However, such data will be available by late 1973 or early 1974 from a new Federal-State Cooperative Program for Population Estimates being implemented now under the auspices of the Census Bureau. This program will provide total population data for each county. The population changes indicated by these data could be used to update the school age population data. It is possible that age-specific population estimates will be available annually at some later time. If so, these would provide a more direct means of updating the school age population data by county.

Appendix C

STATE ALLOTMENTS BASED ON ALTERNATIVE FORMULAS

This appendix presents the allocations for each state as computed using sixteen variations of the formula components. As noted in Chapter 3, there are 960 possible combinations of formula components that might be considered. Of the 150 combinations that were analyzed, the resulting allocations for sixteen are presented in this Appendix. These are among the combinations suggested as providing the most potential improvement over the existing formula.

The allocation results, which follow, are presented in eight pairs of tables. In each pair, the combination of formula components is the same except the first table shows allocation levels based on the proportional method of reduction and the second table reflects the nonproportional method (SEA entitlements are fully funded).

The specifications for the formula components, as used for this presentation, are as follows (each of the eight consists of proportional and nonproportional reduction):

Formula Components

	Enumeration	Cost Factor	Concentration	Floors
1	Orshansky with AFDC Ratio	50% of SAPPE	None	90% of FY72
2	"	50% of SAPPE	None	None
3	"	50% of SAPPE	Moderate	90% of FY72
4	"	50% of SAPPE	Moderate	None
5	"	$300	None	90% of FY72
6	"	$300	None	None
7	"	$300	Moderate	90% of FY72
8	"	$300	Moderate	None

The computations are based on an appropriation level of $1.5 billion, not counting Parts B and C or the outlying areas. The allocations are presented as the computer printed the results; for each state, the allocation is listed for LEA, SEA, administrative grant, and total allocation.

For example, in Table C.1.1 (formula variation number one, proportional reduction) it can be seen that column one presents total LEA allotment for each state, e.g., Alabama receives $36,231,421. Column two, entitled "State agency", presents the total SEA allotment for each state, e.g., Alabama receives $584,692. Column three presents the administrative grant and column four presents the total allocation (LEA + SEA + administrative) for each state.

The tables contain four additional columns with headings, Notes 1 through 4. Notes 1, 3, and 4 present information of value only for internal accounting purposes and therefore, should be disregarded. However, Note 2, which presents the total allocation as a percentage of the authorization, should be of interest to the reader.

For example, in Table C.1.1 it can be seen, under "Note 2", that the total allocation, $37,184,274, received by the state of Alabama is only 51.91% of the authorized entitlement. Thus, it may be inferred that if full funding were to occur, Alabama would receive $71,632,198.

Table C.1.1
Proportional Reduction

Enumeration - Orshansky x AFDC Ratio Concentration - None
Cost Factor - 50% of SAPPE Floor - 90% of FY72

TOTAL ALLOTMENTS FOR 1973

STATE	LEA	STATE AGENCY	ADMINISTRATIVE	TOTAL	NOTE 1	NOTE2	NOTE 3	NOTE 4
ALABAMA	36231321.	584602.	368161.	37104274.	9031627.	51.21%	27.00%	7692774.
ALASKA	3683323.	441772.	150000.	4281615.	0.	38.05%	-8.07%	-364926.
ARIZONA	12473127.	892502.	150000.	13521833.	0.	38.05%	-7.03%	-948270.
ARKANSAS	21793010.	571613.	223646.	22588269.	4305717.	47.01%	15.00%	2836005.
CALIFORNIA	109225595.	5080752.	1149063.	116055411.	3311121.	39.17%	-4.10%	-4834533.
COLORADO	12567659.	1020029.	150000.	13737687.	0.	38.05%	-7.02%	-953058.
CONNECTICUT	11740408.	882321.	150000.	12373030.	0.	38.05%	-7.13%	-874802.
DELAWARE	3663334.	384514.	150000.	4197049.	0.	38.05%	-9.01%	-364130.
FLORIDA	49310023.	4601962.	544218.	54966002.	0.	38.05%	-6.92%	-3722953.
GEORGIA	42070192.	510029.	425501.	42975612.	0.	38.05%	-6.92%	-3108830.
HAWAII	3901042.	101328.	150000.	4152370.	0.	38.05%	-9.03%	-399861.
IDAHO	2329635.	287717.	150000.	3247352.	0.	38.05%	-9.63%	-300553.
ILLINOIS	69591235.	2241523.	710229.	72641985.	0.	38.05%	-6.92%	-5207153.
INDIANA	27935706.	1245829.	220815.	29372351.	0.	38.05%	-6.92%	-2000112.
IOWA	13919193.	454098.	150000.	14523191.	2118827.	44.55%	8.03%	1136705.
KANSAS	10315364.	657767.	150000.	11123031.	0.	38.05%	-7.26%	-911123.
KENTUCKY	33913715.	327499.	337462.	34083676.	13453673.	62.86%	53.78%	11679631.
LOUISIANA	39701000.	928825.	406223.	41036130.	0.	38.05%	-6.92%	-2965784.
MAINE	6209276.	266020.	150000.	6625196.	0.	38.05%	-8.12%	-550070.
MARYLAND	24451101.	1001622.	255357.	25791080.	0.	38.05%	-6.92%	-1927196.
MASSACHUSETTS	21472221.	1477271.	229406.	23179057.	282211.	38.52%	-5.78%	-1323618.
MICHIGAN	54275437.	3725930.	590024.	59582441.	0.	38.05%	-6.92%	-4055909.
MINNESOTA	21217732.	697925.	219157.	22133813.	0.	38.05%	-6.92%	-1585553.
MISSISSIPPI	37956737.	552378.	394251.	38809366.	15071042.	62.21%	52.17%	12974151.
MISSOURI	26759401.	859204.	276066.	27892671.	0.	38.05%	-6.92%	-1909469.
MONTANA	4299092.	423061.	150000.	4853143.	0.	38.05%	-8.73%	-410773.
NEBRASKA	7333057.	272233.	150000.	7762789.	0.	38.05%	-7.81%	-623781.
NEVADA	1669029.	80438.	150000.	1906527.	0.	38.05%	-11.60%	-210476.
NEW HAMPSHIRE	3050271.	143368.	150000.	3347232.	0.	38.05%	-9.55%	-323205.
NEW JERSEY	40374535.	2607629.	429922.	43412056.	440576.	38.45%	-5.95%	-2567759.
NEW MEXICO	9472769.	432110.	150000.	10054879.	0.	38.05%	-7.39%	-759734.
NEW YORK	174113236.	6252946.	1803668.	182170459.	21500705.	43.14%	5.54%	9083606.
NORTH CAROLINA	50634229.	1832345.	524672.	52991096.	13030562.	51.62%	26.27%	10521708.
NORTH DAKOTA	3844963.	337561.	150000.	4331624.	417615.	42.11%	.91%	33523.
OHIO	45599063.	2465258.	479543.	48332965.	0.	38.05%	-6.92%	-3391769.
OKLAHOMA	16379223.	624365.	170042.	17174229.	2740710.	45.30%	10.81%	1593447.
OREGON	10816821.	1243376.	150000.	12210197.	0.	38.05%	-7.15%	-936379.
PENNSYLVANIA	61269527.	2617369.	638860.	64524916.	0.	38.05%	-6.92%	-4579120.
RHODE ISLAND	4670314.	255214.	150000.	5095528.	334155.	40.72%	-2.14%	-103691.
SOUTH CAROLINA	30921208.	660407.	315512.	31866727.	2660081.	41.53%	1.59%	472136.
SOUTH DAKOTA	5639443.	172209.	150000.	5961652.	1025010.	45.05%	10.86%	550635.
TENNESSEE	32670595.	583100.	332427.	33575092.	4829522.	44.44%	9.72%	2609302.
TEXAS	110601356.	6780874.	1173923.	118556093.	0.	38.05%	-6.92%	-8265042.
UTAH	3757222.	215697.	150000.	4123009.	0.	38.05%	-9.05%	-375196.
VERMONT	2090062.	254604.	150000.	2493746.	0.	38.05%	-10.47%	-245131.
VIRGINIA	37229252.	952210.	381815.	38563276.	0.	38.05%	-6.92%	-2782075.
WASHINGTON	14497809.	1407499.	159053.	16064361.	0.	38.05%	-6.92%	-1083305.
WEST VIRGINIA	18472046.	450412.	189225.	19111683.	7449469.	62.35%	52.53%	6357819.
WISCONSIN	21415958.	1223729.	226327.	22866053.	0.	38.05%	-6.92%	-1500376.
WYOMING	1656957.	157545.	150000.	1964502.	0.	38.05%	-11.46%	-215021.
DIST. OF COLUMBIA	10948364.	528981.	150000.	11627345.	0.	38.05%	-7.20%	-853908.
OUTLYING AREAS	0.	0.	0.	0.				
TOTAL	$ 1420402408.	$ 62914901.	$ 16682601.	$ 1500000001.	$ 73665152.	$ 103837720.		

Table C.1.2
Nonproportional Reduction

Enumeration - Orshansky x AFDC Ratio
Cost Factor - 50% of SAPPE

Concentration - None
Floor - 90% of FY72

TOTAL ALLOTMENTS FOR 1973

STATE	LEA	STATE AGENCY	ADMINISTRATIVE	TOTAL	NOTE 1	NOTE 2	NOTE 3	NOTE 4
ALABAMA	36231421.	1126256.	373577.	37731253.	13475904.	52.68%	36.15%	9519744.
ALASKA	3152319.	1187219.	150000.	4489558.	0.	39.00%	-16.63%	-628649.
ARIZONA	10733523.	2364320.	150000.	13247843.	0.	37.20%	-14.24%	-1781825.
ARKANSAS	21733010.	1217951.	280090.	23230051.	6657895.	40.36%	23.28%	4116000.
CALIFORNIA	100225585.	12072320.	1227922.	124025824.	18095722.	41.06%	2.71%	2002820.
COLORADO	10814900.	2663611.	150000.	13624503.	0.	37.00%	-14.22%	-1742486.
CONNECTICUT	10671726.	2323329.	150000.	13104832.	875607.	40.30%	-6.66%	-750016.
DELAWARE	3130435.	1033706.	150000.	4314220.	0.	32.10%	-16.64%	-625097.
FLORIDA	42876755.	12096571.	519714.	55521140.	0.	38.43%	-14.12%	-7050820.
GEORGIA	35271424.	1356494.	375972.	37373887.	0.	33.62%	-13.98%	-5485585.
HAWAII	3340881.	272426.	150000.	3763477.	0.	34.40%	-16.48%	-550261.
IDAHO	2457106.	775269.	150000.	3388075.	62605.	39.67%	-15.28%	-443077.
ILLINOIS	60043737.	5891200.	650346.	66583093.	0.	34.88%	-14.02%	-9708320.
INDIANA	23970568.	4274304.	272552.	27526301.	0.	35.66%	-14.04%	-3915511.
IOWA	13918193.	1021808.	150000.	15090002.	3707762.	46.20%	16.78%	1904790.
KANSAS	9394546.	1735033.	150000.	11269579.	512934.	38.55%	-9.55%	-906572.
KENTUCKY	33417715.	529983.	330307.	34279005.	16140817.	63.22%	64.96%	13147405.
LOUISIANA	34215948.	2441150.	366571.	37023665.	0.	34.33%	-14.00%	-5570857.
MAINE	5330204.	710564.	150000.	6190049.	0.	35.55%	-15.44%	-973500.
MARYLAND	21053992.	2850617.	239146.	24153754.	0.	35.63%	-14.04%	[illegible]
MASSACHUSETTS	21472291.	3835310.	253075.	25560676.	3240834.	42.48%	1.01%	215504.
MICHIGAN	46733962.	9795164.	565200.	57094317.	0.	37.08%	-14.08%	-7652914.
MINNESOTA	19008039.	1835295.	208423.	21050757.	732500.	36.19%	-10.61%	-2255545.
MISSISSIPPI	37866737.	897640.	387644.	39152021.	18080508.	62.75%	63.14%	14658934.
MISSOURI	23049733.	2255542.	253043.	25557383.	0.	34.80%	-14.02%	-3757407.
MONTANA	3662630.	1133863.	150000.	4946493.	0.	38.70%	-16.27%	-711453.
NEBRASKA	6770750.	739872.	150000.	7660623.	[illegible]	[illegible]	[illegible]	[illegible]
NEVADA	1413613.	244730.	150000.	1808342.	0.	36.00%	-19.60%	-356521.
NEW HAMPSHIRE	2606231.	395867.	150000.	3152140.	0.	35.93%	-17.16%	-540047.
NEW JERSEY	40374535.	6782611.	471571.	47628717.	6026910.	42.18%	.83%	431774.
NEW MEXICO	8666554.	1141461.	150000.	9958015.	521220.	37.68%	-9.17%	-875036.
NEW YORK	[illegible]	14493375.	[illegible]	[illegible]	[illegible]	45.11%	13.10%	20226609.
NORTH CAROLINA	50634889.	3560811.	541847.	54725547.	18660703.	53.31%	35.37%	13210201.
NORTH DAKOTA	3944063.	819206.	150000.	4912359.	887672.	46.70%	8.18%	200816.
OHIO	39092726.	6481051.	455746.	46930323.	0.	36.04%	-14.06%	-6387422.
OKLAHOMA	16379923.	1378109.	177580.	17935612.	4571224.	47.31%	18.90%	2591351.
OREGON	9303551.	3275743.	150000.	12729294.	-0.	39.67%	-14.38%	-1562808.
PENNSYLVANIA	60402332.	6879002.	672813.	67954147.	7695460.	40.07%	-1.63%	-928657.
RHODE ISLAND	4670314.	662970.	150000.	5483285.	940948.	43.01%	4.01%	218566.
SOUTH CAROLINA	30881800.	1611986.	324938.	32818732.	6550033.	42.77%	8.01%	2525441.
SOUTH DAKOTA	5659443.	360013.	150000.	6169456.	1657504.	47.55%	19.85%	906230.
TENNESSEE	32659155.	1312071.	339716.	34311343.	8643975.	45.42%	16.55%	4637405.
TEXAS	95247658.	17821579.	1130690.	114199727.	0.	36.65%	-14.07%	-15502930.
UTAH	3233078.	582918.	150000.	3966696.	10246.	36.60%	-16.08%	-619512.
VERMONT	1946014.	695903.	150000.	2742817.	124090.	41.05%	-12.85%	-278570.
VIRGINIA	32009265.	2502611.	345860.	34932744.	0.	34.47%	-14.01%	-5225450.
WASHINGTON	12475123.	3690206.	161753.	16337083.	0.	38.60%	-14.13%	-2063916.
WEST VIRGINIA	18072086.	722158.	191944.	19386344.	8845235.	63.25%	63.52%	7175788.
WISCONSIN	18444108.	3213220.	216607.	21877335.	0.	36.40%	-14.06%	-3017729.
WYOMING	1401090.	435267.	150000.	1986357.	0.	38.47%	-19.73%	-306400.
DIST. OF COLUMBIA	9418175.	1394500.	150000.	10962675.	-0.	35.87%	-14.42%	-1587190.
TOTAL	$ 1324494910.	$ 158836146.	$ 16668963.	$ 1500000019.	$ 108492696.	$ 189433338.		

Table C.2.1
Proportional Reduction

Enumeration - Orshansky x AFDC Ratio   Concentration - None
Cost Factor - 50% of SAPPE   Floor - None

TOTAL ALLOTMENTS FOR 1973

STATE	LEA	STATE AGENCY	ADMINISTRATIVE	TOTAL	NOTE 1	NOTE2	NOTE 3	NOTE 4
ALABAMA	28529733.	460396.	289896.	29279525.	0.	40.88%	-.00%	26043.
ALASKA	3974712.	475343.	150000.	4600055.	0.	40.80%	-1.95%	-75215.
ARIZONA	13411917.	966084.	150000.	14527501.	0.	40.88%	-.04%	7419.
ARKANSAS	18950752.	497063.	194476.	19642293.	0.	40.88%	-.00%	18628.
CALIFORNIA	114427705.	5302889.	1199322.	121129476.	0.	40.88%	-.00%	112473.
COLORADO	13512479.	1096730.	150000.	14759409.	0.	40.88%	-.03%	9709.
CONNECTICUT	12194445.	948823.	150000.	13293268.	0.	40.88%	-.14%	-5053.
DELAWARE	3945986.	414172.	150000.	4510058.	0.	40.88%	-1.99%	-76331.
FLORIDA	53525714.	4944119.	584693.	59054026.	0.	40.88%	-.00%	57613.
GEORGIA	45156121.	555595.	457147.	46171866.	0.	40.88%	-.00%	44356.
HAWAII	4202050.	109147.	150000.	4461197.	0.	40.88%	-2.07%	-82222.
IDAHO	3028717.	310152.	150000.	3488869.	0.	40.88%	-2.59%	-77388.
ILLINOIS	74863685.	2408234.	772719.	78044638.	0.	40.88%	-.00%	73487.
INDIANA	29905950.	1338486.	312444.	31556880.	0.	40.88%	-.00%	29394.
IOWA	12759793.	417128.	150000.	13326922.	0.	40.88%	-.14%	-4919.
KANSAS	11092936.	707356.	150000.	11950292.	0.	40.88%	-.27%	-18848.
KENTUCKY	21731913.	212970.	219449.	22164332.	0.	40.88%	-.00%	21361.
LOUISIANA	42653716.	997905.	436516.	44088138.	0.	40.88%	-.00%	41927.
MAINE	6681779.	287232.	150000.	7119010.	0.	40.88%	-1.13%	-69595.
MARYLAND	26269419.	1165289.	274349.	27709257.	0.	40.88%	-.00%	25822.
MASSACHUSETTS	22788189.	1567817.	243562.	24599768.	0.	40.88%	-.00%	22400.
MICHIGAN	58312155.	4004115.	623163.	62939433.	0.	40.88%	.00%	57318.
MINNESOTA	22795773.	749832.	235456.	23781061.	0.	40.88%	-.00%	22807.
MISSISSIPPI	24884375.	366942.	252513.	25503830.	0.	40.88%	-.00%	24460.
MISSOURI	28737770.	722032.	296598.	29956408.	0.	40.88%	-.00%	[illegible]
MONTANA	4608560.	455527.	150000.	5214087.	0.	40.88%	-1.72%	-74096.
NEBRASKA	7890157.	299979.	150000.	8340136.	0.	40.88%	-.82%	-57135.
NEVADA	1802746.	95577.	150000.	2048323.	0.	40.88%	-4.46%	-82362.
NEW HAMPSHIRE	3288420.	157765.	150000.	3596185.	0.	40.88%	-2.51%	-81307.
NEW JERSEY	42928120.	2772629.	457007.	46157756.	0.	40.88%	-.00%	42196.
NEW MEXICO	10187963.	464734.	150000.	10802697.	0.	40.88%	-.40%	-31110.
NEW YORK	164775093.	5924477.	1709006.	172609576.	0.	40.88%	.00%	162144.
NORTH CAROLINA	40029960.	1451109.	415510.	41966478.	0.	40.88%	-.00%	39416.
NORTH DAKOTA	3727760.	327348.	150000.	4205108.	0.	40.88%	-2.14%	-77779.
OHIO	48763741.	2649683.	514134.	51927558.	0.	40.88%	-.00%	47932.
OKLAHOMA	14781579.	563350.	153449.	15498390.	0.	40.88%	-.00%	14530.
OREGON	11631313.	1337001.	150000.	13118314.	0.	40.88%	-.15%	-5591.
PENNSYLVANIA	65875358.	2812032.	686374.	69323764.	0.	40.88%	-.00%	64703.
RHODE ISLAND	4688503.	266247.	150000.	5104750.	0.	40.88%	-1.74%	-79224.
SOUTH CAROLINA	30399481.	658756.	310586.	31369182.	0.	40.88%	-.00%	27531.
SOUTH DAKOTA	5001074.	152716.	150000.	5303790.	0.	40.88%	-1.69%	-31054.
TENNESSEE	30041341.	536355.	305777.	30883472.	0.	40.88%	-.00%	29529.
TEXAS	118827218.	7285193.	1261124.	127373535.	0.	40.88%	-.00%	116801.
UTAH	4047708.	233412.	150000.	4430619.	0.	40.88%	-2.03%	-79784.
VERMONT	2254377.	274838.	150000.	2679215.	0.	40.88%	-3.37%	-74752.
VIRGINIA	39998128.	1023029.	410212.	41431369.	0.	40.88%	.00%	39314.
WASHINGTON	15576065.	1512180.	170882.	17259127.	0.	40.88%	-.00%	15310.
WEST VIRGINIA	12084905.	294672.	150000.	12529576.	0.	40.88%	-.21%	-13423.
WISCONSIN	23008741.	1314742.	243235.	24566718.	0.	40.88%	-.00%	22016.
WYOMING	1790378.	170231.	150000.	2110609.	0.	40.88%	-4.33%	-79143.
DIST. OF COLUMBIA	11773776.	568838.	150000.	12492113.	0.	40.88%	-.21%	-13506.
OUTLYING AREAS	0.	0.	0.	0.				
TOTAL	$ 1418538735.	$ 64832175.	$ 16629583.	$ 1499999993.	$ 0.	$ 0.		

Table C.2.2
Nonproportional Reduction

Enumeration - Orshansky x AFDC Ratio Concentration - None
Cost Factor - 50% of SAPPE Floor - None

TOTAL ALLOTMENTS FOR 1973

STATE	LEA	STATE AGENCY	ADMINISTRATIVE	TOTAL	NOTE 1	NOTE 2	NOTE 3	NOTE 4
ALABAMA	26655431.	1126256.	277917.	28059554.	0.	39.18%	.16%	42183.
ALASKA	3695474.	1187239.	150000.	5032713.	0.	44.72%	-2.27%	-85723.
ARIZONA	12523414.	2364320.	150000.	15037934.	0.	42.31%	.04%	7503.
ARKANSAS	17703237.	1215951.	189192.	19108380.	0.	39.77%	.14%	75155.
CALIFORNIA	107047095.	12977320.	1200194.	121219609.	0.	40.91%	.11%	117805.
COLORADO	17615377.	2683611.	152990.	15451973.	0.	42.80%	.05%	6810.
CONNECTICUT	11385424.	2324325.	150000.	13859751.	0.	42.62%	-.05%	-5921.
DELAWARE	3669991.	1033786.	150000.	4853777.	0.	43.99%	-2.28%	-85769.
FLORIDA	49943696.	12094671.	620434.	62663801.	0.	43.38%	.04%	18070.
GEORGIA	42192890.	1366484.	435594.	43994968.	0.	38.95%	.16%	69314.
HAWAII	3915168.	272496.	150000.	4337664.	0.	39.75%	-2.13%	-85316.
IDAHO	2813013.	778869.	150000.	3741882.	0.	43.84%	-3.01%	-87347.
ILLINOIS	69928803.	5891200.	758200.	76578203.	0.	40.11%	.13%	92711.
INDIANA	27923969.	3274304.	312033.	31515304.	0.	40.82%	.11%	31499.
IOWA	11914464.	1021808.	150000.	13086292.	0.	40.14%	-.04%	-4706.
KANSAS	10355458.	1735033.	150000.	12240491.	0.	41.67%	-.20%	-20291.
KENTUCKY	20306660.	520703.	208276.	21035919.	0.	38.80%	.17%	34194.
LOUISIANA	39847459.	2441150.	422808.	42711698.	0.	39.60%	.15%	58434.
MAINE	6221466.	710664.	150000.	7092331.	0.	40.73%	-1.15%	-72507.
MARYLAND	24533179.	2850617.	273838.	27657633.	0.	40.80%	.11%	27746.
MASSACHUSETTS	21273725.	3835310.	251090.	25360125.	0.	42.14%	.07%	15733.
MICHIGAN	54436465.	9795164.	642316.	64873945.	0.	42.13%	.07%	40374.
MINNESOTA	21292968.	1834295.	231272.	23358435.	0.	40.15%	.13%	27959.
MISSISSIPPI	23250530.	897640.	241482.	24389652.	0.	39.09%	.16%	37313.
MISSOURI	26843471.	2255542.	290990.	29390003.	0.	40.11%	.13%	35633.
MONTANA	[illegible]	[illegible]	150000.	5573500.	0.	43.70%	-1.93%	-94630.
NEBRASKA	7361728.	739872.	150000.	8251600.	0.	40.94%	-.60%	-59144.
NEVADA	1670791.	244730.	150000.	2065521.	0.	41.22%	-5.06%	-89450.
NEW HAMPSHIRE	3059626.	395867.	150000.	3605494.	0.	40.98%	-2.76%	-86894.
NEW JERSEY	40077544.	6782411.	460602.	47328757.	0.	41.92%	.08%	32344.
NEW MEXICO	9509725.	1141461.	150000.	10801186.	0.	40.87%	-.34%	-32446.
NEW YORK	154091727.	14493385.	1685851.	170270963.	0.	40.32%	.13%	195106.
NORTH CAROLINA	37454135.	3549811.	410039.	41413986.	0.	40.34%	.13%	47258.
NORTH DAKOTA	3467321.	818296.	150000.	4435617.	0.	43.12%	-2.47%	-86147.
OHIO	45533141.	6481851.	520150.	52535142.	0.	41.36%	.10%	44221.
OKLAHOMA	13805906.	1378109.	151840.	15335856.	0.	40.45%	.12%	[illegible]
OREGON	10858444.	3275743.	150000.	14284187.	0.	44.51%	-.08%	-8577.
PENNSYLVANIA	61475871.	6879007.	683549.	69038422.	0.	40.71%	.12%	71140.
RHODE ISLAND	4367433.	662970.	150000.	5180404.	0.	41.43%	-1.90%	-84486.
SOUTH CAROLINA	28400524.	1611986.	300125.	30312635.	0.	39.50%	.15%	42429.
SOUTH DAKOTA	4661548.	380013.	150000.	5191561.	0.	40.01%	-1.77%	-83945.
TENNESSEE	28067505.	1312071.	293796.	29673372.	0.	39.28%	.16%	43648.
TEXAS	110942510.	17821579.	1287641.	130051730.	0.	41.74%	.09%	95359.
UTAH	3768036.	582818.	150000.	4500854.	0.	41.53%	-2.22%	-85590.
VERMONT	2088035.	695903.	150000.	2933938.	0.	44.76%	-4.07%	-88692.
VIRGINIA	37385468.	2502611.	378681.	40266760.	0.	39.73%	.14%	[illegible]
WASHINGTON	14534184.	3679206.	182334.	18415724.	0.	43.62%	.03%	4159.
WEST VIRGINIA	11283715.	722358.	150000.	12156073.	0.	39.46%	-.12%	-13231.
WISCONSIN	21483445.	3216220.	246997.	24946662.	0.	41.51%	.09%	19900.
WYOMING	1656209.	435267.	150000.	2241476.	0.	43.41%	-5.13%	-89477.
DIST. OF COLUMBIA	10991921.	1894500.	150000.	12536420.	0.	41.02%	-.13%	-14115.
TOTAL	$ 1324575609.	$ 158836156.	$ 16588210.	$ 1499999965.	$ 0.	$	0.	

Table C.3.1
Proportional Reduction

Enumeration - Orshansky x AFDC Ratio
Cost Factor - 50% of SAPPE

Concentration - Moderate
Floor - 90% of FY72

TOTAL ALLOTMENTS FOR 1973

STATE	LEA	STATE AGENCY	ADMINISTRATIVE	TOTAL	NOTE 1	NOTE2	NOTE 3	NOTE 4
ALABAMA	36231421.	223257.	364547.	36819224.	3343462.	19.02%	.03%	62012.
ALASKA	3111372.	204767.	150000.	3469139.	0.	18.02%	-12.12%	-423980.
ARIZONA	12766660.	425637.	150000.	13333079.	0.	18.02%	-9.18%	-1269364.
ARKANSAS	25602764.	210149.	259112.	26170325.	0.	18.02%	-9.05%	-2417604.
CALIFORNIA	109525505.	2033152.	1127532.	113885929.	23003320.	22.61%	14.00%	13500034.
COLORADO	11239516.	482427.	150000.	11871841.	0.	18.02%	-9.30%	-1135593.
CONNECTICUT	10631704.	590267.	150000.	11371972.	3328151.	25.48%	28.15%	2437040.
DELAWARE	2962100.	179656.	150000.	3291804.	0.	18.02%	-12.33%	-411923.
FLORIDA	51274076.	2170003.	534541.	53980620.	0.	18.02%	-9.05%	-5[illegible]604.
GEORGIA	55224313.	246277.	554729.	56025500.	0.	18.02%	-9.05%	-5[illegible]11705.
HAWAII	2925602.	45533.	150000.	3125135.	145203.	19.09%	-8.27%	-263375.
IDAHO	2457106.	148367.	150000.	2755473.	261323.	19.03%	-3.97%	-96447.
ILLINOIS	58025186.	1061761.	590869.	59677816.	0.	18.02%	-9.05%	-5696156.
INDIANA	22760099.	590122.	233502.	23583724.	0.	18.02%	-9.05%	-2310367.
IOWA	13918193.	295013.	150000.	14363206.	5402042.	28.90%	45.60%	4178507.
KANSAS	9334566.	347743.	150000.	9832309.	1045722.	20.16%	1.17%	121344.
KENTUCKY	33418715.	129973.	335436.	33884134.	9397758.	24.94%	25.85%	6502101.
LOUISIANA	49615212.	432365.	500558.	50556365.	0.	18.02%	-9.05%	-4562085.
MAINE	5793734.	124169.	150000.	6075507.	0.	18.02%	-10.41%	-664354.
MARYLAND	22789070.	513762.	233028.	23535860.	0.	18.02%	-9.05%	-2133206.
MASSACHUSETTS	21472291.	954559.	224288.	22653138.	5253458.	24.94%	25.86%	4435397.
MICHIGAN	43263030.	1765366.	450292.	45479088.	0.	18.02%	-9.05%	-4239623.
MINNESOTA	19000039.	367418.	193755.	19560212.	1061422.	20.03%	1.08%	220107.
MISSISSIPPI	37066733.	168851.	380356.	38415934.	1699700.	18.91%	-5.08%	[illegible]
MISSOURI	27922446.	405513.	282229.	28511248.	0.	18.02%	-9.05%	-2726450.
MONTANA	3971653.	199063.	150000.	4220916.	0.	18.02%	-11.41%	-492424.
NEBRASKA	6770750.	143133.	150000.	7063883.	553337.	19.57%	-2.30%	-155169.
NEVADA	1123257.	39920.	150000.	1313148.	0.	18.02%	-17.75%	-240459.
NEW HAMPSHIRE	2243310.	67742.	150000.	2461052.	0.	18.02%	-13.65%	-350020.
NEW JERSEY	40376535.	1572562.	419454.	42364950.	9397210.	23.16%	16.87%	5976460.
NEW MEXICO	10636519.	294965.	150000.	11091463.	0.	18.02%	-9.40%	-1056675.
NEW YORK	174113036.	3293115.	1774070.	179181122.	37053581.	22.72%	14.66%	22471859.
NORTH CAROLINA	50634990.	733012.	513739.	51887641.	6967556.	20.92%	5.05%	2573696.
NORTH DAKOTA	3844063.	170938.	150000.	4165001.	666358.	21.46%	5.41%	212528.
OHIO	37142080.	1241157.	383841.	38767079.	2278832.	19.15%	-3.37%	-1242967.
OKLAHOMA	16379923.	293958.	166738.	16840518.	2606590.	21.32%	7.60%	1179500.
OREGON	8444003.	605722.	150000.	9199730.	240023.	18.61%	-6.60%	-592656.
PENNSYLVANIA	60402332.	1481534.	618839.	62502704.	10195524.	21.58%	8.60%	4902585.
RHODE ISLAND	4672314.	157492.	150000.	4987806.	1502070.	25.70%	27.40%	1012474.
SOUTH CAROLINA	41610734.	292576.	419083.	42327094.	0.	18.02%	-9.05%	-4073379.
SOUTH DAKOTA	5639443.	76377.	150000.	5865791.	696363.	20.41%	1.37%	83978.
TENNESSEE	33221161.	236472.	334476.	33782110.	0.	18.02%	-9.05%	-3251515.
TEXAS	151143984.	3211954.	1543558.	155899396.	0.	18.02%	-9.05%	-14911299.
UTAH	3233878.	116349.	150000.	3500227.	445385.	20.65%	.74%	29222.
VERMONT	1896014.	138003.	150000.	2184017.	309492.	20.09%	.07%	4004.
VIRGINIA	44260011.	451041.	447111.	45158163.	0.	18.02%	-9.05%	-4337243.
WASHINGTON	11029520.	681999.	150000.	11861519.	290193.	19.40%	-6.97%	-903206.
WEST VIRGINIA	18472046.	201330.	186734.	18860110.	6655279.	27.97%	40.64%	5356630.
WISCONSIN	16161958.	570654.	167416.	16900020.	0.	18.02%	-9.05%	-1503785.
WYOMING	1226544.	71660.	150000.	1448204.	0.	18.02%	-16.92%	-287758.
DIST. OF COLUMBIA	13557765.	251114.	150000.	13958879.	0.	18.02%	-9.13%	-1341302.
OUTLYING AREAS	0.	0.	0.	0.				
TOTAL	$ 1451582319.	$ 31577722.	$ 16839981.	$ 1500000022.	$ 82707003.	$ 135795598.		

Table C.3.2
Nonproportional Reduction

Enumeration - Orshansky x AFDC Ratio   Concentration - Moderate
Cost Factor - 50% of SAPPE   Floor - 90% of FY72

TOTAL ALLOTMENTS FOR 1973

STATE	LEA	STATE AGENCY	ADMINISTRATIVE	TOTAL	NOTE 1	NOTE 2	NOTE 3	NOTE 4
ALABAMA	36231921.	1125258.	373577.	37731253.	10957065.	20.31%	0.70%	3232565.
ALASKA	2358434.	1187239.	150000.	3695673.	0.	19.21%	-25.88%	-967211.
ARIZONA	9793872.	2360322.	150000.	12314192.	0.	16.64%	-23.43%	-2292063.
ARKANSAS	21793810.	1215951.	230030.	23239051.	2018840.	16.00%	-15.33%	-3335476.
CALIFORNIA	107225805.	12872320.	1227079.	124025804.	42869441.	24.62%	25.21%	22111898.
COLORADO	9090479.	2683611.	150000.	11924090.	462035.	18.10%	-10.40%	-2200521.
CONNECTICUT	10541725.	2324328.	150000.	13126032.	4004131.	29.37%	40.65%	3072402.
DELAWARE	2941327.	1037736.	150000.	3427613.	0.	18.77%	-27.11%	-873620.
FLORIDA	33421058.	1209671.	515157.	52633026.	0.	17.32%	-23.24%	-11095363.
GEORGIA	42557518.	1364954.	430249.	44363283.	0.	14.27%	-23.08%	-12766770.
HAWAII	2926502.	272606.	150000.	3349008.	816476.	20.25%	.60%	10630.
IDAHO	2457106.	779469.	150000.	3385075.	794267.	24.40%	5.56%	128168.
ILLINOIS	56913721.	6291200.	628100.	63439080.	12363380.	19.16%	-2.06%	-1211240.
INDIANA	17516460.	3274304.	207907.	20998652.	0.	16.05%	-23.18%	-5204783.
IOWA	13919191.	1021808.	150000.	15090002.	7302541.	30.35%	59.91%	5214213.
KANSAS	9374556.	1735333.	150000.	11260673.	2963248.	22.00%	11.04%	232830.
KENTUCKY	33819715.	520083.	339327.	34279095.	14955454.	25.33%	35.13%	9225030.
LOUISIANA	38224079.	2441150.	406561.	41072790.	0.	14.64%	-23.10%	-11675510.
MAINE	5046979.	710664.	150000.	5907643.	612470.	17.52%	-14.43%	-669926.
MARYLAND	17542384.	2850617.	203930.	20596931.	0.	15.77%	-23.16%	-5287853.
MASSACHUSETTS	21472291.	3835310.	253076.	25560676.	9639810.	28.14%	38.14%	5937082.
MICHIGAN	42937665.	9795144.	527328.	53260158.	9768473.	21.11%	-.03%	-404337.
MINNESOTA	19339039.	1636295.	208423.	21050757.	5820536.	21.55%	10.94%	1874273.
MISSISSIPPI	37865737.	987640.	387644.	39152021.	10006661.	10.17%	4.16%	1520156.
MISSOURI	23021190.	2255542.	252767.	25529499.	1609751.	16.14%	-17.41%	-4451527.
MONTANA	2946119.	1133363.	150000.	4229983.	0.	18.06%	-26.01%	-1035533.
NEBRASKA	6770750.	739472.	150000.	7660623.	2008814.	21.22%	7.15%	451560.
NEVADA	328224.	244730.	150000.	1222954.	0.	16.78%	-33.44%	-416026.
NEW HAMPSHIRE	1717568.	395867.	150000.	2253435.	25491.	16.58%	-27.44%	-649373.
NEW JERSEY	40374535.	6782611.	471571.	47628717.	16375679.	26.04%	28.27%	8898464.
NEW MEXICO	8564556.	1141461.	150000.	9958015.	502493.	16.33%	-19.98%	-2079651.
NEW YORK	174113976.	14497395.	1906073.	190493394.	68456170.	24.16%	25.04%	35756176.
NORTH CAROLINA	50630009.	3549911.	541347.	54726547.	17043779.	21.06%	15.30%	6720136.
NORTH DAKOTA	3044063.	812226.	150000.	4012359.	1410650.	24.79%	15.70%	571538.
OHIO	37142020.	6441851.	436249.	44061080.	10352192.	21.76%	6.05%	2119761.
OKLAHOMA	16379223.	1379109.	177500.	17935612.	5776902.	22.71%	16.10%	2510283.
OREGON	8444008.	3275743.	150000.	11869751.	2181028.	24.01%	2.41%	164403.
PENNSYLVANIA	60402332.	6070002.	572917.	67959147.	21712800.	23.42%	19.28%	9744535.
RHODE ISLAND	4670314.	662970.	150000.	5487285.	2225497.	28.35%	30.42%	1332566.
SOUTH CAROLINA	32067400.	1611986.	336793.	34016079.	0.	14.48%	-23.00%	-9526253.
SOUTH DAKOTA	5639047.	380013.	150000.	6169056.	1849744.	21.07%	11.26%	570654.
TENNESSEE	32659556.	1319071.	339716.	34311343.	7141009.	18.31%	-1.84%	-611614.
TEXAS	116355553.	17821579.	1341771.	135519903.	0.	15.67%	-23.16%	-35361498.
UTAH	3233078.	502818.	150000.	3966696.	1110050.	23.40%	10.57%	309047.
VERMONT	1936914.	655993.	150000.	2742817.	697173.	26.34%	0.83%	169829.
VIRGINIA	34035975.	2503611.	365986.	36964571.	0.	14.75%	-23.10%	-10344038.
WASHINGTON	11029520.	3699206.	150000.	14878726.	2779985.	23.1?%	2.11%	227903.
WEST VIRGINIA	18672046.	722358.	191946.	19386349.	9163331.	28.65%	54.36%	6505572.
WISCONSIN	14891737.	3216220.	181080.	18289036.	2485502.	19.49%	-8.03%	-1299434.
WYOMING	1112214.	435267.	150000.	1697481.	205453.	21.13%	-17.32%	-232934.
DIST. OF COLUMBIA	10416304.	1394509.	150000.	11960803.	0.	15.44%	-23.57%	-3177550.
TOTAL	$ 1324419200.	$ 158836146.	$ 16744701.	$ 1500000056.	$ 156815516.	$ 311649500.		

Table C.4.1
Proportional Reduction

Enumeration - Orshansky x AFDC Ratio Concentration - Moderate
Cost Factor - 50% of SAPPE Floor - None
TOTAL ALLOTMENTS FOR 1973

STATE	LEA	STATE AGENCY	ADMINISTRATIVE	TOTAL	NOTE 1	NOTE 2	NOTE 3	NOTE 4
ALABAMA	36223380.	223103.	364436.	36800004.	0.	19.92%	-.00%	46931.
ALASKA	3475085.	220279.	150000.	3817364.	0.	19.92%	-2.97%	-100657.
ARIZONA	14012493.	463373.	150000.	14661268.	0.	19.92%	-.03%	13530.
ARKANSAS	28240560.	240063.	284935.	28775370.	0.	19.92%	.00%	36642.
CALIFORNIA	96271066.	2573707.	986417.	99830164.	0.	19.92%	-.00%	124871.
COLORADO	12372433.	530954.	150000.	13053590.	0.	19.92%	-.16%	-3820.
CONNECTICUT	8237193.	457325.	150000.	8844518.	0.	19.92%	-.71%	-44386.
DELAWARE	3271142.	198335.	150000.	3619477.	0.	19.92%	-3.10%	-103255.
FLORIDA	56370227.	2394705.	597750.	59362762.	0.	19.92%	.00%	73127.
GEORGIA	60771670.	271734.	600925.	61602380.	0.	19.92%	.00%	78761.
HAWAII	3073058.	50043.	150000.	3275001.	0.	19.92%	-3.62%	-111471.
IDAHO	2442726.	147403.	150000.	2740223.	0.	19.92%	-4.44%	-110110.
ILLINOIS	63901127.	1167651.	640486.	65618263.	0.	19.92%	.00%	82756.
INDIANA	25025494.	648864.	256795.	25931294.	0.	19.92%	-.00%	32460.
IOWA	9501774.	201402.	150000.	9853176.	0.	19.92%	-.54%	-38060.
KANSAS	9224470.	341335.	150000.	9716295.	0.	19.92%	-.56%	-30854.
KENTUCKY	25553393.	137482.	266572.	26023707.	0.	19.92%	-.00%	34403.
LOUISIANA	54559701.	443759.	556395.	55538045.	0.	19.92%	.00%	70752.
MAINE	6391224.	138046.	150000.	6680270.	0.	19.92%	-1.27%	-73677.
MARYLAND	25057540.	568503.	254224.	25878666.	0.	19.92%	.00%	32502.
MASSACHUSETTS	17060003.	769938.	172210.	17099150.	0.	19.92%	-.00%	22120.
MICHIGAN	47570407.	1941084.	495115.	50006606.	0.	19.92%	-.00%	61703.
MINNESOTA	18805315.	367500.	191629.	19360503.	0.	19.92%	-.00%	24302.
MISSISSIPPI	39862510.	177834.	400794.	40471098.	0.	19.92%	.00%	51704.
MISSOURI	30591207.	446973.	310332.	31349314.	0.	19.92%	.00%	39600.
MONTANA	4271066.	215593.	150000.	4641074.	0.	19.92%	-2.26%	-93202.
NEBRASKA	6858131.	144900.	150000.	7153122.	0.	19.92%	-1.12%	-68542.
NEVADA	1249483.	44373.	150000.	1443861.	0.	19.92%	-8.51%	-111370.
NEW HAMPSHIRE	2491107.	71923.	150000.	2705030.	0.	19.92%	-4.40%	-113390.
NEW JERSEY	34546290.	1346101.	359934.	36249204.	0.	19.92%	.06%	44810.
NEW MEXICO	11703446.	225628.	150000.	12085575.	0.	19.92%	-.25%	-14550.
NEW YORK	151855770.	2873134.	1547279.	156275122.	0.	19.92%	.00%	106970.
NORTH CAROLINA	45190071.	793061.	420025.	40391517.	0.	19.92%	-.00%	62510.
NORTH DAKOTA	3530620.	157336.	150000.	3846016.	0.	19.92%	-2.94%	-102417.
OHIO	38449042.	1284599.	397245.	40121787.	0.	19.92%	.00%	40860.
OKLAHOMA	15222745.	273098.	154959.	15650802.	0.	19.92%	.00%	19745.
OREGON	8999933.	645601.	150000.	9795534.	0.	19.92%	-.55%	-37720.
PENNSYLVANIA	55577660.	1367203.	560312.	57510573.	0.	19.92%	-.00%	72000.
RHODE ISLAND	3555202.	127501.	150000.	3832703.	0.	19.92%	-2.05%	-103521.
SOUTH CAROLINA	45761160.	319445.	460806.	46541411.	0.	19.92%	-.00%	60356.
SOUTH DAKOTA	5470036.	74056.	150000.	5694097.	0.	19.92%	-1.66%	-85149.
TENNESSEE	36517066.	260011.	367771.	37144048.	0.	19.92%	.00%	47366.
TEXAS	166100043.	3531678.	1697207.	171417928.	0.	19.92%	-.00%	215561.
UTAH	3097485.	111442.	150000.	3359027.	0.	19.92%	-3.51%	-108525.
VERMONT	1743460.	129749.	150000.	2063209.	0.	19.92%	-5.91%	-100650.
VIRGINIA	40065730.	495939.	401617.	40653205.	0.	19.92%	-.00%	63123.
WASHINGTON	11832699.	731662.	150000.	12714361.	0.	19.92%	-.10%	-7333.
WEST VIRGINIA	13116766.	142963.	150000.	13400829.	0.	19.92%	-.13%	-9.
WISCONSIN	17770751.	637354.	186081.	18592186.	0.	19.92%	-.00%	23050.
WYOMING	1362743.	79617.	150000.	1592361.	0.	19.92%	-7.70%	-111721.
DIST. OF COLUMBIA	14920063.	273346.	151964.	15349373.	0.	19.92%	.00%	19353.
OUTLYING AREAS	0.	0.	0.	0.				
TOTAL	$ 1451742482.	$ 31345991.	$ 16051420.	$ 1499975023.	$ 0.	$	0.	

Table C.4.2
Nonproportional Reduction

Enumeration - Orshansky x AFDC Ratio | Concentration - Moderate
Cost Factor - 50% of SAPPE | Floor - None

TOTAL ALLOTMENTS FOR 1973

STATE	LEA	STATE AGENCY	ADMINISTRATIVE	TOTAL	NOTE 1	NOTE 2	NOTE 3	NOTE 4
ALABAMA	33069293.	1126256.	341962.	34538201.	0.	18.59%	.21%	69649.
ALASKA	3117776.	1187239.	150000.	4455014.	0.	23.15%	-3.34%	-107818.
ARIZONA	12813194.	2364320.	151744.	15326169.	0.	20.72%	.09%	11382.
ARKANSAS	25789564.	1215851.	270056.	27275671.	0.	18.70%	.20%	51505.
CALIFORNIA	87815608.	12972320.	1007883.	101796811.	0.	20.21%	.12%	104203.
COLORADO	11285311.	2683611.	150000.	14119422.	0.	21.43%	-.04%	-5011.
CONNECTICUT	7526803.	2324323.	150000.	10001130.	0.	22.36%	-.69%	-51980.
DELAWARE	2953476.	1037786.	150000.	4152261.	0.	22.77%	-3.57%	-109923.
FLORIDA	51393668.	12090671.	674953.	64120193.	0.	21.41%	.05%	24551.
GEORGIA	55444415.	1368484.	566109.	57379008.	0.	18.46%	.22%	120904.
HAWAII	2792476.	272436.	150000.	3214972.	0.	19.45%	-3.00%	-113481.
IDAHO	2211611.	778469.	150000.	3140081.	0.	22.71%	-5.04%	-117294.
ILLINOIS	58220110.	5891200.	641113.	64752423.	0.	19.56%	.16%	91000.
INDIANA	22828744.	3274304.	261030.	26364078.	0.	20.15%	.12%	27881.
IOWA	8663716.	1021809.	150000.	9835524.	0.	19.78%	-.46%	-40126.
KANSAS	8409816.	1735033.	150000.	10294649.	0.	21.00%	-.50%	-41966.
KENTUCKY	24246326.	520903.	247678.	25015087.	0.	18.41%	.22%	53532.
LOUISIANA	49993571.	2441150.	522447.	52767168.	0.	18.81%	.20%	99865.
MAINE	5822296.	710664.	150000.	6682960.	0.	19.82%	-1.28%	-75516.
MARYLAND	22861372.	2850617.	257119.	25969008.	0.	19.88%	.14%	31386.
MASSACHUSETTS	15550171.	3035310.	193355.	18779335.	0.	21.56%	.04%	6000.
MICHIGAN	43365356.	9795164.	531605.	53692126.	0.	21.28%	.06%	24040.
MINNESOTA	17159523.	1834295.	189938.	19183756.	0.	19.64%	.15%	26029.
MISSISSIPPI	36425406.	897640.	373231.	37696368.	0.	18.46%	.22%	79490.
MISSOURI	27920526.	2255542.	301751.	30477828.	0.	19.27%	.17%	48250.
MONTANA	3883361.	1133863.	150000.	5167224.	0.	22.06%	-2.47%	-98520.
NEBRASKA	6248857.	738872.	150000.	7138725.	0.	19.78%	-1.11%	-79234.
NEVADA	1124348.	244730.	150000.	1519078.	0.	20.05%	-9.64%	-119803.
NEW HAMPSHIRE	2249700.	395057.	150000.	2795568.	0.	20.47%	-4.95%	-117203.
NEW JERSEY	31495212.	6782611.	382778.	38660601.	0.	21.14%	.06%	20140.
NEW MEXICO	10580051.	1141461.	150000.	11872312.	0.	19.63%	-.14%	-15194.
NEW YORK	138568339.	14493385.	1530617.	154592341.	0.	19.60%	.15%	212779.
NORTH CAROLINA	43990116.	3549911.	475399.	48015326.	0.	19.26%	.17%	76051.
NORTH DAKOTA	3215180.	812295.	150000.	4183465.	0.	21.55%	-3.23%	-107284.
OHIO	35953713.	6481851.	415356.	41950920.	0.	20.72%	.09%	31048.
OKLAHOMA	13891356.	1378109.	152695.	15422160.	0.	19.53%	.16%	21935.
OREGON	8203151.	3275743.	150000.	11628894.	0.	23.53%	-.51%	-41743.
PENNSYLVANIA	50702099.	6870002.	575811.	58156312.	0.	20.04%	.13%	65104.
RHODE ISLAND	3230320.	662970.	150000.	4043290.	0.	20.91%	-3.22%	-107376.
SOUTH CAROLINA	41779386.	1611996.	433914.	43825296.	0.	18.66%	.21%	86462.
SOUTH DAKOTA	4982305.	380013.	150000.	5512317.	0.	19.18%	-1.70%	-86409.
TENNESSEE	33339431.	1312071.	346515.	34998017.	0.	19.67%	.21%	64708.
TEXAS	151641543.	17821579.	1684531.	171147653.	0.	19.79%	.14%	216957.
UTAH	2812139.	582318.	150000.	3544457.	0.	20.91%	-3.85%	-112646.
VERMONT	1618328.	685903.	150000.	2454231.	0.	23.57%	-6.87%	-118730.
VIRGINIA	44424839.	2502611.	469274.	47396724.	0.	18.92%	.19%	85558.
WASHINGTON	10792199.	3699206.	150000.	14641406.	0.	22.82%	-.09%	-9247.
WEST VIRGINIA	11966107.	722358.	150000.	12838466.	0.	18.07%	-.00%	-177.
WISCONSIN	16203476.	3216220.	194197.	19613893.	0.	20.91%	.08%	12572.
WYOMING	1225605.	435257.	150000.	1810752.	0.	22.53%	-8.80%	-119642.
DIST. OF COLUMBIA	13614791.	1394500.	150093.	15159383.	0.	19.57%	.16%	21144.
TOTAL	$ 1324398247.	$ 158836146.	$ 16765573.	$ 1499999966.	$ 0.	$ 0.		

Table C.5.1
Proportional Reduction

Enumeration - Orshansky x AFDC Ratio   Concentration - None
Cost Factor - $300   Floor - 90% of FY72

TOTAL ALLOTMENTS FOR 1973

STATE	LEA	STATE AGENCY	ADMINISTRATIVE	TOTAL	NOTE 1	NOTE2	NOTE 3	NOTE 4
ALABAMA	38408753.	619321.	390281.	39418355.	0.	48.56%	-11.47%	-4957740.
ALASKA	1920758.	229917.	150000.	2300175.	0.	48.56%	-14.53%	-375478.
ARIZONA	12807063.	922550.	150000.	13879613.	0.	48.56%	-11.55%	-1666391.
ARKANSAS	26041280.	683042.	267243.	26991573.	0.	48.56%	-11.47%	-3161425.
CALIFORNIA	109825895.	5080752.	1149263.	116055910.	15138663.	55.34%	1.82%	1977104.
COLORADO	11834760.	960504.	150000.	12944764.	0.	48.56%	-11.67%	-1453175.
CONNECTICUT	10631704.	827230.	150000.	11608934.	2223896.	60.06%	9.18%	857549.
DELAWARE	2809375.	294933.	150000.	3254308.	0.	48.56%	-13.61%	-641550.
FLORIDA	48821788.	4509418.	533009.	53864215.	0.	48.56%	-11.47%	-6101561.
GEORGIA	49916087.	617491.	505344.	51039721.	0.	48.56%	-11.47%	[illegible]
HAWAII	3031478.	78747.	150000.	3260425.	0.	48.56%	-13.61%	[illegible]
IDAHO	3561432.	364725.	150000.	4076357.	0.	48.56%	-13.17%	-538770.
ILLINOIS	56918781.	1630978.	587493.	59337256.	3301913.	51.42%	-6.25%	[illegible]
INDIANA	27206016.	1217646.	284237.	28707899.	0.	48.56%	-11.47%	-3511769.
IOWA	13918193.	454998.	150000.	14523191.	3540821.	64.21%	17.03%	2022632.
KANSAS	10029393.	639538.	150000.	10818931.	0.	48.56%	-11.82%	[illegible]
KENTUCKY	33418715.	327499.	337462.	34083676.	6461892.	59.92%	9.25%	[illegible]
LOUISIANA	42438081.	992877.	434318.	43866078.	0.	48.56%	-11.47%	[illegible]
MAINE	6713980.	288594.	150000.	7152075.	0.	48.56%	-12.43%	-557115.
MARYLAND	18997232.	842675.	198399.	20038326.	0.	48.56%	-11.47%	-2457174.
MASSACHUSETTS	21472791.	1477271.	279496.	23179057.	3573074.	57.41%	4.67%	955571.
MICHIGAN	42937465.	2948397.	458861.	46344923.	200118.	48.77%	-11.08%	-5311041.
MINNESOTA	19008019.	625247.	196333.	19829612.	2980780.	57.13%	4.27%	772532.
MISSISSIPPI	37866737.	558378.	384251.	38809366.	103276.	48.69%	-11.21%	[illegible]
MISSOURI	28362586.	909994.	292726.	29565305.	0.	48.56%	-11.47%	[illegible]
MONTANA	4098741.	405156.	150000.	4654097.	0.	48.56%	[illegible]	[illegible]
NEBRASKA	6948798.	264167.	150000.	7362935.	0.	48.56%	-12.40%	[illegible]
NEVADA	1632959.	86575.	150000.	1869534.	0.	48.56%	-15.27%	-291523.
NEW HAMPSHIRE	3044443.	146069.	150000.	3340712.	0.	48.56%	-13.54%	-475142.
NEW JERSEY	40374535.	2607699.	429822.	43412056.	14435193.	72.75%	17.64%	9946310.
NEW MEXICO	10541982.	480883.	150000.	11172865.	0.	48.56%	-11.78%	[illegible]
NEW YORK	174113936.	6252846.	1803668.	182170450.	99460720.	105.95%	95.00%	[illegible]
NORTH CAROLINA	50634989.	1832345.	524672.	52991906.	4098325.	52.63%	-4.04%	[illegible]
NORTH DAKOTA	3490377.	341628.	150000.	4382005.	0.	48.56%	-13.05%	-522245.
OHIO	45558094.	2475497.	480336.	48513927.	0.	48.56%	-11.47%	-5280666.
OKLAHOMA	16890158.	643711.	175339.	17709208.	0.	48.56%	-11.47%	-2181192.
OREGON	8626570.	991610.	150000.	9768180.	0.	48.56%	-11.95%	-1167488.
PENNSYLVANIA	60402332.	2580363.	629827.	63612522.	9293392.	56.26%	3.62%	2166694.
RHODE ISLAND	4670314.	265214.	150000.	5085528.	1236493.	64.15%	15.71%	615748.
SOUTH CAROLINA	37935760.	822301.	387576.	39145137.	0.	48.56%	-11.47%	-4597606.
SOUTH DAKOTA	5639443.	172209.	150000.	5961652.	692627.	54.94%	-.94%	-53628.
TENNESSEE	38730514.	691490.	394220.	39816224.	0.	48.56%	-11.47%	-4097358.
TEXAS	126815764.	7774933.	1345902.	135936098.	0.	48.56%	-11.47%	-16169389.
UTAH	4359932.	251441.	150000.	4761273.	0.	48.56%	-12.92%	-655145.
VERMONT	2017443.	245953.	150000.	2413395.	0.	48.56%	-14.38%	-334071.
VIRGINIA	38597207.	987198.	395844.	39930249.	0.	48.56%	-11.47%	-4082151.
WASHINGTON	12405165.	1204338.	150000.	13759503.	0.	48.56%	-11.54%	-1415435.
WEST VIRGINIA	18472045.	450412.	189225.	19111683.	5247793.	66.94%	22.05%	3142493.
WISCONSIN	17251043.	985742.	162368.	18419152.	0.	48.56%	-11.47%	-2224775.
WYOMING	1441471.	137075.	150000.	1728746.	0.	48.56%	-15.59%	-265653.
DIST. OF COLUMBIA	7460454.	360459.	150000.	7970913.	0.	48.56%	-12.26%	-1019554.
OUTLYING AREAS	0.	0.	0.	0.				
TOTAL	$ 1421451408.	$ 61760771.	$ 16787618.	$ 1499999997.	$ 122629826.	$ 171,989174.		

Table C.3.2
Nonproportional Reduction

Enumeration - Orshansky x AFDC Ratio   Concentration - None
Cost Factor - $300   Floor - 90% of FY72

TOTAL ALLOTMENTS FOR 1973

STATE	LEA	STATE AGENCY	ADMINISTRATIVE	TOTAL	NOTE 1	NOTE 2	NOTE 3	NOTE 4
ALABAMA	36231421.	1276500.	375079.	37883000.	787277.	46.47%	-13.26%	-5528019.
ALASKA	1849477.	490500.	150000.	2489977.	95810.	52.56%	-14.50%	-315772.
ARIZONA	11811319.	1901700.	150000.	13863019.	0.	48.50%	-15.27%	-2179277.
ARKANSAS	24033912.	1406700.	254406.	25695018.	0.	46.72%	-15.14%	[illegible]
CALIFORNIA	109825795.	9098700.	1189243.	120113538.	21926341.	57.77%	5.75%	5968863.
COLORADO	10912483.	1981500.	150000.	13043983.	0.	48.73%	-15.35%	-1977350.
CONNECTICUT	10631704.	1381500.	150000.	12163204.	2736632.	62.93%	13.40%	1255924.
DELAWARE	2575821.	622500.	150000.	3348321.	0.	47.95%	-17.75%	-555700.
FLORIDA	45021603.	9287400.	543090.	54852093.	0.	49.45%	-15.20%	[illegible]
GEORGIA	46076858.	1271700.	473486.	47822044.	0.	45.50%	-15.12%	-6208361.
HAWAII	2925402.	166200.	150000.	3241602.	140047.	43.28%	-13.41%	-453178.
IDAHO	3270000.	765900.	150000.	4185900.	0.	47.46%	-17.20%	-679441.
ILLINOIS	56918781.	3561000.	604798.	61084579.	7387463.	52.93%	-2.63%	-1536549.
INDIANA	25103187.	2507700.	276109.	27886996.	0.	47.17%	-15.15%	-4483685.
IOWA	13918193.	708900.	150000.	14777093.	4246935.	65.33%	21.55%	2467324.
KANSAS	9384546.	1322400.	150000.	10856946.	139193.	48.73%	-15.30%	-1566380.
KENTUCKY	33418715.	546600.	339653.	34304968.	8502669.	60.30%	13.45%	3965742.
LOUISIANA	39168859.	2044800.	412137.	41625796.	0.	46.06%	-15.13%	-5983937.
MAINE	6183502.	600900.	150000.	6934402.	0.	47.08%	-16.23%	-1197947.
MARYLAND	17528967.	1735500.	192645.	19457112.	0.	47.15%	-15.15%	-3130752.
MASSACHUSETTS	21472791.	2572900.	240457.	24286148.	4765889.	60.15%	8.71%	1720552.
MICHIGAN	42937665.	6045900.	489836.	49473401.	3536360.	52.06%	-7.65%	-3555935.
MINNESOTA	19008039.	1094100.	201021.	20303160.	4144497.	58.51%	8.22%	1443895.
MISSISSIPPI	37866737.	1146900.	390136.	39403773.	3037125.	49.43%	-7.80%	-3204211.
MISSOURI	26174406.	1874100.	280485.	28328991.	0.	46.53%	-15.14%	-4670250.
MONTANA	3766259.	848700.	150000.	4764959.	0.	49.71%	-16.93%	-767759.
NEBRASKA	6770750.	549900.	150000.	7470650.	369717.	49.27%	-11.35%	-866871.
NEVADA	1492459.	186300.	150000.	1828759.	0.	47.50%	-19.57%	-363094.
NEW HAMPSHIRE	2796067.	308100.	150000.	3254167.	0.	47.30%	-17.55%	-595094.
NEW JERSEY	40374535.	3584700.	439592.	44398827.	15669315.	74.40%	37.76%	11064774.
NEW MEXICO	9719366.	993900.	150000.	10863266.	0.	47.21%	-15.52%	-1786122.
NEW YORK	174113936.	5846700.	1799606.	181760242.	102175972.	106.71%	102.52%	83144059.
NORTH CAROLINA	50634889.	3481800.	541167.	54657856.	7597789.	54.28%	-.34%	-172473.
NORTH DAKOTA	3844063.	716400.	150000.	4710463.	249694.	52.20%	-10.77%	-463913.
OHIO	42031870.	5098200.	471301.	47601371.	0.	47.64%	-15.16%	-7513108.
OKLAHOMA	16379923.	1325700.	177056.	17882679.	801929.	49.03%	-10.32%	-1988329.
OREGON	8444008.	2053500.	150000.	10647508.	496456.	52.93%	-10.49%	-989465.
PENNSYLVANIA	60402132.	4537800.	649401.	65589333.	12937922.	58.63%	7.69%	5310711.
RHODE ISLAND	4670314.	417900.	150000.	5238214.	1454178.	66.08%	20.18%	784324.
SOUTH CAROLINA	35012087.	1693500.	367965.	37073552.	0.	45.99%	-15.13%	-6242068.
SOUTH DAKOTA	5639443.	317100.	150000.	6106543.	1067171.	56.27%	2.84%	155969.
TENNESSEE	35748446.	1424100.	371727.	37544273.	0.	45.79%	-15.11%	-6371257.
TEXAS	116989740.	16012200.	1330019.	134331959.	0.	47.98%	-15.17%	-20923394.
UTAH	4009640.	526500.	150000.	4686140.	0.	47.79%	-14.82%	-811072.
VERMONT	1896914.	523800.	150000.	2570714.	53649.	51.72%	-16.39%	-371879.
VIRGINIA	35622249.	2033100.	376553.	38031902.	0.	46.19%	-15.13%	-6352681.
WASHINGTON	11439938.	2482800.	150000.	14072738.	0.	49.66%	-15.29%	-2064474.
WEST VIRGINIA	18472046.	672900.	191449.	19336395.	6165850.	67.72%	26.76%	3899504.
WISCONSIN	15915257.	2030100.	179454.	18124811.	0.	47.76%	-15.17%	-2845460.
WYOMING	1313261.	296100.	150000.	1759361.	0.	49.42%	-20.14%	-331205.
DIST. OF COLUMBIA	7368550.	749100.	150000.	8267650.	495522.	50.36%	-10.00%	-818571.
TOTAL	$ 1369119125.	$ 114123900.	$ 16756972.	$ 1499999998.	$ 144914392.	$ 211001394.		

Table C.6.1
Proportional Reduction

Enumeration - Orshansky x AFDC Ratio   Concentration - None
Cost Factor - $300   Floor - None

TOTAL ALLOTMENTS FOR 1973

STATE	LEA	STATE AGENCY	ADMINISTRATIVE	TOTAL	NOTE 1	NOTE 2	NOTE 3	NOTE 4
ALABAMA	43382462.	700094.	440826.	44523381.	0.	54.848	.00%	35607.
ALASKA	2186797.	261771.	150000.	2598068.	0.	54.848	-2.67%	-58646.
ARIZONA	14478944.	1042983.	155219.	15677147.	0.	54.848	.00%	11884.
ARKANSAS	29413966.	771501.	301854.	30487221.	0.	54.848	.00%	23142.
CALIFORNIA	107867392.	4990162.	1128576.	113986129.	0.	54.848	.00%	88535.
COLORADO	13354469.	1086356.	150000.	14621726.	0.	54.848	-.04%	8147.
CONNECTICUT	9696055.	754427.	150000.	10600483.	0.	54.848	-.41%	-33500.
DELAWARE	3191160.	334975.	150000.	3676335.	0.	54.848	-1.68%	-55529.
FLORIDA	55144075.	5093654.	602377.	60840109.	0.	54.848	.00%	43260.
GEORGIA	56381567.	697461.	570790.	57649518.	0.	54.848	.00%	46274.
HAWAII	3443241.	89437.	150000.	3682678.	0.	54.848	-1.88%	-63138.
IDAHO	4040517.	413764.	150000.	4604281.	0.	54.848	-1.50%	-57074.
ILLINOIS	60712736.	1953022.	626558.	63292316.	0.	54.848	.00%	49831.
INDIANA	30729437.	1375342.	371048.	32425827.	0.	54.848	.00%	25222.
IOWA	11866750.	367934.	150000.	12404684.	0.	54.848	-.22%	-15560.
KANSAS	11346551.	723528.	150000.	12220079.	0.	54.848	-.24%	-17835.
KENTUCKY	30590367.	299782.	308901.	31199050.	0.	54.848	.00%	25107.
LOUISIANA	47935093.	1121466.	490566.	49547124.	0.	54.848	.00%	37343.
MAINE	7601561.	326771.	150000.	8078332.	0.	54.848	-.85%	-55649.
MARYLAND	21457542.	951831.	224094.	22633467.	0.	54.848	.00%	17611.
MASSACHUSETTS	20514498.	1411375.	219259.	22145132.	0.	54.848	.00%	16837.
MICHIGAN	48289057.	3315960.	516049.	52120966.	0.	54.848	.00%	39534.
MINNESOTA	18242424.	600057.	188425.	19030905.	0.	54.848	.00%	14973.
MISSISSIPPI	42656997.	629015.	432860.	43713871.	0.	54.848	.00%	35011.
MISSOURI	32035792.	1027846.	330636.	33394274.	0.	54.848	.00%	26294.
MONTANA	4647469.	459375.	150000.	5256844.	0.	54.848	-1.31%	-57775.
NEBRASKA	7867387.	299113.	150000.	8316501.	0.	54.848	-.82%	-55570.
NEVADA	1862890.	98766.	150000.	2111655.	0.	54.848	-3.34%	-62741.
NEW HAMPSHIRE	3457488.	165876.	150000.	3773364.	0.	54.848	-1.84%	-61741.
NEW JERSEY	30439546.	1966021.	324056.	32729623.	0.	54.848	.00%	24964.
NEW MEXICO	11925841.	544009.	150000.	12619850.	0.	54.848	-.20%	-14150.
NEW YORK	89289799.	3206610.	924964.	93421373.	0.	54.848	.00%	73265.
NORTH CAROLINA	52769358.	1909585.	546789.	55225733.	0.	54.848	.00%	43311.
NORTH DAKOTA	4412073.	387440.	150000.	4949514.	0.	54.848	-1.39%	-58593.
OHIO	51458271.	2796096.	542544.	54796911.	0.	54.848	.00%	42235.
OKLAHOMA	19077583.	727077.	198047.	20002707.	0.	54.848	.00%	15658.
OREGON	9761211.	1122035.	150000.	11033246.	0.	54.848	-.37%	-25518.
PENNSYLVANIA	58257727.	2488746.	607465.	61353938.	0.	54.848	.00%	47816.
RHODE ISLAND	3971963.	225557.	150000.	4347520.	0.	54.848	-1.59%	-60781.
SOUTH CAROLINA	42846214.	928796.	437770.	44214780.	0.	54.848	.00%	35148.
SOUTH DAKOTA	5629505.	171906.	150000.	5951411.	0.	54.848	-1.15%	-61051.
TENNESSEE	43746460.	781044.	445275.	44972779.	0.	54.848	.00%	35905.
TEXAS	143238065.	8781855.	1520208.	153541028.	0.	54.848	.00%	117565.
UTAH	4942835.	285064.	150000.	5377900.	0.	54.848	-1.28%	-59930.
VERMONT	2296035.	279917.	150000.	2725951.	0.	54.848	-2.56%	-58439.
VIRGINIA	43595888.	1115049.	447109.	45158046.	0.	54.848	.00%	35782.
WASHINGTON	14025915.	1361686.	153876.	15541480.	0.	54.848	.00%	11517.
WEST VIRGINIA	15135292.	369050.	155043.	15659386.	0.	54.848	.00%	12422.
WISCONSIN	19485206.	1113404.	205986.	20804595.	0.	54.848	.00%	15991.
WYOMING	1646119.	156514.	150000.	1952634.	0.	54.848	-1.62%	-60460.
DIST. OF COLUMBIA	8445180.	408037.	150000.	9003217.	0.	54.848	-.68%	-51075.
OUTLYING AREAS	0.	0.	0.	0.				
TOTAL	$ 1420823677.	$ 62509047.	$ 16667269.	$ 1499999993.	$ 0.	$ 0.		

Table C.6.2
Nonproportional Reduction

Enumeration - Orshansky x AFDC Ratio   Concentration - None
Cost Factor - $300   Floor - None

TOTAL ALLOTMENTS FOR 1973

STATE	LEA	STATE AGENCY	ADMINISTRATIVE	TOTAL	NOTE 1	NOTE 2	NOTE 3	NOTE 4
ALABAMA	41821191.	1276500.	430977.	43528668.	0.	53.62%	.12%	48284.
ALASKA	2095554.	490500.	150000.	2736054.	0.	57.76%	-3.14%	-67074.
ARIZONA	13950783.	1902700.	158527.	16011210.	0.	56.01%	.07%	9231.
ARKANSAS	28352779.	1406700.	297595.	30057074.	0.	54.07%	.11%	30214.
CALIFORNIA	103957760.	9098700.	1130565.	114187025.	0.	54.94%	.09%	97419.
COLORADO	12879748.	1981500.	150000.	15030748.	0.	56.35%	.05%	6315.
CONNECTICUT	9339925.	1381500.	150000.	10871425.	0.	56.25%	-.39%	-36633.
DELAWARE	3065364.	622500.	150000.	3837864.	0.	57.25%	-2.13%	-66616.
FLORIDA	53123763.	9247400.	624112.	62035275.	0.	55.52%	.05%	25417.
GEORGIA	54354783.	1271700.	556260.	56182243.	0.	53.45%	.12%	64542.
HAWAII	3312765.	166200.	150000.	3628965.	0.	54.54%	-1.76%	-66295.
IDAHO	3884214.	765900.	150000.	4800114.	0.	57.18%	-1.66%	-65554.
ILLINOIS	58519495.	3561000.	620805.	62701300.	0.	54.33%	.10%	59297.
INDIANA	29616043.	2507700.	371237.	32494986.	0.	54.46%	.09%	26722.
IOWA	11435104.	708900.	150000.	12294004.	0.	54.36%	-.15%	-16715.
KANSAS	10932707.	1322400.	150000.	12405107.	0.	55.68%	-.17%	-19127.
KENTUCKY	29491114.	546600.	300377.	30338091.	0.	53.33%	.12%	35697.
LOUISIANA	46207019.	2044800.	482518.	48734333.	0.	53.95%	.11%	50394.
MAINE	7320966.	600900.	150000.	8071866.	0.	54.80%	-.83%	-61097.
MARYLAND	20680165.	1735500.	224157.	22639822.	0.	54.66%	.09%	18737.
MASSACHUSETTS	19767021.	2573400.	223404.	22563825.	0.	55.88%	.07%	13441.
MICHIGAN	46529626.	6045900.	525755.	53101281.	0.	55.88%	.07%	32149.
MINNESOTA	17583305.	1094100.	186774.	18864179.	0.	54.36%	.10%	17704.
MISSISSIPPI	41122338.	1146900.	472692.	42691931.	0.	53.56%	.12%	47934.
MISSOURI	30878525.	1874100.	327526.	33080151.	0.	54.33%	.10%	31311.
MONTANA	4169599.	848700.	150000.	5168299.	0.	57.05%	-1.43%	-44795.
NEBRASKA	7577565.	549900.	150000.	8277465.	0.	54.59%	-.79%	-60692.
NEVADA	1787437.	186300.	150000.	2123737.	0.	55.16%	-3.68%	-68271.
NEW HAMPSHIRE	3325166.	308100.	150000.	3783266.	0.	54.99%	-1.95%	-66279.
NEW JERSEY	29331526.	3584700.	329162.	33245389.	0.	55.71%	.07%	21315.
NEW MEXICO	11491853.	993900.	150000.	12635753.	0.	54.91%	-.13%	-14590.
NEW YORK	86061370.	5846700.	919081.	92827151.	0.	54.50%	.10%	84363.
NORTH CAROLINA	50861766.	3481800.	543431.	54886497.	0.	54.51%	.10%	49735.
NORTH DAKOTA	4243245.	716400.	150000.	5109645.	0.	56.62%	-1.51%	-65094.
OHIO	49589641.	5098200.	545878.	55234720.	0.	55.28%	.08%	40556.
OKLAHOMA	18387443.	1325700.	197131.	19910274.	0.	54.59%	.10%	17644.
OREGON	9401829.	2053500.	150000.	11605329.	0.	57.69%	-.34%	-32474.
PENNSYLVANIA	56147943.	4537800.	606857.	61292601.	0.	54.79%	.09%	51670.
RHODE ISLAND	3820676.	417900.	150000.	4388576.	0.	55.36%	-1.69%	-35534.
SOUTH CAROLINA	41304150.	1693500.	429976.	43427626.	0.	53.87%	.11%	45673.
SOUTH DAKOTA	5420367.	317100.	150000.	5887467.	0.	54.26%	-1.16%	-61562.
TENNESSEE	42171450.	1424100.	435955.	44031505.	0.	53.70%	.11%	48053.
TEXAS	138028967.	16012200.	1540412.	155581579.	0.	55.57%	.08%	104388.
UTAH	4756689.	526500.	150000.	5433189.	0.	55.41%	-1.34%	-64423.
VERMONT	2201744.	523800.	150000.	2875044.	0.	57.84%	-2.99%	-67737.
VIRGINIA	42023435.	2033100.	440565.	44497100.	0.	54.05%	.11%	45021.
WASHINGTON	13511488.	2482800.	159943.	16154231.	0.	57.01%	.04%	5953.
WEST VIRGINIA	14589534.	672900.	152624.	15415058.	0.	53.99%	.11%	15765.
WISCONSIN	18777165.	2030100.	208073.	21015338.	0.	55.40%	.08%	14891.
WYOMING	1576056.	296100.	150000.	2022156.	0.	56.80%	-4.17%	-68567.
DIST. OF COLUMBIA	8134326.	749100.	150000.	9033426.	0.	55.03%	-.65%	-53424.
TOTAL	$ 1369232493.	$ 114123900.	$ 16643371.	$ 1499999763.	$ 0.	$	0.	

Table C...1
Proportional Reduction

Enumeration - Orshansky x AFDC Ratio   Concentration - Moderate
Cost Factor - $300   Floor - 90% of FY72

TOTAL ALLOTMENTS FOR 1973

STATE	LEA	STATE AGENCY	ADMINISTRATIVE	TOTAL	NOTE 1	NOTE 2	NOTE 3	NOTE 4
ALABAMA	41572663.	258035.	415935.	42226562.	0.	20.06%	-21.05%	-10945192.
ALASKA	1342577.	122907.	150000.	2122364.	513422.	26.46%	-1.37%	-29982.
ARIZONA	11796394.	310922.	150000.	11936226.	0.	20.06%	-21.26%	-3043266.
ARKANSAS	33073261.	252160.	337614.	33625037.	0.	20.06%	-21.05%	-8713292.
CALIFORNIA	108325525.	2332652.	1127532.	113665922.	43012430.	32.23%	26.97%	23476014.
COLORADO	9210469.	395258.	150000.	9755827.	0.	20.06%	-21.49%	-2490823.
CONNECTICUT	10631794.	593247.	150000.	11371272.	6051042.	42.97%	56.17%	4325864.
DELAWARE	2018066.	122361.	150000.	2290427.	76136.	20.75%	-22.63%	-583717.
FLORIDA	43919922.	1362797.	454899.	46132613.	0.	20.06%	-21.05%	-11542442.
GEORGIA	57122352.	259192.	576534.	58027070.	0.	20.06%	-21.05%	-15065419.
HAWAII	2935592.	40533.	150000.	3125135.	1092697.	30.94%	17.31%	437939.
IDAHO	2457166.	148357.	150000.	2755473.	27544.	20.26%	-23.75%	-757271.
ILLINOIS	56918791.	1041516.	572593.	58532900.	18792934.	29.25%	15.12%	7601464.
INDIANA	19499926.	507093.	103130.	20102052.	0.	20.06%	-21.05%	-5110023.
IOWA	13913193.	290913.	150000.	14353206.	7458275.	41.64%	63.80%	5442719.
KANSAS	9394386.	347813.	150000.	9892399.	2366637.	26.44%	3.53%	343249.
KENTUCKY	33419715.	120933.	375496.	33916144.	5292271.	23.77%	-6.44%	-2208256.
LOUISIANA	46293920.	410153.	466640.	47130683.	0.	20.06%	-21.05%	-12183574.
MAINE	5449764.	117542.	150000.	5717306.	0.	20.06%	-22.35%	-1550721.
MARYLAND	17499527.	393092.	170749.	18063368.	2106356.	22.71%	-10.62%	-2027819.
MASSACHUSETTS	21172291.	956559.	224228.	22353130.	10429988.	37.17%	46.31%	6933278.
MICHIGAN	42937665.	1752957.	446997.	45136620.	13894794.	28.98%	14.06%	5399406.
MINNESOTA	19009032.	367418.	193755.	19569212.	7880564.	33.58%	32.18%	4664064.
MISSISSIPPI	51571945.	230952.	510211.	52339305.	0.	20.06%	-21.05%	-13599415.
MISSOURI	25729162.	375913.	261041.	26365116.	0.	20.06%	-21.05%	-6776965.
MONTANA	3201593.	164593.	150000.	3516186.	0.	20.06%	-23.66%	-991729.
NEBRASKA	6770750.	143173.	150000.	7063893.	[illegible]642.	26.33%	2.[illegible]	178724.
NEVADA	936455.	33256.	150000.	1119712.	0.	20.06%	-29.74%	-392971.
NEW HAMPSHIRE	1930127.	50295.	150000.	2130411.	0.	20.06%	-25.54%	-655465.
NEW JERSEY	40374575.	1570862.	415454.	42364950.	22273178.	43.02%	72.48%	17025960.
NEW MEXICO	10302231.	199513.	150000.	10651449.	0.	20.06%	-21.38%	-2769067.
NEW YORK	174117336.	3293116.	1774071.	179181122.	115370917.	56.32%	121.70%	95775449.
NORTH CAROLINA	50634399.	730012.	513732.	51887641.	2052120.	21.23%	-16.46%	-3921158.
NORTH DAKOTA	3844063.	170938.	150000.	4165001.	756075.	24.51%	-6.08%	-238606.
OHIO	37142920.	1241157.	383441.	38767273.	6926290.	24.35%	-4.19%	-1520821.
OKLAHOMA	16379923.	293358.	166739.	16840518.	1601466.	22.17%	-12.75%	-2346613.
OREGON	8444998.	605722.	150000.	9199730.	2294277.	29.69%	16.10%	1199508.
PENNSYLVANIA	60403372.	1481534.	616839.	62502709.	24103042.	39.65%	29.51%	13519253.
RHODE ISLAND	4670714.	167492.	150000.	4987206.	2536560.	40.91%	57.75%	1717321.
SOUTH CAROLINA	48660263.	339698.	490006.	49490657.	0.	20.06%	-21.05%	-12917613.
SOUTH DAKOTA	5639443.	76337.	150000.	5865781.	1055710.	24.46%	-5.24%	-293003.
TENNESSEE	40117963.	285651.	404076.	40807640.	0.	20.06%	-21.05%	-10567331.
TEXAS	151135678.	3211779.	1543475.	155890932.	0.	20.06%	-21.05%	-39910118.
UTAH	3233278.	116349.	150000.	3500227.	420902.	22.96%	-13.02%	-474610.
VERMONT	1906914.	130003.	150000.	2184917.	605596.	27.75%	3.70%	72342.
VIRGINIA	40017373.	407806.	404252.	40829431.	0.	20.06%	-21.05%	-10540835.
WASHINGTON	11029520.	681999.	150000.	11861519.	3224020.	27.55%	8.12%	854093.
WEST VIRGINIA	18472046.	201330.	196734.	18860110.	6216212.	29.92%	17.77%	2826351.
WISCONSIN	14991737.	534097.	154259.	15580092.	3701582.	26.31%	3.55%	547403.
WYOMING	1112214.	64900.	150000.	1327194.	221137.	24.07%	-13.62%	-172136.
DIST. OF COLUMBIA	8046299.	149032.	150000.	8345331.	0.	20.06%	-21.69%	-2203019.
OUTLYING AREAS	0.	0.	0.	0.				
TOTAL	$ 1452337674.	$ 30689578.	$ 16973787.	$ 1500000039.	$ 215770368.	$ 315739524.		

Table C.7.2
Nonproportional Reduction

Enumeration - Orshansky x AFDC Ratio   Concentration - Moderate
Cost Factor - $300   Floor - 90% of FY72

TOTAL ALLOTMENTS FOR 1973

STATE	LEA	STATE AGENCY	ADMINISTRATIVE	TOTAL	NOTE 1	NOTE 2	NOTE 3	NOTE 4
ALABAMA	36231421.	1275500.	175070.	37883000.	172212.	18.00%	-26.79%	-1325400[illegible].
ALASKA	1919477.	490500.	150000.	2489977.	699157.	31.04%	4.90%	86330.
ARIZONA	[illegible]	1491700.	150000.	11032311.	0.	20.05%	-27.46%	[illegible]
ARKANSAS	[illegible]	1406700.	301110.	30612159.	0.	19.10%	-27.14%	-10600305.
CALIFORNIA	[illegible]	9981700.	1139283.	122113539.	51074406.	33.00%	34.93%	[illegible]
COLORADO	[illegible]	1951500.	150000.	[illegible]	1116540.	23.07%	-17.69%	-1935531.
CONNECTICUT	10631704.	1391500.	150000.	12167204.	6403200.	45.85%	78.86%	4687671.
DELAWARE	[illegible]	[illegible]	150000.	[illegible]	354250.	25.22%	-17.71%	[illegible]
FLORIDA	[illegible]	[illegible]	472512.	[illegible]	0.	20.75%	-27.25%	[illegible]
GEORGIA	[illegible]	1271700.	[illegible]	[illegible]	0.	17.78%	-27.12%	[illegible]
HAWAII	2925602.	166200.	150000.	[illegible]	1350100.	31.93%	24.76%	[illegible]
IDAHO	2457106.	765000.	150000.	[illegible]	372374.	24.80%	-10.01%	[illegible]
ILLINOIS	56218791.	3561000.	604798.	[illegible]	23292367.	30.52%	22.44%	10431100.
INDIANA	16320607.	2507700.	193222.	[illegible]	0.	19.48%	-27.20%	[illegible]
IOWA	13918193.	708900.	150000.	14777093.	8185187.	42.84%	74.21%	5920002.
KANSAS	[illegible]	1322400.	150000.	[illegible]	3257804.	29.05%	10.11%	[illegible]
KENTUCKY	[illegible]	546600.	339653.	[illegible]	9033170.	24.07%	-.40%	[illegible]
LOUISIANA	[illegible]	2044800.	421807.	[illegible]	0.	18.13%	-27.14%	[illegible]
MAINE	[illegible]	631000.	150000.	[illegible]	330451.	20.34%	-23.51%	[illegible]
MARYLAND	[illegible]	1735500.	192163.	[illegible]	4131086.	24.41%	-4.94%	[illegible]
MASSACHUSETTS	[illegible]	2573400.	240457.	24286148.	11540150.	30.85%	55.61%	[illegible]
MICHIGAN	42037665.	6045900.	489936.	48473401.	17350455.	31.76%	21.31%	[illegible]
MINNESOTA	[illegible]	1094100.	201021.	[illegible]	9252746.	34.04%	40.58%	5487011.
MISSISSIPPI	44775407.	1145900.	459233.	[illegible]	0.	17.70%	-27.12%	[illegible]
MISSOURI	23021190.	1974100.	248053.	[illegible]	709117.	19.13%	-24.47%	[illegible]
MONTANA	[illegible]	840700.	150000.	[illegible]	0.	21.41%	-30.14%	[illegible]
NEBRASKA	6770750.	549000.	150000.	[illegible]	2345058.	27.85%	8.46%	[illegible]
NEVADA	[illegible]	186300.	150000.	[illegible]	5820.	20.27%	-36.53%	-457755.
NEW HAMPSHIRE	1717569.	308100.	150000.	2175669.	64877.	20.41%	-29.53%	[illegible]
NEW JERSEY	40374535.	3584700.	439592.	[illegible]	24604551.	45.03%	83.45%	18365622.
NEW MEXICO	[illegible]	997000.	150000.	10067277.	0.	18.06%	-27.58%	[illegible]
NEW YORK	[illegible]	5846700.	1799606.	[illegible]	[illegible]	57.14%	135.79%	[illegible]
NORTH CAROLINA	[illegible]	[illegible]	541167.	[illegible]	9214075.	22.36%	-11.15%	[illegible]
NORTH DAKOTA	[illegible]	716400.	150000.	[illegible]	1159543.	27.72%	-.11%	[illegible]
OHIO	[illegible]	[illegible]	422412.	[illegible]	10724702.	26.70%	1.01%	[illegible]
OKLAHOMA	16379023.	1325700.	177056.	17882679.	3550912.	23.54%	-7.21%	-1272155.
OREGON	[illegible]	2053500.	150000.	10647500.	3555097.	34.36%	23.48%	1605744.
PENNSYLVANIA	[illegible]	4537800.	640401.	[illegible]	28507420.	34.26%	36.68%	[illegible]
RHODE ISLAND	[illegible]	417900.	150000.	[illegible]	2765101.	42.06%	67.70%	[illegible]
SOUTH CAROLINA	[illegible]	1693500.	[illegible]	44361075.	0.	17.00%	-27.13%	-15722800.
SOUTH DAKOTA	[illegible]	317100.	150000.	6106543.	1660080.	25.46%	.70%	[illegible]
TENNESSEE	[illegible]	1424100.	362385.	[illegible]	0.	17.00%	-27.13%	[illegible]
TEXAS	[illegible]	[illegible]	1470810.	[illegible]	0.	19.11%	-27.18%	-48921261.
UTAH	3233378.	525500.	150000.	3910379.	800361.	25.54%	-7.40%	-261831.
VERMONT	1895214.	523000.	150000.	2570714.	767123.	32.65%	10.20%	[illegible]
VIRGINIA	[illegible]	2033100.	367552.	[illegible]	0.	18.24%	-27.14%	[illegible]
WASHINGTON	[illegible]	[illegible]	150000.	[illegible]	[illegible]	31.77%	14.00%	[illegible]
WEST VIRGINIA	[illegible]	672000.	191440.	[illegible]	[illegible]	30.68%	24.25%	[illegible]
WISCONSIN	[illegible]	2030100.	160218.	17001055.	[illegible]	28.96%	10.14%	[illegible]
WYOMING	[illegible]	295100.	150000.	[illegible]	353612.	28.26%	-8.13%	[illegible]
DIST. OF COLUMBIA	[illegible]	749100.	150000.	8267650.	404470.	19.87%	-23.73%	[illegible]
TOTAL	$ 1369007902.	$ 114123900.	$ 16868164.	$ 1500000046.	$ 245312500.	$ 377700552.		

Table C.8.1
Proportional Reduction

Enumeration - Orshansky x AFDC Ratio
Cost Factor - $300

Concentration - Moderate
Floor - None

TOTAL ALLOTMENTS FOR 1973

STATE	LEA	STATE AGENCY	ADMINISTRATIVE	TOTAL	NOTE 1	NOTE2	NOTE 3	NOTE 4
ALABAMA	52630070.	324375.	529552.	53484731.	0.	25.41%	.00%	69044.
ALASKA	1770788.	117543.	150000.	2037932.	0.	25.41%	-5.67%	-102458.
ARIZONA	14495943.	483139.	150000.	15118581.	0.	25.41%	-.00%	18708.
ARKANSAS	41895432.	357378.	422540.	42675560.	0.	25.41%	.00%	54982.
CALIFORNIA	86568762.	2311627.	886324.	89769184.	0.	25.41%	.00%	113601.
COLORADO	11704075.	502285.	150000.	12356960.	0.	25.41%	-.23%	-11121.
CONNECTICUT	6242054.	346604.	150000.	6739560.	0.	25.41%	-1.25%	-70594.
DELAWARE	2502893.	151757.	150000.	2804650.	0.	25.41%	-4.04%	-102071.
FLORIDA	55602751.	2359570.	578424.	58441045.	0.	25.41%	.00%	72835.
GEORGIA	72449702.	323090.	727713.	73499005.	0.	25.41%	-.00%	95071.
HAWAII	2343950.	40362.	150000.	2574313.	0.	25.41%	-4.41%	-106755.
IDAHO	3117017.	188214.	150000.	3455231.	0.	25.41%	-3.27%	-101290.
ILLINOIS	49442493.	904713.	503472.	50850677.	0.	25.41%	.00%	64882.
INDIANA	24572330.	637110.	252094.	25461534.	0.	25.41%	.00%	32245.
IOWA	8435070.	178792.	150000.	8763862.	0.	25.41%	-.73%	-50744.
KANSAS	9010749.	333969.	150000.	9494218.	0.	25.41%	-.60%	-42102.
KENTUCKY	35717399.	139877.	356563.	36214831.	0.	25.41%	-.00%	46870.
LOUISIANA	58585789.	519505.	591053.	59696346.	0.	25.41%	.00%	76880.
MAINE	6940417.	150998.	150000.	7241616.	0.	25.41%	-1.09%	-67425.
MARYLAND	19550162.	440924.	199991.	20179076.	0.	25.41%	-.00%	25645.
MASSACHUSETTS	14676169.	653002.	153300.	15483270.	0.	25.41%	.00%	19259.
MICHIGAN	37643483.	1536030.	391795.	39571308.	0.	25.41%	.00%	49398.
MINNESOTA	14377091.	277904.	150000.	14804995.	0.	25.41%	-.02%	15520.
MISSISSIPPI	65345900.	291383.	656373.	66293656.	0.	25.41%	.00%	85751.
MISSOURI	32587631.	476137.	330638.	33394405.	0.	25.41%	.00%	42744.
MONTANA	4093204.	210443.	150000.	4453648.	0.	25.41%	-2.40%	-95222.
NEBRASKA	6527051.	138000.	150000.	6815951.	0.	25.41%	-1.22%	-72135.
NEVADA	1224747.	43494.	150000.	1418241.	0.	25.41%	-8.11%	-106305.
NEW HAMPSHIRE	2483544.	74997.	150000.	2708540.	0.	25.41%	-4.19%	-105209.
NEW JERSEY	23407828.	910734.	243186.	24561748.	0.	25.41%	-.00%	30717.
NEW MEXICO	13089065.	252201.	150000.	13491266.	0.	25.41%	-.12%	1085.
NEW YORK	78537325.	1485421.	800227.	80822973.	0.	25.41%	.00%	103042.
NORTH CAROLINA	60609496.	884591.	614941.	62109028.	0.	25.41%	.00%	79516.
NORTH DAKOTA	3990048.	177443.	150300.	4317792.	0.	25.41%	-2.51%	-97312.
OHIO	38761037.	1295256.	400572.	40457765.	0.	25.41%	.00%	50844.
OKLAHOMA	18774067.	336809.	191109.	19301985.	0.	25.41%	-.00%	24616.
OREGON	7205462.	516872.	150000.	7872575.	0.	25.41%	-.92%	-57687.
PENNSYLVANIA	47003078.	1152880.	481560.	48637518.	0.	25.41%	.00%	61680.
RHODE ISLAND	2852472.	102298.	150000.	3104770.	0.	25.41%	-3.65%	-104132.
SOUTH CAROLINA	61634620.	430253.	620649.	62685521.	0.	25.41%	.00%	80881.
SOUTH DAKOTA	5863123.	79365.	150000.	6092488.	0.	25.41%	-1.49%	-80671.
TENNESSEE	50813943.	361809.	511759.	51687509.	0.	25.41%	.00%	66681.
TEXAS	191430050.	4068082.	1954985.	197453518.	0.	25.41%	.00%	251207.
UTAH	3610089.	129892.	150000.	3890181.	0.	25.41%	-2.89%	-102731.
VERMONT	1724901.	125489.	150000.	2000390.	0.	25.41%	-5.70%	-101902.
VIRGINIA	50686535.	516532.	512031.	51715097.	0.	25.41%	.00%	66514.
WASHINGTON	10162001.	628357.	150000.	10940358.	0.	25.41%	-.38%	-25844.
WEST VIRGINIA	15685407.	170958.	158564.	16014928.	0.	25.41%	.00%	20581.
WISCONSIN	14379743.	515734.	150000.	15045477.	0.	25.41%	-.01%	17672.
WYOMING	1181096.	69051.	150000.	1400947.	0.	25.41%	-8.21%	-104025.
DIST. OF COLUMBIA	10230913.	189493.	150000.	10570306.	0.	25.41%	-.43%	-31035.
OUTLYING AREAS	0.	0.	0.	0.				
TOTAL	$ 1454113775.	$ 28912606.	$ 16974111.	$ 1499999992.	$ 0.	$	0.	

Table C.S.2
Nonproportional Reduction

Enumeration - Orshansky x AFDC Ratio   Concentration - Moderate
Cost Factor - $300   Floor - None

TOTAL ALLOTMENTS FOR 1973

STATE	LEA	STATE AGENCY	ADMINISTRATIVE	TOTAL	NOTE 1	NOTE 2	NOTE 3	NOTE 4
ALABAMA	49575424.	1276500.	513519.	51365443.	0.	24.40%	.18%	91374.
ALASKA	1652565.	490500.	150000.	2293065.	0.	28.59%	-6.27%	-110501.
ARIZONA	13633107.	1901700.	155348.	15690157.	0.	26.37%	.10%	13459.
ARKANSAS	39443797.	1406700.	408700.	41276697.	0.	24.57%	.18%	69741.
CALIFORNIA	81477356.	9096700.	925901.	91499957.	0.	25.89%	.12%	97501.
COLORADO	11017459.	1981500.	150000.	13148959.	0.	27.03%	-.11%	-12238.
CONNECTICUT	5868856.	1381500.	150000.	7400356.	0.	27.90%	-1.26%	-75[illegible].
DELAWARE	2343339.	622500.	150000.	3115839.	0.	28.23%	-4.45%	-107055.
FLORIDA	52220867.	9287400.	615083.	62123350.	0.	27.01%	.07%	36571.
GEORGIA	68240932.	1271700.	675176.	70212876.	0.	24.27%	.19%	129346.
HAWAII	2235551.	166200.	150000.	2551751.	0.	25.18%	-4.06%	-107314.
IDAHO	2921946.	765900.	150000.	3837846.	0.	28.22%	-3.56%	-107916.
ILLINOIS	46554358.	3561000.	501154.	50616512.	0.	25.29%	.15%	66015.
INDIANA	23131404.	2507700.	256391.	25895495.	0.	25.84%	.12%	24240.
IOWA	7937002.	708900.	150000.	8795902.	0.	25.50%	-.65%	-51955.
KANSAS	8473145.	1322400.	150000.	9945545.	0.	26.43%	-.52%	-44054.
KENTUCKY	33646259.	546600.	341929.	34534788.	0.	24.23%	.19%	64381.
LOUISIANA	55179035.	2044800.	572247.	57795964.	0.	24.60%	.18%	96959.
MAINE	6528701.	600900.	150000.	7279601.	0.	25.54%	-1.05%	-68992.
MARYLAND	18413729.	1735500.	201987.	20351217.	0.	25.80%	.13%	24439.
MASSACHUSETTS	13807755.	2573400.	163809.	16544964.	0.	27.15%	.06%	8766.
MICHIGAN	35419463.	6045900.	414854.	41880217.	0.	26.89%	.08%	26662.
MINNESOTA	13536324.	1094100.	150000.	14780424.	0.	25.36%	.12%	15680.
MISSISSIPPI	61555591.	1146900.	627025.	63329516.	0.	24.27%	.19%	116686.
MISSOURI	30657419.	1874100.	335817.	32867336.	0.	25.02%	.16%	48344.
MONTANA	3842764.	848700.	150000.	4841464.	0.	27.62%	-2.55%	-100511.
NEBRASKA	6139977.	549900.	150000.	6839877.	0.	25.49%	-1.19%	-73747.
NEVADA	1141573.	186300.	150000.	1477873.	0.	26.47%	-8.90%	-111541.
NEW HAMPSHIRE	2328046.	308100.	150000.	2786146.	0.	26.13%	-4.48%	-109125.
NEW JERSEY	22026183.	3584700.	256109.	25866992.	0.	26.76%	.08%	17894.
NEW MEXICO	12322606.	993900.	150000.	13466506.	0.	25.36%	.01%	980.
NEW YORK	73948212.	5846700.	797949.	80592861.	0.	25.33%	.14%	104540.
NORTH CAROLINA	57075706.	3401800.	685575.	61163081.	0.	25.02%	.16%	90018.
NORTH DAKOTA	3746437.	716400.	150000.	4612837.	0.	27.14%	-2.65%	-101575.
OHIO	36480327.	5098200.	415785.	41994312.	0.	26.37%	.10%	35944.
OKLAHOMA	17677598.	1325700.	190033.	19193331.	0.	25.26%	.15%	26021.
OREGON	6775453.	2053500.	150000.	8978953.	0.	28.98%	-.92%	-62617.
PENNSYLVANIA	44248761.	4537600.	487566.	49274427.	0.	25.74%	.13%	55970.
RHODE ISLAND	2675063.	417900.	150000.	3242963.	0.	26.54%	-3.90%	-108419.
SOUTH CAROLINA	58054972.	1693500.	597485.	60345957.	0.	24.46%	.18%	105451.
SOUTH DAKOTA	5514005.	317100.	150000.	5981105.	0.	24.94%	-1.46%	-81756.
TENNESSEE	47862533.	1424100.	492867.	49779500.	0.	24.47%	.18%	86729.
TEXAS	180231476.	16012200.	1962437.	198206113.	0.	25.50%	.14%	246544.
UTAH	3389027.	526500.	150000.	4065527.	0.	26.55%	-3.05%	-106[illegible].
VERMONT	1609248.	523800.	150000.	2283048.	0.	29.00%	-6.43%	-110589.
VIRGINIA	47737912.	2033100.	497710.	50268723.	0.	24.70%	.17%	61897.
WASHINGTON	9562942.	2482800.	150000.	12195742.	0.	28.32%	-.30%	-28385.
WEST VIRGINIA	14772599.	672900.	154455.	15599954.	0.	24.75%	.17%	25014.
WISCONSIN	13533717.	2030100.	155633.	15718950.	0.	26.54%	.09%	12291.
WYOMING	1098997.	296100.	150000.	1545097.	0.	26.02%	-9.22%	-111628.
DIST. OF COLUMBIA	9629782.	749100.	150000.	10528382.	0.	25.31%	-.33%	-31694.
TOTAL	$ 1368969129.	$ 114123900.	$ 16906932.	$ 1499999961.	$ 0.	$ 0.		