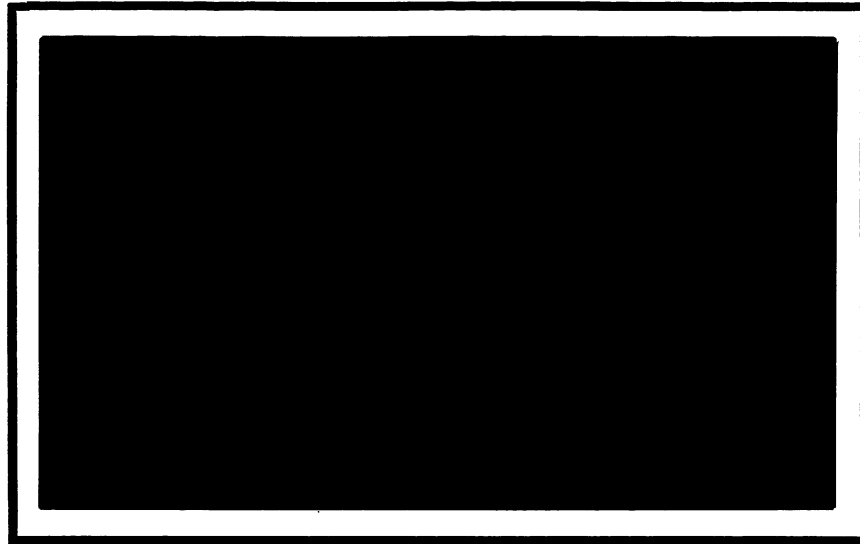


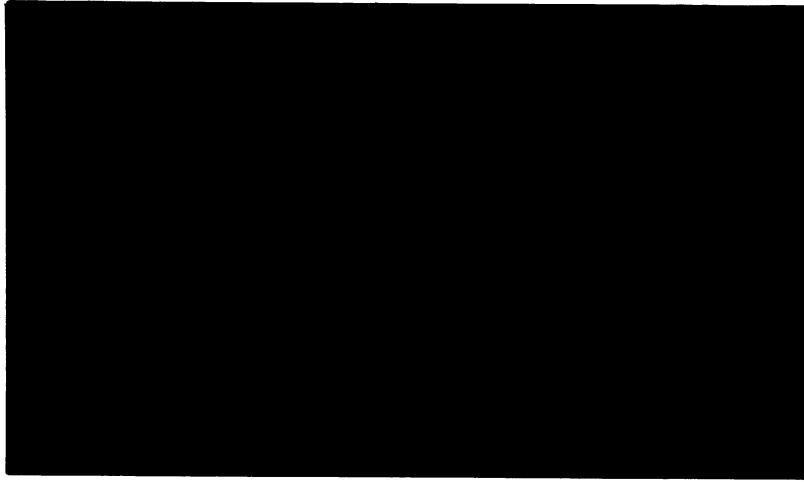
C-40

**Center for Research on Economic and Social Theory
Research Seminar in Quantitative Economics**

Discussion Paper



DEPARTMENT OF ECONOMICS
University of Michigan
Ann Arbor, Michigan 48109



MICHIGAN STATE EXPENDITURES AND
THE PROVISION OF PUBLIC SERVICES

JOHN G. CROSS

(with Catherine E. Jensen,
Michael J. Moore, Janet C. Wolfe)

C-40

October 1981

MICHIGAN STATE EXPENDITURES AND THE PROVISION OF PUBLIC SERVICES

JOHN G. CROSS

(with Catherine E. Jensen, Michael J. Moore, Janet C. Wolfe)

I OVERVIEW

The State of Michigan is by no means unique among northern industrial states in facing unpleasant financial pressures. Most states have experienced dramatic increases in social service and medical needs, growing pressures upon the judicial and correctional systems, and ever-increasing demands for support from older, declining cities. In common with other states, too, is the growing concern with "tax revolts," and with the accompanying threat that rising demands for state services may be met with declines in the resources available to fund them. However, the dependence upon a single concentrated industry, one which itself is apparently losing its market position to competitors, exacerbates these trends to such an extent that the financial problems faced by the State of Michigan during fiscal years 1980 and 1981 neared crisis proportions.

It is often alleged that pressures upon the budget of the State are the consequence of an excessive expansion in spending during the decade of the 1970's. In fact, over this period, State spending has not grown at all relative to personal incomes in Michigan. It is true that real personal income in the State has not grown significantly, and this fact may have somehow exacerbated a belief that growth in the government sector must have been excessive, but in fact that spending has not grown significantly faster than the rate of inflation.

Since FY1971, personal income net of transfers in Michigan has increased at an average rate of 9.47 percent per year, only a little higher than the average rate of increase of the Detroit-based Consumer Price Index (8.5 percent per year over the same period). Since 1974, in fact, the CPI and Michigan personal income net of transfers have moved almost exactly in step at an average rate of 9 percent per year. If we include transfers (largely composed of Social Security payments), the rate of income increase is about 0.5 percent higher. On the other hand, since Michigan population increased slightly over the last ten years, the rate of per capita income increase is 0.4 percent lower. Finally, since labor force participation has been increasing over the decade (approximately 1 percent per year), it is clear that real employee incomes in Michigan have not been increasing, and indeed, over the last five years, they have declined.

Michigan State expenditures have been following a course roughly parallel with income. Thus, while total personal income rose at 9.91 percent per year over the last decade, Michigan State expenditures (excluding Federal Grants and User Fees) have risen at a slightly lower rate of 9.74 percent per year. This growth has been supplemented by a great increase in Federal spending through such programs as AFDC, Medicaid, CETA, special school programs, and transportation subsidies. Overall, Federal aid to Michigan has increased at a rate of 17 percent per year over the last decade, and when this is combined with all of the State's own resources, gross

spending in Michigan is found to have risen at just over 11 percent per year.

It is clear that the expansion in state and local government activity which characterized the 1960's came to an end during the 1970's. Certainly, our figures provide no support for a contention that State spending in Michigan has grown excessively, or that it is inappropriately high, at least by 1970-71 standards. On the other hand, spending patterns within this total have changed markedly, and it is evident that the financial pressures under which the state budget presently suffers are attributable in large part to changes in its composition.

Even a cursory review of social and economic trends in Michigan must engender a pessimistic view of the condition of the State. Using the 9.91 percent annual rate of growth of personal income in Michigan as a convenient benchmark, we note that over the last decade:

- * The State share of spending on the Aid to Families with Dependent Children program has been increasing at over 13 percent per year.

- * The State share of spending on Medicaid and related services has been increasing at over 14 percent per year.

- * State spending on General Assistance has been increasing at over 19 percent per year (this figure, however, is exaggerated by the fact that during the 1970's, the State assumed all responsibility for this program from the counties).

- * The State share of spending on juvenile services has been increasing at over 20 percent per year.

- * State spending on corrections has been increasing at 19 percent per year.

These financial trends are matched by equally discouraging demographic data:

- * While unemployment naturally fluctuates in response to general economic conditions, there has been an unremitting underlying trend upward, adding about 0.4 percent each year to the unemployment rate about which cyclic fluctuations are centered.

- * Caseloads in the Aid to Families with Dependent Children program have increased at an average rate of 7.8 percent per year--7.4 percentage points higher than the rate of population growth in Michigan.

- * General Assistance caseloads have increased over the decade at an average rate of 8.6 percent per year--8.2 percentage points higher than the rate of population growth.

- * Prison inmate population has grown at an average rate of

4.8 percent per year, and evidence suggests that this rate would be substantially higher were it not for the overcrowding of all available prison facilities.

In the case of social services such as AFDC and GA, these high rates of growth are not entirely due to changes in the economic and social climate. During the late 1960's and early in the 1970's, social policies were deliberately directed toward expanding eligibility for social services, locating eligible individuals who were not receiving benefits, and enhancing the benefits themselves. As a consequence, caseloads and expenditures increased dramatically during this earlier period, and the growth rates listed above reflect in part the consequences of an intentional policy of increasing the delivery of social services.

Nevertheless, even after this administratively determined expansion in services came to an end, social service caseloads continued to expand at a very high rate. By 1981, the underlying rate of growth of AFDC caseloads has apparently fallen to 2.5 percent per year, but this rate is still far higher than the 0.4 percent rate of population growth, and it is being maintained in the face of a slight decline in the real value of AFDC benefits. The rate of caseload growth in the General Assistance program has actually increased, and this too in spite of the declining real value of assistance payments.

As a consequence of these trends, the role of the Department of Social Services expanded greatly over the decade of the seventies, as did that of the smaller, but equally rapidly growing Department of Corrections. Moreover, since the activities of these departments are determined largely by social forces outside of immediate legislative control, it has proven to be very difficult to curtail their growth, even in the face of revenue declines. This has led to a concentration of any budgetary pressures which do arise upon other programs elsewhere in the State expenditure system.

Naturally, in an expenditure budget which has remained relatively constant in real terms, the expansion in Social Services and Corrections has forced a displacement of funds away from other spending categories. Thus while Social Services was increasing its share of the State budget (excluding Federal contributions) from 18.2 percent in FY1971 to 27.6 percent in FY1981, State expenditures on school aid (K-12) fell from 40.4 percent to 29.2 percent of the total. While State expenditure on Corrections was increasing from 1.4 percent to 3.1 percent over the same period, the share of the State budget going to the Department of Natural Resources was halved from 1.1 percent to 0.51 percent, and expenditures on Higher Education fell from 14.4 percent to 12.5 percent. Even the Department of Transportation has lost ground somewhat in this respect (from 10.2 percent to 9.2 percent), although this is largely a reflection of the rate of growth of gasoline tax revenues which are constitutionally earmarked for transportation.

These trends reflect an important change in the general character of Michigan government spending. Social Services and Corrections are "targeted" programs whose expenditures are concentrated upon a relatively small minority of Michigan citizens, while the programs which have been displaced were serving a much broader cross-section of the population. In

part, this shift in the composition of spending reflects the increased concern for income redistribution which characterized the 1960's, and this growth in interest in one function of government naturally led to real declines in the more traditional public sector services. However, public opinion polls (see Courant, Gramlich, and Rubinfeld, 1980) suggest that this shift in composition is extremely unpopular. "Welfare spending" is the single category in which an overwhelming majority of voters would support reduction.

A consequence of this displacement from general public services to targeted programs is the fact that most taxpayers become aware of a greatly reduced return on their tax dollars. Services which were formerly freely available are reduced (such as school music and arts programs or highway patrols) or are accompanied by sharply increased user fees (ranging from park entrance fees and fishing and hunting license fees to high tuition rates in the community and four-year colleges and an increased reliance upon local property taxes to support local schools). A popular impression of decreasing efficiency in State Government is inevitable. This tendency is compounded by two other developments which have taken place over the last decade. First is the growth in state to local revenue sharing and related grants, transfers, and other forms of direct subsidy for local governments. Cash transfers to local jurisdictions have increased from approximately 2.5 percent of state spending in FY1971 to over 11.5 percent in FY1981. Politically speaking, the "credit" for the resulting programs naturally goes to local government and, to an equivalent extent, the State is seen to be taking in revenues but to be delivering no comparable product. Second, overhead and administrative costs in state government have in fact grown more rapidly than have actual services. Compared to the gross spending increase for the entire state of 11.2 percent per year, general government spending has been increasing at 15.6 percent, and the Department of Management and Budget at about 22 percent (after taking account of the large number of office and function transfers which have taken place over the decade). Quantitatively, expenditures on central administration, executive, and overhead do not constitute a large share of state operations, and elimination of such "fat" as may have accumulated would provide only trivial savings in terms of the overall budget. Nevertheless, these increases do tend to reinforce any impressions of inefficiency which may have been obtained from other sources.

II ACCOUNTING PROCEDURES AND BUDGET ANALYSIS

A. BUDGET CONCEPTS

It is not always the case that accounting procedures which are consistent and which meet traditional definitional standards are equally effective for the analysis of the actual operations of an organization. A prime example of this dilemma is provided by the so-called General Purpose component of the Michigan General Fund. Most observers treat the General Purpose fund as the pool of resources over which the Executive and Legislature have discretionary authority, and therefore as the fund in which incremental revenues are placed and from which incremental spending programs must be funded. Unfortunately, this is far from the truth. The General Purpose fund includes some revenues which are best described as

"user fees" and which therefore could not reasonably be diverted from the programs which generate them. On the other hand, it excludes a number of expenditures which are clearly incurred at the discretion of the State, but which have been "earmarked" by legislative action--action which can be reversed whenever the desire to do so arises. Since the inclusion and exclusion of resources in the General Purpose fund varies significantly from year to year, annual comparisons of spending patterns are impossible, and the fund itself provides no guide as to the resources available to the State, or to the burdens placed on the State by various spending programs.

The total State budget is an equally unreliable guide for analysis in that it includes resources which are clearly not fungible from program to program. The bulk of the Federal money spent in the State-- which constitutes some 28 percent of the entire State budget in FY1981--is specifically earmarked for certain programs and could not be diverted elsewhere. Similarly, the total budget includes innumerable user fees which would certainly be reduced or cease to be collected altogether if the associated spending programs were reduced or terminated.

It is impossible to perform any reasonably accurate analysis of Michigan State operations with such erratic and even arbitrary budget data. Our review therefore began with a tentative reconstruction of the Michigan State Budget with the objective of determining the extent to which expenditures are genuinely discretionary. In our definition, a "discretionary" expenditure is one which is 1) subject to control by the Executive or Legislature, and 2) free of offsetting variations in revenues ("user fees") which would arise as a natural consequence of expenditure changes. Such a criterion must be applied with a fairly long time horizon in mind. If the Department of Natural Resources were to abandon the maintenance of parks and waterways, park fees and fishing license fees might not fall off immediately. Eventually, however, such fees would decline, and hence reductions in these expenditures would lead to offsetting revenue losses. On the other hand, hunting and fishing license fee revenue is also used to support financial transfers to counties "in lieu of taxes" on State-owned land. Since elimination of these transfers would not have any significant effect on license revenues, such expenditures were deemed to be discretionary. A more difficult question arises in the case of Federal grants in that most of these funds require State matching funds; in a typical instance (such as AFDC or Medicaid) a \$2 reduction in total expenditure would lead to a \$1 loss in Federal income. In these cases, it was deemed to be most appropriate to consider the entire State share to be discretionary and to treat the Federal grant as a device for reducing the cost to the State of any given unit of service. Moreover, there are floors below which certain expenditures cannot legally go. The Michigan Constitution requires that 50 percent of the sales tax be earmarked for "education" (not specifically K-12 education, however), and the State could not reduce Medicaid coverage or AFDC benefit levels below certain standards without losing all Federal approval for these programs. In each of these cases, however, actual Michigan expenditures greatly exceed the minima, and as they stand, they are subject to discretionary control over a very wide range. We therefore included all expenditures in these areas in the discretionary category. Finally, since gasoline tax revenue is constitutionally earmarked for transportation purposes, these funds are treated as user fees and are not included with discretionary resources.

Gross State expenditures in FY1981 amount to \$9,875 million. The "discretionary" component of this is found to be \$6,068 million. The difference between these two figures is accounted for by \$2,655 million in Federal spending and about \$903 million in user fees.

Our purpose in developing such a budgetary classification is to clarify the potential consequences of general revenue increases or decreases. A tax cut program, for example (such as a reduction in local property taxes to be reimbursed in whole or in part from State revenues), would have to be financed out of discretionary funds. The impact of such a cut cannot be appraised by reference to the (higher) Gross Expenditure budget or the (lower) General Purpose fund. It is a common practice for such summary statistics to be used in debate over taxes, and confusion often results from a failure to use appropriate budget measures. For example, the 1980 "Tisch II" tax cutting referendum was generally believed to propose a \$2 billion cost to the State. Supporters of the measure chose to describe this as a 20 percent budget cut (using Gross Expenditures as a base), while opponents characterized it as a 45 percent cut (using the General Purpose fund as a base). In fact, the cut would have amounted to about one third of State discretionary spending.

B. REVENUE CONTROL BY GENERATING AGENCIES

Unfortunately, available data do not permit us to include all forms of user fees in our budget analysis. County mental health units, for example, receive a number of fees for services which are not treated as revenue to the State. It is therefore very difficult to ascertain the extent to which gross revenue to these units is dependent upon State expenditure policies. Community Colleges and four-year colleges and universities are treated as fully autonomous units, and only their state subsidy is included in the budget, although it is clear that their ability to attract tuition revenue is strongly influenced by the extent of their State support. In fact, there is very little consistency in the budgetary treatment of revenue-generating units of State government. Colleges and Universities are regarded as independent units which are granted state subsidies. Even though these subsidies are ostensibly determined by formulas which reflect specific aspects of their operations, there is very little direct control exerted over management operations, tuition levels, curriculum, or admissions policies. At the other extreme is the Department of Licensing and Regulation, which receives none of the revenue generated by its licensing operations but is funded instead through the General Fund, while the General Fund receives all license fee revenues. The inappropriateness of this arrangement for both budgeting and operations is obvious when one considers that a reduction in activities of this department would inevitably produce a corresponding reduction in revenue generation.

Quite apart from the difficulty in determining actual levels of discretionary spending is the question of whether the accounting system may actually interfere with the efficient delivery of services. It is a principle of organizations in any setting that the greater the managerial separation between income generation and expenditure, the less efficient the operation is likely to be. If those who deliver the services and charge the fees are not funded by the revenues, they will naturally lose interest in the efficiency and effectiveness of their activities, and the

quality of the product will decline. There are a number of areas in Michigan State Government in which this principle applies. Until FY1981, third-party (insurance) fees paid by patients in State mental hospitals were transferred to the general fund, and this naturally reduced the incentive of the Department of Mental Health to obtain such fees. The same problem arises at the level of the County Mental Health Board, which is expected to "share" patient fees with the state. Inevitably, this reduces (and sometimes eliminates) the incentive to collect the fees. Ultimately, it degrades service, increases the tax burden of Mental Health programs, or both.

Efficiency in State government would be greatly enhanced were steps taken to increase the budgetary autonomy of direct-service delivering units. A good model for such a development is provided by the recent experiment with "Contract Boards" in the Department of Mental Health. These are county boards which have been granted both more autonomy and more responsibility for the care of patients from their districts. Such a board, for example, would no longer simply transfer a patient into the state system should hospitalization be required, but would instead retain responsibility (including financial), for the patient no matter what setting is chosen. Naturally, the budget of the local board must be increased in compensation for this change (although the increased spending is initially only an accounting transfer of state spending on hospitals); however, it can be expected that this program will greatly improve the efficiency and quality of community mental health care delivery. On the one hand, it will no longer be possible for a county to dispose of a difficult case simply by transferring it to the state system, and on the other, a larger share of patient fees will be retained by the board, increasing the incentive to take advantage of available resources.

This procedure of establishing relatively independent units with more comprehensive program responsibility could be applied effectively to a variety of State services. Licensing, pollution surveillance, bank examination, and insurance regulation all could be organized into comprehensive and self-funding operations. Even some aspects of corrections and social services might be provided on the model of the Contract Mental Health Board, reducing both costs of providing services and the political dissatisfaction that these statewide operations seem to produce.

C. THE HEADLEE AMENDMENT

In 1978, the voters of Michigan approved the so-called Headlee Amendment to the Michigan Constitution. This Amendment was designed to restrict growth in State revenues to the rate of growth in Michigan personal income, to limit the introduction of new local taxes or new bonding issues without a popular vote, and to ensure that the share of Michigan expenditures redistributed to local units of government remains at the level established during Fiscal Year 1978 (this fraction was then 41.6 percent). The first of these restrictions has had no effect, because state revenues have not been increasing as rapidly as Michigan Personal Income in any case, and the second, for similar reasons, has had only minor consequences. The third, however, removed what was an important source of flexibility in State budget-making. Before this amendment was passed, cyclical fluctuations in revenues and expenditure demands upon the State

were passed on in part to local units of government. An economic downturn that increased the Michigan unemployment rate by 1 percent would lead roughly to a 1.6 percent decrease in gross State expenditures, and a 2.1 percent decrease in State discretionary expenditures. (The difference between the 1.6 and 2.1 is due to the fact that Federal Aid to Michigan is insensitive to variations in employment.) However, since the same one-point increase in the Michigan unemployment rate is generally followed by an increase in expenditures by the Department of Social Services, other departments are forced to sacrifice more than their proportional share of the 2.1 percent decline in discretionary spending. Before 1978, Grants and Transfers accounted for a large part of these offsetting declines, being reduced by about 5.3 percent for every one point increase in unemployment. The Headlee Amendment requirement that all State payments to local governments (including Grants and Transfers) remain at (or above) 41.6 percent of gross expenditures has eliminated this flexibility. In recent years this has placed great pressure upon the State Budget as other programs which use discretionary funds have been required to sacrifice much more than proportional shares of the overall cuts. While local units of government are now protected to some extent from economic fluctuations in the State, other state programs, primarily in the areas of Mental Health and Higher Education, have been forced to make up the difference.

The Headlee Amendment also affects the role of social service programs in Michigan. Most Federal money which comes to the state is paid through the Department of Social Services. Since most welfare programs are matched by Federal funds, a \$1.00 reduction in State spending on one of these programs also reduces Federal spending through the state by \$1.00. This in turn reduces the requirement to spend at the local level by 41.6 cents. In effect, state-level spending on other programs can be increased by \$1.42 for every dollar taken out of Social Services.

Finally, this same Headlee Amendment has changed the meaning of any proposed budget cut at the State level. Since the 41.6 percent applies to Gross State expenditures rather than discretionary spending, and since almost all Federal and user fee income is spent at the state level, virtually all of the money which is spent at the local level (and which meets the Headlee requirement) comes from the fund of discretionary resources. That is, the Amendment requires that much more than 41.6 percent of state discretionary money be spent at the local level (the 1981 ratio is about 69 percent). If the supply of discretionary revenue were reduced by some amount, then the consequences of that reduction would be divided between the State and local units of government, the latter absorbing 41.6 percent of the reduction. However, a number of recent proposals have suggested cuts at the local level which would then be reimbursed by the State in addition to the existing 41.6 percent requirement. This would focus any spending cuts upon the 31 percent of State discretionary money which is not already spent locally. To give an extreme example, a \$2 billion reduction in property taxes which was to be reimbursed by the State might reduce gross State spending by 21 percent and discretionary spending by 33 percent, but would reduce State-level discretionary spending by 48 percent. Since it is these discretionary resources which fund Higher Education, Mental Health, and Social Services, the effect of such a cut on public services would be considerable. The State would probably be forced to respond to this situation by giving up Federal subsidies—that is, by

focusing its cuts upon the Department of Social Services.

III THE FEDERAL SHARE OF MICHIGAN STATE EXPENDITURES

Contributions by the Federal Government have risen from 16.7 percent of gross expenditures in FY1971 to 27.6 percent in FY1981. In general, these Federal dollars have had strings attached. Apart from relatively small amounts of revenue sharing and CETA funds, most of this money is designated for particular programs. Over 60 percent of Federal aid in Michigan is directed through the Department of Social Services, and if we include certain education programs and transportation, we will have accounted for over 81 percent of all Federal contributions to the Michigan State Budget. It is furthermore the case that the bulk of these Federal grants require matching funds from the State. The growth of Federal aid in Michigan has thus required equivalent expansion in State contributions to certain program areas from its own discretionary funds. Generally speaking, in order to obtain the \$1.6 billion in Social Service support from the Federal government, the State has had to put in \$1.6 billion of its own.

It is likely that the increased share of the State budget which is spent on targeted sub-groups of the population is in part a consequence of the increased role of (deliberately) highly targeted Federal aid in Michigan and its tendency to draw State discretionary expenditures along with it. Federal subsidy programs actually have two general effects. First, they reduce the local tax cost of providing certain services. The direct cost to Michigan residents of each dollar in medical service to low income recipients is only \$0.50, the direct cost of \$1.00 of AFDC benefits is \$0.50, and the cost of certain special education and school lunch programs is reduced to little more than administrative overhead. Inevitably, a system which thus reduces the cost of certain services will stimulate the willingness to provide these services in preference to alternative programs for which the State must provide full cost. Second, it makes possible the substitution of Federal dollars for State discretionary funds in ongoing programs. Thus, whereas Federal subsidy programs can usually be expected to lead to expansion of targeted State programs, it does not follow that the State programs will expand in proportion to the subsidy, and to that extent the Federal program will make State money available for other purposes.

Since State discretionary spending over the last decade has not increased more rapidly than personal income, it is clear that the great increase in Federal spending in the State has not led to an overall increase in state spending, but has primarily had the effect of displacing resources away from unsubsidized programs. Table 1 describes department-by-department gross expenditures in FY1981, the fraction of gross spending accounted for by the Federal government, and annual growth over the preceding decade of gross expenditures, expenditures from State discretionary funds, and Federal funds. The data are obtained from the FY1971 and FY1981 appropriations bills (including supplements). It is noteworthy that many of the departments with the highest rate of growth of gross expenditure (Social Services, Public Health, and Labor) also enjoy a substantial proportion of Federal subsidy, while those departments which receive

negligible Federal assistance (the Departments of State, Treasury, Higher Education, and the School Aid Fund), have been expanding at substantially less than the average rate for the State Government as a whole. It is also easy to see from the Table that some departments have tended to replace existing State spending with Federal dollars. The Department of Education, for example, has expanded its operations relatively rapidly over the last decade (12.8 percent per year compared to the 11.2 percent for the State Government as a whole), but it has done so entirely at the expense of the Federal Government. In fact, nominal spending from State discretionary funds in this Department has actually fallen slightly (-0.3 percent per year). Converting to constant dollars, this amounts to an annual decrease in funding at a rate of 8.8 percent per year! The same tendency appears in several other departments: Military Affairs, Civil Rights, and Natural Resources.

During Fiscal Years 1980 and 1981, the State budget was put under severe strain as a consequence of the economic downturn in the automobile industry together with the continuing demand for social services and the Headlee Amendment requirement that transfers to and expenditures for local services be maintained. The ensuing budget cuts were often extremely painful if not actually disruptive to the provision of all State services. During this period, it was frequently suggested that the presence of Federal matching programs had an influence over the distribution of the cuts: if a dollar were cut from such a program, the State would only save about \$0.50, whereas in areas not matched with Federal funds, the State would save the entire amount of the cutback. A number of news reports contributed to the impressions that General Assistance benefits (which are not subsidized by the Federal Government) were being cut more than AFDC benefits (which are), and that hospitals for the Developmentally Disabled (which receive support from the Medicaid program) were being partially exempted from cuts which did apply to hospitals for the mentally ill (which do not receive such support). In fact, there is no evidence that such differential economizing took place during this period: hospitals for the Developmentally Disabled were actually reduced disproportionately more than the others, and substantial changes were made in AFDC eligibility rules and benefit rates as well as in General Assistance.

Such results as these are actually to be expected. The presence of Federal subsidies certainly influences the amount of services to be delivered--Federal support for AFDC, for example, induces an AFDC program more generous than would otherwise have existed--but it does not follow that such programs are either immune from cuts or more vulnerable to them. The very expansion in a program which is induced by a Federal subsidy brings about a condition in which we see ourselves to be less in need of the service and we are to that extent less likely to resist cutbacks. Whether these programs are cut more or less than others is more likely to depend upon the conditions under which the necessity for cutbacks arises. The Department of Corrections, for example, was relatively immune from budget cuts during FY1980 and FY1981, not because of any significant Federal support, but because of a legislative reluctance to make cuts in an area of such obviously growing need, while the cuts in the Department of Mental Health were facilitated by a conviction on the part of its administration that (less expensive) community residential facilities are

TABLE 1
 Spending Growth Rates
 (***) applies to departments with 0 Federal Aid in 1971)
 source: see Appendix

DEPARTMENT	FY1981 GROSS EXP \$millions	% FEDERAL FUNDS	GROWTH RATES IN:		
			GROSS EXP	DISCRETIONARY	FED.
Governor	2.222	0	10.05	10.05	***
Legislature	43.294	0.16	11.37	11.14	***
Judiciary	35.347	1.1	12.72	16.47	2.3
Atty. Gen.	20.653	17.1	17.86	16.2	***
State	38.162	4.7	8.85	4.92	26.4
Man. & Bud.	101.877	35.6	20.83	15.7	29.26
Treasury	38.689	3.2	7.84	7.55	***
Civil Svc.	9.771	86.3	13.64	-8.27	***
Civil Rts.	9.082	20.4	9.49	7.08	***
Education	407.006	90.4	12.8	-0.28	15.11
School Aid	1,800.820	1.7	6.68	6.49	***
Higher Ed.	757.773	.44	8.24	8.42	***
Pub. Health	202.305	54.1	12.3	13.33	11.37
Mental H.	569.346	12.4	10.85	10.18	31.58
Soc. Svcs.	3,270.044	47.1	14.93	14.5	15.27
Correct.	193.737	1.66	19.01	18.97	20.33
Mil. Affair	10.616	7.47	4.54	14.08	
State Police	145.420	12.9	13.38	12.44	18.86
Commerce	84.986	8.8	12.24	5.91	24.01
Labor	211.621	86.	39.32	12.81	90.97
Lic. & Reg.	9.761	0	11.36	***	***
Nat. Res.	128.896	24.2	11.94	1.91	38.02
Agriculture	25.172	9.6	6.57	7.27	5.07
Grants & T.	722.452	2.9	25.55	27.82	4.59
Trans.	956.819	18.0	10.09	***	30.84
Cap. Outlay	76.161	41.7	-7.82	-17.62	16.83
Total	9,626.385	27.6	11.16	9.93	17.03

more suitable for patients in any case.

There is considerable debate at the Federal level as to the appropriateness of current program levels, especially in areas of social services. If these programs were reduced, we would expect a reversal of the trends which we observed over the last decade—certain welfare benefits and eligibility standards would be reduced, and State money would be returned to those programs (e.g. in the Department of Education) from which they have been released. Quite different consequences might be expected were the Federal Government to abandon its attempts to focus federal support upon targeted low-income groups, replacing existing entitlement programs with a system of "block grants" which were defined broadly enough to include program areas which do not presently receive Federal support. If it became possible to use low income assistance subsidies for General Assistance as well as AFDC, for example, there would certainly be a tendency

to make substitutions in this direction. More broadly defined educational grants would probably lead to less emphasis upon special and remedial educational programs in deference to adult education and experimental teaching formats for normal or even "gifted" children. In short, just as the existing configuration of Federal subsidies has tended to focus State programs upon targeted elements of the population, movement toward block grants would enable the State to redirect its expenditures toward a broader cross-section of its citizens.

IV ADMINISTRATION AND OVERHEAD

A persistent complaint directed at State Government alleges that the bureaucracy itself is consuming an ever-increasing share of State resources, leaving less and less for the delivery of actual public services. There are generally four dimensions to this claim: 1) Civil Service and administrative salary rates are too high, 2) salary rates have been rising faster than is justified by economic conditions, 3) staff sizes are increasing more rapidly than is necessary to deliver the services, 4) managerial incompetence extending even to corruption and fraud is draining resources. Unfortunately, it is easy to find specific instances in support of each of these charges. State Legislators are the third highest paid in the nation (behind California and Illinois), while the Governor's salary is seventh highest in the U.S. The Civil Service Commission routinely seems to grant cost of living increases in an economy few of whose citizens have been keeping up with inflation. Staff sizes in mental institutions have grown dramatically relative to patient loads. Cases of managerial ineptitude, improper contract relationships, and even outright theft are described periodically in the news media. That such circumstances should engender distrust and even hostility from the general public is understandable. The pragmatic issues, however, are whether they can legitimately be generalized to apply to the entire State government, and, even if they can, whether they account for substantial financial losses.

There is no doubt that executive and bureaucratic overhead components of state operations have expanded more rapidly than the average. Compared to the 9.9 percent annual growth rate in State discretionary funds, departmental executive costs have expanded at 22.0 percent. Similarly, the nine departments constituting general government (Governor, Legislature, Judiciary, Attorney General, State, Management and Budget, Treasury, Civil Service, and Civil Rights) have consumed discretionary funds at a rate which grew at 12.6 percent over the last decade. This is a slight overstatement of actual expansion because a few activities have been transferred into these departments over the period. Nevertheless, the rate of growth is much larger than the 9.9 percent rate of growth of government as a whole. On the other hand, the amount of money involved is only moderate. If executive components of government had grown at the average rate of 9.9 percent instead of the 22.0 percent, the consumption of discretionary funds in 1981 would have been reduced by \$118.4 million (about 2 percent of the total). If all the nine departments responsible for general government had grown at the 9.9 percent rate, their use of General Fund money in FY1981 would have been reduced by \$40.8 million (about 0.6 percent of the total). These numbers are moderate simply because the categories themselves are small. General government (at \$183 million) only absorbs about 3 percent

of state discretionary resources, and all executive offices together only absorb about \$181 million.

The most rapidly expanding branch of general government is the Department of Management and Budget, whose claim on discretionary resources grew at an annual rate of 16.9 percent per year over the last decade. Much of this, however, is accounted for by increases in services rather than in overhead. The Michigan Council for the Arts, human resource programs and the Michigan Women's Commission are all operated within the Department of Management and Budget, and the sum of their claims upon discretionary resources has grown at an annual rate of 28.5 percent per year. The residual grew at 12.3 percent per year—about the same rate as the other departments comprising general government.

It is worth noting that just as overhead categories were the most prone to expansion during 1971-81, they were also the most vulnerable to cuts when the state revenue condition worsened. The state discretionary resources used by the Department of Management and Budget declined 15.6 percent from FY1980 to FY1981, and the Governor's office and Legislative branch declined by over 7 percent and 12 percent respectively. These reductions are much larger than the reductions experienced by the entire fund of discretionary resources (-0.5 percent), and this fact lends some support to the proposition that some "fat" has accumulated in these areas (or at least that they provide less essential services than do operations elsewhere).

If we turn to the entire Civil Service in Michigan, we find a similar pattern of growth slightly higher than would seem to be justified by general circumstances, but not by enough to make a dramatic difference to overall expenditure levels. Between FY1971 and FY1981 the average classified civil service salary has increased from \$9,061 to \$19,935, a rate of increase of 8.2 percent per year. Since this matches the increase in the CPI almost exactly, the impression that the Civil Service Commission routinely grants cost of living increases (after taking into account ordinary career advancements) is strongly reinforced. Compared to other wages and salaries in Michigan, this rate of increase is high, but only by about 0.15 percent per year. Over the decade, this suggests that civil service salaries have increased relative to other wage rates in Michigan by 1.5 percent in total. If we were to eliminate this differential, reducing these salaries to the relative level they occupied in 1971, the FY1981 saving in discretionary funds would be trivial.

Quite a different pattern emerges if we compare the level of civil service salaries in Michigan to those in neighboring states and in the nation as a whole. Nationally, average salaries of non-education state employees in October 1979 were \$1,193 per month compared to \$1,475 in Michigan. Average salaries of non-education employees in the Great Lakes States excluding Michigan (Illinois, Indiana, Ohio, and Wisconsin) were \$1,228 at the same time. Thus Michigan State salary rates were typically 23.6 percent higher than the national average and 20 percent higher than those in the neighboring States. In 1979, Michigan state government salaries were the third highest in the nation behind Alaska (\$1,758) and California (\$1,523). If Michigan were to pay salaries comparable to those in the other Great Lakes states, there would be a substantial saving in ex-

penditures, amounting to about \$217 million.

It would be inappropriate to compare Civil Service salaries to those in neighboring states without considering them in the context of the wage and salary structure in Michigan itself. In fact, wages in Michigan are high generally, especially wages in the unionized sectors of the economy. Average 1979 incomes for production workers in Michigan, for example, were 16.5 percent higher than average production incomes in the other Great Lakes States, and 41 percent higher than production wages averaged across all 50 states. If we were to use local production wages as a benchmark, civil service salaries in Michigan would not appear to be seriously out of line. Other wage and income statistics do not put Michigan so far above the other states (although even the most pessimistic has Michigan incomes 6.5 percent above the other Great Lakes States), but this is because they are less heavily weighted by wages in the unionized sector of the economy. Michigan Civil Service salaries are apparently high because they have come to be established with reference to production wages rather than with Michigan incomes generally or civil service incomes elsewhere.

Michigan also has more state employees per capita than do the neighboring states. Whereas the Great Lakes states excluding Michigan averaged about 64 state government employees per 10,000 in population in 1979, Michigan had almost 80 state employees per 10,000 population. This employee level is not in itself evidence of inefficiency. It may simply reflect a higher level of services or a different distribution of service responsibilities between state and local units. Moreover, Michigan is below the national average in this respect: nationally, there are 92.1 state government employees per 10,000 population.

V SOCIAL SERVICES

We have already remarked upon the rapid growth of spending on social services which has taken place over the last decade. Not only have benefits per caseload been rising, but caseloads themselves have increased sharply. Since 1971, for example, AFDC caseloads have been expanding at 8.8 percent per year while GA caseloads have been growing at 7.3 percent per year. Although these figures provide a good overall indication of the rise in the number of adults in Michigan who are found in a state of dependency upon the social service system, they obscure two important details. First, the expansion in AFDC cases took place most noticeably during the first third of the decade. This expansion was a continuation of the rapid increase which began in the latter half of the 1960's and which continued into FY1973. (This rapid expansion is usually attributed to three factors: 1) A deliberate attempt, both Nationally and in Michigan to expand the coverage of welfare programs, 2) The activities of the National Welfare Rights Organization, and 3) Various Court decisions which struck down local restrictions upon welfare eligibility (see Brinker and Kloss, 1976).) Second, there has been a steady decline in the number of welfare recipients per caseload: AFDC recipients per case declined from 3.9 in 1970 to 3.1 in 1980 while General Assistance recipients per case declined from 2.9 to 1.2 over the same period. As a consequence of these two offsetting trends, the number of total welfare recipients has grown (albeit erratically) at less than 2 percent per year since 1975 despite the contin-

uing growth in caseloads. This recent stability has been maintained in the face of the slightly declining real value of benefits. AFDC benefits per recipient have grown at about 8.5 percent per year since 1975, about a 0.6 percent annual reduction compared to the Detroit CPI, but very close to the rate of increase of other income sources in Michigan. General Assistance benefits have fared worse: although benefits per case have been rising, benefits per recipient having grown at only 4.2 percent per year since 1975. This amounts to a considerable decline in real benefits. Real GA benefits per recipient did not change significantly from 1974 to 1978. The more recent decline may reflect in part program changes initiated in 1979.

Wayne County welfare (AFDC and GA) cases account for approximately half of state totals. Between 1970 and 1980, the Wayne County AFDC caseload grew at 12.0 percent per year while the non-Wayne County caseload grew at 13.2 percent per year. However, during this period, the population of Wayne County has declined while the state as a whole has grown slightly. Hence, the per capita growth rate in AFDC caseloads has been higher in Wayne County, 13.5 percent per year compared to 11.9 percent per year for the remainder of the State.

Provision of social services has also expanded during the decade. Appropriations for children and youth services (including youth institutional services) have grown at 20.6 percent per year over the 1971-1981 decade. Appropriations for the operation, administration and field services for adult and family services and income maintenance, taken together, have grown at 14.5 percent per year. Radical changes in the organization of the Department make distinguishing the growth rates for field services for income maintenance from those for provision of social services difficult.

Most observers draw a close parallel between unemployment rates and welfare caseloads, and it is not uncommon to encounter a reference to purely cyclical fluctuations in unemployment rates as explanations for changes (usually increases) in the caseload level. This is stimulated partly by the fact that a large portion of new applicants for welfare benefits cite "unemployment" as the basis for their need, and partly by the observation that unemployment rates and welfare caseloads have a strong positive association in state-by-state comparisons. Figure 1 depicts the relation between unemployment and AFDC caseloads per capita for all states excluding the South in 1978. The "M" represents Michigan.

Statistical analysis of these data suggest that a state with an unemployment rate one point above average will have an AFDC caseload per capita approximately 15 percent above the average. It is not true, however, that short-run fluctuations in unemployment have an important influence over welfare caseloads. The relation described by Figure 1 is much more structural than it is cyclic, and it is quite unresponsive to temporary changes in unemployment levels. Reviewing the data which has accumulated since 1973° (the year in which the rapid expansion in eligibility standards seems to have come to an end), a one point increase in the Michigan unemployment rate adds only 1.8 percent to the total number of recipients. The dependence of General Assistance caseloads upon short run changes in unemployment is more definite, and a one point increase in

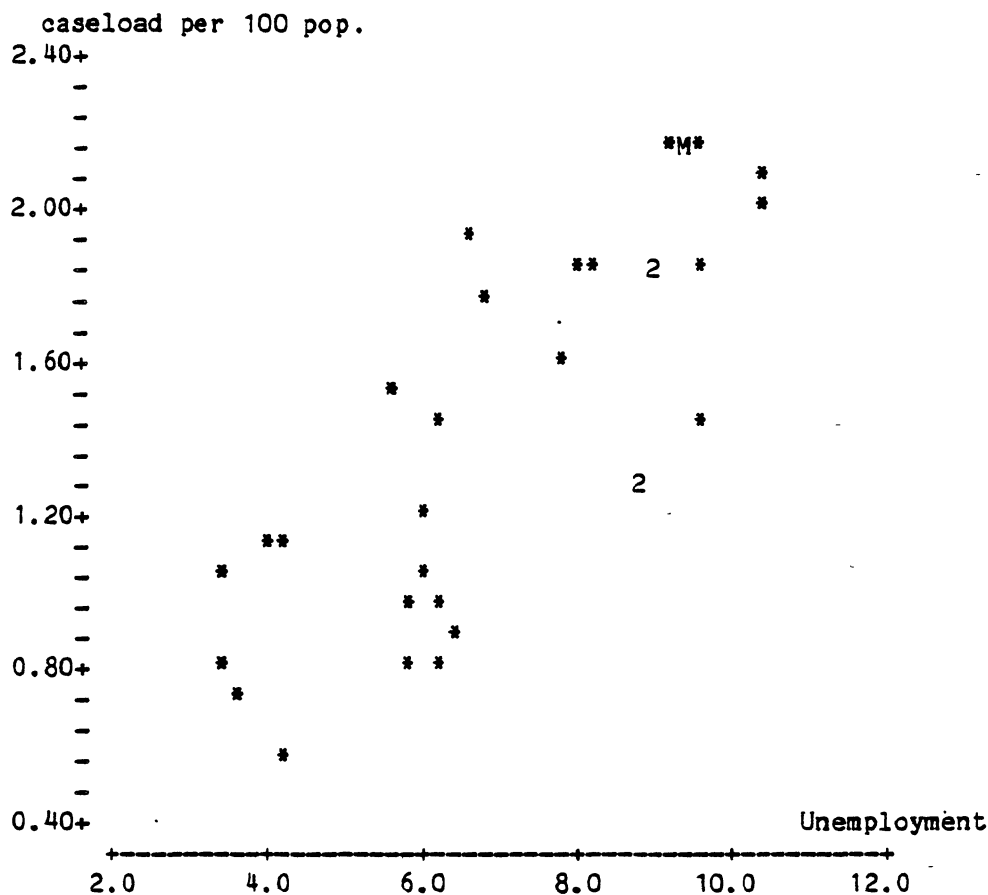


Figure 1
 AFDC CASELOADS PER CAPITA BY STATE VS. UNEMPLOYMENT RATE
 Unemployment lagged two years
 Excluding Southern States
 source: see Appendix

unemployment may produce as much as a 8.7 percent increase in GA caseloads and a 7.6 percent increase in GA recipients per capita. Presumably this result is a reflection of the character of welfare itself. Most studies of AFDC families indicate that as many as 70-80 percent of current AFDC recipients will stay in the program for longer than two years (although there is considerable turnover in the remaining 20-30 percent--see Coe, 1981). In effect, these are people who are mainly outside of the labor force and who are therefore relatively unaffected by fluctuations in labor market conditions. On the other side of the coin, those who become unemployed in Michigan are to a great extent protected by relatively generous unemployment benefits provided by the state unemployment compensation program, by union-negotiated supplemental benefits, and by the Federal unemployment and trade adjustment programs. These programs extend over long enough periods to prevent a strong direct short run influence of unemployment on welfare caseloads. There is some suggestion of an influence of short term fluctuations in the unemployment rate over benefit

levels, and this might be expected as high unemployment would make it more difficult for welfare recipients to obtain supplemental earnings on their own. This effect is small, however, probably because increases in unemployment also put the State budget under pressure, making it necessary to tighten eligibility rules and limit benefits at the same time.

Michigan is one of the most generous states with respect to welfare benefits. In 1979, an AFDC family of four was eligible for benefits which were third highest in the nation behind Hawaii and Vermont. These benefit levels were 52 percent above the national average, 42 percent above the average for the other Great Lakes states, and 29 percent above the national average if the traditionally lower-paying southern states are excluded. Actual payments per recipient are similarly high; in calendar year 1978, Michigan payments per recipient were 27 percent above the national average excluding the South, and by this measure, Michigan ranked sixth in the nation. This was not always the case; during the mid 1960's, Michigan benefits were only slightly above the national average in actual payments per recipient.

Since the AFDC program in Michigan consumed \$449 million of State discretionary dollars in FY1981, this generosity incurs a substantial cost. Reducing benefits from 1978 levels to those of the other Great Lakes states would reduce costs by \$133 million. A reduction to the national average excluding southern states would save \$110 million. A recent legislative proposal to reduce AFDC benefits to a level no more than 10 percent above those in neighboring states would reduce costs by about \$96 million below those implied by the relative 1978 position of Michigan benefits. Some of these potential savings have probably already been realized, however. During FY1981, AFDC benefit standards were reduced, and these cuts, together with inflation, have amounted to a 21 percent real reduction in standards compared to 1978. (This reduction has not been reflected by as large a reduction in actual expenditures, because the needs for assistance have increased at the same time.) Since the inflation has affected welfare programs in all states similarly, it is unlikely that Michigan benefits have been reduced so far as to eliminate the benefit differential, but some reduction in this differential may have taken place.

One might go farther than this, suggesting that the generous benefits in Michigan actually induce potential welfare recipients to move into the State (or discourage them from leaving) and at the same time make it easy for some individuals to forego the unpleasantness of an honest day's work, collecting welfare payments instead. In effect, it might be the case that generous welfare programs exacerbate the problem by making a lifestyle of dependency both easy and (relatively) comfortable. This point of view is reinforced by the observation that, for many recipients, total welfare benefits exceed what would be earned for full time work at the minimum wage. According to a Department of Social Services study, in 1975 approximately 50 percent of Michigan AFDC recipients received benefits in excess of the BLS lower consumption budget once all forms of income supplement were taken into account.

It is certainly plausible to expect some relationship to exist between the generosity of a State welfare program and its welfare caseload. In fact, however, no important relationship can be found from available

evidence. This is not to say that the dependence does not exist at all, but only that it is not powerful enough to be detectable with the data and statistical methods at hand. It does imply, however, that the dependency—creating potential of high State benefit levels is not large enough to justify any change in our estimates of the savings attributable to a reduction in benefit levels.

It should be borne in mind that welfare benefit levels in Michigan are only a part of the overall wage/income distribution in the State, and that all income levels are relatively high. We have already observed that production workers' incomes in Michigan are 41 percent above the national average, and that Civil Service salaries are 24 percent above the average as well. This generally high level of wages is a much more significant inducement to migration than welfare benefits alone (or any other single income measure, for that matter), and indeed, Michigan experienced a steady population in-migration throughout the 1950's and 1960's. Under ordinary circumstances, even the influence of extensive union membership in Michigan would have been unable to prevent wage rates from drifting toward the national average in the face of this influx of potential workers. However, until the late 1970's, the State was insulated from traditional competitive economic pressures by the unique features of the automobile industry which dominates the economy. The establishment of competition in this industry is extraordinarily difficult, requiring massive amounts of capital investment, extensive distribution and service systems, and the development of favorable reputations among consumers. For many years, the higher--than-average production wage rates in Michigan were sustainable because the higher automobile costs which they engendered did not induce rapid entry of lower-priced competition. Even the increase in energy prices in 1973 and the consequent shift in preferences away from traditional American automobile models required several years to take effect. By the late 1970's, of course, the competition was in place and Michigan was facing the high unemployment levels which economists would ordinarily have expected to have arisen years earlier. This, however, is simply the culmination of a trend which was in process throughout the decade: the above-average wage/income structure was maintaining the presence of a large potential workforce (either through in-migration or the discouragement of out-migration) without providing the employment opportunities which customarily accompany high wages. The result was a steadily expanding structural unemployment level (growing at about 0.4 percent per year) and a concomitant expansion in welfare caseloads. In effect, it is not high welfare benefit levels which have induced high caseload levels, it is the high wage structure which has produced both the unemployment and the welfare caseloads.

One often encounters statements in the news media questioning the efficiency (and sometimes even the honesty) of the administration of the welfare programs in the Department of Social Services. Unfortunately, there are no data available which are adequate to evaluate this aspect of the Department. Existing estimates of the staff which would be necessary to reduce fraudulent welfare claims suggest that the cost would be far greater than the savings to be realized, although these savings themselves may be much smaller than those which would result from the deterrent effect of more intensive review of applications. It is equally difficult to identify the efficiency of welfare case administration. We have determined

that in 1981 it cost about 12 cents to distribute \$1.00 in welfare benefits, but the data are inadequate to afford any meaningful comparisons with earlier years.

VI EDUCATION

A. PUBLIC SCHOOL AID

In simple dollar terms, the most conspicuous losers in the competition for State resources during the last decade have been educational programs. The School Aid fund which is used to aid local districts in K-12 education has grown at an average rate between 6 and 6.5 percent per year over the last decade—almost 3.5 percent below the rate of personal income growth and 2 percent per year below the inflation rate as measured by the CPI. Over the entire period, this growth differential has cumulated to a substantial sum: if the School Aid fund were given the same share of discretionary expenditures in 1981 as it received in 1971, the fund would receive \$2,449 million—\$680 million more than actually budgeted. Higher Education has suffered a similar, although less dramatic decline relative to other dimensions of State operations. The average growth in Higher Education spending has been about 8.5 percent per year over the decade, about equal to the inflation rate as measured by the CPI, but about 1 to 1.5 percent per year lower than the rate of growth of Michigan Personal Income. If this program were to receive the same share of State expenditures in 1981 as it did in 1971, the budget would be \$873 million—\$115 million more than actually appropriated.

The relative decline in these expenditure categories is usually justified by making reference to the declining population in school and college age groups. This applies particularly to the case of K-12 education. Enrollments in public schools have been declining over the last half of the decade, and this rate of decline has now reached about -2.5 percent per year. Over the entire decade, the average decline has been about -1.7 percent per year, and as a fraction of total Michigan population, the decline has been -2.1 percent per year. If we take the declining school-age population into account, then a School Aid Fund in FY1981 which compared in expenditure to its FY1971 counterpart would receive \$2010 million—\$240 million more than was actually appropriated. In order to maintain a stable share of Michigan income on a per-student basis, the School Aid Fund would have had to grow at about 7.8 percent per year instead of the 6 to 6.5 percent which actually occurred. In fact, local support for schools has been growing at almost exactly the indicated rate of 7.8 percent per year, but, together with the State School Aid Fund, this means that school spending has not been maintaining 1971 levels, rising at just under 7 percent per year. It is furthermore the case that the local share of school funding has risen from 54 percent in FY1970 to 60 percent in FY1982.

We remarked in the first section on the tendency for State expenditures to become increasingly "targeted" over the decade. That tendency is apparent in the distribution of the school aid fund. In the interests of more equitable school financing, the State has employed school aid formulas (the "Bursley" plan) designed to reduce the impact of variations in property tax base per pupil across the State. The effect of this has been

to focus the school aid fund more narrowly upon districts with lower tax bases (and upon Detroit/Wayne County schools). In fact, these targeted districts have received school aid support per pupil which has kept up with the Consumer Price Index. The "wealthier" districts have absorbed all of the decline in real per capita school aid. Figure 2 contains a superposition of two histograms describing the distribution of values of school aid per pupil across the State, one for FY1972 and the other for FY1980. Both histograms are presented in 1980 dollars. It is apparent from the figure that most of the reduction in real school aid has been concentrated on relatively few districts.

B. HIGHER EDUCATION

Although a decline in college age population is anticipated in the future, this reduction has not yet occurred, and over the last decade the pool of potential college students has increased. Estimates of college-age population vary too widely to be reliable, but actual enrollment statistics reflect a growth in student enrollment demand. Over the decade, the total number of full time equated students enrolled in Community Colleges and the four-year institutions was rising at 1.7 percent per year, although the underlying rate of increase has been declining slightly in recent years. In this case it would be quite misleading to calculate a 1981 equivalent to 1971 expenditures because the character of higher education in Michigan has changed substantially over the decade. In particular, the increase in college enrollment is concentrated in non-residential "commuter" situations and in part-time student programs rather than in the more traditional full-time four-year college settings. This is reflected in a 4.3 percent annual growth in Community College (full time equated) enrollments compared to 0.5 percent growth in enrollments in four-year colleges and universities. In both types of institution, moreover, "head-counts" have expanded much more rapidly than full-time equivalent enrollments, indicating an expanding role for part-time training.

If we were to take these enrollment changes into account, funding of four-year colleges and universities at the FY1971 level would require \$700 million in FY1981 compared to the actual appropriation of \$590 million. This real reduction in State support per student has been accompanied by a reallocation of resources along the lines already indicated. The increased importance of commuting compared to residential students has been reflected by a redistribution of higher education funds toward smaller regional colleges and away from the large residential centers of education. Those colleges which are more accommodating to part-time enrollments have similarly enjoyed generous appropriations compared to others. Thus the small regional branch campuses of the University of Michigan at Dearborn and Flint, both of which have large part-time student populations, have been receiving funding increases at rates of 14.4 percent and 16.1 percent respectively compared to Ann Arbor campus growth of only 6.7 percent per year. Similarly, Grand Valley State College and Saginaw Valley College have large part-time student enrollments, and have enjoyed funding increases of 13.2 percent and 11.6 percent over the last decade (compared to the average four-year college growth of 8.1 percent). Naturally, overall enrollment statistics parallel these funding changes to some extent, but the relationship is not a particularly close one. The total student load at Grand Valley State College has increased by 32 percent over the decade compared to 51 percent at Saginaw, despite the substantially higher rate of

over 10 percent per year over the last decade, making this the only educational category which has kept pace with inflation. However, over this same period, enrollments have been rising at almost 4.4 percent per year, and thus the per-student level of support has actually been growing at just under 6 percent per year. Taking enrollments into account thus transforms the Community College system from the best financed part of the system to the worst.

We have already mentioned that fluctuations in the Michigan State economy lead to pressures upon both revenues on the one hand, and the Department of Social Services on the other, and that these pressures are often focused upon particular departments in the State. Higher education is noticeably vulnerable in this respect--typically, a one point increase in the Michigan unemployment rate is translated into a 5 percent lower level of four-year college funding, a 2.5 percent reduction in Community College funding, and a 3.7 percent cut in the general School Aid Fund. Ironically, unemployment is also accompanied by an increase in enrollments in institutions of higher learning--about 1.2 percent in the case of four-year colleges, and perhaps 3 percent in the case of community colleges. It is in the nature of educational services that existing facilities and staff can accommodate temporary overloads, but it is not likely that the system can withstand the protracted unemployment over the period 1979-1981, together with funding declines, without suffering some long-term damage.

VII MENTAL HEALTH

At first glance, expansion in the Department of Mental Health over the last decade appears to have been modest compared to the other health and social service units of State government. After accounting for patient fees and Federal support, discretionary funds allocated to this department have grown at an average rate of 10.2 percent per year, well below the rates set by other human service departments. Such figures take no account of the substantial decline in mental health caseloads, however, and when these are considered, the impression of moderation in growth is quickly dissipated.

Most striking is the extraordinary decline in patient population in State hospitals which has occurred over the last 15 to 20 years. Patients in hospitals for the "developmentally disabled" have declined from a high of 12,516 in FY1965 to an anticipated 3,065 in FY1982--a decline of about 8 percent per year--while patients in State psychiatric hospitals have declined from a high of 19,059 in FY1960 to an anticipated 3,787 in FY1982--a decline of over 7 percent per year. Three facts are usually given prominence in explanations for these declines: First, new drug treatments have been introduced which have reduced the necessity for hospitalization of the mentally ill. Second, the expansion of Federal and State programs for medical care for the aged and for the indigent made it possible for elderly patients in State institutions to be transferred to nursing homes supported, at least in part, by the Department of Social Services. Some of the expansion in the latter Department during the early 1970's therefore was actually a transfer of responsibility from the Department of Mental Health. Third, at least since 1973, the Department, in

common with its counterparts in many other states, has espoused a policy of "de-institutionalization:" removing patients from hospitals in order to place them in community-based residential settings. Indeed, the decline in patient population has been accompanied by a very large expansion in support for residential programs (about 22.5 percent per year), and these have grown from 12.3 percent of the total Mental Health program in FY1971 to 33.8 percent in FY1981.

In spite of these very substantial declines in inpatient loads, staff levels in the hospitals have shown no inclination to follow suit; indeed, until the budget crisis of FY1980, there were 74 percent more employees in centers for the developmentally disabled than there were in 1965, even though the patient load had fallen by 59 percent over the period. In 1979, staff levels in psychiatric hospitals were 40 percent above their 1960 level even though patient loads were reduced by almost three-quarters. Some increase in staff/patient ratios was to be expected. The patients who are discharged are naturally the easiest ones to care for, and after such a large decline in patient loads, only those requiring great amounts of attention have remained. Moreover, the now-discharged patients may have provided some domestic services to the institutions and to other patients, and these now must be provided by paid staff. Finally, there may have been some improvement in the quality of service over this 15-20 year period. Nevertheless, it is unlikely that these facts can account for staff/patient ratios of 1.6 to 1.7 in 1979 when they were only 0.3 to 0.35 in 1960. This fact was not lost on the State when the budget pressures of 1981 arose, and contraction in State spending fell heavily in this area. So far, the Department has laid off over 3,500 employees, most of whom were State hospital employees, and projections for 1982 suggest the elimination of at least 2,000 more. A total hospital employee force of 16,378 in 1978 is projected at only 8,808 in 1982—a reduction of 46 percent.

The dollar implications of these staff/patient ratios are substantial. If the intermediate FY1971 ratios (of 0.58 in hospitals for the developmentally disabled and 0.7 for the mentally ill) had been in effect in FY1981, the total mental health budget would have been \$172 million smaller—nearly 31 percent of the entire Department budget for that year. Even if all of the proposed layoffs are put into effect, a restoration of FY1971 staffing ratios would reduce the proposed FY1982 budget by an additional 24 percent.

One naturally is led to wonder how it was that such an apparent surplus of employees could have been permitted to accumulate in the first place. In part, this is probably a consequence of a natural resistance to contraction in one branch of a department when it is other branches (in this case, community mental health services) which are taking on increased responsibility. Moreover, staffing has been strongly influenced by the California-based "Staff Needs Assessment Program"—a set of "needs" definitions which are noticeably sensitive neither to costs nor to any objective measure of treatment effectiveness. However, it is also possible that the organization of this department is not structured in a way which would be conducive to the rigorous treatment of questions of cost-effectiveness in service delivery. It has not been possible in this study to engage in an extensive analysis of the administration of any department, but in the case of Mental Health, there are several indications that such

an analysis might be in order. Besides the hospital staffing questions, we note that:

* Per patient operating costs at various regional State hospitals are extremely variable. In the case of psychiatric hospitals, they range from a low of \$27,414 per patient-year at Ypsilanti Regional Psychiatric Hospital to a high of \$61,057 per patient-year at the Detroit Psychiatric Institute, while staff/patient ratios ranged from a low of 1.06 to a high of 1.86. Centers for the Developmentally Disabled display similar variability, with staff/patient ratios ranging from 0.98 to 1.33. (The variation was reduced from FY1980 when the ratios ranged from 1.09 to 1.78.) Since units in unique circumstances or with special functions such as research or day-treatment as well as children's facilities (which are considerably more expensive) were excluded from these comparisons, we have been able to uncover no adequate explanation for the extreme variability in patient costs which is observed.

* Administrative and executive overhead in the Department of Mental Health has grown at a rate of 36.3 percent per year over the last decade--far higher than that of any other Department. Administrative costs increased from less than 1 percent of the Department budget in FY1971 to more than 7.4 percent in FY1981. This expansion persisted even in the face of the budget pressures of FY1980 and FY1981. While the Mental Health Service units were laying off 3,700 employees, the executive branch added 695. This executive expansion was probably associated with the residential service programs which were being expanded as alternatives to the hospitals, but it is unreasonable that the 54 percent increase in employees which took place in these programs should necessitate a 76 percent increase at the executive level.

* The Department of Mental Health seems to have been the target of more than an average amount of unfavorable publicity. Charges of nepotism, lawsuits directed at State institutions, neighborhood confrontations over residential facilities, and charges of fraud and corruption in the leasing of residential facilities have been common during the early 1980's. Many of these problems may be inherent in any mental health care delivery system, but not all of them are, and there may be a need to tighten the system to prevent these difficulties from getting out of hand.

We have noted that the decline in patients in State hospitals is due largely to a policy of de-institutionalization which has been in place for several years. This policy has costs which should be given more attention, not only in their own right, but because they point to a type of problem which may arise in the case of any contraction of public services at the State level. The problem is that State cutbacks of any sort are usually translated into increased costs at the local level. When mental patients are removed from hospitals and placed in residential facilities, some degree of control is lost, and the patients may become an irritant to the

community—by frightening some, by offending others, or occasionally even by endangering local residents. Moreover, patients in some "halfway" facilities may simply walk out—placing the burden of their care upon family or acquaintances. No data are available concerning the status of the thousands of patients who by the standards of 1960 would be in hospitals, but by the standards of 1980 are not. They are certainly not all in residential mental health facilities or even in nursing homes, and while many of those not accounted for may in fact not be ill at all (subject perhaps to regular drug treatments), others may be imposing the responsibility for their care upon friends and relatives, whereas formerly that would have been the responsibility of the State.

State cutbacks in this form also impose financial burdens upon certain unlucky individuals. One of the attractions of residential settings is that they are believed to be much cheaper (although in fact the data are not sufficient to determine whether this is really the case). On the other hand, the acquisition of such "halfway-houses" for the developmentally disabled or the mentally ill frequently encounters virulent opposition from potential neighbors who fear inconvenience, unpleasantness, and most of all a loss of property values. Usually, these objections are not taken especially seriously by department officials who see the facilities as "good" for the patients, and who regard the opposition as the manifestation of prejudice and antagonism toward people with mental health problems. The loss of property value may nevertheless be real, and a direct financial loss has thereby been imposed on the neighbors. In a fairly subtle way, the State has saved money by imposing other costs upon certain of its citizens.

Savings calculated solely on the basis of cuts in Mental Health services will overestimate the benefits of any de-institutionalization program. This is the case partly because of the impacts upon local communities, but also because many services offered by the Department of Social Services (particularly juvenile services) are indistinguishable from those offered in the Department of Mental Health, and a cut in one area only increases the demand for services (and funding needs) in the other. Although the data are too sketchy to enable us to make good estimates of the magnitude, there is some evidence of a linkage between the Departments of Mental Health and Corrections as well.

The 1974 Michigan Mental Health Code enables the formation of a new form of mental health organization called the "Contract" community mental health board. Existing Community Boards can be reorganized to provide care for all patients from their areas, using State facilities when necessary, but always at their own expense. Increased funding is provided to match the expenses of community patients currently residing in the State hospital system. It is anticipated that such boards will make less use of State hospitals because it will no longer be possible to shift the burden of care of certain patients on to the State by placing them "for free" in the State system. At the same time, the smaller, more community-oriented organizations might provide more efficient service. From the community point of view, they would certainly be able to handle the "halfway house" problems more effectively than the State has been able to. A further incidental advantage is that these boards exploit a loophole in the Headlee Amendment. By transferring the funds for State hospitals to local boards,

the State increases the local expenditure which qualifies for the 41.6 percent requirement. Of course, the local boards could eventually come to spend the money elsewhere (indeed, it is hoped that they will), but so long as the hospitals do realize the savings from further decreases in patient loads by reducing staff and overhead, such a redirection amounts only to an improvement in service.

So far, five of these boards have been established on an experimental basis, and it is still too early for any review of their effectiveness. From the standpoint of economic efficiency, it is clear that the Contract Board provides a very promising model for future development. There are still problems to be faced, however. First, it is by no means certain that all of the existing community boards have managerial staff capable of handling increased decision-making responsibility, and it may prove to be necessary to acquire professional managers if the program is to be expanded any further. Second, the State is in effect giving up control in exchange for efficiency, and contract boards may adopt policies which are contrary to the preferences of the Department of Mental Health at the State level. There already are proposals to constrain the behavior of local contract boards to conform to a menu of State "mandates," and to the extent that such proposals are adopted, the effectiveness of the Contract Board may be destroyed. Third, so long as local units are required to turn over to the State a portion of third party payments and other user fees, incentives for revenue generation will remain weak. Finally, decentralization as embodied in the Contract system is unlikely to afford similar treatment to similar patients in different districts. Thus a certain measure of equity may be sacrificed as the State moves in this direction.

VIII CORRECTIONS

As a fraction of total Michigan State expenditures, the Department of Corrections is not particularly prominent. The FY1981 budget for Corrections is \$190 million, and this represents only 3.1 percent of total State discretionary funds. The rate of growth of this department is the highest of any in the State, however, and the problems faced in this area are often considered to be symptomatic of the problems in the State as a whole.

Most states in the nation have experienced an increased pressure on correctional facilities over the last decade, but the experience in Michigan has been exceptional. In 1968 there were 7,548 male prisoners in the Michigan correctional system. By 1978, that figure had nearly doubled to 14,273. This represents a growth rate of about 6.5 percent per year—over 6 percent above what would be expected from population growth alone. Total State expenditures on correctional facilities have grown at about 13.5 percent per year. (Nationally, expenditures on correctional facilities have grown at 11.5 percent, and in the other Great Lakes states, expenditures have grown at only 8.2 percent.) New (male) commitments in Michigan have expanded similarly, from 3,194 in 1968 to 6,230 in 1978, an average growth of 6.9 percent per year. Michigan also has a greater than average number of prisoners. In 1978, the total population in both Federal and State systems together was 162 per 100,000 population compared to a national average of 141 prisoners per 100,000 (although this is one area in which the

Southern states, with 186 prisoners per 100,000, clearly surpass the North).

These inmate population growth rates actually understate the severity of the problem because they do not reflect the change in composition of the prison population. In 1974, 5.6 percent of new commitments represented individuals with sentences longer than 11 years, but by 1979, 7.1 percent of new sentences were for more than 11 years. Average minimum sentence length (excluding life sentences) has risen from 3.13 years in 1974 to 3.46 years in 1978, and the fraction of life sentences has risen from 2.78 percent to 3.18 percent. A doubling of new commitments in conjunction with an increase in average sentence length implies the need for more than a doubling of capacity—the figures listed above suggest that a doubling of commitments would require a steady-state increase in capacity by a factor of 2.2. In fact, sentence lengths stand to increase even more than this: in 1978, the voters of Michigan approved a constitutional amendment eliminating "time off" for good behavior for certain crimes, and it is estimated that this will increase the effective sentence length of 66 percent of the inmates now entering the system.

It is possible that the increasing burden of the prison population is a reflection of some tendency of the part of the judiciary to impose longer sentences, but it is equally plausible that the pressures on the correctional system have been inducing judges to be more moderate in their sentencing behavior because there is so little room for the increased number of inmates that harsher procedures would entail. Moreover, there is a great deal of supporting evidence that the crime rate in Michigan has grown as fast as the inmate population. The judicial system in Michigan has been growing as fast as the Department of Corrections, suggesting that there are many more individuals being brought before courts. Employment levels in "Criminal Justice Activity" (police protection, legal services, public defense, etc.) have been growing at 7.6 percent annually in Michigan compared to the national average of 6 percent (and 4.4 percent in the other Great Lakes states), while dollar expenditures on payroll, by far the largest cost component of total expenditures in these areas, have been expanding at 14.1 percent in Michigan. Even more disturbing is the increased demand for youth services in the Department of Social Services. The growing need for foster care, services for abused children, and care and control of delinquent children has produced an expansion of 21 percent per year in these offices of the Department of Social Services since 1971. This fact suggests further that the problem of corrections in Michigan is not a temporary one, and that the pressures on prison facilities will continue when today's children become adults.

The cost of operating Michigan correctional facilities has been growing at about 17.5 percent per year since 1971. This growth is accounted for by three factors: 1) The annual increase in prisoners, 2) the (civil service) salary increments of correctional employees, and 3) an increase in the number of employees per inmate in the system. While the prison population was growing at 6.5 percent per year, the number of (full time equivalent) employees in prisons was growing at 7.9 percent per year, and the administrative overhead was growing at 21.1 percent per year. This disproportionate increase may be due in part to increasing difficulty of administering a system with increasingly violent inmates, but the primary

cause seems to be the increasing emphasis being placed upon smaller facilities. Attempts have been made throughout the decade to place the prison population away from the large institutions at Jackson and Ionia. It is believed that the smaller facilities are more manageable, can be more readily tailored to the characteristics of different types of prisoners, and are more effective in achieving rehabilitation. Unfortunately, they are also more expensive. Review of existing facilities suggests that for every 10 percent increase in capacity, the ratio of employees to inmates declines by 2.5 percent: Marquette prison, for example, with 1,000 inmates has .37 FTE employees per rated inmate capacity compared to .23 at Jackson, with a population of about 5,200, while the Dunes facility with a population of only 328 has an FTE/inmate ratio of .52. Costs per inmate reflect this variation, ranging from a low of \$7,184 at Jackson to a high of \$15,088 at the Dunes facility. Naturally, a move to smaller prisons such as the proposed "regional" plan (Public Act 485) could lead to a substantial increase in per inmate operating costs over and above the sizeable capital outlays needed in the first place.

Wages paid by the Michigan Department of Corrections reflect the general level of civil service salaries in the State. In 1977, the monthly payroll in Michigan was \$1,550 per FTE corrections employee, whereas it was \$1,120 in the United States as a whole and \$1,185 in the other Great Lakes states. As in many other departments, administrative overhead has grown disproportionately rapidly. The (very small) executive office has expanded from .09 to .25 percent of its share of discretionary funds over the FY1971-FY1981 period. As was the case in many other departments as well, the budget contraction of the last two years produced a relatively large contraction in administrative overhead (almost -15 percent per year), while the rest of the department continued to expand.

IX Budget Changes and Forecasts

It would be extremely foolish to imagine that the trends outlined above will continue for the next decade. There are already many indications that economic priorities within the State are changing. The political support for social services is showing signs of eroding, and expansions along the lines of the last decade are therefore unlikely. The patient populations of State mental hospitals have been reduced to only the most seriously ill. The department may persist in its de-institutionalization policy, but the social costs of this program are increasing, and it is likely that local communities will eventually force the policy to come to an end. Perhaps most important, economic conditions within the State are changing. The unemployment and industrial problems which are presently so painful may have the effect finally of bringing the incomes structure in Michigan more in line with that in the rest of the country. In the long run, this is the best solution to the welfare problem on the one hand, and the high civil service costs on the other.

There are a few aspects of Michigan State operations which are difficult to review. These are expenditures of questionable merit from a cost-effectiveness point of view, but which are regarded as politically very sensitive. Examples are the (trivial) subsidy for the Pontiac Silverdome, the (less trivial) State support for the Department of Military

Affairs (whose annual reports reveal no accomplishments whatsoever), and the \$25 million subsidy for private colleges and universities (which takes the form of a tuition credit and simply duplicates existing State support for higher education). These expenditures (some \$32 million of State discretionary dollars) have survived despite the lack of any objective justification, and it is unlikely that budget cuts at the State level would have a significant impact upon them, however desirable that may be.

The futures of Corrections and Higher Education are more problematic. The juvenile caseloads now faced by the Department of Social Services can only engender a gloomy forecast of the future for the Department of Corrections, and the population pressures on correctional facilities are showing no signs of subsiding. The future funding of Higher Education will depend simply upon the preferences of the State as a whole. Student enrollment pressures may continue, but they will not do so for much longer unless there is an expansion in the desire of Michigan citizens to acquire additional education. In fact, some such expansion is likely. The growing awareness that neither the State nor its citizens can rely upon the automobile industry for income of employment is stimulating a general search for alternatives. Educational institutions (particularly the four-year institutions) are central to such a search, and there are already indications that State priorities are moving back in this direction.

Throughout our discussion, we have noted dollar savings which might plausibly accrue were Michigan to imitate the operations of some other states. The question naturally arises as to whether these particular reductions would occur were the State to be subjected to further budget cuts. The experience of FY1980 and FY1981 provides some evidence on this matter. We note that during this period:

* Both AFDC and General Assistance benefit levels were reduced somewhat.

* Staff levels in the State hospitals were reduced dramatically.

* Executive branches of State government were cut proportionately more than were the operating branches.

* Civil Service salaries were reduced through the imposition of "unpaid holidays," and unclassified employees absorbed small salary cuts.

All of these events suggest that expenditure reductions might take place along the lines noted in earlier sections. On the other hand:

* Higher Education appropriations were also cut, putting some higher education institutions under severe pressure.

* Other departments, such as Natural Resources, State Police, Public Health, and Education (at all levels) were also severely cut, despite the absence of any indication of surplus in their operations.

* User fees were increased sharply--many such fees were given their first serious review in years--indicating that one consequence of further budget cuts would be an increase in such fees.

* The reductions in Civil Service salaries were only temporary, and there was no indication of even a slight long-term reduction.

These facts suggest that State revenue contraction might not entirely take the directions which we have indicated but would spread as well over State departments which have already lost a substantial relative share of government resources over the decade. Of course, these were only short-run responses, and over a longer term, the actual budget might not follow these lines at all. Nevertheless, it is clear that there is a tendency to accommodate budget reductions by cutting across the board, and that further reductions would lead (at least initially) to cutbacks in all services, and not in any particularly targeted programs.

APPENDIX

APPENDIX I DEPARTMENT BUDGET SHARES AND GROWTH RATES

LEGEND: G REPRESENTS GROSS SPENDING NET OF TRANSFERS
 S REPRESENTS STATE DISCRETIONARY SPENDING
 R REPRESENTS "USER FEES"
 F REPRESENTS FEDERAL EXPENDITURES

TABLE 1 GENERAL DEPARTMENTAL GROWTH RATES, 1971-1981 AND 1980-1981

OFFICE OF THE GOVERNOR

% OF 1971 G = 0.0254 % OF 1971 S = 0.0362
 % OF 1981 G = 0.0225 % OF 1981 S = 0.0366
 G-71 = 832,961 S-71 = 832,961
 G-81 = 2,222,100 S-81 = 2,222,100
 R-71 = 0 F-71 = 0
 R-81 = 0 F-81 = 0
 10 YEAR % GROWTH RATE IN G = 10.05
 10 YEAR % GROWTH RATE IN S = 10.05
 G-80 TO G-81 % GROWTH RATE = -7.42
 S-80 TO S-81 % GROWTH RATE = -7.42

LEGISLATURE

% OF 1971 G = 0.4381 % OF 1971 S = 0.6236
 % OF 1981 G = 0.4384 % OF 1981 S = 0.6981
 G-71 = 14,357,915 S-71 = 14,343,915
 G-81 = 43,293,900 S-81 = 42,360,700
 R-71 = 14,000 F-71 = 0
 R-81 = 863,200 F-81 = 70,000
 10 YEAR % GROWTH RATE IN G = 11.37
 10 YEAR % GROWTH RATE IN S = 11.14
 10 YEAR % GROWTH RATE IN R = 49.50
 G-80 TO G-81 % GROWTH RATE = -11.29
 S-80 TO S-81 % GROWTH RATE = -12.56

JUDICIARY

% OF 1971 G = 0.3161 % OF 1971 S = 0.2142
 % OF 1981 G = 0.3579 % OF 1981 S = 0.3876
 G-71 = 10,359,695 S-71 = 4,927,000
 G-81 = 35,347,400 S-81 = 23,518,800
 R-71 = 5,132,695 F-71 = 300,000
 R-81 = 11,422,500 F-81 = 378,800
 10 YEAR % GROWTH RATE IN G = 12.72
 10 YEAR % GROWTH RATE IN S = 16.47
 10 YEAR % GROWTH RATE IN R = 8.12
 10 YEAR % GROWTH RATE IN F = 2.30
 G-80 TO G-81 % GROWTH RATE = -24.10
 S-80 TO S-81 % GROWTH RATE = -11.53

ATTORNEY GENERAL

% OF 1971 G = 0.1169 % OF 1971 S = 0.1267
 % OF 1981 G = 0.2091 % OF 1981 S = 0.2238
 G-71 = 3,831,320 S-71 = 2,914,420
 G-81 = 20,652,800 S-81 = 13,579,000
 R-71 = 916,900 F-71 = 0
 R-81 = 3,550,200 F-81 = 3,523,600
 10 YEAR % GROWTH RATE IN G = 17.86
 10 YEAR % GROWTH RATE IN S = 16.20
 10 YEAR % GROWTH RATE IN R = 14.12
 G-80 TO G-81 % GROWTH RATE = 8.80
 S-80 TO S-81 % GROWTH RATE = 2.05

DEPARTMENT OF STATE

% OF 1971 G = 0.4882 % OF 1971 S = 0.2410
 % OF 1981 G = 0.3864 % OF 1981 S = 0.1494
 G-71 = 16,000,321 S-71 = 5,543,047
 G-81 = 38,162,300 S-81 = 9,067,300
 R-71 = 10,294,524 F-71 = 162,750
 R-81 = 27,299,000 F-81 = 1,796,000
 10 YEAR % GROWTH RATE IN G = 8.85
 10 YEAR % GROWTH RATE IN S = 4.92
 10 YEAR % GROWTH RATE IN R = 9.98
 10 YEAR % GROWTH RATE IN F = 26.40
 G-80 TO G-81 % GROWTH RATE = -4.63
 S-80 TO S-81 % GROWTH RATE = -5.74

MANAGEMENT AND BUDGET

% OF 1971 G = 0.4470 % OF 1971 S = 0.4619
 % OF 1981 G = 1.0316 % OF 1981 S = 0.7804
 G-71 = 14,650,433 S-71 = 10,624,819
 G-81 = 101,877,160 S-81 = 47,353,010
 R-71 = 1,416,895 F-71 = 2,608,719
 R-81 = 18,304,700 F-81 = 36,219,450
 10 YEAR % GROWTH RATE IN G = 20.83
 10 YEAR % GROWTH RATE IN S = 15.70
 10 YEAR % GROWTH RATE IN R = 28.35
 10 YEAR % GROWTH RATE IN F = 29.26
 G-80 TO G-81 % GROWTH RATE = -1.54
 S-80 TO S-81 % GROWTH RATE = -17.20

TREASURY

% OF 1971 G = 0.5447 % OF 1971 S = 0.7638
 % OF 1981 G = 0.3918 % OF 1981 S = 0.6103
 G-71 = 17,850,804 S-71 = 17,567,748
 G-81 = 38,689,200 S-81 = 37,033,200
 R-71 = 283,056 F-71 = 0
 R-81 = 427,300 F-81 = 1,228,700
 10 YEAR % GROWTH RATE IN G = 7.84
 10 YEAR % GROWTH RATE IN S = 7.55
 10 YEAR % GROWTH RATE IN R = 4.10
 G-80 TO G-81 % GROWTH RATE = 3.61
 S-80 TO S-81 % GROWTH RATE = 29.12

CIVIL SERVICE

% OF 1971 G = 0.0804 % OF 1971 S = 0.1146
 % OF 1981 G = 0.0989 % OF 1981 S = 0.0179
 G-71 = 2,635,857 S-71 = 2,635,857
 G-81 = 9,771,024 S-81 = 1,088,274
 R-71 = 0 F-71 = 0
 R-81 = 254,449 F-81 = 8,428,301
 10 YEAR % GROWTH RATE IN G = 13.64
 10 YEAR % GROWTH RATE IN S = -8.27
 G-80 TO G-81 % GROWTH RATE = 36.57
 S-80 TO S-81 % GROWTH RATE = 13.34

CIVIL RIGHTS

% OF 1971 G = 0.1095 % OF 1971 S = 0.1560
 % OF 1981 G = 0.0920 % OF 1981 S = 0.1192
 G-71 = 3,587,175 S-71 = 3,587,175
 G-81 = 9,081,900 S-81 = 7,231,900
 R-71 = 0 F-71 = 0
 R-81 = 0 F-81 = 1,850,000
 10 YEAR % GROWTH RATE IN G = 9.49
 10 YEAR % GROWTH RATE IN S = 7.08
 G-80 TO G-81 % GROWTH RATE = -2.74
 S-80 TO S-81 % GROWTH RATE = -10.59

EDUCATION

% OF 1971 G = 3.6151 % OF 1971 S = 1.3547
 % OF 1981 G = 4.1214 % OF 1981 S = 0.4991
 G-71 = 118,475,167 S-71 = 31,159,187
 G-81 = 407,005,535 S-81 = 30,285,135
 R-71 = 232,639 F-71 = 87,019,841
 R-81 = 8,603,700 F-81 = 368,116,700
 10 YEAR % GROWTH RATE IN G = 12.80
 10 YEAR % GROWTH RATE IN S = -0.28
 10 YEAR % GROWTH RATE IN R = 42.22
 10 YEAR % GROWTH RATE IN F = 15.11
 G-80 TO G-81 % GROWTH RATE = 9.24
 S-80 TO S-81 % GROWTH RATE = -35.77

SCHOOL AID

% OF 1971 G = 28.3292 % OF 1971 S = 40.3647
 % OF 1981 G = 18.2354 % OF 1981 S = 29.1618
 G-71 = 928,413,824 S-71 = 928,413,824
 G-81 = 1,800,820,300 S-81 = 1,769,520,300
 R-71 = 0 F-71 = 0
 R-81 = 0 F-81 = 31,300,000
 10 YEAR % GROWTH RATE IN G = 6.68
 10 YEAR % GROWTH RATE IN S = 6.49
 G-80 TO G-81 % GROWTH RATE = -8.62
 S-80 TO S-81 % GROWTH RATE = -8.78

HIGHER EDUCATION

% OF 1971 G = 10.0918 % OF 1971 S = 14.3793
 % OF 1981 G = 7.7073 % OF 1981 S = 12.4881
 G-71 = 330,732,384 S-71 = 330,732,384
 G-81 = 761,130,000 S-81 = 757,772,700
 R-71 = 0 F-71 = 0
 R-81 = 0 F-81 = 3,357,300
 10 YEAR % GROWTH RATE IN G = 8.47
 10 YEAR % GROWTH RATE IN S = 8.42
 G-80 TO G-81 % GROWTH RATE = -6.21
 S-80 TO S-81 % GROWTH RATE = -6.26

PUBLIC HEALTH

% OF 1971 G = 1.8796 % OF 1971 S = 0.9875
 % OF 1981 G = 2.0486 % OF 1981 S = 1.3502
 G-71 = 61,599,974 S-71 = 22,714,289
 G-81 = 202,305,200 S-81 = 81,928,000
 R-71 = 2,445,700 F-71 = 36,338,985
 R-81 = 9,392,300 F-81 = 109,604,800
 10 YEAR % GROWTH RATE IN G = 12.30
 10 YEAR % GROWTH RATE IN S = 13.33
 10 YEAR % GROWTH RATE IN R = 14.03
 10 YEAR % GROWTH RATE IN F = 11.37
 G-80 TO G-81 % GROWTH RATE = 6.81
 S-80 TO S-81 % GROWTH RATE = -18.55

MENTAL HEALTH

% OF 1971 G = 6.0432 % OF 1971 S = 7.1218
 % OF 1981 G = 5.7653 % OF 1981 S = 7.2937
 G-71 = 198,048,955 S-71 = 163,805,625
 G-81 = 569,345,505 S-81 = 442,579,944
 R-71 = 29,990,839 F-71 = 4,252,500
 R-81 = 55,928,726 F-81 = 70,836,835
 10 YEAR % GROWTH RATE IN G = 10.85
 10 YEAR % GROWTH RATE IN S = 10.18
 10 YEAR % GROWTH RATE IN R = 6.27
 10 YEAR % GROWTH RATE IN F = 31.58
 G-80 TO G-81 % GROWTH RATE = -0.81
 S-80 TO S-81 % GROWTH RATE = 6.92

SOCIAL SERVICES

% OF 1971 G = 23.9650 % OF 1971 S = 18.1643
 % OF 1981 G = 33.1131 % OF 1981 S = 27.5832
 G-71 = 785,389,834 S-71 = 417,790,725
 G-81 = 3,270,044,159 S-81 = 1,673,733,932
 R-71 = 7,956,888 F-71 = 359,642,221
 R-81 = 52,985,200 F-81 = 1,543,325,027
 10 YEAR % GROWTH RATE IN G = 14.93
 10 YEAR % GROWTH RATE IN S = 14.50
 10 YEAR % GROWTH RATE IN R = 20.32
 10 YEAR % GROWTH RATE IN F = 15.27
 G-80 TO G-81 % GROWTH RATE = 22.71
 S-80 TO S-81 % GROWTH RATE = 20.68

CORRECTIONS

% OF 1971 G = 0.9929 % OF 1971 S = 1.3938
 % OF 1981 G = 1.9618 % OF 1981 S = 3.1342
 G-71 = 32,540,225 S-71 = 32,058,025
 G-81 = 193,736,600 S-81 = 190,180,000
 R-71 = 0 F-71 = 482,200
 R-81 = 293,300 F-81 = 3,213,300
 10 YEAR % GROWTH RATE IN G = 19.01
 10 YEAR % GROWTH RATE IN S = 18.97
 10 YEAR % GROWTH RATE IN F = 20.33
 G-80 TO G-81 % GROWTH RATE = 12.17
 S-80 TO S-81 % GROWTH RATE = 10.65

MILITARY AFFAIRS

% OF 1971 G = 0.1548 % OF 1971 S = 0.1608
 % OF 1981 G = 0.1075 % OF 1981 S = 0.0961
 G-71 = 5,073,311 S-71 = 3,699,321
 G-81 = 10,615,835 S-81 = 5,833,835
 R-71 = 368,000 F-71 = 1,005,990
 R-81 = 900,000 F-81 = 3,882,000
 10 YEAR % GROWTH RATE IN G = 7.47
 10 YEAR % GROWTH RATE IN S = 4.54
 10 YEAR % GROWTH RATE IN R = 9.12
 10 YEAR % GROWTH RATE IN F = 14.08
 G-80 TO G-81 % GROWTH RATE = -7.69
 S-80 TO S-81 % GROWTH RATE = -18.79

STATE POLICE

% OF 1971 G = 1.2251 % OF 1971 S = 1.6062
 % OF 1981 G = 1.4726 % OF 1981 S = 2.0250
 G-71 = 40,148,292 S-71 = 36,943,234
 G-81 = 145,420,400 S-81 = 122,877,000
 R-71 = 8,700 F-71 = 3,196,358
 R-81 = 3,760,600 F-81 = 18,782,800
 10 YEAR % GROWTH RATE IN G = 13.38
 10 YEAR % GROWTH RATE IN S = 12.44
 10 YEAR % GROWTH RATE IN R = 80.78
 10 YEAR % GROWTH RATE IN F = 18.86
 G-80 TO G-81 % GROWTH RATE = 8.08
 S-80 TO S-81 % GROWTH RATE = 4.89

COMMERCE

% OF 1971 G = 0.7939 % OF 1971 S = 0.3300
 % OF 1981 G = 0.8606 % OF 1981 S = 0.2253
 G-71 = 26,019,386 S-71 = 7,591,258
 G-81 = 84,985,800 S-81 = 13,669,700
 R-71 = 17,600,798 F-71 = 827,330
 R-81 = 63,809,000 F-81 = 7,507,100
 10 YEAR % GROWTH RATE IN G = 12.24
 10 YEAR % GROWTH RATE IN S = 5.91
 10 YEAR % GROWTH RATE IN R = 13.39
 10 YEAR % GROWTH RATE IN F = 24.01
 G-80 TO G-81 % GROWTH RATE = -4.38
 S-80 TO S-81 % GROWTH RATE = -29.10

LABOR

% OF 1971 G = 0.2157 % OF 1971 S = 0.2970
 % OF 1981 G = 2.1429 % OF 1981 S = 0.3873
 G-71 = 7,070,495 S-71 = 6,830,495
 G-81 = 211,621,200 S-81 = 23,504,000
 R-71 = 0 F-71 = 240,000
 R-81 = 6,081,300 F-81 = 182,035,900
 10 YEAR % GROWTH RATE IN G = 39.32
 10 YEAR % GROWTH RATE IN S = 12.81
 10 YEAR % GROWTH RATE IN F = 90.97
 G-80 TO G-81 % GROWTH RATE = 0.86
 S-80 TO S-81 % GROWTH RATE = -30.83

LICENSING & REGULATION

% OF 1971 G = 0.0989 % OF 1971 S = 0.0000
 % OF 1981 G = 0.0988 % OF 1981 S = 0.0000
 G-71 = 3,241,264 S-71 = 0
 G-81 = 9,761,000 S-81 = 0
 R-71 = 3,241,264 F-71 = 0
 R-81 = 9,761,000 F-81 = 0
 10 YEAR % GROWTH RATE IN G = 11.36
 10 YEAR % GROWTH RATE IN S = *****
 10 YEAR % GROWTH RATE IN R = 11.36
 G-80 TO G-81 % GROWTH RATE = 6.41
 S-80 TO S-81 % GROWTH RATE = *****

NATURAL RESOURCES

% OF 1971 G = 1.2372 % OF 1971 S = 1.1144
 % OF 1981 G = 1.3052 % OF 1981 S = 0.5126
 G-71 = 40,546,286 S-71 = 25,632,261
 G-81 = 128,896,400 S-81 = 31,106,800
 R-71 = 13,766,611 F-71 = 1,147,414
 R-81 = 66,430,000 F-81 = 31,189,600
 10 YEAR % GROWTH RATE IN G = 11.94
 10 YEAR % GROWTH RATE IN S = 1.91
 10 YEAR % GROWTH RATE IN R = 16.60
 10 YEAR % GROWTH RATE IN F = 38.02
 G-80 TO G-81 % GROWTH RATE = 0.43
 S-80 TO S-81 % GROWTH RATE = -36.51

AGRICULTURE

% OF 1971 G = 0.4000 % OF 1971 S = 0.3940
 % OF 1981 G = 0.2549 % OF 1981 S = 0.3066
 G-71 = 13,107,653 S-71 = 9,062,237
 G-81 = 25,172,050 S-81 = 18,606,950
 R-71 = 2,591,014 F-71 = 1,454,402
 R-81 = 4,150,600 F-81 = 2,414,500
 10 YEAR % GROWTH RATE IN G = 6.57
 10 YEAR % GROWTH RATE IN S = 7.27
 10 YEAR % GROWTH RATE IN R = 4.70
 10 YEAR % GROWTH RATE IN F = 5.07
 G-80 TO G-81 % GROWTH RATE = -30.98
 S-80 TO S-81 % GROWTH RATE = -8.82

GRANTS & TRANSFERS

% OF 1971 G = 2.1409 % OF 1971 S = 2.4594
 % OF 1981 G = 7.3157 % OF 1981 S = 11.5425
 G-71 = 70,163,186 S-71 = 56,568,786
 G-81 = 722,452,200 S-81 = 700,390,200
 R-71 = 15,200 F-71 = 13,579,200
 R-81 = 562,000 F-81 = 21,500,000
 10 YEAR % GROWTH RATE IN G = 25.55
 10 YEAR % GROWTH RATE IN S = 27.82
 10 YEAR % GROWTH RATE IN R = 42.22
 10 YEAR % GROWTH RATE IN F = 4.59
 G-80 TO G-81 % GROWTH RATE = -7.41
 S-80 TO S-81 % GROWTH RATE = -5.78

TRANSPORTATION

% OF 1971 G = 10.8950 % OF 1971 S = 0.0000
 % OF 1981 G = 9.6889 % OF 1981 S = 0.0000
 G-71 = 357,055,396 S-71 = 0
 G-81 = 956,819,200 S-81 = 0
 R-71 = 346,050,396 F-71 = 11,005,000
 R-81 = 783,728,200 F-81 = 173,091,000
 10 YEAR % GROWTH RATE IN G = 10.09
 10 YEAR % GROWTH RATE IN S = *****
 10 YEAR % GROWTH RATE IN R = 8.30
 10 YEAR % GROWTH RATE IN F = 30.84
 G-80 TO G-81 % GROWTH RATE = -9.51
 S-80 TO S-81 % GROWTH RATE = *****

CAPITAL OUTLAY

% OF 1971 G = 5.3552 % OF 1971 S = 7.1340
 % OF 1981 G = 0.7712 % OF 1981 S = 0.3708
 G-71 = 175,501,993 S-71 = 164,086,833
 G-81 = 76,160,900 S-81 = 22,498,200
 R-71 = 4,975,160 F-71 = 6,440,000
 R-81 = 21,931,700 F-81 = 31,731,000
 10 YEAR % GROWTH RATE IN G = -7.82
 10 YEAR % GROWTH RATE IN S = -17.62
 10 YEAR % GROWTH RATE IN R = 15.57
 10 YEAR % GROWTH RATE IN F = 16.83
 G-80 TO G-81 % GROWTH RATE = -48.88
 S-80 TO S-81 % GROWTH RATE = -60.89

TOTALS

% OF 1971 G =100.0000 % OF 1971 S =100.0000
% OF 1981 G =100.0000 % OF 1981 S =100.0000
G-71 = 3,277,234,106 S-71 = 2,300,065,426
G-81 = 9,875,390,068 S-81 = 6,067,940,980
R-71 =447,301,279 F-71 =529,702,910
R-81 = 1,150,438,975 F-81 = 2,655,382,713
10 YEAR % GROWTH RATE IN G = 11.36
10 YEAR % GROWTH RATE IN S = 9.93
10 YEAR % GROWTH RATE IN R = 9.65
10 YEAR % GROWTH RATE IN F = 17.03
G-80 TO G-81 % GROWTH RATE = 3.56
S-80 TO S-81 % GROWTH RATE = -0.54

Source: FY71, FY80, FY81 appropriations bills and supplements.

TABLE G1
OVERHEAD GROWTH RATES
1971-1981

EXECUTIVE (ALL DEPARTMENTS)

	EXPENDITURE (x1000)				BUDGET SHARE (%)	
	G	S	R	F	G	S
1971	29823.9	23598.9	2464.7	3761.1	.85	1.03
1981	334274.7	180532.8	84795.8	68251.3	3.22	2.97
RATE OF GROWTH (%):	26.6	22.0	41.2	32.7		

GENERAL GOVERNMENT

	EXPENDITURE (x1000)				BUDGET SHARE (%)	
	G	S	R	F	G	S
1971	84106.5	54214.5	35342.8	8188.0	2.40	2.36
1981	299097.8	183454.3	62121.3	53494.9	2.88	3.02
RATE OF GROWTH (%):	13.2	12.6	5.7	20.1		

SOURCE: FY1971 AND FY1981 APPROPRIATIONS BILLS

GENERAL GOVERNMENT INCLUDES EXECUTIVE, LEGISLATURE, JUDICIAL, ATTORNEY GENERAL, STATE, MANAGEMENT & BUDGET, TREASURY, CIVIL SERVICE, AND CIVIL RIGHTS.

TABLE G2
DEPARTMENT OF MANAGEMENT AND BUDGET
GROWTH RATES 1971-1981

=====						
ADMINISTRATIVE OVERHEAD						
	EXPENDITURE (x1000)				BUDGET SHARE	
	G	S	R	F	G	S
1971	1309.3	1300.4	-0-	8.8	.037	.057
1981	8277.5	7548.9	192.7	535.9	.080	.124
RATE OF GROWTH (%):						
	19.7	18.7	*	49.3		
INTERDEPARTMENTAL PROGRAMS						
	EXPENDITURE (x1000)				BUDGET SHARE	
	G	S	R	F	G	S
1971	12407.4	8420.6	1416.9	2569.9	.35	.37
1981	33187.2	24396.2	4636.7	4154.3	.32	.40
RATE OF GROWTH (%):						
	10.1	10.9	12.3	4.8		
SERVICE PROGRAMS						
	EXPENDITURE (x1000)				BUDGET SHARE	
	G	S	R	F	G	S
1971	1608.7	1356.9	-0-	251.8	.02	.02
1981	62066.8	17716.9	12812.2	31537.7	.55	.21
RATE OF GROWTH (%):						
	42.8	28.5	*	60.2		
TOTAL DEPARTMENT						
	EXPENDITURE (x1000)				BUDGET SHARE	
	G	S	R	F	G	S
1971	14650.4	10624.8	1416.9	2608.7	.42	.46
1981	106953.2	52429.1	18304.7	36219.4	1.03	.86
RATE OF GROWTH (%):						
	21.4	16.9	28.4	29.3		

Grants to Veteran's Service Organizations & Grants to Michigan Veteran's Trust Fund Board of Trustees are included in DMB for 1981 to reflect the 1982 transfer of these accounts to DMB-Office of Veteran's Affairs.

Data Processing is not included in these calculations.

Administrative Overhead includes expenditures for Director's Office, and Department-wide Appropriations.

Interdepartmental programs includes Administrative Services, Budget, Criminal Justice, State Employer, General Health & Medical Affairs, Revenue & Tax Analysis, Intergovernmental Relations, Accounting, Office Services, Purchasing, Bureau of Facilities--Administration, Building, Technical Services, and Property Management, Bureau of Retirement Systems, Special Boards & Commissions and the Toxic Substance Commission.

Service Programs include the Crime Victim's Compensation Board, Veteran's Affairs, Council for the Arts, Human Resources Policy, Services to the Aging-Administration and Planning, Community Nutrition, Michigan Women's Commission, Indian Affairs, Spanish Speaking Affairs, and State Lottery.

TABLE G3
MICHIGAN STATE CLASSIFIED SERVICE
EMPLOYEES AND PAYROLL
1970-71 TO 1980-81

FISCAL YEAR	AVERAGE NUMBER OF EMPLOYEES	CLASSIFIED PAYROLL	PAYROLL AMOUNT PER EMPLOYEE
1970-71	47286	451827000	9555
1971-72	48996	508710000	10389
1972-73	52122	530000000	10168
1973-74	53502	589774457	11023
1974-75	55996	671432334	11991
1975-76	57856	738527879	12765
1976-77	60395	841403192	13932
1977-78	65190	957971306	14695
1978-79	67586	1341288515	19845
1979-80	69995	1565772640	22369
1980-81	69500	1535310900	22090

Classified payroll on and after FY 1978-1979 includes fringe benefit compensation items pursuant to an Attorney General's opinion dated July 26, 1977.

Source: Department of Civil Service

TABLE G4
CIVIL SERVICE- INTERSTATE COMPARISONS
1979

MONTHLY PAYROLL			
	FTE	PAYROLL (x1000)	AVERAGE
U.S.	2026274	2417929	1193
MICHIGAN	73374	108252	1475
OTHER GREAT LAKES STATES	204858	251485	1228
STATE EMPLOYEES PER CAPITA			
	FTE	POPULATION(/1000)	FTE RATIO
U.S.	2026274	22009.8	92.1
MICHIGAN	73374	920.7	79.7
OTHER GREAT LAKES STATES	204858	3208.0	63.8

Source: "Public Employment in 1979"-U.S. Bureau of the Census

General Overhead Summary

General overhead includes executive, legislature, DMB, civil service, and data processing.

Corrections have been made for the transfer of the veteran's trust funds to DMB in 1981 from grants, transfers, and debt service.

10 year growth rates	% growth in	
	G	S
net sumtotal	11.4	10.1
DMB	21.4	16.9
executive	10.1	10.1
legislature	11.4	11.1

An alternative view is gained by looking at the change in the mix of expenditures i.e. at the % of total spending for each category.

	% of total G		% of total S	
	71	81	71	81
DMB	.417	1.029	.462	.864
executive	.024	.021	.036	.037
legislature	.041	.042	.062	.070

Note that insight into the changing mix of revenue sources is also given here. For example, legislature is being financed more out of discretionary funds and special revenues in 1981, although the difference is slight. DMB, on the other hand, has financed its rapid growth more and more out of Federal and special revenues. Federal spending in DMB has risen at a rate of 29% over the last 10 years, special funds at 28%, and state funds at only 17%.

Three year trends show sizeable declines in realized spending for executive and legislature in 80-81, and cuts also in the proposed 81 figures. Yet three year projected growth rates remain positive, apparently due to optimistic proposals for FY82.

Similarly, DMB has shown a large negative growth in realized 80-81 state discretionary funds, and a smaller decline in other financed types of spending.

In almost all cases, general overhead spending, especially at the state level, proved more sensitive to recent budgetary pressures than expenditures net of these overhead items. In the following table, RG means "realized (ex post) gross spending," and PG means "planned (ex ante) gross spending." RS and PS are similarly defined for State discretionary funds.

	GROWTH RATES					
	RG80- PG82	RS80- PS82	RG80- RG81	RS80- RS81	PG81- RG81	PS81- RS81
netsum	5.0%	3.7	1.8	0.0	-3.0	-5.3
DMB	4.2	-1.0	-1.4	-15.6	-1.0	-12.5
exec	7.6	7.6	-7.4	-7.4	-15.5	-15.5
leg	-2.2	-2.9	-11.3	-12.6	-12.5	-13.5

DMB is by far the largest and fastest growing of the three departments discussed so far. Its share of total general overhead has risen from 41 to 49% of 1971 S and G respectively, to 54 and 70% in 1981.

DMB expenditures can be roughly classified in one of three categories--administrative overhead, interdepartmental overhead, and service programs. The first category includes such items as the director's office and departmentwide appropriations, the second, administrative services, office of the budget, office of criminal justice, and so on, and the last such things as the Council for the Arts, human resource policy programs, and the Michigan Women's Commission. Analysis of growth rates in these three areas shows the following for 1971-81:

growth rates	S	G
adm. o.h.	18.7	19.7
interdept.	10.9	10.7
service	28.5	42.8

Thus most of the growth in DMB appears to be in service programs. This is reinforced by looking at budget shares and absolute spending levels for the three areas. Where service programs were relatively insignificant, both as a share of total budget and of DMB budget in 1971, they now constitute 0.59% of the former as compared to .08 and .32 for adm. o.h. and interdepartmental respectively, and well over half of the DMB budget (total spending) itself. On the other hand, as mentioned earlier, the increased other financing in DMB can now be isolated in service programs, which as opposed to its large share of G (59%), comprises only about 35% of total state spending in the department.

Spending Levels

	<u>S</u>		<u>G</u>	
	1971	1981	1971	1981
	adm o.h.	1300445	7548900	1309251
interd.	8420619	24396200	12407427	33187200
service	1356927	17716900	1608727	62066800

Budget Shares

	<u>total budget</u>				<u>dmb</u>			
	<u>S</u>		<u>G</u>		<u>S</u>		<u>G</u>	
	1971	1981	1971	1981	1971	1981	1971	1981
adm oh	.06	.12	.04	.08	11.8	15.5	8.5	8.0
interd.	.37	.40	.35	.32	76.0	49.1	81.0	32.1
service	.05	.30	.04	.59	12.2	35.7	10.5	59.9

As noted above, DMB has grown at about 4 and -1% for G and S in the period 1980-82. As should be expected from the preceding discussion, this is due to the growth in service programs, which grew at 12 and 14% for G and S. Note that the financing mix in this category is now shifting slightly towards S, as opposed to the higher 10 year growth in G.

Marginal Growth Rates (Total % change)

	RG80- PG82	RS80- PS82	RG80- RG81	RS80- RS81	PG81- RG81	PS81- RS81
aoH	10.2	11.1	64.4	56.1	52.8	46.2
int	3.3	0.0	-11.5	-20.7	- 1.4	- 9.6
serv	12.3	14.6	3.6	-11.4	10.4	- 5.0
nsum	5.0	3.7	1.8	0.0	- 3.0	- 5.3

Two questions arise from this chart: 1) Why is administrative overhead rising so rapidly in 80-81? 2) Why is state spending in outside programs rising at 14% if it decreased in both RS80-RS81 and PS81-RS81?

The answers to both again can be found in proposed spending levels for 1982. Administrative overhead shows large cuts for the current year (3-4 million dollars) while service programs anticipate a 40% rise in state spending (7 million) and a 9 million dollar increase in total spending.

Big winners in these proposed increases include property management, in the Bureau of Facilities (about \$2 million), retirement systems (\$1 million), Crime Victims Compensation Board (\$2 million), Council for the Arts (\$2.8 million), and human resource policy (includes services to the aging-\$1.5 million), with partially offsetting decreases elsewhere.

Note: DMB budget has been altered to reflect the transfer of veteran's grants to DMB in 1982 as follows:

1980 RG and RS- add \$4934000
 1981 RG and RS- add 5076100
 1981 PG and PS- add 4561800
 1971 G and S- add 937895

All growth rates are calculated using these figures.

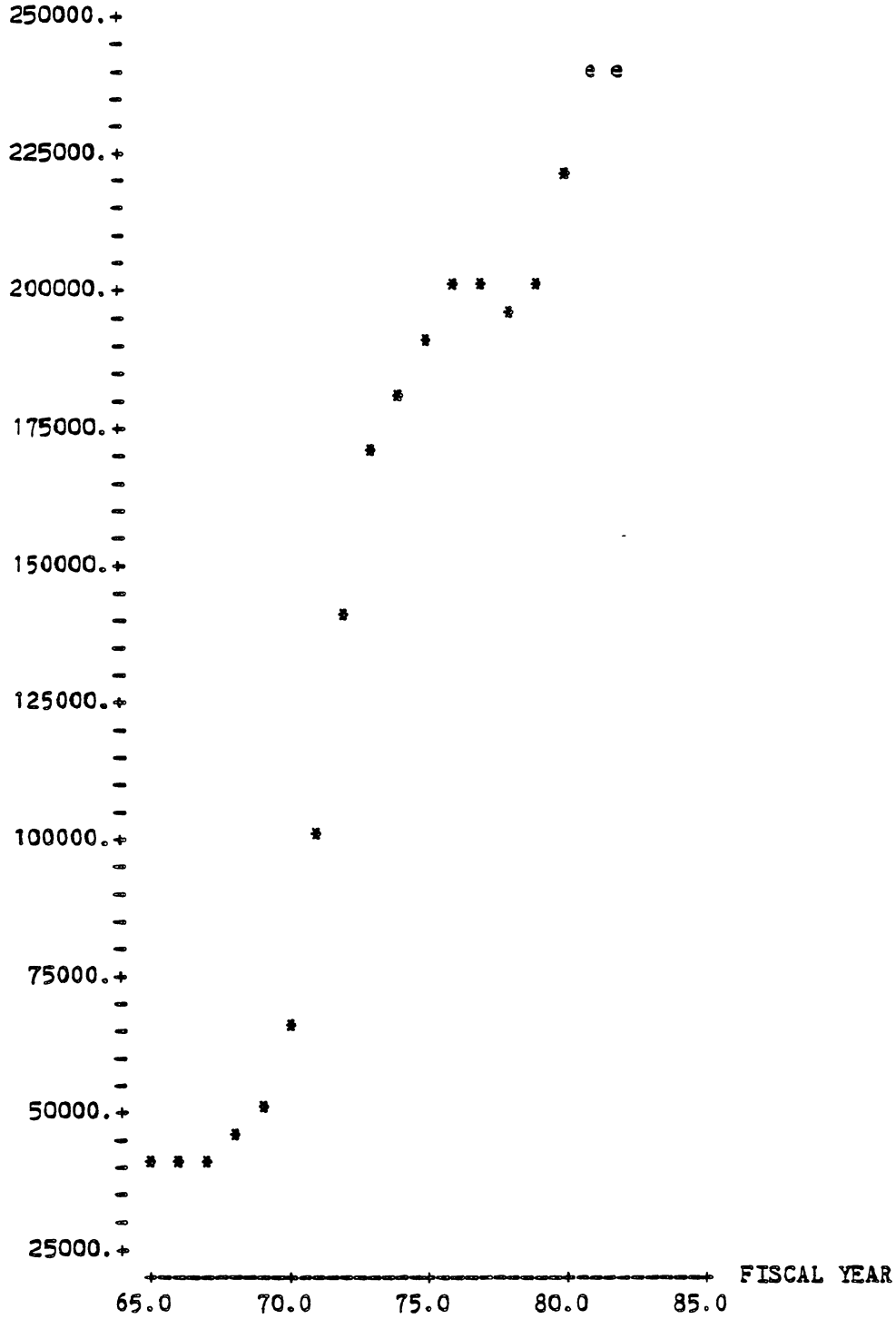
FY	ADC CASELOAD (MONTHLY AVERAGE)			GA CASELOAD (MONTHLY AVERAGE)		
	NON-WAYNE	WAYNE	MICHIGAN	NON-WAYNE	WAYNE	MICHIGAN
65	20,028	19,694	39,722	13,276	8,251	21,527
66	19,489	18,839	38,328	12,391	6,225	18,616
67	19,702	18,775	38,477	10,234	5,598	15,832
68	23,938	20,842	44,780	12,288	7,088	19,376
69	26,983	23,511	50,494	13,216	11,726	24,942
70	35,616	29,080	64,696	13,795	12,644	26,439
71	60,160	40,879	101,039	18,353	25,106	43,459
72	79,377	61,302	140,679	13,672	30,887	44,559
73	92,023	77,333	169,356	12,043	31,961	44,004
74	97,495	82,678	180,473	11,230	30,712	41,942
75	106,030	84,379	190,409	15,372	37,165	52,537
76	115,248	86,428	201,676	17,338	44,886	62,224
77	115,726	83,903	199,629	15,915	35,402	51,317
78	113,062	81,637	194,699	16,071	25,479	41,550
79	114,282	85,815	200,097	18,444	29,701	48,145
80	126,622	93,192	219,814	34,738	48,493	83,231
81			238,000			107,000(est.)
82			238,675			99,100(est.)

FY	ADC RECIPIENTS (MONTHLY AVERAGE)			GA RECIPIENTS (MONTHLY AVERAGE)		
	NON-WAYNE	WAYNE	MICHIGAN	NON-WAYNE	WAYNE	MICHIGAN
70	138,810	114,462	253,272	45,880	29,546	75,426
71	227,152	154,040	381,192	52,035	54,203	106,238
72	285,444	220,039	505,483	31,456	49,158	80,614
73	319,275	271,056	590,331	21,019	39,508	60,527
74	326,602	282,689	609,291	18,072	35,117	53,189
75	351,243	285,738	636,981	23,736	43,547	67,283
76	377,822	287,076	664,898	24,218	51,158	75,376
77	372,001	274,227	646,228	24,226	39,027	63,253
78	354,130	262,959	617,089	25,216	28,908	54,124
79	350,700	270,991	621,691	25,839	34,852	60,691
80	388,317	291,035	679,352	43,483	56,174	99,657

FY	ADC PAYMENTS (IN \$MILLIONS/YR)			GA PAYMENTS (IN \$MILLIONS/YR)		
	NON-WAYNE	WAYNE	MICHIGAN	NON-WAYNE	WAYNE	MICHIGAN
65	33.704	36.206	69.910	10.682	9.830	20.512
66	32.991	35.004	67.995	12.265	8.214	20.479
67	36.383	38.115	74.498			20.393
68	50.423	47.373	97.796			26.389
69	59.704	55.468	115.172	13.814	20.187	34.001
70	86.115	74.404	160.519	16.718	23.691	40.409
71	157.207	112.628	269.835	20.560	44.395	64.955
72	216.862	176.979	393.841	15.111	56.000	71.111
73	256.441	231.716	488.157	13.883	55.671	69.554
74	270.523	256.994	527.517	14.603	59.963	74.565
75	317.838	283.397	601.235	21.278	80.293	101.571
76	380.080	308.980	689.060	26.234	95.130	121.364
77	380.882	308.358	689.244	28.780	79.694	108.474
78	384.542	316.691	701.233	30.873	72.541	103.414
79	414.957	351.316	766.273	39.753	75.763	115.516
80	554.107	428.076	982.183	74.007	112.374	186.381
81			1076.600			211.000(est.)
82			982.700			197.000(est.)

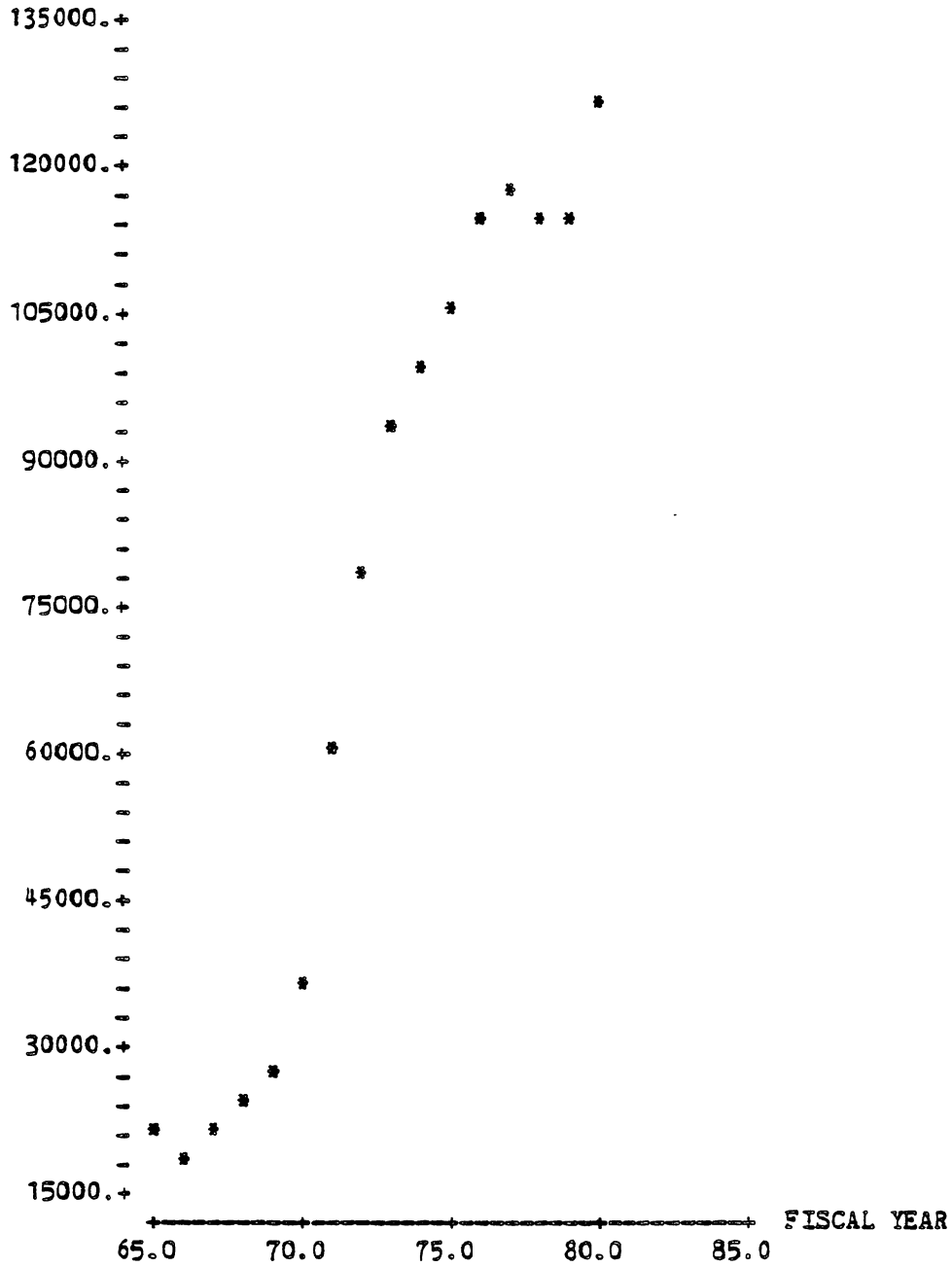
Source: Michigan Department of Social Services, Biennial Reports, July 1964-June 1966, July 1966-June 1968, Annual Reports, Fiscal 1969, 1970, Program Statistics, FY71, FY72, FY73, FY74, FY75, FY77, FY78, FY79, Report, FY75-76, Monthly Public Assistance Statistics, July 1967-Sept 1980, and Executive Budget, 1982.

MONTHLY AVERAGE NUMBER OF ADC CASES IN MICHIGAN

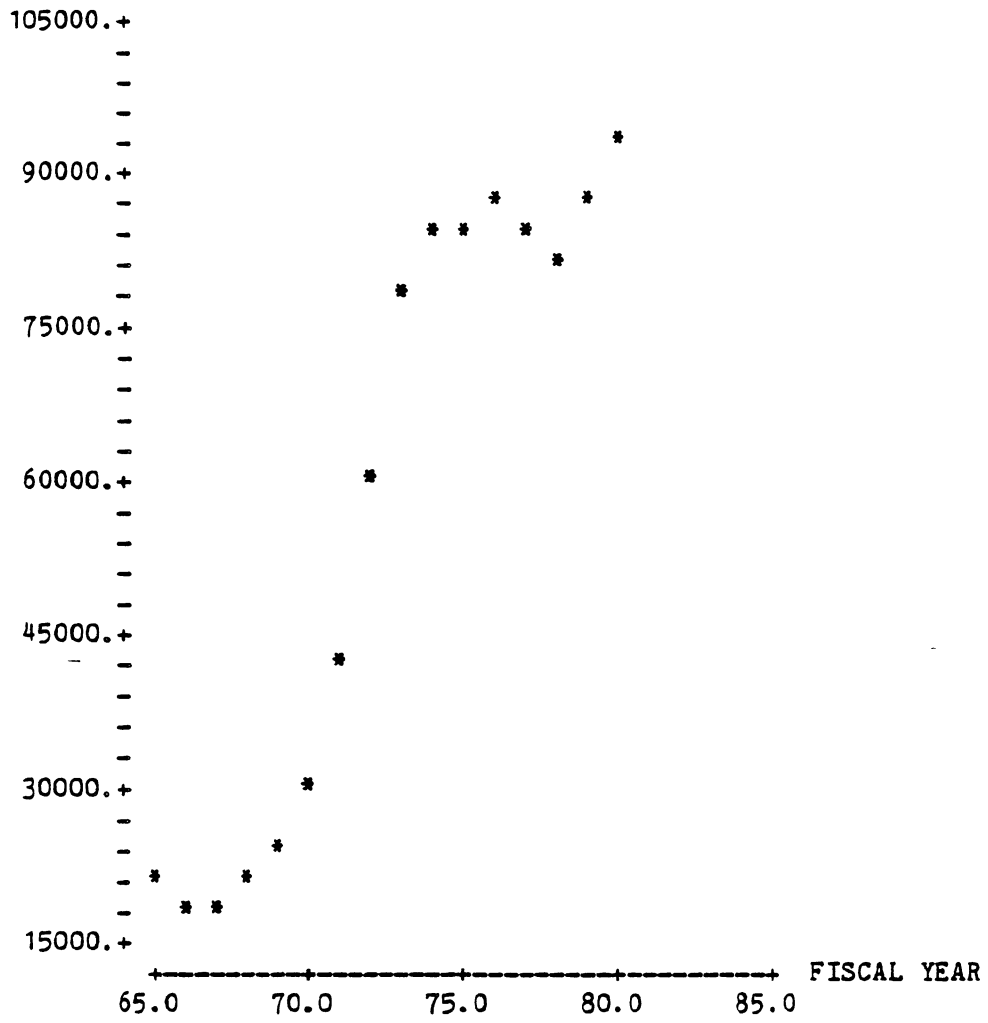


Over the period from 1967 to 1973, the ADC caseload increased at an average rate of 28% per year, while from 1973 to 1980, the ADC caseload average growth rate was 3.7% per year. Regression results suggest that, since 1973, the number of ADC cases per capita has been increasing at an underlying rate of 2.45% per year and that a 1 point fluctuation in the unemployment rate above its time trend accounts for a 1.65% increase in the number of ADC cases per capita. For the period from 1967 to 1973, regression results suggest that the number of ADC cases per capita grew at 26% per year. The coefficient measuring the effect of fluctuation in the unemployment rate was positive (a 5.7% increase for a 1 point fluctuation above trend) but not significantly different from 0.

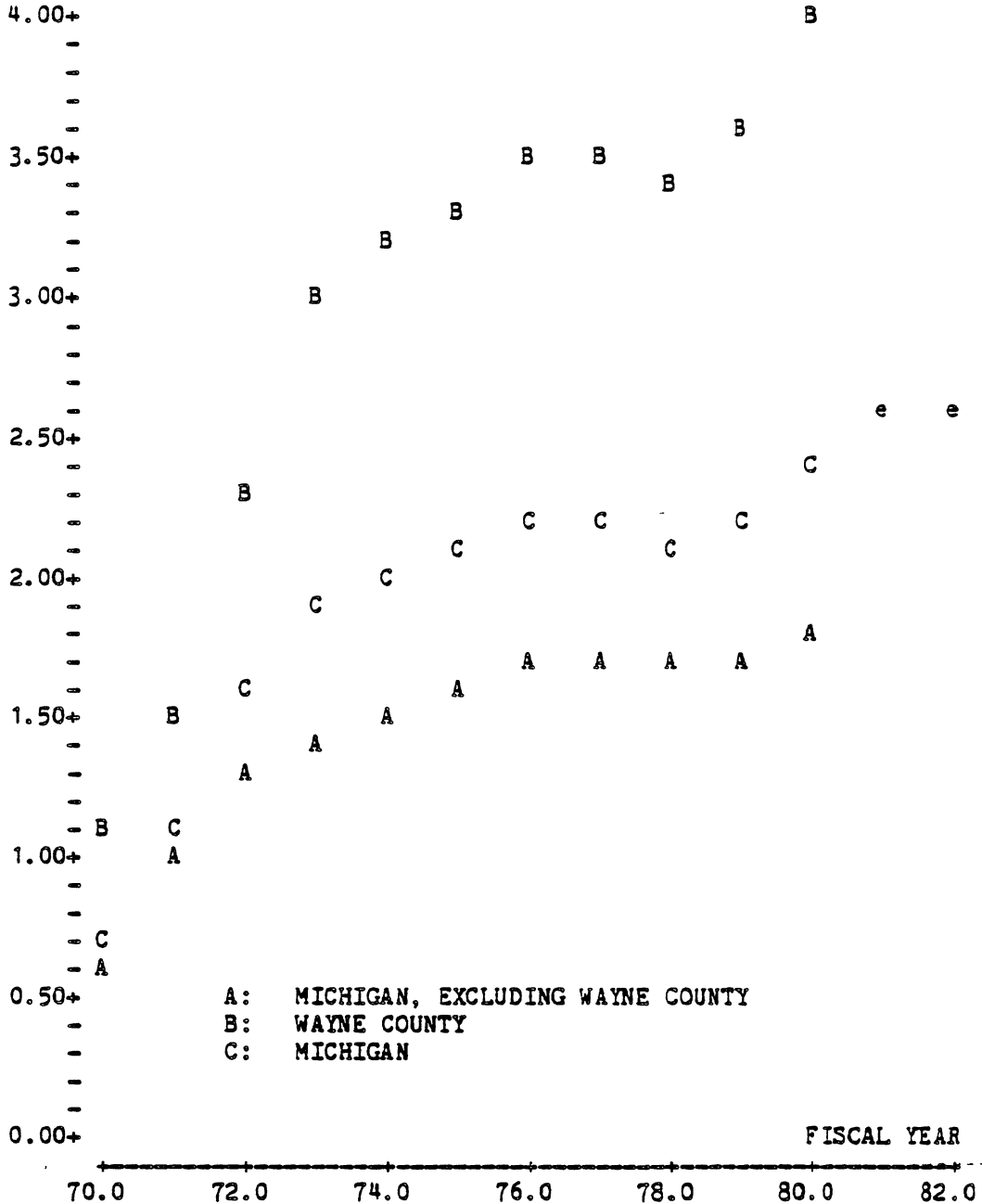
MONTHLY AVERAGE NUMBER OF ADC CASES
IN MICHIGAN, EXCLUDING WAYNE COUNTY



MONTHLY AVERAGE NUMBER OF ADC CASES IN WAYNE COUNTY

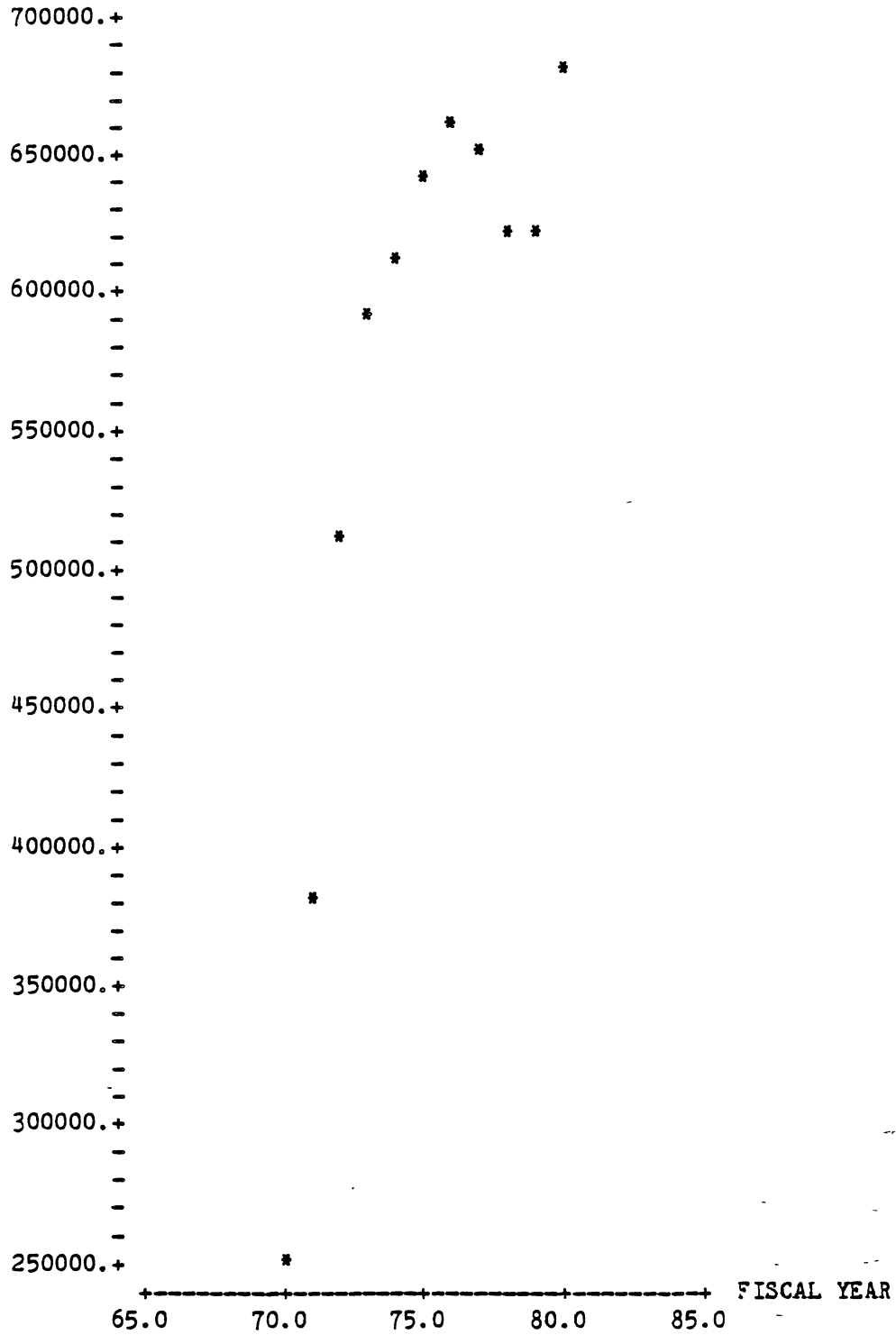


ADC CASES PER CAPITA (IN CASES PER 100 PEOPLE)



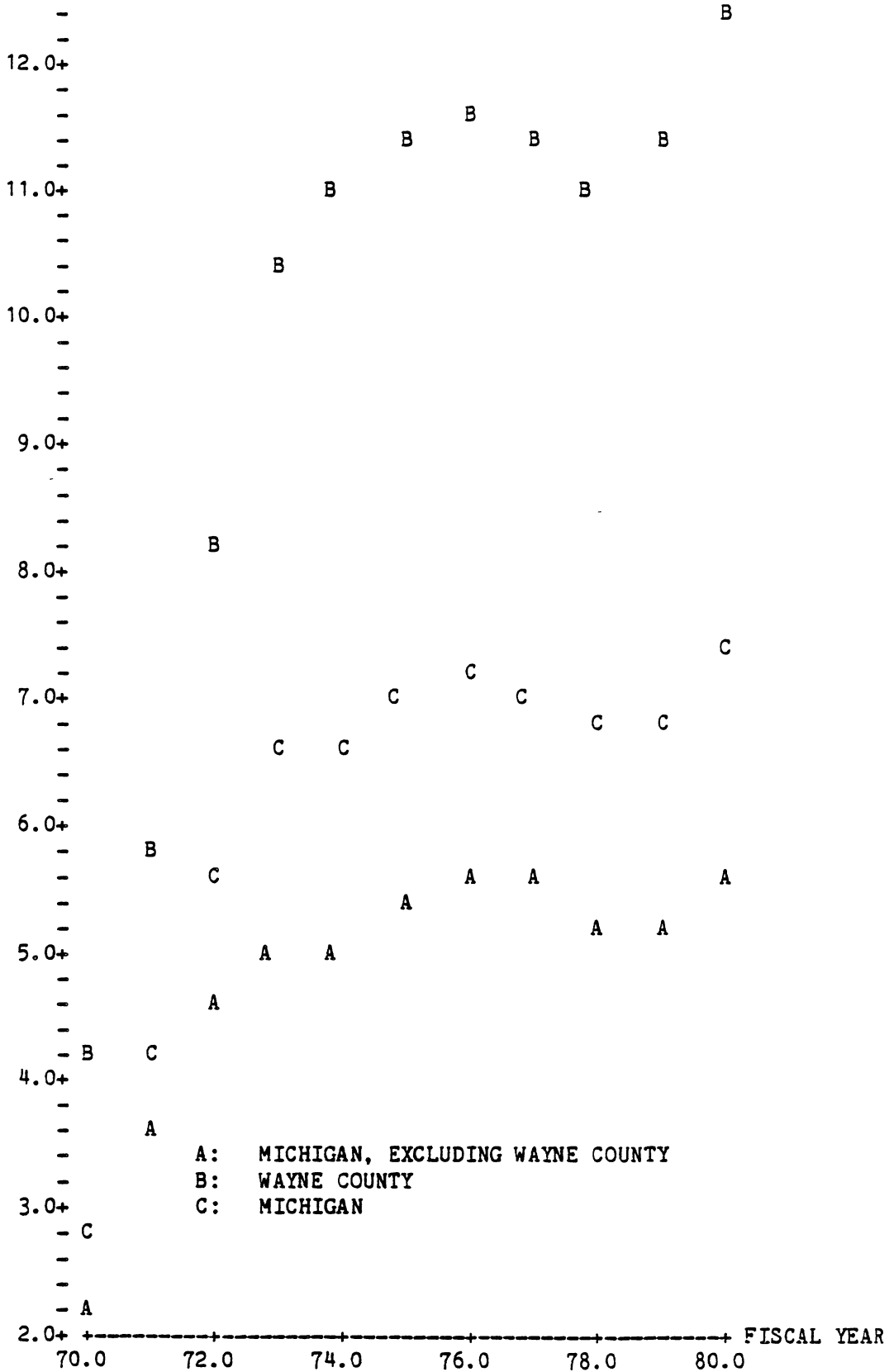
The Wayne County ADC caseload increased at an average rate of 2.6% per year from 1973 to 1980, while the non-Wayne County caseload grew at 4.1% per year. However, during this period the population of Wayne County declined while that of the state as a whole grew slightly. Hence, the per capita growth rate in ADC cases has been higher in Wayne County, 4.1% per year compared to 3.5% per year for the remainder of the state.

MONTHLY AVERAGE NUMBER OF ADC RECIPIENTS IN MICHIGAN

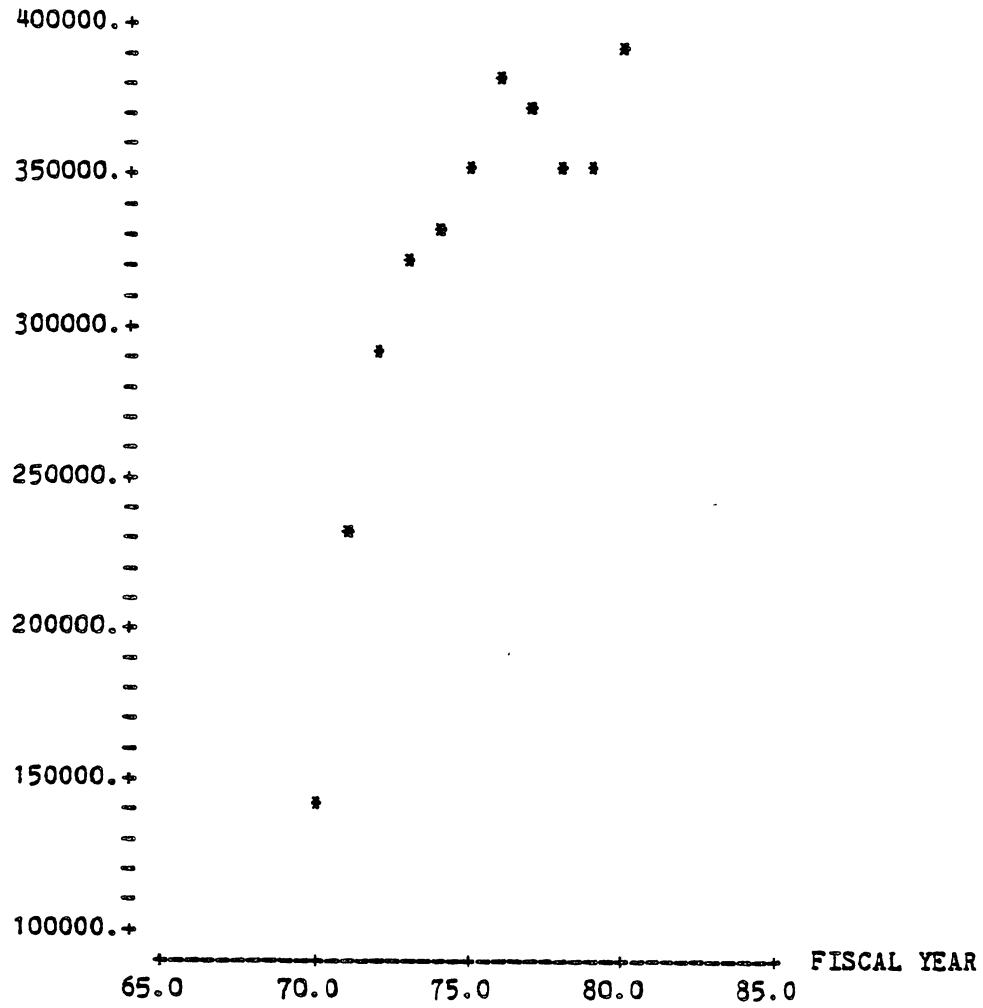


From 1973 to 1980, the number of ADC recipients in Michigan increased at an average rate of 2.0% per year. Regression results suggest that, during this period, the number of ADC recipients per capita has been increasing at an underlying rate of 0.8% per year (not significantly different from 0) and that a 1 point fluctuation in the unemployment rate above its time trend accounts for a 1.8% increase in the number of ADC recipients per capita.

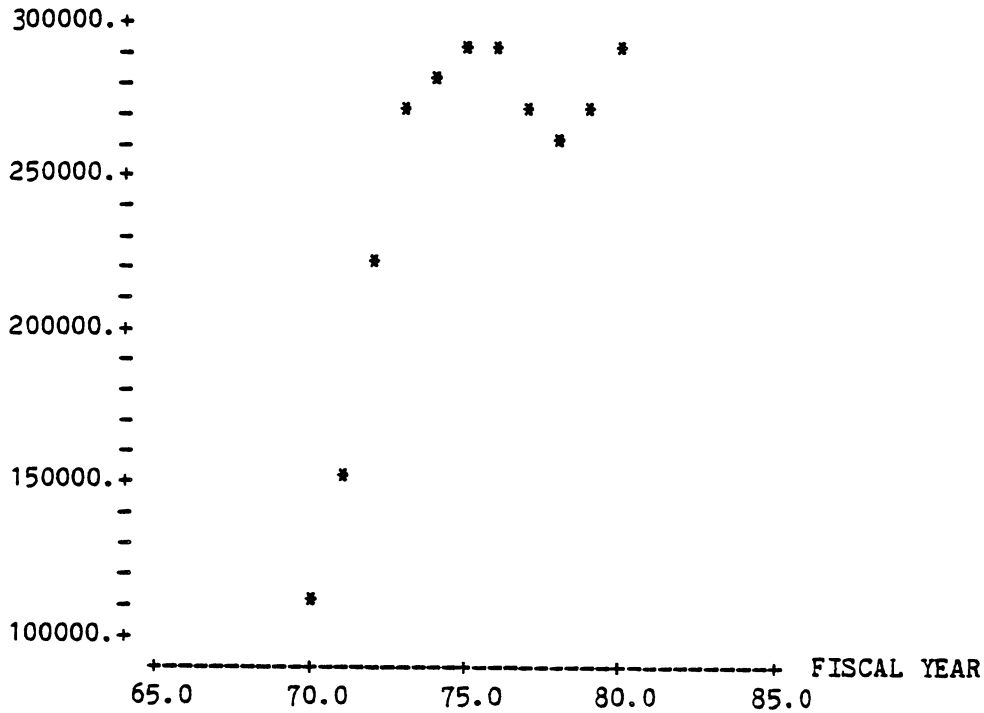
ADC RECIPIENTS PER CAPITA (IN RECIPIENTS PER 100 PEOPLE)



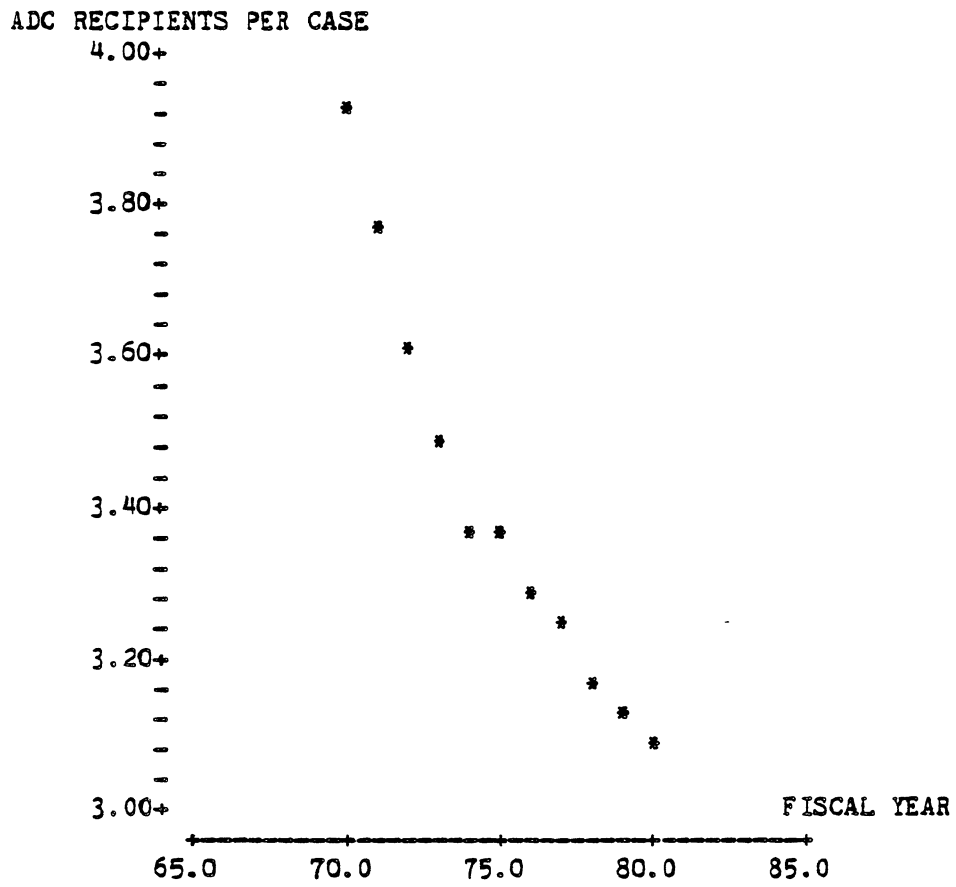
MONTHLY AVERAGE NUMBER OF ADC RECIPIENTS
IN MICHIGAN, EXCLUDING WAYNE COUNTY



MONTHLY AVERAGE NUMBER OF ADC RECIPIENTS IN WAYNE COUNTY

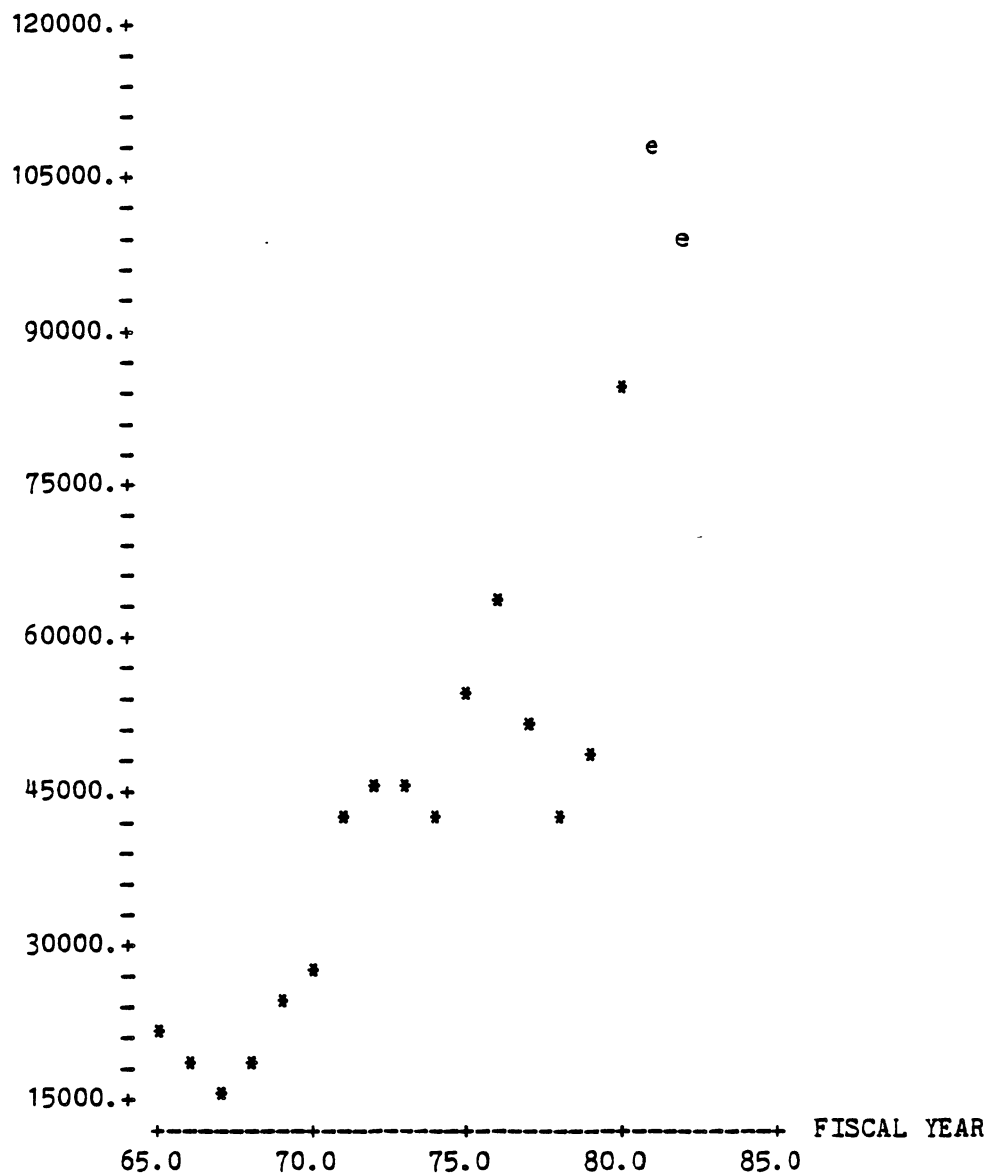


From 1973 to 1980, the number of ADC recipients in Wayne County grew at an average rate of 1.0% per year while the number in Michigan, excluding Wayne County, grew at 2.7% per year. The corresponding per capita growth rates were 2.5% per year for Wayne County and 1.7% per year for the remainder of the state. Regression results suggest that the growth rate for the number of Wayne County ADC recipients per capita has been 1.5% per year, but that the growth rate for the number of ADC recipients per capita in the remainder of the state has not been significantly different from 0.



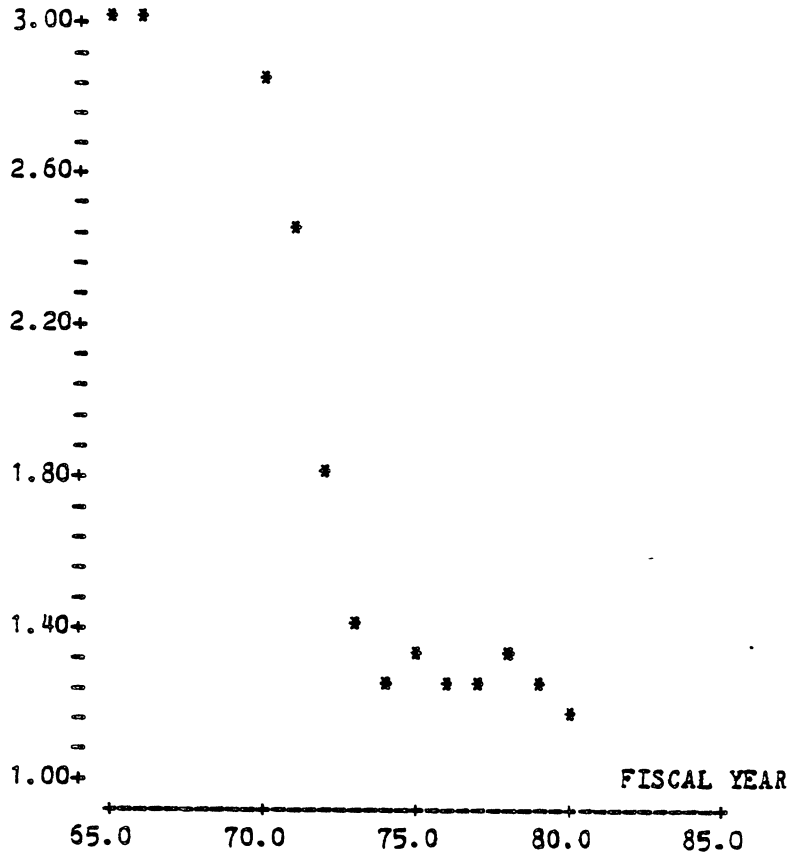
The number of ADC recipients per case has fallen from 3.9 in 1970 to 3.1 in 1980.

MONTHLY AVERAGE NUMBER OF GA CASES IN MICHIGAN

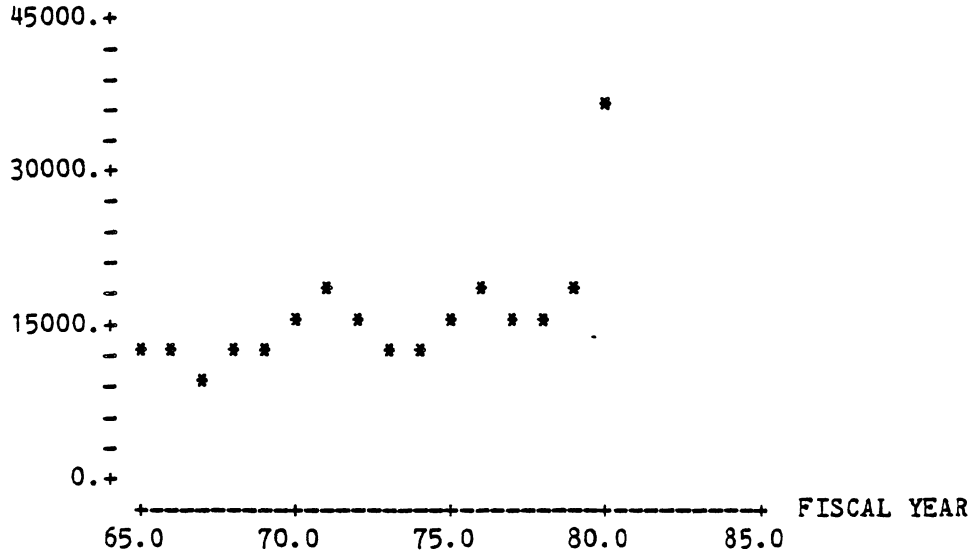


Note: Program changes were initiated in April 1979, so that GA caseload, recipient, and payment statistics since that date are not strictly comparable with previous data.

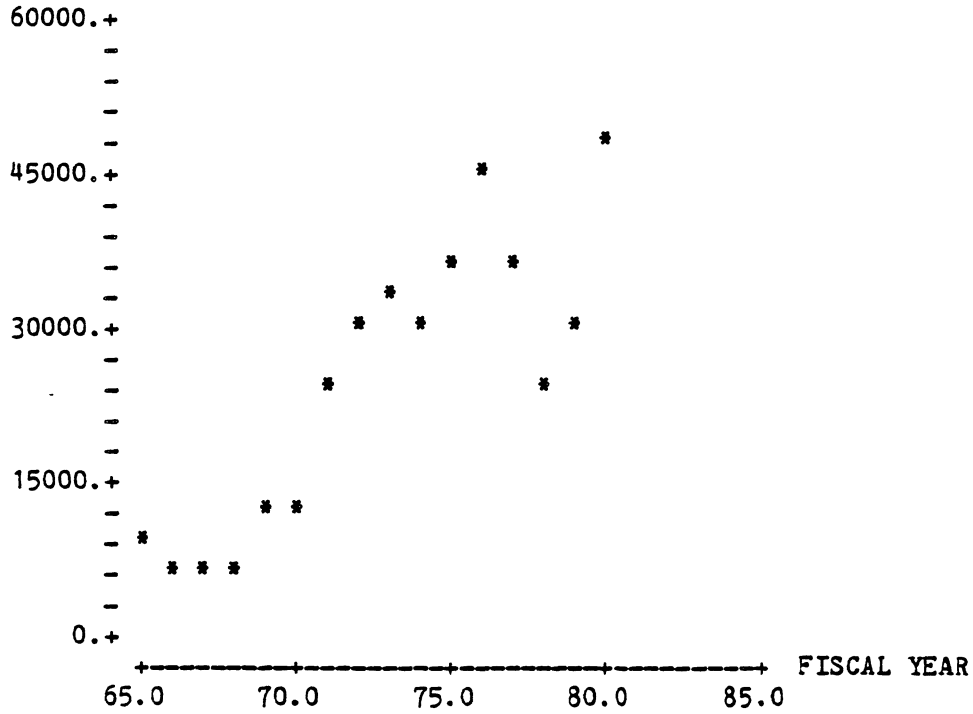
GA RECIPIENTS PER CASE



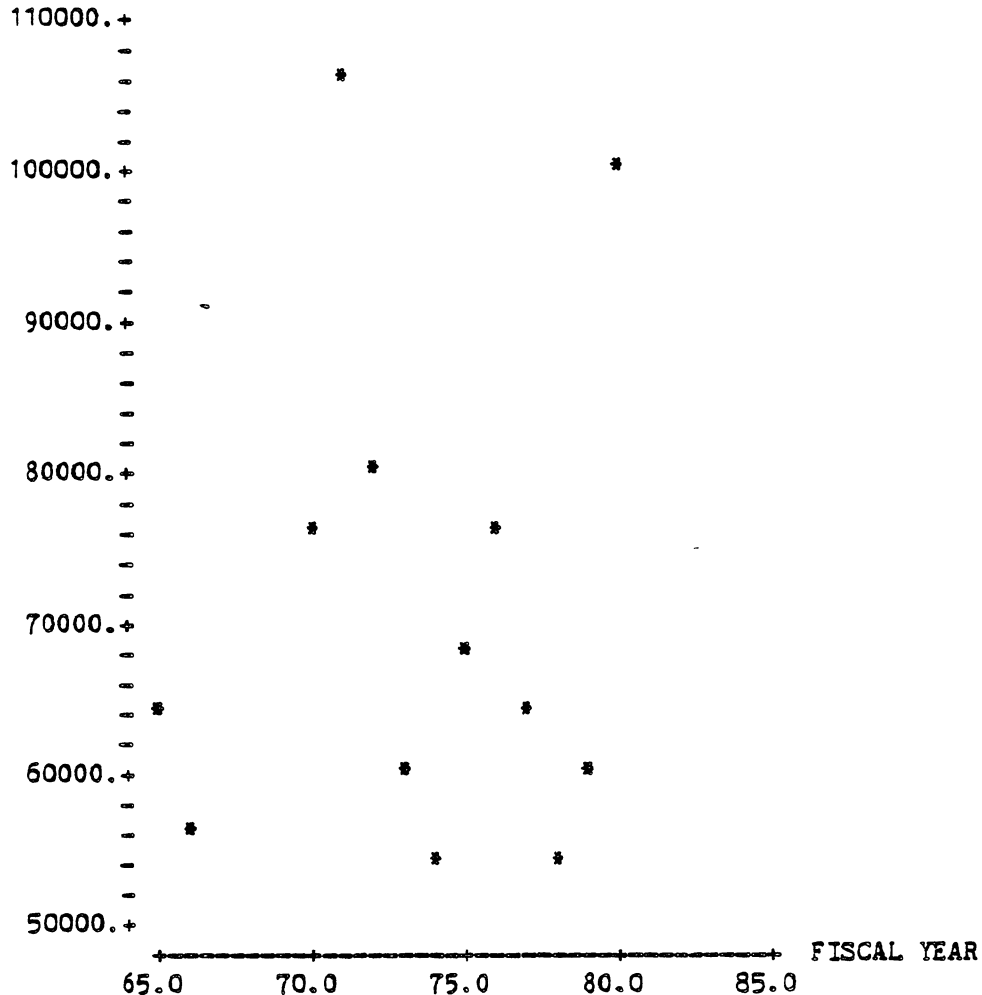
MONTHLY AVERAGE NUMBER OF GA CASES
IN MICHIGAN, EXCLUDING WAYNE COUNTY



MONTHLY AVERAGE NUMBER OF GA CASES IN WAYNE COUNTY



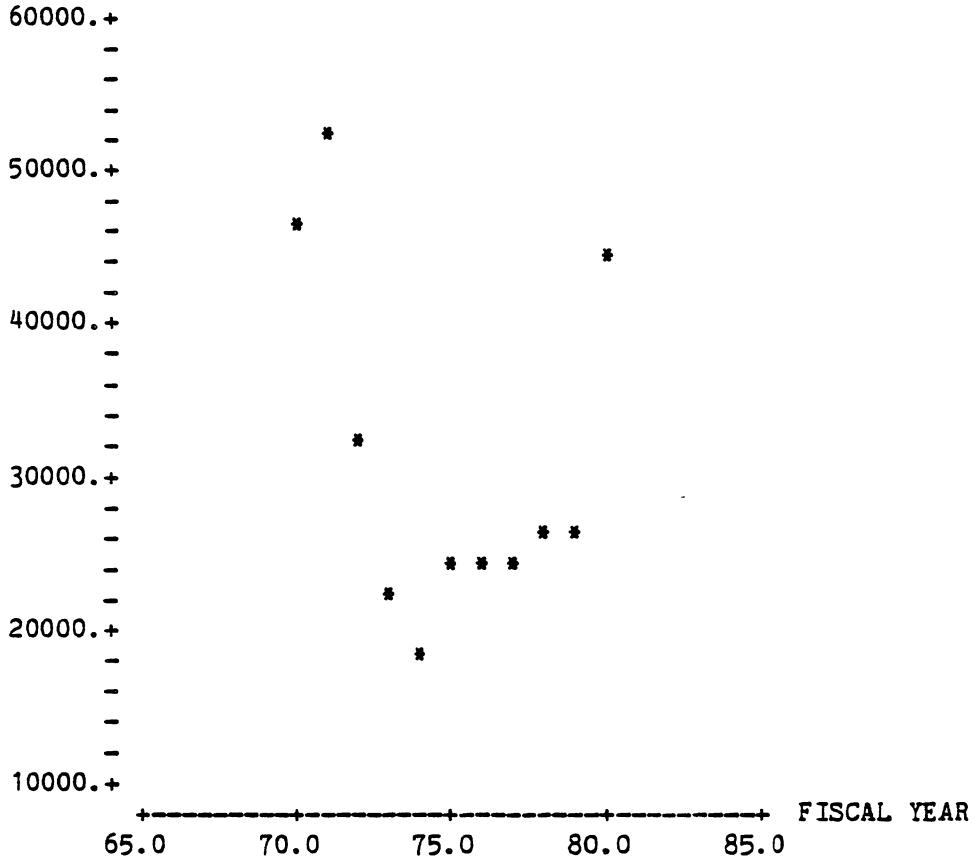
MONTHLY AVERAGE NUMBER OF GA RECIPIENTS IN MICHIGAN



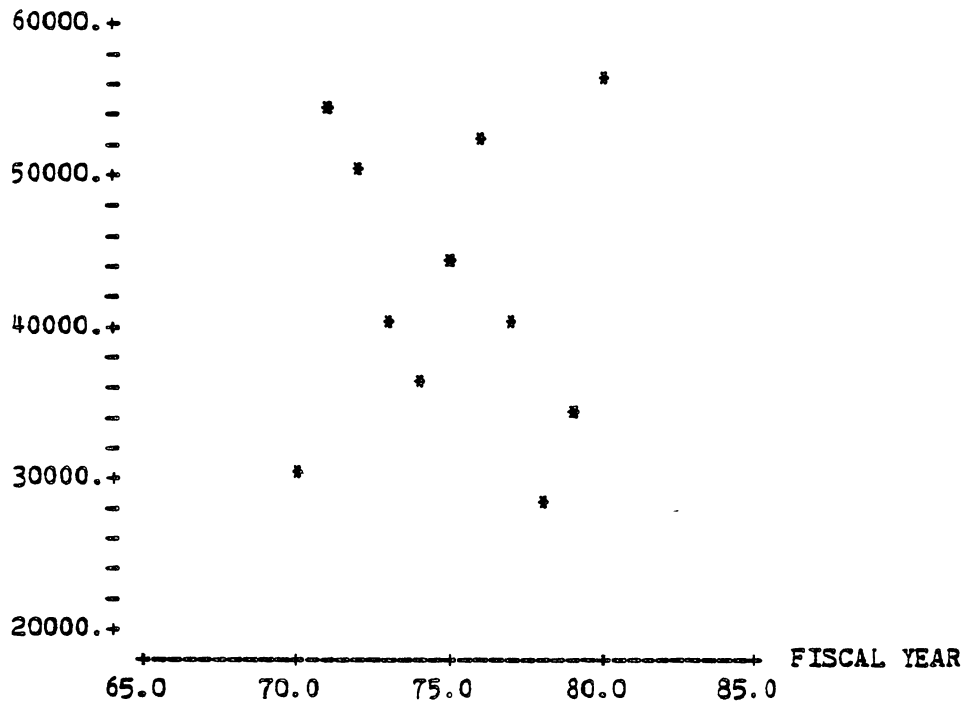
Regression results suggest that the underlying growth rate of neither the GA caseload nor the number of GA recipients in Michigan has been significantly different from 0 during the period 1973-1980. General Assistance displays a more marked dependence on the unemployment rate than does ADC. When fluctuations in the number of GA cases attributable to fluctuations in the unemployment rate are accounted for, the underlying growth rate of the per capita GA caseload appears to be significant at 4.6% per year. The growth rate of the number of GA recipients per capita is still not significantly different from 0. Regression results suggest that a 1 point fluctuation in the unemployment rate above its time trend accounts for a 8.7% increase in the per capita GA caseload and a 7.6% increase in the per capita number of GA recipients during this period.

For the period 1967 to 1973, regression results suggest that the GA caseload was growing at 18% per year and that a 1 point fluctuation in the unemployment rate above its time trend accounted for a 9.7% increase in the per capita GA caseload.

MONTHLY AVERAGE NUMBER OF GA RECIPIENTS
IN MICHIGAN, EXCLUDING WAYNE COUNTY



MONTHLY AVERAGE NUMBER OF GA RECIPIENTS IN WAYNE COUNTY



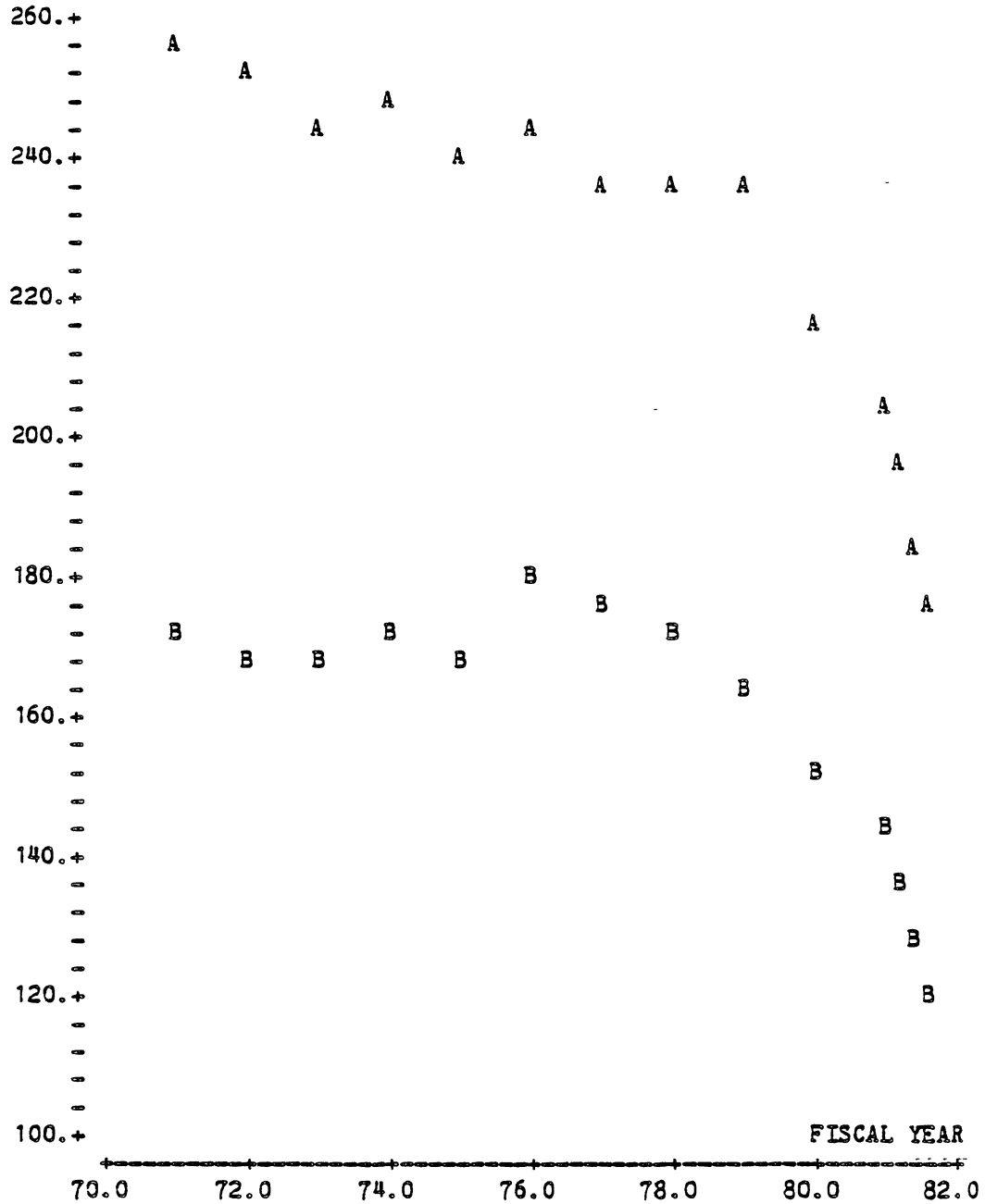
ADC GRANT STANDARD FOR A FAMILY OF FOUR (\$/MONTH)

FY	PERSONAL NEEDS	HEAT AND UTILITIES	TOTAL EXCL. SHELTER	SHELTER MAX. (WAYNE)	TOTAL ADC STANDARD	DETROIT CPI 1967=100	
71	176	29	205	100	305	119.7	
72			210	100	310	124.0	
73			219	99	318	129.5	
74			240	108	348	140.4	
75			267	110	377	158.0	
76	244	54	298	110	408	166.9	
77	252	58	310	110	420	177.5	
78	256	73	329	120	449	189.7	
79	276	74	350	150	500	211.4	
80	292	79	371	160	531	244.5	
81	292	91	383	160	543	267.1	10/1-12/31
81	292	86	378	160	538	274.0	1/1-3/31
81	288	77	365	160	525	282.4	4/1-6/1
81			339	160	499		6/1-

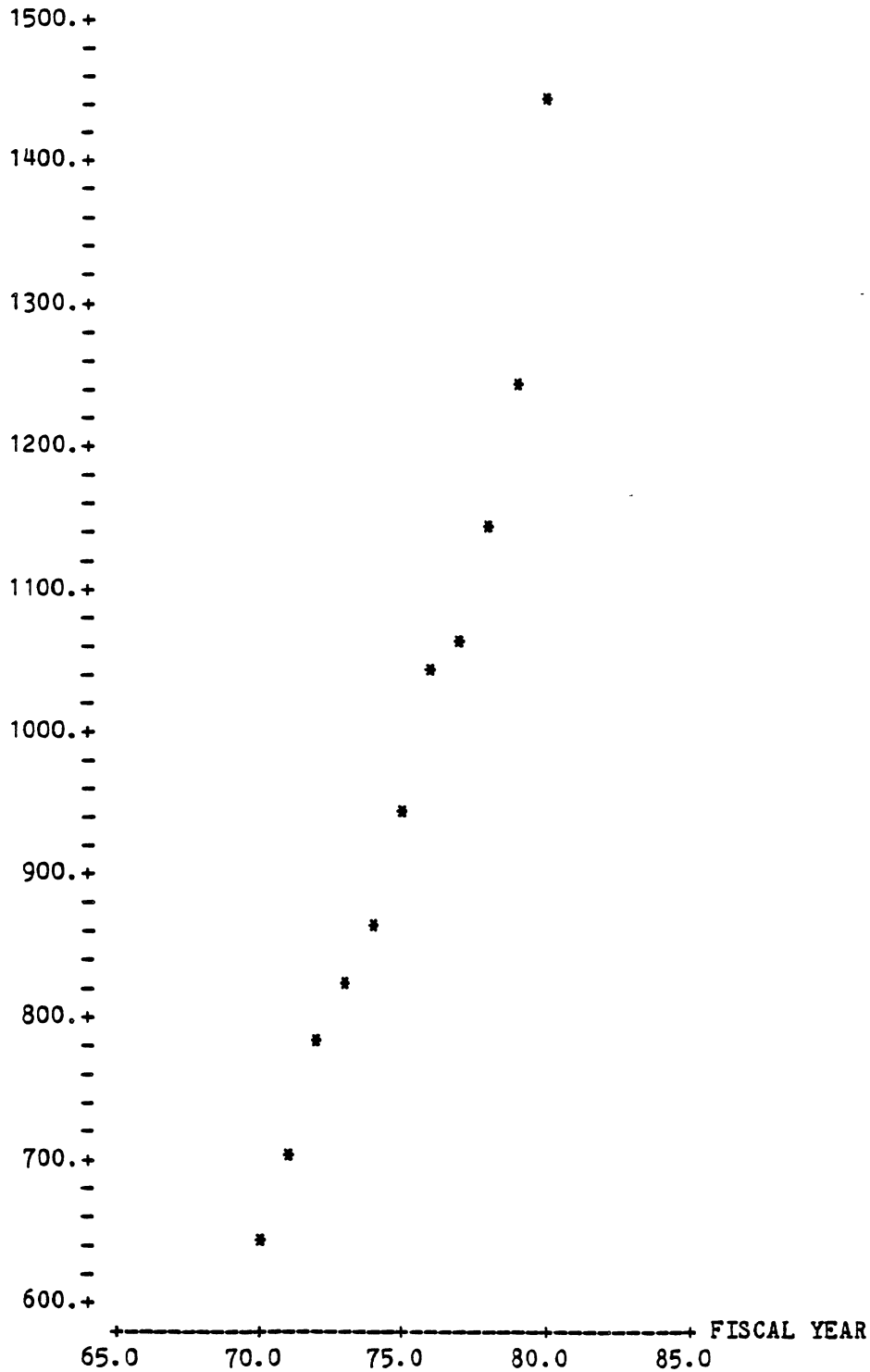
Source: Department of Social Services and Senate Fiscal Agency

REAL ADC GRANT STANDARD FOR A FAMILY OF FOUR (1967\$ PER MONTH)

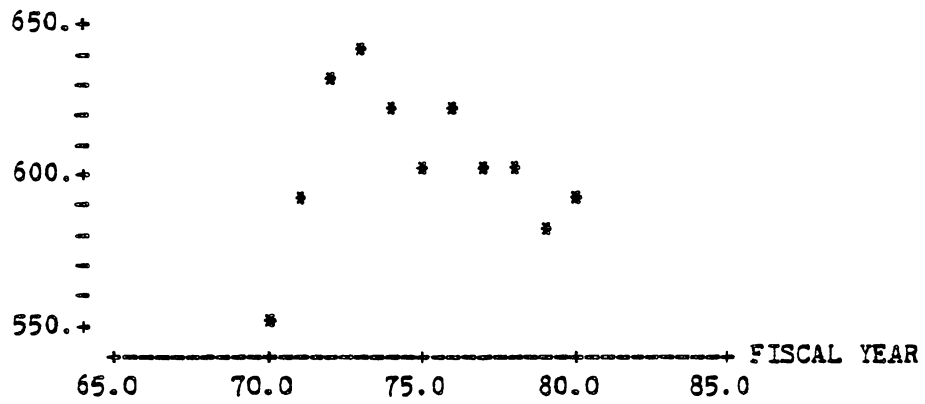
A: TOTAL ADC GRANT STANDARD INCLUDING WAYNE COUNTY SHELTER MAXIMUM
 B: ADC GRANT STANDARD EXCLUDING SHELTER



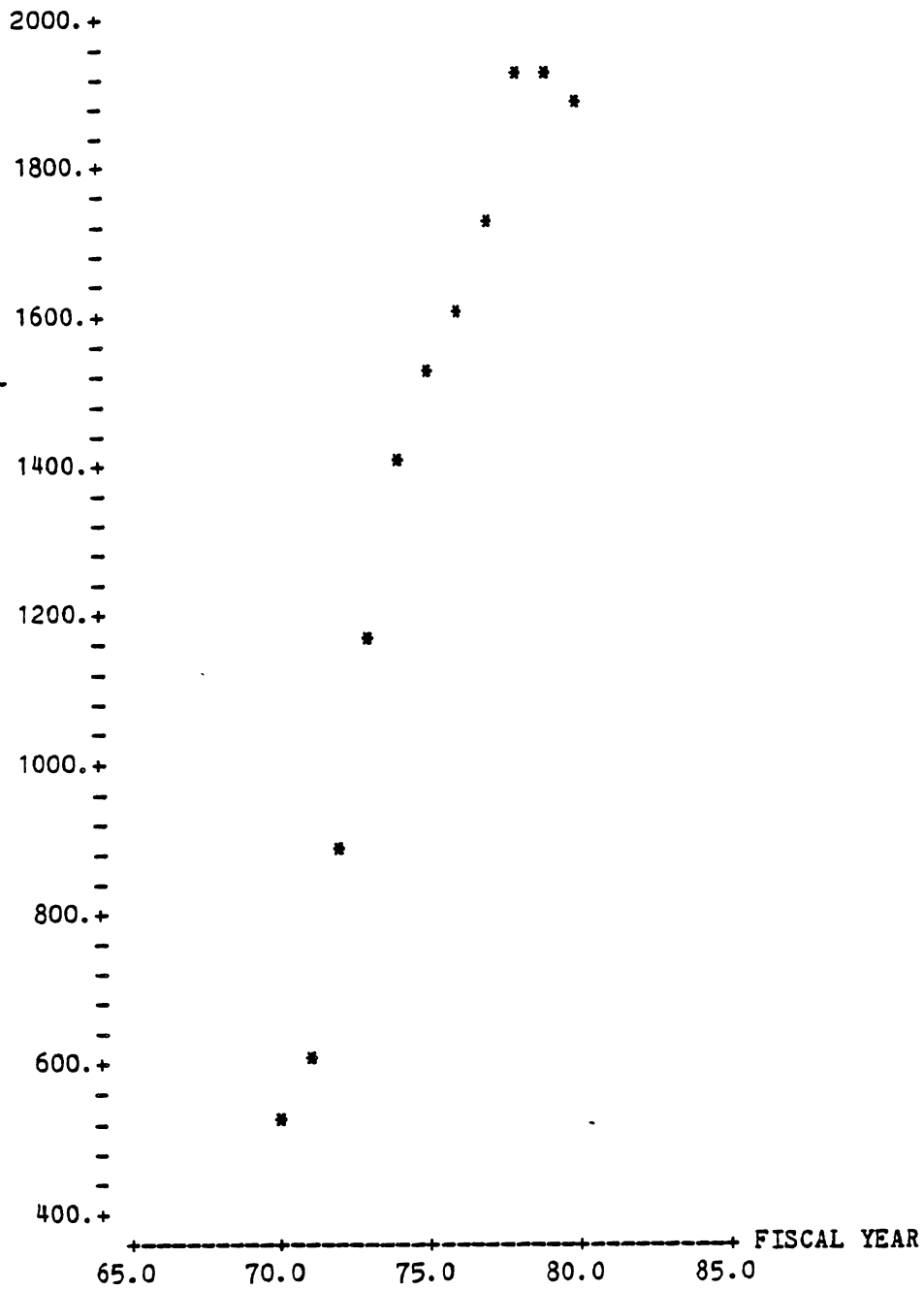
ADC PAYMENTS PER RECIPIENT (IN \$ PER YEAR)



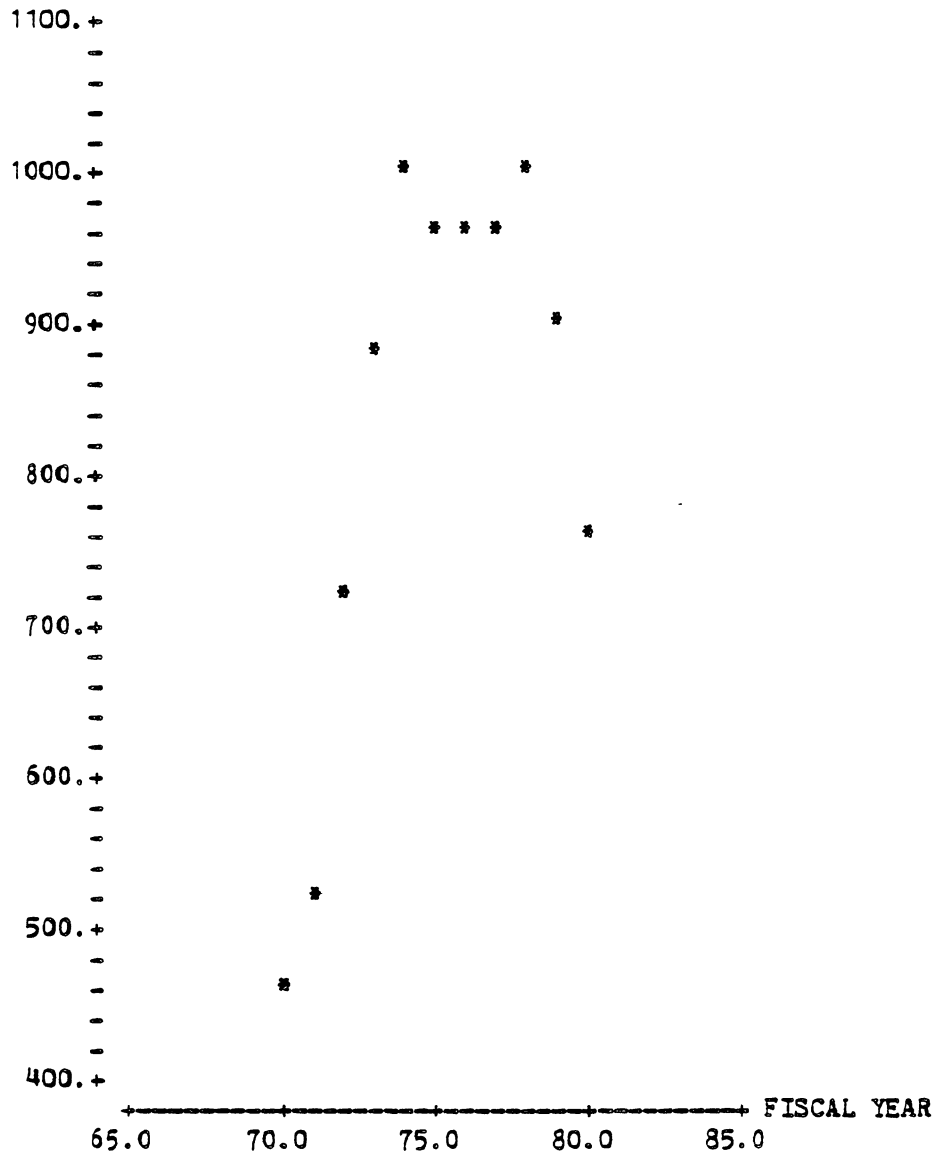
REAL ADC PAYMENTS PER RECIPIENT (IN 1967\$ PER YEAR)



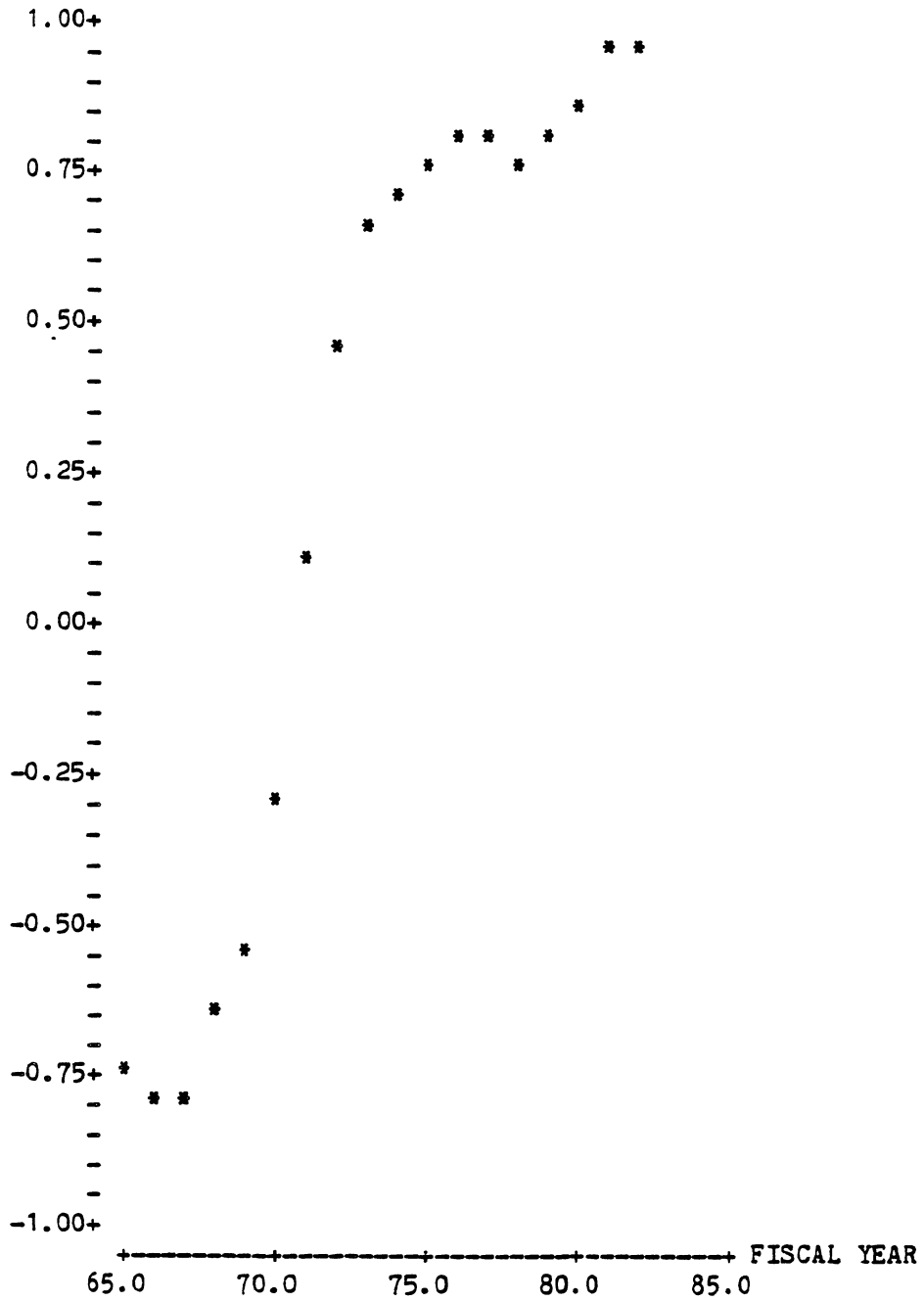
GA PAYMENTS PER RECIPIENT (IN \$ PER YEAR)



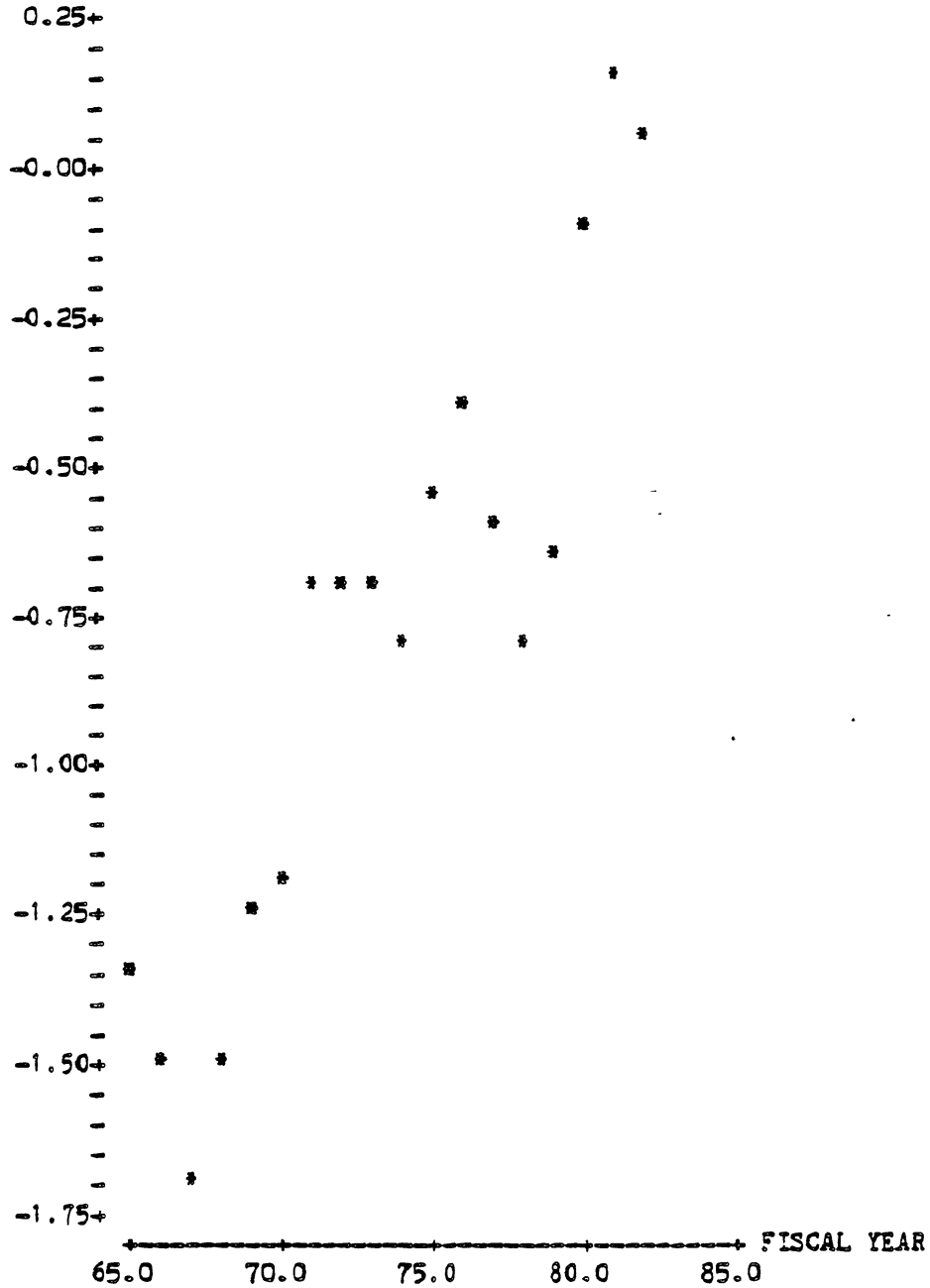
REAL GA PAYMENTS PER RECIPIENT (IN 1967\$ PER YEAR)



LOG ADC CASES PER CAPITA (IN CASES PER 100 PEOPLE)



LOG GA CASES PER CAPITA (IN CASES PER 100 PEOPLE)



REGRESSION OF LOG ADC CASES PER CAPITA ON TIME, 1973-1980

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	0.4414	0.0720	6.13
X1	TIME	0.0245	0.0056	4.39

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS
 S = 0.03787
 WITH (8- 2) = 6 DEGREES OF FREEDOM

R-SQUARED = 76.2 PERCENT
 R-SQUARED = 72.3 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	0.027599	0.027599
RESIDUAL	6	0.008605	0.001434
TOTAL	7	0.036205	

REGRESSION OF LOG ADC CASES PER CAPITA ON UNEMPLOYMENT RESIDUALS AND TIME, 1973-1980

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	0.4414	0.0361	12.22
X1	UNEMPL.	0.0165	0.0038	4.34
X2	TIME	0.0245	0.0028	8.75

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS
 S = 0.01900
 WITH (8- 3) = 5 DEGREES OF FREEDOM

R-SQUARED = 95.0 PERCENT
 R-SQUARED = 93.0 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	2	0.0344004	0.0172002
RESIDUAL	5	0.0018041	0.0003608
TOTAL	7	0.0362045	

FURTHER ANALYSIS OF VARIANCE
 SS EXPLAINED BY EACH VARIABLE WHEN ENTERED IN THE ORDER GIVEN

DUE TO	DF	SS
REGRESSION	2	0.0344004
UNEMPL.	1	0.0068009
TIME	1	0.0275995

REGRESSION OF LOG ADC RECIPIENTS PER CAPITA ON TIME, 1973-1980

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	1.8306	0.0767	23.86
X1	TIME	0.0082	0.0060	1.37

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 0.04034

WITH (8- 2) = 6 DEGREES OF FREEDOM

R-SQUARED = 23.8 PERCENT

R-SQUARED = 11.2 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	0.003057	0.003057
RESIDUAL	6	0.009763	0.001627
TOTAL	7	0.012820	

REGRESSION OF LOG ADC RECIPIENTS PER CAPITA ON UNEMPLOYMENT RESIDUALS AND TIME, 1973-1980

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	1.8306	0.0363	50.46
X1	UNEMPL.	0.0178	0.0038	4.67
X2	TIME	0.0082	0.0028	2.90

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 0.01907

WITH (8- 3) = 5 DEGREES OF FREEDOM

R-SQUARED = 85.8 PERCENT

R-SQUARED = 80.1 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	2	0.0110006	0.0055003
RESIDUAL	5	0.0018192	0.0003638
TOTAL	7	0.0128197	

FURTHER ANALYSIS OF VARIANCE

SS EXPLAINED BY EACH VARIABLE WHEN ENTERED IN THE ORDER GIVEN

DUE TO	DF	SS
REGRESSION	2	0.0110006
UNEMPL.	1	0.0079437
TIME	1	0.0030569

REGRESSION OF NON-WAYNE COUNTY ADC RECIPIENTS PER CAPITA ON TIME, 1973-1980

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	1.5347	0.0939	16.34
X1	TIME	0.0105	0.0073	1.44

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS
 S = 0.04939
 WITH (8- 2) = 6 DEGREES OF FREEDOM

R-SQUARED = 25.6 PERCENT
 R-SQUARED = 13.2 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	0.005044	0.005044
RESIDUAL	6	0.014637	0.002440
TOTAL	7	0.019681	

REGRESSION OF LOG WAYNE COUNTY ADC RECIPIENTS PER CAPITA ON TIME, 1973-1980

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	2.2371	0.0700	31.95
X1	TIME	0.0150	0.0054	2.75

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS
 S = 0.03682
 WITH (8- 2) = 6 DEGREES OF FREEDOM

R-SQUARED = 55.8 PERCENT
 R-SQUARED = 48.4 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	0.010263	0.010263
RESIDUAL	6	0.008132	0.001355
TOTAL	7	0.018395	

REGRESSION OF LOG GA CASES PER CAPITA ON TIME, 1973-1980

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	-1.1449	0.4087	-2.80
X1	TIME	0.0455	0.0317	1.43

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 0.2149

WITH (8- 2) = 6 DEGREES OF FREEDOM

R-SQUARED = 25.5 PERCENT

R-SQUARED = 13.1 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	0.09487	0.09487
RESIDUAL	6	0.27710	0.04618
TOTAL	7	0.37198	

REGRESSION OF LOG GA CASES PER CAPITA ON UNEMPLOYMENT RESIDUALS AND TIME, 1973-1980

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	-1.1449	0.2503	-4.57
X1	UNEMPL.	0.0872	0.0263	3.32
X2	TIME	0.0455	0.0194	2.34

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 0.1316

WITH (8- 3) = 5 DEGREES OF FREEDOM

R-SQUARED = 76.7 PERCENT

R-SQUARED = 67.4 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	2	0.28537	0.14269
RESIDUAL	5	0.08660	0.01732
TOTAL	7	0.37197	

FURTHER ANALYSIS OF VARIANCE

SS EXPLAINED BY EACH VARIABLE WHEN ENTERED IN THE ORDER GIVEN

DUE TO	DF	SS
REGRESSION	2	0.28537
UNEMPL.	1	0.19050
TIME	1	0.09488

REGRESSION OF LOG GA RECIPIENTS PER CAPITA ON TIME, 1973-1980

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	--	-0.7743	0.3684	-2.10
X1	TIME	0.0348	0.0286	1.22

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 0.1937

WITH (8- 2) = 6 DEGREES OF FREEDOM

R-SQUARED = 19.8 PERCENT

R-SQUARED = 6.4 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	0.05548	0.05548
RESIDUAL	6	0.22507	0.03751
TOTAL	7	0.28055	

REGRESSION OF LOG GA RECIPIENTS PER CAPITA ON UNEMPLOYMENT RESIDUALS AND TIME, 1973-1980

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	--	-0.7743	0.2409	-3.21
X1	UNEMPL.	0.0760	0.0253	3.00
X2	TIME	0.0348	0.0187	1.86

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 0.1267

WITH (8- 3) = 5 DEGREES OF FREEDOM

R-SQUARED = 71.4 PERCENT

R-SQUARED = 60.0 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	2	0.20032	0.10016
RESIDUAL	5	0.08024	0.01605
TOTAL	7	0.28055	

FURTHER ANALYSIS OF VARIANCE

SS EXPLAINED BY EACH VARIABLE WHEN ENTERED IN THE ORDER GIVEN

DUE TO	DF	SS
REGRESSION	2	0.20032
UNEMPL.	1	0.14484
TIME	1	0.05548

REGRESSION OF LOG ADC CASES PER CAPITA ON TIME, 1967-1973

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	-1.6996	0.1384	-12.28
X1	TIME	0.2565	0.0219	11.72

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 0.1158

WITH (7- 2) = 5 DEGREES OF FREEDOM

R-SQUARED = 96.5 PERCENT

R-SQUARED = 95.8 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	1.84219	1.84219
RESIDUAL	5	0.06700	0.01340
TOTAL	6	1.90919	

REGRESSION OF LOG ADC CASES PER CAPITA ON UNEMPLOYMENT RATE AND TIME, 1967-1973

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	-1.8192	0.1622	-11.22
X1	UNEMPL.	0.0573	0.0458	1.25
X2	TIME	0.2228	0.0340	6.56

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 0.1097

WITH (7- 3) = 4 DEGREES OF FREEDOM

R-SQUARED = 97.5 PERCENT

R-SQUARED = 96.2 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	2	1.86106	0.93053
RESIDUAL	4	0.04813	0.01203
TOTAL	6	1.90919	

FURTHER ANALYSIS OF VARIANCE

SS EXPLAINED BY EACH VARIABLE WHEN ENTERED IN THE ORDER GIVEN

DUE TO	DF	SS
REGRESSION	2	1.86106
UNEMPL.	1	1.34321
TIME	1	0.51785

REGRESSION OF LOG GA CASES PER CAPITA ON TIME, 1967-1973

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	-2.1931	0.1531	-14.33
X1	TIME	0.1800	0.0242	7.44

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 0.1281

WITH (7 - 2) = 5 DEGREES OF FREEDOM

R-SQUARED = 91.7 PERCENT

R-SQUARED = 90.1 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	0.90744	0.90744
RESIDUAL	5	0.08200	0.01640
TOTAL	6	0.98944	

REGRESSION OF LOG GA CASES PER CAPITA ON UNEMPLOYMENT RATE AND TIME,
1967-1973

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	-2.3959	0.1232	-19.45
X1	UNEMPL.	0.0972	0.0348	2.80
X2	TIME	0.1229	0.0258	4.77

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 0.08329

WITH (7 - 3) = 4 DEGREES OF FREEDOM

R-SQUARED = 97.2 PERCENT

R-SQUARED = 95.8 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

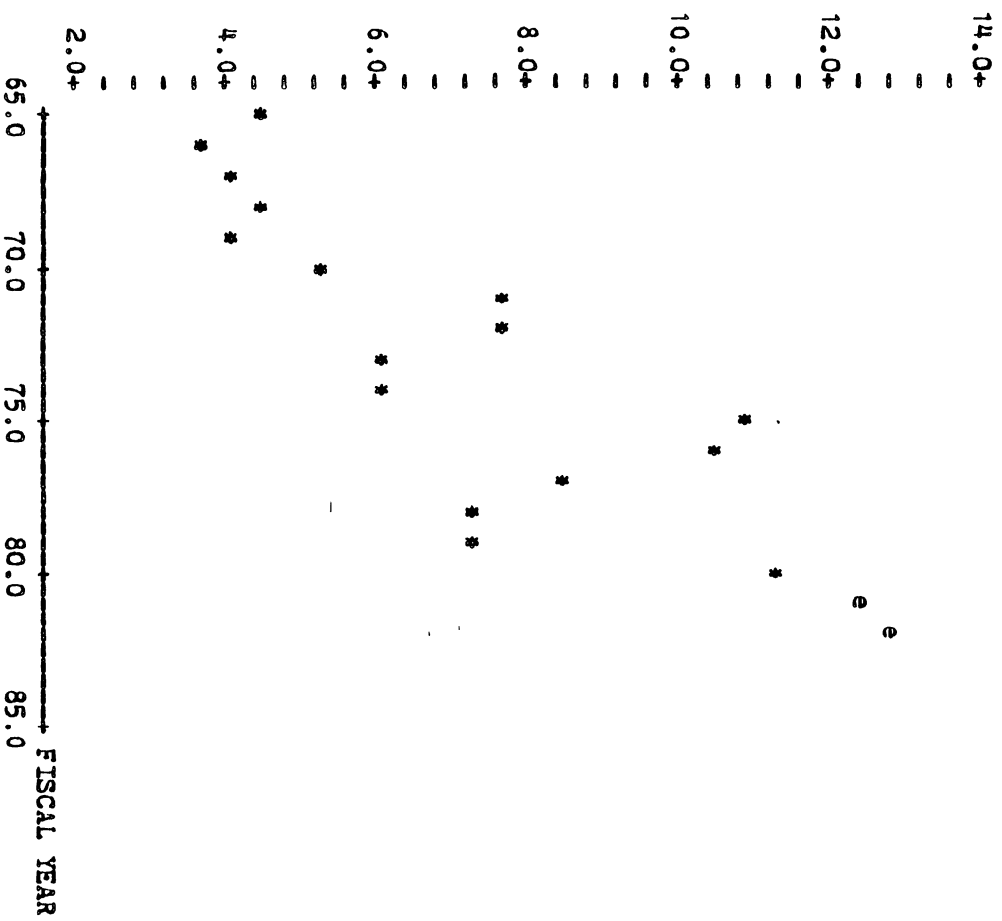
DUE TO	DF	SS	MS=SS/DF
REGRESSION	2	0.961693	0.480846
RESIDUAL	4	0.027746	0.006937
TOTAL	6	0.989439	

FURTHER ANALYSIS OF VARIANCE

SS EXPLAINED BY EACH VARIABLE WHEN ENTERED IN THE ORDER GIVEN

DUE TO	DF	SS
REGRESSION	2	0.961693
UNEMPL.	1	0.804138
TIME	1	0.157554

UNEMPLOYMENT RATE IN MICHIGAN



REGRESSION OF UNEMPLOYMENT RATE ON TIME, 1965-1982

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	2.8153	0.7560	3.72
X1	TIME	0.4803	0.0690	6.96

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 1.549

WITH (18- 2) = 16 DEGREES OF FREEDOM

R-SQUARED = 75.2 PERCENT

R-SQUARED = 73.6 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	116.281	116.281
RESIDUAL	16	38.371	2.398
TOTAL	17	154.652	

	X1	Y	PRED. Y	ST.DEV.	RESIDUAL
FY	TIME	UNEMPL.	VALUE	PRED. Y	
65	1.0	4.239	3.296	0.696	0.943
66	2.0	3.622	3.776	0.639	-0.154
67	3.0	4.083	4.256	0.583	-0.173
68	4.0	4.392	4.737	0.531	-0.345
69	5.0	4.112	5.217	0.484	-1.104
70	6.0	5.100	5.697	0.441	-0.597
71	7.0	7.774	6.178	0.407	1.597
72	8.0	7.627	6.658	0.381	0.970
73	9.0	6.190	7.138	0.367	-0.948
74	10.0	6.132	7.618	0.366	-1.486
75	11.0	10.712	8.099	0.378	2.614
76	12.25	10.404	8.699	0.408	1.705
77	13.25	8.445	9.180	0.444	-0.735
78	14.25	7.107	9.660	0.486	-2.553
79	15.25	7.249	10.140	0.534	-2.891
80	16.25	11.013	10.620	0.586	0.393
81	17.25	12.538	11.101	0.642	1.437
82	18.25	12.908	11.581	0.700	1.327

REGRESSION OF UNEMPLOYMENT RATE ON TIME, 1973-1980

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	4.5903	3.8859	1.18
X1	TIME	0.3015	0.3017	1.00

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 2.043

WITH (8- 2) = 6 DEGREES OF FREEDOM

R-SQUARED = 14.3 PERCENT

R-SQUARED = -0.0 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	4.170	4.170
RESIDUAL	6	25.047	4.174
TOTAL	7	29.217	

FY	X1 TIME	Y UNEMPL.	PRED. Y VALUE	ST.DEV. PRED. Y	RESIDUAL
73	9.0	6.190	7.304	1.319	-1.114
74	10.0	6.132	7.606	1.079	-1.473
75	11.0	10.712	7.907	0.878	2.805
76	12.25	10.404	8.284	0.733	2.120
77	13.25	8.445	8.586	0.744	-0.141
78	14.25	7.107	8.887	0.868	-1.780
79	15.25	7.249	9.189	1.065	-1.940
80	16.25	11.013	9.490	1.303	1.523

REGRESSION OF UNEMPLOYMENT RATE ON TIME, 1967-1973

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	---	2.0859	1.2806	1.63
X1	TIME	0.5876	0.2025	2.90

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 1.071

WITH (7- 2) = 5 DEGREES OF FREEDOM

R-SQUARED = 62.7 PERCENT

R-SQUARED = 55.3 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	9.667	9.667
RESIDUAL	5	5.740	1.148
TOTAL	6	15.407	

FY	X1 TIME	Y UNEMPL.	PRED. Y VALUE	ST.DEV. PRED. Y	RESIDUAL
67	3.0	4.083	3.849	0.730	0.235
68	4.0	4.392	4.436	0.573	-0.044
69	5.0	4.112	5.024	0.453	-0.911
70	6.0	5.100	5.611	0.405	-0.511
71	7.0	7.774	6.199	0.453	1.575
72	8.0	7.627	6.787	0.573	0.841
73	9.0	6.190	7.374	0.730	-1.184

COMPARISON OF STATES

STATE	ADC CASES PER CAPITA	ADC AVERAGE PAYMENT PER RECIPIENT	AMOUNT PAYABLE TO A FAMILY OF FOUR	UNEMPLOYMENT RATE	
	(CASES PER 100 PEOPLE) 1978	(\$ PER YEAR) 1978	(\$ PER MONTH) 1979	1978	1976
ALABAMA	1.57	452	148	6.3	6.8
ALASKA	1.16	1446	450	11.2	8.0
ARIZONA	0.73	603	240	6.1	9.8
ARKANSAS	1.37	572	188	6.3	7.1
CALIFORNIA	2.13	1293	487	7.1	9.2
COLORADO	1.08	900	327	5.5	5.9
CONNECTICUT	1.45	1274	446	5.2	9.5
DELAWARE	1.87	898	287	7.6	8.9
DIST. OF COLUMBIA	4.74	978	253	8.5	9.1
FLORIDA	0.95	616	230	6.6	9.0
GEORGIA	1.57	476	170	5.7	8.1
HAWAII	2.08	1446	546	7.7	9.8
IDAHO	0.78	1098	366	5.7	5.7
ILLINOIS	1.93	985	315	6.1	6.5
INDIANA	0.96	775	275	5.7	6.1
IOWA	1.12	1183	419	4.0	4.0
KANSAS	1.08	1050	350	3.1	4.2
KENTUCKY	1.73	725	235	5.2	5.6
LOUISIANA	1.59	478	187	7.0	6.8
MAINE	1.85	865	332	6.1	8.9
MARYLAND	1.75	823	294	5.6	6.8
MASSACHUSETTS	2.16	1317	419	6.1	9.5
MICHIGAN	2.18	1306	500	6.9	9.4
MINNESOTA	1.17	1294	454	3.8	5.9
MISSISSIPPI	2.20	229	120	7.1	6.6
MISSOURI	1.42	742	270	5.0	6.2
MONTANA	0.81	824	331	6.0	6.1

STATE	ADC	ADC	AMOUNT	UNEMPLOYMENT	
	CASES PER CAPITA (CASES PER 100 PEOPLE) 1978	AVERAGE PAYMENT PER RECIPIENT (\$ PER YEAR) 1978	PAYABLE TO A FAMILY OF FOUR (\$ PER MONTH) 1979	1978	1976
NEBRASKA	0.78	1078	370	2.9	3.3
NEVADA	0.55	806	297	4.4	9.0
NEW HAMPSHIRE	0.88	982	382	3.8	6.4
NEW JERSEY	1.97	1089	386	7.2	10.4
NEW MEXICO	1.38	640	242	5.8	9.1
NEW YORK	2.10	1452	476	7.7	10.3
NORTH CAROLINA	1.32	706	210	4.3	6.2
NORTH DAKOTA	0.74	1048	389	4.6	3.6
OHIO	1.59	887	327	5.4	7.8
OKLAHOMA	1.00	856	349	3.9	5.6
OREGON	1.81	1224	456	6.0	9.5
PENNSYLVANIA	1.83	1116	373	6.9	7.9
RHODE ISLAND	1.84	1148	389	6.6	8.1
SOUTH CAROLINA	1.73	370	142	5.7	6.9
SOUTH DAKOTA	1.07	850	361	3.1	3.4
TENNESSEE	1.35	480	148	5.8	6.0
TEXAS	0.72	414	140	4.8	5.7
UTAH	0.99	1089	389	3.8	5.7
VERMONT	1.31	1153	524	5.7	8.7
VIRGINIA	1.12	843	263	5.4	5.9
WASHINGTON	1.30	1297	483	6.8	8.7
WEST VIRGINIA	1.25	801	249	6.3	7.5
WISCONSIN	1.49	1373	492	5.1	5.6
WYOMING	0.55	983	340	3.3	4.1

AVERAGE ADC PAYMENT PER RECIPIENT BY STATE, 1978
 (\$ PER YEAR) (M DENOTES MICHIGAN)

MIDDLE OF INTERVAL	NUMBER OF OBSERVATIONS	
1450.	3	***
1400.	0	
1350.	1	*
1300.	5	*M***
1250.	1	*
1200.	2	**
1150.	2	**
1100.	5	*****
1050.	2	**
1000.	4	****
950.	0	
900.	3	***
850.	4	****
800.	4	****
750.	2	**
700.	2	**
650.	1	*
600.	2	**
550.	1	*
500.	3	***
450.	1	*
400.	1	*
350.	1	*
300.	0	
250.	1	*

Source: Social Security Bulletin, Annual Statistical Supplement, 1977-79,
 p. 253.

ADC AMOUNT PAYABLE TO A FAMILY OF FOUR BY STATE, 1979
 (\$ PER MONTH) (M DENOTES MICHIGAN)

MIDDLE OF INTERVAL	NUMBER OF OBSERVATIONS	
550.	1	*
525.	1	*
500.	2	M*
475.	3	***
450.	4	****
425.	2	**
400.	3	***
375.	5	*****
350.	4	****
325.	5	*****
300.	2	**
275.	4	****
250.	4	****
225.	2	**
200.	2	**
175.	2	**
150.	4	****
125.	1	*

Source: U.S. Department of Health and Human Services. Characteristics of State Plans for Aid to Families with Dependent Children, 1980 Edition. SSA Pub. No. 80-21235, p. 235-236.

1978 STATE CROSS-SECTION REGRESSION RESULTS
FOR STATES EXCLUDING SOUTHEAST, SOUTHWEST, NEVADA, D.C., ALASKA,
AND HAWAII

REGRESSION OF LOG ADC CASES PER CAPITA ON 1978 UNEMPLOYMENT RATE

31 CASES USED

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	-0.7850	0.1956	-4.01
X1	78 UNEMPL.	0.1970	0.0349	5.64

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS
S = 0.2669
WITH (31- 2) = 29 DEGREES OF FREEDOM

R-SQUARED = 52.3 PERCENT
R-SQUARED = 50.7 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	2.26757	2.26757
RESIDUAL	29	2.06513	0.07121
TOTAL	30	4.33270	

REGRESSION OF LOG ADC CASES PER CAPITA ON 1977 UNEMPLOYMENT RATE

31 CASES USED

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	-0.7641	0.1769	-4.32
X1	77 UNEMPL.	0.1627	0.0265	6.14

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS
S = 0.2549
WITH (31- 2) = 29 DEGREES OF FREEDOM

R-SQUARED = 56.5 PERCENT
R-SQUARED = 55.0 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	2.44869	2.44869
RESIDUAL	29	1.88401	0.06497
TOTAL	30	4.33269	

REGRESSION OF LOG ADC CASES PER CAPITA ON 1976 UNEMPLOYMENT RATE

31 CASES USED

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	-0.6832	0.1444	-4.73
X1	76 UNEMPL.	0.1387	0.0198	7.01

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 0.2354

WITH (31- 2) = 29 DEGREES OF FREEDOM

R-SQUARED = 62.9 PERCENT

R-SQUARED = 61.6 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	2.72549	2.72549
RESIDUAL	29	1.60721	0.05542
TOTAL	30	4.33269	

REGRESSION OF ADC CASES PER CAPITA ON 1976 UNEMPLOYMENT RATE

31 CASES USED

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	0.1443	0.1828	0.79
X1	76 UNEMPL.	0.1828	0.0250	7.30

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 0.2980

WITH (31- 2) = 29 DEGREES OF FREEDOM

R-SQUARED = 64.7 PERCENT

R-SQUARED = 63.5 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	4.72968	4.72968
RESIDUAL	29	2.57553	0.08881
TOTAL	30	7.30522	

REGRESSION OF ADC CASES PER CAPITA ON AMOUNT PAYABLE TO A FAMILY OF FOUR WITH NO OTHER INCOME

31 CASES USED			ST. DEV.	T-RATIO =
	COLUMN	COEFFICIENT	OF COEF.	COEF/S.D.
	—	0.4634	0.4417	1.05
X1	AMT PAYABLE	0.2941	0.1334	2.20

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS
 S = 0.4645
 WITH (31- 2) = 29 DEGREES OF FREEDOM

R-SQUARED = 14.4 PERCENT
 R-SQUARED = 11.4 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	1.0486	1.0486
RESIDUAL	29	6.2566	0.2157
TOTAL	30	7.3052	

REGRESSION OF ADC CASES PER CAPITA ON 1976 UNEMPLOYMENT RATE AND AMOUNT PAYABLE TO A FAMILY OF FOUR WITH NO OTHER INCOME

31 CASES USED			ST. DEV.	T-RATIO =
	COLUMN	COEFFICIENT	OF COEF.	COEF/S.D.
	—	-0.0900	0.2958	-0.30
X1	76 UNEMPL.	0.1736	0.0266	6.52
X2	AMT PAYABLE	0.0917	0.0910	1.01

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS
 S = 0.2979
 WITH (31- 3) = 28 DEGREES OF FREEDOM

R-SQUARED = 66.0 PERCENT
 R-SQUARED = 63.5 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	2	4.81977	2.40989
RESIDUAL	28	2.48544	0.08877
TOTAL	30	7.30522	

FURTHER ANALYSIS OF VARIANCE
 SS EXPLAINED BY EACH VARIABLE WHEN ENTERED IN THE ORDER GIVEN

DUE TO	DF	SS
REGRESSION	2	4.81977
76 UNEMPL.	1	4.72968
AMT PAYABLE	1	0.09009

REGRESSION OF ADC CASES PER CAPITA ON AN EFFECTIVE WAGE INDEX (DATA NOT AVAILABLE FOR OREGON, WASHINGTON, UTAH AND NEBRASKA)

27 CASES USED

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	1.7731	0.1932	9.18
X1	WAGE INDEX	2.7670	1.4520	1.91

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 0.4773

WITH (27- 2) = 25 DEGREES OF FREEDOM

R-SQUARED = 12.7 PERCENT

R-SQUARED = 9.2 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	0.8275	0.8275
RESIDUAL	25	5.6965	0.2279
TOTAL	26	6.5241	

REGRESSION OF ADC CASES PER CAPITA ON 1976 UNEMPLOYMENT RATE WITH STATES FOR WHICH WAGE INDEX IS NOT AVAILABLE OMITTED

27 CASES USED

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	0.1219	0.2057	0.59
X1	76 UNEMPL.	0.1895	0.0281	6.73

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 0.3046

WITH (27- 2) = 25 DEGREES OF FREEDOM

R-SQUARED = 64.5 PERCENT

R-SQUARED = 63.0 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	1	4.20503	4.20503
RESIDUAL	25	2.31902	0.09276
TOTAL	26	6.52405	

REGRESSION OF ADC CASES PER CAPITA ON 1976 UNEMPLOYMENT RATE AND AN
EFFECTIVE WAGE INDEX

27 CASES USED

	COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
	—	0.4318	0.2100	2.06
X1	76 UNEMPL.	0.1848	0.0248	7.45
X2	WAGE INDEX	2.3629	0.8157	2.90

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 0.2676

WITH (27- 3) = 24 DEGREES OF FREEDOM

R-SQUARED = 73.7 PERCENT

R-SQUARED = 71.5 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	2	4.80581	2.40290
RESIDUAL	24	1.71824	0.07159
TOTAL	26	6.52405	

FURTHER ANALYSIS OF VARIANCE

SS EXPLAINED BY EACH VARIABLE WHEN ENTERED IN THE ORDER GIVEN

DUE TO	DF	SS
REGRESSION	2	4.80581
76 UNEMPL.	1	4.20503
WAGE INDEX	1	0.60078

	1971 FYE ENROLLMENT (X1000)	1981 FYE ENROLLMENT (X1000)	FYE/HC (1978)	STATE \$ 1971 (X1000)	STATE \$ 1981 (X1000)
CENTRAL MICH	13.8000	16.4400	0.89662	12186.8	27721.
EASTERN MICH	18.5000	14.0270	0.73724	17898.3	32647.
FERRIS STATE	9.7000	11.7640	1.09473	9574.9	20507.
GRAND VALLEY	3.6580	4.8350	0.76235	3490.1	12455.
L. SUPERIOR	1.5450	2.0540	0.84257	1767.5	5388.
MICH STATE	40.2000	41.3440	0.88129	63187.1	137149.
MICH TECH	5.4930	8.4150	1.07893	7963.8	19647.
NORTHERN MI	7.5280	8.0500	0.94943	7319.1	19572.
OAKLAND UNIV	7.1000	9.7000	0.80322	6304.0	18545.
SAGINAW	2.0000	3.0200	0.70063	2047.9	6278.
UM ANN ARBOR	34.4880	35.2760	0.96324	70818.8	137400.
DEARBORN	1.3500	4.7530	0.73025	2202.6	8775.
FLINT	1.7000	3.1640	0.72538	1738.8	8059.
WAYNE STATE	27.7900	25.3120	0.73716	42823.3	92217.
WESTERN MICH	22.5960	19.1390	0.83902	21485.3	43865.

REGRESSION OF GROWTH IN STATE APPROPRIATIONS ON 1971 ENROLLMENT AND FYE/HEADCOUNT:

COLUMN	COEFFICIENT	ST. DEV. OF COEF.	T-RATIO = COEF/S.D.
—	18.9524	3.4698	5.46
1971 ENROLLMENT	-0.1592	0.0407	-3.91
FYE/HC	-8.1644	4.0913	-2.00

THE ST. DEV. OF Y ABOUT REGRESSION LINE IS

S = 1.921

WITH (15- 3) = 12 DEGREES OF FREEDOM

R-SQUARED = 64.9 PERCENT

R-SQUARED = 59.0 PERCENT, ADJUSTED FOR D.F.

ANALYSIS OF VARIANCE

DUE TO	DF	SS	MS=SS/DF
REGRESSION	2	81.844	40.922
RESIDUAL	12	44.292	3.691
TOTAL	14	126.136	

FURTHER ANALYSIS OF VARIANCE

SS EXPLAINED BY EACH VARIABLE WHEN ENTERED IN THE ORDER GIVEN

DUE TO	DF	SS
REGRESSION	2	81.844
ENROLLMENT	1	67.146
FYE/HC	1	14.698

ROW	Y	PRED. Y VALUE	ST.DEV. PRED. Y	RESIDUAL
CENTRAL MICH	8.350	9.435	0.531	-1.085
EASTERN MICH	6.040	9.988	0.731	-3.948
FERRIS	7.710	8.470	1.147	-0.760
GRAND VALLEY	13.210	12.146	0.693	1.064
L. SUPERIOR	11.490	11.827	0.683	-0.337
MICH STATE	7.850	5.357	1.197	2.493
MICH TECH	9.210	9.269	1.147	-0.059
NORTHERN	10.070	10.002	0.703	0.068
OAKLAND	11.100	11.264	0.573	-0.164
SAGINAW	11.550	12.914	0.859	-1.364
UM ANN ARBOR	6.680	5.597	1.046	1.083
DEARBORN	14.440	12.775	0.802	1.665
FLINT	16.140	12.759	0.806	3.381
WAYNE STATE	7.770	8.510	0.947	-0.740
WESTERN	7.210	8.505	0.633	-1.295

TABLE M1. COMPARABLE UNITS FOR MENTALLY ILL*
(COMBINED ADULT AND CHILD FACILITIES)

	FY71	FY75	FY79	FY80	FY81	FY82
Caro						
pop.	-	-	16	16	12	14
s/p	-	-	1.38	1.38	1.25	1.24
\$ per p	-	-	28,300	32,012	41,650	35,095
Clinton (A & C)						
pop.	1350	750	788	820	604	438
s/p	.91	1.21	1.54	1.48	1.55	1.69
\$ per p	10,693	19,828	31,548	33,774	40,896	49,253
Det. Psych. (A & C) - {W}						
pop.	-	180	187	184	138	146
s/p	-	1.19	1.75	1.79	1.83	1.50
\$ per p	-	23,758	42,388	49,551	59,532	56,450
Kalamazoo (A & C)						
pop.	2200	825	840	781	705	525
s/p	.52	1.27	1.23	1.22	1.15	1.25
\$ per p	5,920	19,211	23,040	26,893	28,597	33,367
Metro. Regional - {W}						
pop.	-	-	172	172	-	-
s/p	-	-	1.56	1.55	-	-
\$ per p	-	-	36,653	43,797	-	-
Newberry {U}						
pop.	650	200	225	178	147	114
s/p	.75	2.22	1.48	1.64	1.44	1.41
\$ per p	9,042	35,561	29,550	36,055	40,079	38,897
Northville {W}						
pop.	1200	850	690	633	710	541
s/p	.84	1.04	1.36	1.44	1.24	1.19
\$ per p	9,757	16,268	30,186	35,670	34,115	37,015
Reuther {W}						
pop.	-	-	-	300	265	323
s/p	-	-	-	1.35	1.37	1.18
\$ per p	-	-	-	16,667	38,695	33,389
Traverse City (A & C) - {U}						
pop.	1700	750	469	449	379	293
s/p	.65	1.28	1.55	1.61	1.49	1.45
\$ per p	7,409	19,697	31,745	37,270	37,682	41,209
Ypsilanti (A & C)						
pop.	2520	875	1000	902	822	646
s/p	.50	1.25	1.26	1.27	1.13	1.10
\$ per p	6,074	19,881	25,443	28,700	29,745	33,831
AVERAGES						
s/p	.69	1.25	1.40	1.41	1.31	1.29
\$ per p	7,583	19,888	28,882	32,126	34,854	38,048

*The figures for Tables M1. through M6. were computed from the annual appropriation bills. 's/p' refers to the number of staff members per patient, and '\$ per p' refers to the appropriation per patient for each individual facility. {U} designates facilities located in the upper-most regions of the state and {W} designates facilities located in Wayne County.

TABLE M2. COMPARABLE UNITS FOR MENTALLY ILL ADULTS ONLY

	FY71	FY75	FY79	FY80	FY81	FY82
Caro						
pop.	-	-	16	16	12	14
s/p	-	-	1.38	1.38	1.25	1.24
\$ per p	-	-	28,300	32,012	41,650	35,095
Clinton						
pop.	-	-	647	679	479	315
s/p	-	-	1.50	1.38	1.42	1.60
\$ per p	-	-	30,379	31,088	37,220	43,909
Det. Psych. {W}						
pop.	-	-	172	172	126	135
s/p	-	-	1.75	1.78	1.86	1.48
\$ per p	-	-	43,099	49,391	61,057	56,581
Kalamazoo						
pop.	-	-	782	723	647	473
s/p	-	-	1.19	1.18	1.11	1.18
\$ per p	-	-	22,287	25,523	27,415	30,880
Metro. Regional - {W}						
pop.	-	-	172	172	-	-
s/p	-	-	1.56	1.55	-	-
\$ per p	-	-	36,653	43,797	-	-
Newberry {U}						
pop.	650	200	225	178	147	114
s/p	.75	2.22	1.48	1.64	1.44	1.41
\$ per p	9,042	35,561	29,550	36,055	40,079	38,897
Northville {W}						
pop.	1200	850	690	633	710	541
s/p	.84	1.04	1.36	1.44	1.24	1.19
\$ per p	9,757	16,268	30,186	35,670	34,115	37,015
Reuther {W}						
pop.	-	-	-	300	265	323
s/p	-	-	-	1.35	1.37	1.18
\$ per p	-	-	-	16,667	38,695	33,389
Traverse City						
pop.	-	-	412	379	331	243
s/p	-	-	1.52	1.61	1.44	1.41
\$ per p	-	-	30,932	36,952	36,106	39,610
Ypsilanti						
pop.	-	-	920	822	742	572
s/p	-	-	1.20	1.20	1.06	1.00
\$ per p	-	-	23,682	26,450	27,414	30,185
AVERAGES						
s/p	-	-	1.37	1.37	1.26	1.23
\$ per p	-	-	28,063	30,890	33,877	35,697

TABLE M3. COMPARABLE UNITS FOR MENTALLY ILL CHILDREN ONLY

	FY71	FY75	FY79	FY80	FY81	FY82
Clinton						
pop.	-	-	141	141	125	123
s/p	-	-	1.73	2.00	2.02	1.91
\$ per p	-	-	36,912	46,710	54,982	62,985
Det. Psych.						
pop.	-	-	15	12	12	11
s/p	-	-	1.70	2.03	1.50	1.78
\$ per p	-	-	34,240	51,842	43,517	54,846
Kalamazoo						
pop.	-	-	58	58	58	52
s/p	-	-	1.73	1.76	1.71	1.86
\$ per p	-	-	33,195	43,974	41,784	55,994
Traverse City						
pop.	-	-	57	70	48	50
s/p	-	-	1.79	1.62	1.83	1.66
\$ per p	-	-	37,623	38,994	48,548	48,980
Ypsilanti						
pop.	-	-	80	80	80	74
s/p	-	-	1.92	1.92	1.81	1.88
\$ per p	-	-	45,701	51,818	51,369	62,018
AVERAGES						
s/p	-	-	1.78	1.87	1.86	1.85
\$ per p	-	-	38,302	46,077	50,335	59,034

TABLE M4. COMPARABLE CENTERS FOR THE DEVELOPMENTALLY DISABLED

	FY71	FY75	FY79	FY80	FY81	FY82
Alpine {U}						
pop.	190	183	180	180	83	-
s/p	.76	1.03	1.34	1.36	1.18	-
\$ per p	8,888	15,308	25,282	28,068	37,229	-
Caro						
pop.	1400	803	658	613	526	496
s/p	.61	.98	1.23	1.28	1.14	1.08
\$ per p	6,546	13,926	21,673	24,698	25,613	27,208
Mt. Pleasant						
pop.	1300	820	684	616	410	378
s/p	.63	.93	1.16	1.24	1.22	1.19
\$ per p	6,369	12,695	20,625	24,133	29,454	32,013
Coldwater						
pop.	2450	1063	894	804	513	420
s/p	.46	1.04	1.20	1.29	1.30	1.11
\$ per p	4,920	14,767	22,162	26,233	27,192	26,498
Hillcrest						
pop.	350	320	375	375	294	249
s/p	.76	1.08	1.14	1.13	1.17	1.19
\$ per p	7,970	14,777	20,330	22,319	25,682	29,643
Muskegon						
pop.	220	440	387	401	370	401
s/p	1.01	1.12	1.13	1.09	.98	.83
\$ per p	10,709	14,536	21,178	22,977	22,561	20,789
Newberry {U}						
pop.	450	303	284	275	222	197
s/p	.45	.63	1.25	1.27	1.33	1.21
\$ per p	4,670	7,966	23,329	26,682	30,566	31,676
Northville {W}						
pop.	-	220	176	176	70	-
s/p	-	1.02	1.21	1.37	1.17	-
\$ per p	-	14,060	24,657	28,658	43,064	-
Oakdale						
pop.	2900	1475	1051	912	733	556
s/p	.46	.81	1.31	1.46	1.21	1.37
\$ per p	4,973	11,657	24,612	30,119	28,020	34,953
Southgate {W}						
pop.	-	-	160	160	158	160
s/p	-	-	1.81	1.78	1.32	1.23
\$ per p	-	-	35,934	38,734	33,196	32,104
AVERAGES						
s/p	.54	.94	1.24	1.31	1.20	1.15
\$ per p	5,708	13,136	22,919	26,547	27,840	29,140

TABLE M5. SPECIAL FACILITIES

	FY71	FY75	FY79	FY80	FY81	FY82
Center for Forensic Psychiatry						
pop.	-	131	128	120	220	210
s/p	-	1.30	1.75	1.96	1.70	2.12
\$ per p	-	21,218	39,244	62,343	46,766	62,376
Lafayette Center (specialized diagnostic, treatment and research center)						
pop.	130	135	152	140	140	140
s/p	3.04	2.53	2.07	2.79	2.53	2.70
\$ per p	43,489	47,673	58,273	72,177	74,942	98,941
Epic Center (special program to treat children and adolescents who are both mentally ill and functionally retarded)						
pop.	-	-	-	30	20	30
s/p	-	-	-	2.11	1.55	2.23
\$ per p	-	-	-	46,090	36,805	63,617

TABLE M6. FACILITIES WITH SPECIAL FUNCTIONS OR UNIQUE CIRCUMSTANCES

	FY71	FY75	FY79	FY80	FY81	FY82
MIMH (MI) - primary function changed from long-term to short-term care						
pop.	650	175	74	74	74	-
s/p	.68	1.45	1.76	1.71	.58	-
\$ per p	8,715	25,924	51,549	56,981	43,589	-
Hawthorne (MI-C) - operates extensive day-treatment center						
pop.	140	150	164	162	150	143
s/p	2.58	2.31	2.49	2.49	2.30	1.99
\$ per p	31,665	37,853	52,875	57,805	61,003	64,471
Macomb-Oakland (DD) - operates extensive day-treatment center						
pop.	-	-	106	106	105	106
s/p	-	-	3.04	3.37	2.50	1.23
\$ per p	-	-	61,799	72,843	62,534	35,925
Plymouth (DD) - artificially high s/p ratios caused by 1980 civil suit						
pop.	1180	910	787	729	343	102
s/p	.84	1.00	1.13	1.73	2.66	2.32
\$ per p	9,225	14,535	20,799	33,977	43,443	68,502

TABLE M7. PATIENTS AND EMPLOYEES IN
STATE MENTALLY ILL FACILITIES FROM 1955 TO 1982*

END OF FY	PATIENTS IN STATE PSYCH. HOSPITALS	EMPLOYEES IN STATE PSYCH. HOSPITALS	STAFF/PATIENT RATIOS
1955	17,075	4,997	.29
1960	19,059	5,656	.30
1965	17,053	6,275	.37
1970	11,134	7,698	.69
1971	10,540	7,410	.70
1975	4,925	7,399	1.50
1976	4,354	6,620	1.52
1977	4,405	7,098	1.61
1978	4,779	7,657	1.60
1979	4,712	7,904	1.68
1980	4,527	7,803	1.72
1981	4,386	6,118	1.39
1982	3,787	5,163	1.36

*The figures for Fiscal Years 1971, 1981, and 1982 are from the annual appropriation bills. The rest of the figures are taken from a table supplied by the Michigan Senate Fiscal Agency and put out by the Department of Mental Health's Office of Communications, 5/6/81.

GRAPH M1 PATIENTS AND EMPLOYEES
IN STATE PSYCHIATRIC HOSPITALS
(see note for Graph M2)

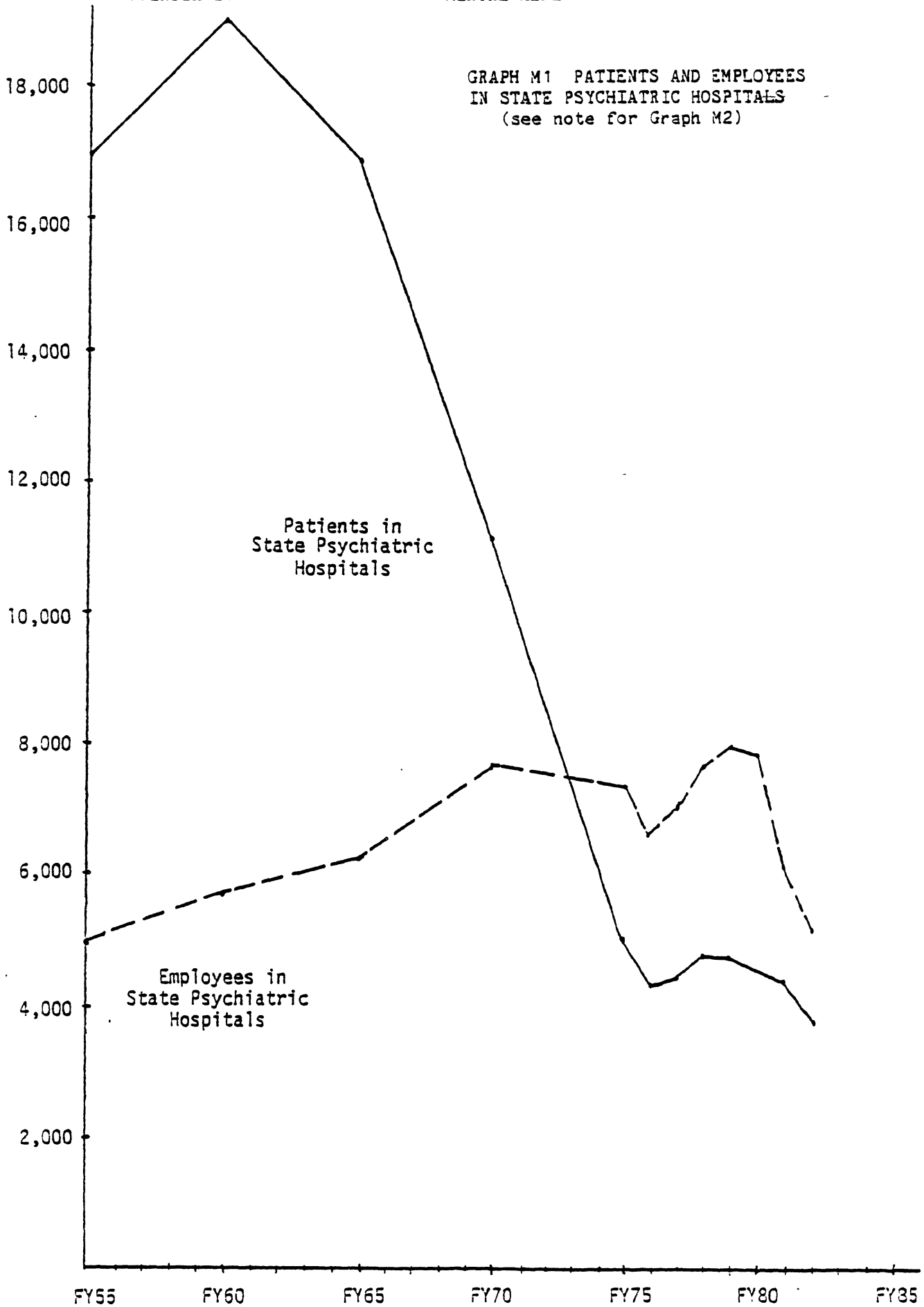
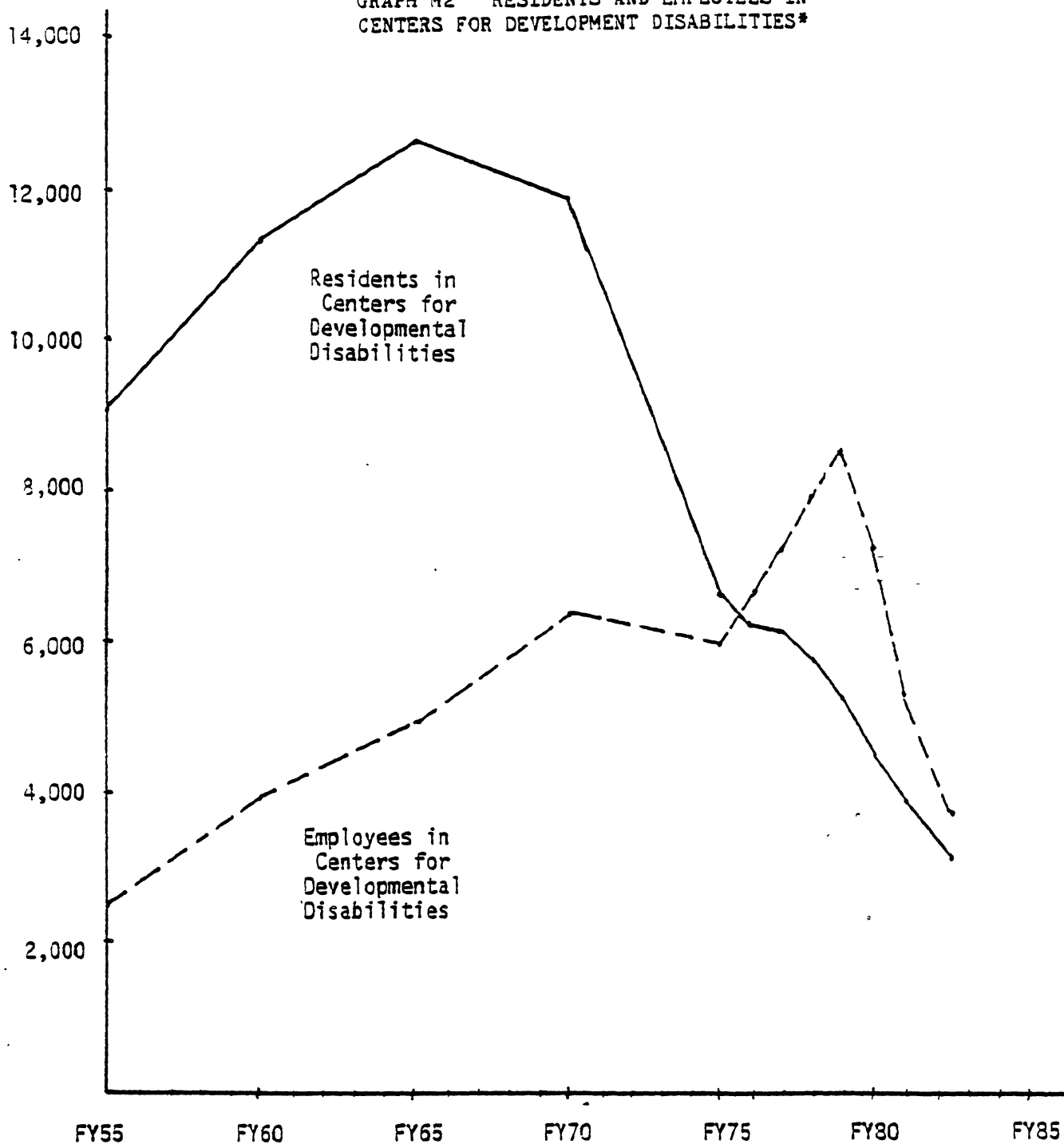


TABLE M8. RESIDENTS AND EMPLOYEES IN STATE
CENTERS FOR THE DEVELOPMENTALLY DISABLED FROM 1955 TO 1982*

END OF FISCAL YEAR	RESIDENTS IN CENTERS FOR DEVELOPMENTAL DISABILITIES	EMPLOYEES IN CENTERS FOR DEVELOPMENTAL DISABILITIES	STAFF/PATIENTS RATIOS
1955	9,025	2,475	.27
1960	11,261	3,913	.35
1965	12,516	4,882	.39
1970	11,844	6,338	.54
1971	11,485	6,683	.58
1975	6,537	5,902	.90
1976	6,191	6,434	1.04
1977	6,047	7,196	1.19
1978	5,728	7,850	1.37
1979	5,142	8,474	1.65
1980	4,371	7,153	1.64
1981	3,827	5,224	1.37
1982	3,065	3,645	1.19

*The figures for Fiscal Years 1971, 1981 and 1982 are from the annual appropriation bills. The rest of the figures are taken from a table supplied by the Michigan Senate Fiscal Agency and put out by the Department of Mental Health's Office of Communications, 5/6/81.

GRAPH M2 RESIDENTS AND EMPLOYEES IN CENTERS FOR DEVELOPMENT DISABILITIES*



*Figures for Fiscal Years 1971, 1981 and 1982 are from the annual appropriation bills. The rest of the figures for the graph are taken from a table supplied by the Michigan Senate Fiscal Agency and put out by the Department of Mental Health's Office of Communications, 5/6/81. The figures are listed in Table M7 and M8.

TABLE M9. SAVINGS IF STAFF/PATIENT RATIOS HAD BEEN
CONTINUED AT THE FY1971 LEVELS OF .70 FOR MENTALLY ILL
HOSPITALS AND .58 FOR THE DEVELOPMENTALLY DISABLED CENTERS*
(In thousands of dollars)

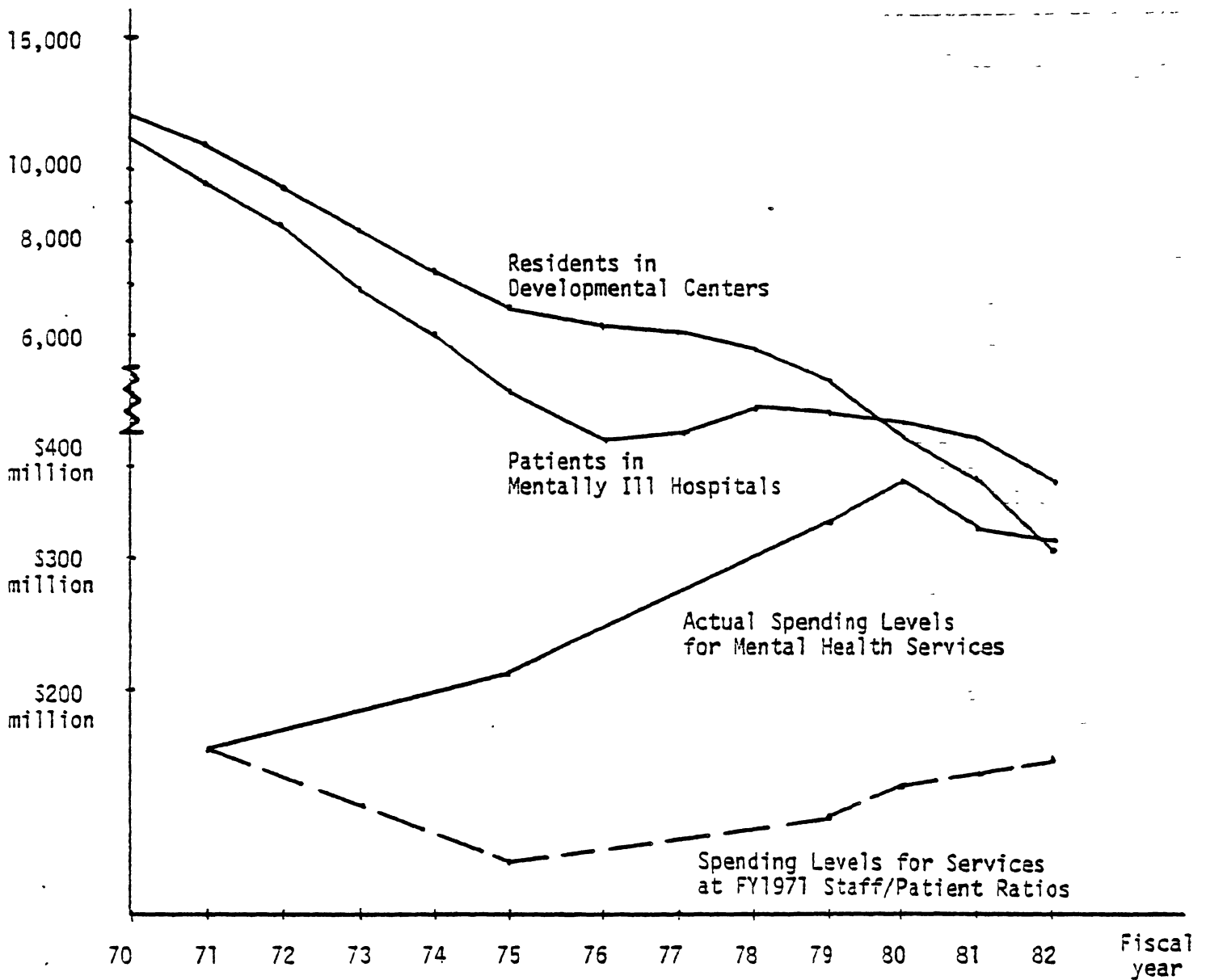
MENTALLY ILL HOSPITALS FOR BOTH ADULTS AND CHILDREN					
	FY1975	FY1979	FY1980	FY1981	FY1982
s/p levels	1.50	1.68	1.72	1.39	1.36
actual \$	116,467	172,125	203,244	195,620	191,435
\$ at FY71 levels	54,584	72,026	83,070	98,936	98,955
SAVINGS	\$61,883	\$100,099	\$120,174	\$96,684	\$92,480
DEVELOPMENTALLY DISABLED CENTERS					
	FY1975	FY1979	FY1980	FY1981	FY1982
s/p levels	.90	1.65	1.64	1.36	1.19
actual \$	88,352	154,402	172,618	131,402	116,602
\$ at FY71 levels	57,134	54,461	61,258	56,185	57,075
SAVINGS	\$31,218	\$99,941	\$111,360	\$75,107	\$59,527
TOTAL SAVED	\$93,101	\$200,040	\$231,534	\$171,791	\$152,007
PERCENT OF TOTAL BUDGET	35.3%	43.1%	40.3%	30.8%	24.2%

*Spending levels were calculated by adding the individual facility appropriations to the corresponding central accounts and then prorating discretionary and institutional service funds between the mentally ill hospitals and the developmentally disabled centers.

Staff/patient ratios are taken from the same sources as Tables M7 and M8. Expenditure figures are from the annual appropriation bills and the Executive Budgets.

GRAPH M3 GROWTH TRENDS OF RESIDENTS AND SPENDING LEVELS IN MENTAL HEALTH FACILITIES*

Log-Scale



*Background figures for the graphs are listed in Tables M7, M8, M9 and M10. Sources are the Michigan Senate Fiscal Agency, Department of Mental Health, appropriation bills and Executive Budgets. See the note for Table M9 for an explanation of how the spending levels were calculated.

TABLE M10. FUNDING LEVELS FOR THE DEPARTMENT OF MENTAL HEALTH BY THREE CATEGORIES: EXECUTIVE, COMMUNITY MENTAL HEALTH AND SERVICES*
(In thousands of dollars)

	FY71	FY75	FY79	FY80	FY81	FY82
EXECUTIVE						
Spending levels	1,738	4,588	22,010	27,815	41,659	42,611
% of total budget	.90%	1.74%	4.74%	4.85%	7.46%	6.78%
COMMUNITY MENTAL HEALTH						
Spending levels	23,689	48,493	106,250	165,777	188,783	273,925
% of total budget	12.32%	18.40%	22.90%	28.88%	33.80%	43.56%
SERVICES						
Spending levels	166,911	210,518	335,803	380,431	328,080	312,256
% of total budget	86.78%	79.86%	72.36%	66.27%	58.74%	49.66%
TOTAL	192,337	263,599	464,062	574,023	558,522	628,792

BREAKDOWN OF SERVICES:

MENTALLY ILL SERVICES (including special projects)

Spending levels	96,252	122,167	180,737	205,991	206,555	194,597
-----------------	--------	---------	---------	---------	---------	---------

DEVELOPMENTAL SERVICES (including special projects)

Spending levels	70,659	88,352	155,066	174,440	132,349	117,660
-----------------	--------	--------	---------	---------	---------	---------

*Figures are calculated from the annual appropriation bills and the Executive Budgets. EXECUTIVE includes executive offices, data processing and grant administration. COMMUNITY MENTAL HEALTH includes Community Mental Health programs, Residential Services and Community Placement. SERVICES includes all mental health facilities, special projects, institutional services, grants and discretionary funds. Expenditures for the different years were made comparable by excluding unemployment compensation funds in FY's 81 and 82 and excluding appropriations for the University of Michigan mental health facilities in FY71.

TABLE M11. FULL-TIME EQUATED EMPLOYEES
BUDGETED FOR THE DEPARTMENT OF MENTAL HEALTH*

FISCAL YEARS	EXECUTIVE	COMMUNITY MENTAL HEALTH	SERVICES	TOTAL
FY1971	103.5	27.9	14,183.0	14,314.4
FY1975	236.5	21.8	13,477.6	13,735.9
FY1979	802.1	24.5	15,086.0	15,912.6
FY1980	918.3	106.5	15,272.6	16,297.4
FY1981	1,613.5	163.5	11,573.3	13,350.3
FY1982	1,268.1	358.1	8,988.8	10,615.0

*Figures for all years, except for FY1975, are from the annual appropriation bills. FY1975 numbers are from the 1976 Executive Budget. The categories are the same as in Table M10.

NOTE M1. INCENTIVES FOR
REVENUE COLLECTION AT THE LOCAL LEVEL*

The Michigan Legislature is aware of the lack of incentives on the part of community mental health boards to collect third party (insurance) payments or other user fees. PA 423 - 1980 is an attempt to improve the situation by one, encouraging the development of community mental health services and residential homes and two, giving the counties an incentive to collect insurance payments for those services. Effective March 31, 1981, insurance reimbursements will be credited towards the 10% local share needed to gain 90% state payment for community mental health services. Counties that collect the insurance payments would turn the money over to the state. Total county reimbursement by the state would then be 100% of the funds collected for the base fiscal year 1980. Amounts totalling base year collections would be distributed 60% to the county where they originated and 40% to programs of the most need as determined by the Department of Mental Health.

Additionally, the legislature is concerned about the effects of deinstitutionalization on local communities. PA 423 therefore requires the Department of Mental Health to seek the advice and consultation of a local unit of government before planning or locating additional specialized mental health facilities.

*Source: Gongwer Michigan Reports, (12/2/80) and (1/14/81).

NOTE M2. DEMAND INTERDEPENDENCE BETWEEN THE
DEPARTMENTS OF MENTAL HEALTH AND SOCIAL SERVICES

A research working paper by Dr. Floyd Westendorp and Kirk L. Brink of Michigan State University lends support to the argument that demands for services provided by either the Department of Social Services or the Department of Mental Health are very much interrelated. Using various personality and psychological adjustment tests, they compared adolescents at six different treatment centers including day treatment programs and group homes similar to those operated by both Social Services and Mental Health as well as state hospitals and outpatient clinics operated solely by Mental Health authorities. The authors reported that because "personality, academic achievement, and adjustment variables do not seem to distinguish most of the groups from each other, it is our conclusion that the majority of the patients are very similar in terms of problems and needs."

They discuss other factors which seem to have had more of an effect on placement than the diagnosis:

"Recency of onset (or chronicity) seems to be more important than diagnosis in determining the placement for the adolescent. Greater specificity would be helpful in understanding more fully the meaning of onset. For the present study, onset was mainly determined by when the parent decided their adolescent needed out- side intervention..."

"A review of the referral source patterns among the groups leads one to question to what degree financing determines treatment decisions. For example, the group home received almost three-fourths of its referrals from the court or the Department of Social Services. Although this type of treatment may be most appropriate for adolescents who have a high degree of court involvement, the lack of insurance may force some families to turn to the court for assistance when they otherwise would not. Similarly, one wonders how many patients were placed in a private hospital program because medical insurance would pay for that program, when the group home may have been a more appropriate placement."

If no significant differences exist between the types of patients placed in the different facilities, demand for treatment from a group home operated by the Department of Social Services could easily increase with a decline in the availability of services offered by the Department of Mental Health. Certainly the courts and officials from the departments themselves would not recommend a facility if they were aware that it could not accept new patients, but would give referrals to places where there was a good chance the person would be accepted for treatment. Given that the referral is more likely to be based on factors such as the availability of insurance or the preferences of the parents than on a standardized diagnosis of need, it is not far-fetched to suggest that the degree of state funding will also influence the demand at group homes, clinics and state hospitals (as well as private hospitals and clinics).

TABLE 01
DEPARTMENT OF CORRECTIONS

GROWTH RATES 1971-1981

ADMINISTRATIVE OVERHEAD

	EXPENDITURE (x1000)				BUDGET SHARE	
	G	S	R	F	G	S
1971	2115.9	1949.7	-0-	166.2	.06	.09
1981	15206.6	13988.6	-0-	2716.0	.15	.23

RATE OF GROWTH

21.2	21.1	-0-	31.3
------	------	-----	------

FIELD SERVICES & RESIDENTIAL PROGRAMS

	EXPENDITURE (x1000)				BUDGET SHARE	
	G	S	R	F	G	S
1971	3668.8	3552.8	-0-	316.0	.10	.15
1981	36566.8	36403.6	50.0	113.2	.35	.60

RATE OF GROWTH

25.2	26.2	*	-9.5
------	------	---	------

PRISONS

	EXPENDITURE (x1000)				BUDGET SHARE	
	G	S	R	F	G	S
1971	26755.5	26755.5	-0-	-0-	.76	1.16
1981	141963.2	139887.8	243.3	384.1	1.34	2.29

RATE OF GROWTH

17.7	17.5	*	*
------	------	---	---

TOTAL DEPARTMENT OF CORRECTIONS

	EXPENDITURE (x1000)				BUDGET SHARE	
	G	S	R	F	G	S
1971	32540.2	32058.0	-0-	482.2	.92	1.40
1981	193736.6	190180.0	293.3	3213.3	1.84	3.12

TABLE 02
DEPARTMENT OF CORRECTIONS
DISTRIBUTION OF MINIMUM TERMS AND AVERAGE
SENTENCE LENGTH 1974 & 1978

1974											
MIN. TERM	.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	
COMMITMENTS	88	776	985	904	399	568	201	115	19	339	
COMMIT.-YRS	44	776	1478	1808	998	1704	704	460	86	1695	
MIN. TERM	5.5	6.0	6.5	7.0	7.5	8.0	9.0	10.0	11-15		
COMMITMENTS	12	82	29	65	93	30	7	169	84		
COMMIT.-YRS	66	492	189	455	696	240	63	1690	1050		
MIN. TERM	20	25	35	LIFE	FLAT	LIFE					
COMMITMENTS	36	17	10	80	64						
COMMIT.-YR	720	425	350								
1978											
MIN. TERM	.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	
COMMITMENTS	155	1010	971	1145	511	875	254	309	49	461	
COMMIT.-YRS	77.5	1010	1456	2290	1278	2625	889	1236	220	2305	
MIN. TERM	5.5	6.0	6.5	7.0	7.5	8.0	9.0	10.0	11-15	20	
COMMITMENTS	19	184	39	150	106	98	52	229	187	57	
COMMIT.-YRS	105	1104	254	1050	795	784	468	2290	2337	1140	
MIN. TERM	25	35	LIFE	FLAT	LIFE						
COMMITMENTS	15	16	139	88							
COMMIT.-YR	375	560									
		1974	1978								
WEIGHTED SUM		16188	24648								
WEIGHTED AVG.		3.13	3.46								

Source: Michigan Department of Corrections-Statistical Presentation, 1978 and "Dimensions", 1974.

TABLE 03
STATE EXPENDITURES ON CORRECTIONS 1971-77
(x1000)

	1971	1972	1973	1974	1975	1976	1977	GROWTH RATE
U.S.	1387331	1467522	1613049	1895434	2291749	2589609	2970627	13.5
MICH	46250	53599	58624	62285	71552	87345	112618	16.0
OTHER GT								
LK ST	50279	53298	56409	60997	69622	82146	86140	9.4

TABLE 04
FULL-TIME EQUIVALENT EMPLOYMENT
STATE DEPARTMENTS OF CORRECTIONS
OCT. 1971-OCT. 1977

	1971	1972	1973	1974	1975	1976	1977	GROWTH RATE
U.S.	106045	107785	112176	121160	126933	134420	145552	5.4
MICH	3178	3132	3143	3312	3659	4049	5401	9.2
OTHER								
GT LK.	3635	3884	3837	3956	4067	4100	4316	2.9

TABLE 05
MONTHLY PAYROLL
STATE DEPARTMENTS OF CORRECTIONS
OCT. 1971- OCT. 1977
(x1000)

	1971	1972	1973	1974	1975	1976	1977	GROWTH RATE
U.S.	78648	86710	95565	110710	123252	137928	163079	12.9
MICH	2963	3013	3310	3538	4146	4848	8375	18.9
OTHER								
GT LK	3271	3161	3435	3715	4138	4279	5117	7.7

Source: "Trends in Expenditure and Employment Data for the Criminal Justice System"- U.S. Department of Justice. Law Enforcement Assistance Administration, National Criminal Justice Information and Statistics Service.

TABLE 06
TOTAL CRIMINAL JUSTICE ACTIVITY
1978

	CRIMINAL JUSTICE	POLICE PROTEC.	JUDI- CIAL	LEGAL SERVICES &PROSECUTION	PUBLIC DEFENSE	CORREC- TIONS	OTHER
U.S.	6688	1892	1013	386	98	3177	122
MICH.	278	85	37	11	1	142	2
OTHER GLS	182	48	20	11	1	98	4

NOTE: OTHER GLS ARE 4-STATE AVERAGES FOR ILLINOIS, INDIANA, OHIO AND WISCONSIN IN THE ABOVE TABLES.

SOURCE: SOURCEBOOK OF CRIMINAL JUSTICE ACTIVITY-1980. U.S. DEPARTMENT OF JUSTICE.

TABLE 07
PER INMATE COSTS - PRISONS - 1981

PRISON	#OF INMATES	EXPENDITURE	COST PER INMATE
SPSM	5434	39040100	7184
IONIA COMPLEX	2828	26434100	9347
MARQUETTE	1030	12123800	11771
KINROSS	628	7959700	12675
MUSKEGON	607	6090300	10033
HURON VALLEY			
WOMEN'S	417	5181100	12425
MICHIGAN DUNES	324	4888600	15088
PHOENIX	320	4668300	14588

Source: 1981 Appropriations

TABLE 08
FTE/CAPACITY RATIOS
PRISONS-1981

PRISON	APPROXIMATE CAPACITY	FTE 1981	FTE/CAP
SPSM	5200	1185.1	.228
IONIA COMPLEX	2635	840.0	.318
MARQUETTE	985	365.6	.371
KINROSS	628	253.1	.403
MUSKEGON	607	193.1	.318
HURON VALLEY			
WOMEN'S	400	158.4	.396
MICHIGAN DUNES	328	169.4	.516
PHOENIX	311	183.5	.590

Approximate capacity and FTE figures are from 1982 Executive Budget.

BIBLIOGRAPHY

- Brinker, Paul A. and Klos, Joseph J. Poverty, Manpower, and Social Security. Austin Press, 1976.
- Citizens Research Council of Michigan. Council Comments. No's 899, 900, 901, 902, 905, 917, 918, 919, 922.
- Coe, Richard, D. "A Preliminary Empirical Examination of the Dynamics of Welfare Use." From Vol. IX of Five Thousand American Families. Institute for Social Research. University of Michigan, Ann Arbor. 1981.
- Coe, Richard. "Dependency and Poverty in the Short and Long Run." From Vol. IV of Five Thousand American Families. Institute for Social Research, University of Michigan, Ann Arbor. 1978.
- Cohen, Wilbur J. Health, Education, and Welfare: Accomplishments 1963-1968, Problems and Challenges, and Look to the Future. A Report to Lyndon B. Johnson. Department of Health, Education, and Welfare.
- Courant, Paul N., Gramlich, Edward M., Rubinfeld, Daniel L. "Why Voters Support Tax Limitation Amendments: The Michigan Case." National Tax Journal. March 1980.
- Gongwer News Service, Inc. Gongwar Michigan Report. January 1, 1980 through May 19, 1981.
- Johnson, George. Effective Wage Index by States.
- Matthews, Lois. "What Happens to Human Services During a Recession? A Case Study of Michigan." New England Journal of Human Services. October 1980.
- Michigan Efficiency Task Force. Summary Findings and Recommendations of the Michigan Efficiency Task Force - 1976.
- Michigan Efficiency Task Force. Implementation Progress Report: A Second and Final Summary of Accomplishments - April 1979.
- Michigan State University, Graduate School of Business Administration. Michigan Statistical Abstract, 1979.
- Michigan Welfare Study Commission. Report of the Michigan Welfare Study Commission. February 1971.
- O'Donnell, Peter S. Social Services: Three Years After Title XX. National Governors' Association, Center for Policy Research, Washington, D.C., 1978.
- Platky, Leon D. "Aid to Families with Dependent Children. An Overview, October 1977." Social Security Bulletin, Vol. 40, No. 10,

October 1977.

Social Security Bulletin. July 1978, Vol. 41, No. 7 through June 1979,
Vol. 42, No. 6.

Social Security Bulletin, Annual Statistical Supplement, 1977-79.

State of Michigan. Budget Message of the Governor. FY1971, FY1972,
FY1973, FY1974, FY1975, FY1976, FY1977, FY1978, FY1979, FY1980,
FY1981, FY1982.

State of Michigan. Constitution of 1963.

State of Michigan. Detail of Current Operations of the Executive
Budget. FY1972.

State of Michigan. Detail of State Operations and Local Benefit
Budget. FY1966, FY1967, FY1968, FY1969, FY1970.

State of Michigan. Detail of the Executive Budget. FY1973.

State of Michigan. Economic Report of the Governor, FY1971, FY1972,
FY1974, FY1975, FY1979, FY1980.

State of Michigan. Executive Budget. FY1974, FY1975, FY1976, FY1977,
FY1978, FY1979, FY1980, FY1981, FY1982.

State of Michigan. Public Acts. Sessions 1970-1981.

State of Michigan; Department of Commerce, Technical Report Number 11.
General Fund: Estimate of Revenue and Expenditure to 1975. March
1967.

State of Michigan; Department of Corrections. 1978 Statistical
Presentation.

State of Michigan; Department of Education. 1979-80 Fact Book on
Higher Education in Michigan.

State of Michigan; Department of Education. Ranking of Michigan
Public High School Districts by Selected Financial Data, Bulletin
1012. FY1972, FY1980.

State of Michigan; Department of Management and Budget. Michigan
Manual. 1980.

State of Michigan; Department of Management and Budget, Bureau of the
Budget, Planning and Policy Analysis Division. Population
Projections of the Counties of Michigan. REVISED October 1974.

State of Michigan; Department of Mental Health. Fiscal Year Update
1980-81 to the 1976 Michigan State Plan for Comprehensive Mental
Health Services.

- State of Michigan; Department of Social Services. Monthly Trend Report of Key DSS Statistics. March 1981.
- State of Michigan; Department of Social Services. Profile of Michigan ADC Caseload. Research Paper No. 1, October 1969.
- State of Michigan; Department of Social Services. Public Assistance Statistics Monthly. July 1969-June 1971, October 1979-September 1980.
- State of Michigan; Department of Social Services. Seventeenth Biennial Report, Fiscal Years 1971-1972.
- State of Michigan; Department of Social Services. Sixteenth Biennial Report. Fiscal Years 1973-1974. Financial Report. FY1978, FY1979.
- State of Michigan; Department of Treasury. Annual Report. FY1973, FY1979.
- State of Michigan; Office of the Governor. Into the 80's: 80 Recommendations. The Final Report of the Governor's Committee on the Unification of the Public Mental Health System.
- State of Michigan; Senate Fiscal Agency. "An Analysis of Proposal A," prepared by Theodore A. Ferris, Economist. April 29, 1981.
- State of Michigan; Senate Fiscal Agency. Statistical Report. 1971, 1972, 1974, 1975, 1978, 1980.
- U.S. Department of Commerce, Bureau of Economic Analysis. Newsletter, Table 3: Total Personal Income by States and Regions; Table 4: Population by States and Regions, Selected years 1969-1979.
- U.S. Department of Commerce, Bureau of the Census. Census of Population and Housing Advance Reports. PHC80-V-24.
- U.S. Department of Commerce, Bureau of the Census. Estimates of Population of Countries and Metropolitan Areas. July 1, 1976 and 1977, Series p-25, No. 810. July 1, 1977 and 1978, Series p-25, No. 873.
- U.S. Department of Commerce, Bureau of the Census. General Population Characteristics, Michigan, PC(1)B24, 1970.
- U.S. Department of Commerce, Bureau of the Census. Public Employment in 1979. Series GE79, No. 1.
- U.S. Department of Commerce, Bureau of the Census. Statistical Abstract of the United States. 1979, 1980.
- U.S. Department of Health, Education and Welfare. Public Assistance Programs: Standards for Basic Needs, July 1973. DHEW Publication No. (SRS) 74-03200. July 1974. DHEW Publication No. (SRS) 75-03200.

U.S. Department of Health, Education and Welfare. State Data and State Rankings in Health, Education, Welfare, Part 2 of Health, Education and Welfare Trends, 1964 and 1965 Editions.

U.S. Department of Justice. Bureau of Justice Statistics. Sourcebook of Criminal Justice Statistics - 1980. Washington, D.C.: U.S. Printing Office.

U.S. Department of Justice. Trends in Expenditure and Employment Data for the Criminal Justice System - 1978. Law Enforcement Assistance Administration and U.S. Bureau of the Census.

University of Michigan. An Analysis of Salaries Paid to the Instructional Staff. 1980-1981.

University of Michigan RSQE Forecasting Service. "March Update of the 1981-81 Forecast Supplement: The State of Michigan; Economy." April 6, 1981.

Westendorp, Floyd and Brink, Kirk L. "A comparison of six adolescent treatment settings." College of Human Medicine, Michigan State University, 1980.

CREST Working Papers

- C-1 The Ergodic Behavior of Stochastic Processes of Economic Equilibrium, by Lawrence E. Blume.
- C-2 The Token Economy, Reinforcement and the³ Consumer Model, by John G. Cross.
- C-3 Notes on a Theory of Learning to Search, by John G. Cross.
- C-4 Redistributive Taxation as Social Insurance, by Hal R. Varian.
- C-5 Catastrophe Theory and the Business Cycle, by Hal R. Varian.
- C-6 Household Bequests, Perfect Expectations, and the National Distribution of Wealth, by John P. Laitner.
- C-7 Inflationary Disequilibrium, by John G. Cross.
- C-8 Ellet's Transportation Model of an Economy with Differentiated Commodities and Consumers, I: Generic Cumulative Demand Functions, by Carl P. Simon.
- C-9 Cournot Equilibrium in Factor Markets, by Theodore Bergstrom.
- C-10 Is a Man's Life Worth More Than His Human Capital, by Theodore Bergstrom.
- C-11 A Model of Sales, by Hal R. Varian.
- C-12 New Techniques for the Study of Stochastic Equilibrium Processes, by Lawrence E. Blume.
- C-13 Consistent Expectations, by Lawrence E. Blume.
- C-14 On Baubles and Bubbles, by John G. Cross.
- C-15⁴ When Does Majority Rule Supply Public Goods Efficiently?, by Theodore Bergstrom.
- C-16 "Rational" Duopoly Equilibria, by John P. Laitner.
- C-17 The Natural Rate of Unemployment, by John P. Laitner.
- C-18 Learning to be Rational, by Lawrence E. Blume and David Easley.
- C-19 Notes on Cost-Benefit Analysis, by Hal R. Varian.
- C-20 On Capturing Oil Rents with a National Excise Tax, by Theodore Bergstrom.
- C-21 Cournot, Novshek and the Many Firms, by Theodore Bergstrom.
- C-22 The Nonparametric Approach to Demand Analysis, by Hal R. Varian.
- C-23 National Debt, Social Security, and Bequests*, by John P. Laitner.

- C-24 The Taking of Land: When Should Compensation be Paid?, by Lawrence Blume.
- C-25 Efficiency-Inducing Taxation for a Monopolistically Supplied Depletable Resource, by Theodore C. Bergstrom, John G. Cross and Richard C. Porter.
- C-26 Monopoly and Long-Run Capital Accumulation*, by John Laitner.
- C-27 Information Asymmetry and Optimal Inefficiency Between Principal and Agent, by David Sappington.
- C-28 Micro-Based Estimates of Demand Functions for Local School Expenditures, by Theodore C. Bergstrom, Daniel L. Rubinfeld and Perry Shapiro.
- C-29 A Quantity-Constrained Macroeconomic Model with Price Flexibility, by Allan Drazen.
- C-30 Limited Liability Contracts Between Principal and Agent, by David Sappington.
- C-31 Nonparametric Tests of Consumer Behavior, by Hal R. Varian.
- C-32 The Nonparametric Approach to Production Analysis, by Hal R. Varian.
- C-33 Nonparametric Tests of Models of Investor Behavior, by Hal R. Varian.
- C-34 Indirect Utility and Nonparametric Demand Analysis, by Hal R. Varian.
- C-35 Social Indifference Curves and Aggregate Demand, by Hal R. Varian.
- C-36 Some Aspects of Risk Sharing in Nonclassical Environments, by Hal R. Varian.
- C-37 A Statistical Test of the Revealed Preference Axioms, by Hal R. Varian.
- C-38 When is There a Representative Consumer of Public Goods? - On Separating the Allocation and Distribution Branches of Government, by Theodore Bergstrom and Richard Cornes.
- C-39 Gorman and Musgrave are Dual - An Antipodal Theorem, by Theodore Bergstrom and Richard Cornes.
- C-40 Michigan State Expenditures and The Provision on Public Services, by John G. Cross.
- C-41 Rational Expectations Equilibrium: An Alternative Approach, by Lawrence E. Blume and David Easley.
- C-42 Estimating the Dispersion of Tastes and Willingness to Pay, by Philip E. Howrey and Hal R. Varian.
- C-43 Lectures on Public Economics, by Ted Bergstrom.
- C-44
- C-45 Optimal Regulation of Research and Development Under Imperfect Information, by David Sappington.

- C-46 Oligopoly Behavior When Conjectural Variations are Rational, by John Laitner.
- C-47 Soldiers of Fortune? by Ted Bergstrom.
- C-48 Scalar and Vector Maximization: Calculus Techniques with Economics Applications, by Carl P. Simon.



