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BY THE COMPTROLLER GENERAL



Report To The Congress

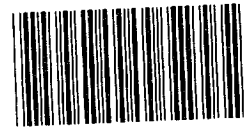
OF THE UNITED STATES

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Reliable Local Unemployment Estimates: A Challenge For Federal And State Cooperation

This report discusses the Federal/State program for estimating unemployment in thousands of cities, counties, and towns. It focuses on the reasons for the unreliability of current statistics. It shows that errors in these figures could mean differences of millions of dollars in Federal assistance for some places.

Developing reliable local unemployment statistics is a formidable assignment, far from being accomplished. Principally, what is needed to improve the statistics is data to establish the proportions of local labor forces (employed and unemployed) not covered by the unemployment insurance system. State roles in this cooperative program may have to be expanded to develop such data. Labor has work underway which will consider this matter and other possibilities for improving these statistics.



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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

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To the President of the Senate and the
Speaker of the House of Representatives

This report discusses problems the Bureau of Labor Statistics has in producing monthly estimates of unemployment in counties, cities, and towns. These statistics are produced with the assistance of the States and are used to distribute billions of Federal dollars to the local level.

Developing reliable local unemployment statistics is a formidable assignment, far from being accomplished. We looked into why the figures are not reliable and what is being done about it. Various members of the Congress requested the review.

Copies of the report are being sent to the Director, Office of Management and Budget, and to the Secretary of Labor.

A handwritten signature in black ink, reading "Thomas B. Steitz".

Comptroller General
of the United States

D I G E S T

Bck. Monthly estimates of unemployment in thousands of counties, cities, and towns by the Labor Department's Bureau of Labor Statistics are not reliable. The Congress requires the Bureau of Labor Statistics to provide local unemployment estimates for use by Federal agencies to allocate funds for jobs programs and other economic assistance to local areas.

AGC 00334

Potential error in estimating local unemployment cannot be measured. Error ranges among areas could be wide. Unemployment may have been consistently understated in some places and consistently overstated in others. Funds probably have been misallocated under allocation formulas which use these poor statistics. Where potential errors in statistics cannot be measured, amounts misallocated cannot be determined. Such errors could mean differences of millions of dollars in Federal assistance received by some areas.

A.C.

Developing reliable unemployment statistics for thousands of localities is a formidable assignment, far from being accomplished. Sampling such a large number of areas to obtain monthly unemployment estimates would be very costly. Although the Bureau of Labor Statistics has research underway on new methods, the only alternative to sampling now is to improve the present system. Principally, this will require better data for estimating the proportions of local labor forces outside the unemployment insurance system. GAO believes it will be difficult, if not impossible, to obtain such data and improve the present system without expanding the roles of States in the program. Labor will consider this matter in conjunction with the research effort on new estimating methods.

AGC 00204

HOW THE ESTIMATES ARE MADE

Local unemployment statistics are developed through a composite technique. This employs Bureau of the Census statewide samples (the Current Population Survey), numbers of persons drawing unemployment compensation, and estimates of persons looking for work but not drawing compensation. The last group includes jobless persons who worked in covered industries but who have exhausted unemployment insurance benefits, have been disqualified from receiving benefits, or have not filed claims, and persons who are just starting to look for work, or who worked in jobs not covered by unemployment insurance.

Under the composite technique, States build employment and unemployment statistics for large urban areas and other State labor markets (comprising one or more counties) by adding the numbers of employed and unemployed persons who are insured to estimates of those uninsured. These figures are then adjusted proportionately to agree in total with statewide statistics from the Current Population Survey. In effect, this adjustment is the first step in distributing the statewide estimates obtained from the Survey to sub-State areas.

To satisfy the needs of program agencies, the adjusted labor market statistics are broken down to smaller areas using labor force relationships among these areas obtained from the 1970 census, population estimates, or claims for unemployment compensation. Small areas are assigned the same unemployment rates as the larger areas they are within.

WHAT THE PRINCIPAL PROBLEMS ARE

The composite technique produces unreliable figures principally because of the methods used to estimate the amount of the local labor force outside the unemployment insurance system and break down labor market statistics to smaller areas. Estimates of local labor

forces not covered by unemployment insurance are based on ratios established more than 15 years ago, mostly on a national level. Using old national relationships to estimate current local conditions is obviously unsatisfactory.

Breakdown of labor market statistics to smaller areas also lacks precision. Distributing employment and unemployment among areas in the same ratios shown by the 1970 census is not likely to reflect the current situation. Using population is unsatisfactory because ratios of employment or unemployment to population are not likely to be the same in all areas.

WHAT NEEDS TO BE DONE

The Bureau of Labor Statistics has taken some actions necessary to improve its statistics. It has increased the sample size of the Current Population Survey to obtain more reliable statewide estimates and begun a program with the States to increase the accuracy of local unemployment insurance claims data.

However, the Bureau has not developed procedures for better estimating proportions of uninsured employment and unemployment in local labor forces. These ratios are needed to provide a better basis for breaking down statewide statistics obtained from the Census Bureau sample. Although the Bureau has not decided how to handle this critical data problem, it now has research underway on it. The job of establishing local relationships between insured and uninsured employment and unemployment may require the help of States. They may be best able to develop the information on labor force characteristics of localities within their jurisdictions necessary to establish such relationships and keep them current.

Federal and State partners also need to agree on procedures to assess the effects of changes in methods before they are implemented officially and to fund the program more efficiently.

RECOMMENDATIONS TO THE
SECRETARY OF LABOR

The Department of Labor should initiate a Federal/State review of the problems experienced in estimating employment and unemployment in local areas. Particular attention should be given to the need to develop better estimates of local employment and unemployment outside the unemployment insurance system. Expanding the roles States have in the program to make use of their potential to provide data which are needed for such estimates should be fully explored.

Labor and the States should also agree on procedures to be followed in proposing and evaluating changes in the methods used to estimate local unemployment and the most efficient way of funding the cost of the program in the States. These matters as well as any changes in assignments of responsibilities under the program should be incorporated in the formal agreements between Labor and the States.

AGENCY COMMENTS

Labor does not believe that a Federal/State review of the problems experienced in estimating unemployment in local areas is necessary. Labor's view is that such a review would duplicate the work of the National Commission on Employment and Unemployment Statistics, which is scheduled to be completed in September 1979.

GAO recognizes the comprehensive work of the Commission and acknowledges that the problems with local statistics are now well defined. GAO's recommendation for a Federal/State review of the program is intended to promote cooperation between Federal and State agencies in solving the data problems that hamper development of better statistics. Labor concurred with the rest of GAO's recommendations. (See pp. 37-39.)

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ABBREVIATIONS

BLS	Bureau of Labor Statistics
CETA	Comprehensive Employment and Training Act
CPS	Current Population Survey
ETA	Employment and Training Administration
LMA	Labor Market Area
OMB	Office of Management and Budget
PWEA	Public Works Employment Act
PWEDA	Public Works and Economic Development Act
SMSA	Standard Metropolitan Statistical Area

CHAPTER 1

INTRODUCTION

For many years economists have used unemployment rates, along with other indicators, to measure the state of the Nation's economy. In the last decade, there has been an emphasis on developing unemployment figures for counties, cities, and towns because the Congress has mandated their use in providing funds for programs, such as public service employment, public works projects, and antirecession assistance, and in targeting these programs to local areas. Each year the distribution of billions of Federal dollars depends on these numbers, and that has created concern in the Congress about the adequacy of the statistics.

WHO PRODUCES UNEMPLOYMENT STATISTICS?

The Bureau of Labor Statistics (BLS) of the Department of Labor, the Bureau of the Census of the Department of Commerce, and State employment security agencies (referred to hereafter as State agencies) which administer unemployment compensation programs have the principal roles in producing unemployment statistics.

BLS has the basic responsibility for establishing methods for, and overseeing the development of, national, State, and local area unemployment estimates. It has had the responsibility for national estimates since 1959. The responsibility for State and local estimates was transferred to BLS in 1972 from the Manpower Administration, the predecessor of the Employment and Training Administration (ETA). BLS is the official source for unemployment data used by Federal agencies.

The Census Bureau, through the Current Population Survey (CPS), obtains and tabulates responses to questions on work activities of selected, sample households. In carrying out this function, the Census Bureau has been designated an agent for BLS.

By agreements between ETA and the States, State agencies are responsible for computing State and local area unemployment estimates according to BLS methods.

The costs of producing national, State, and local estimates of unemployment are not identified separately or in total. Those costs which were identifiable for fiscal year 1978 included about \$12 million for the Census Bureau to conduct the household survey and about \$4.4 million budgeted by BLS for its work on the program.

State agencies develop unemployment estimates under Federal/State agreements with ETA. The work is funded through grants for administration of labor market information programs, and the costs are not segregated. States we visited made rough estimates of the costs they incur on the statistics program which varied from \$23,000 to \$250,000 per year.

WHAT USE IS MADE OF UNEMPLOYMENT STATISTICS?

Federal assistance to States and local areas under several programs is keyed solely or in part to the unemployment estimates BLS is mandated to provide. The major programs provide funds to

- units of local government for training and transitional public service employment under the Comprehensive Employment and Training Act (CETA) of 1973, as amended,
- States and units of local government for public works projects under the Public Works and Economic Development Act (PWEDA), as amended, and title I of the Public Works Employment Act (PWEA) of 1976, as amended, and
- all units of general local government for financial antirecession assistance under title II of PWEA 1/ to prevent them from taking budget related actions contrary to Federal policies.

About \$17 billion was funded for these programs in 1977.

CETA is administered by ETA; PWEDA and title I of PWEA are administered by the Economic Development Administration of the Department of Commerce; title II of PWEA is administered by the Office of Revenue Sharing of the Treasury Department.

1/This program was phased out in September 1978.

BLS collects and publishes unemployment estimates for 50 States, the District of Columbia and Puerto Rico, 281 Standard Metropolitan Statistical Areas (SMSAs)^{1/} and about 2700 Labor Market Areas (LMAs).^{2/} Working from these base estimates, estimates have been produced for the following areas listed by principal program requirement.

CETA:

Prime sponsors ^{3/}	441	
Program agents ^{4/}	868	
Areas of substantial unemployment ^{5/}	<u>410</u>	1,719

PWEA and PWEDA:

Cities over 25,000 population	1,344	
Counties and county equivalents	<u>3,128</u>	4,472

PWEA (antirecession assistance):

Units of general local government potentially eligible (approximately)		40,000
--	--	--------

Estimates for some areas would have been provided by BLS under more than one of the above program categories and to that extent the figures, if summed, would overstate the total number of individual estimates produced each month.

^{1/}Generally defined as a county or group of contiguous counties which contains at least one city of 50,000 persons or more or twin cities with a combined population of at least 50,000.

^{2/}An LMA is defined as one or more counties wherein 85 percent of the labor force lives and works. For purposes of estimating local area unemployment only, BLS also calls all other counties LMAs. This figure includes both groups.

^{3/} Prime sponsors are units or consortia of local government with at least 50,000 population.

^{4/} Program agents are general local governments with population of 50,000 - 100,000 having areas of substantial unemployment, and administrative responsibility over funds for such areas.

^{5/} Areas of substantial unemployment are areas with at least 10,000 population and unemployment rates of at least 6.5 percent for three consecutive months.

NATIONAL COMMISSION ON EMPLOYMENT
AND UNEMPLOYMENT STATISTICS

The Emergency Jobs Programs Extension Act of 1976 (Public Law 94-444, Oct. 1, 1976) established a National Commission on Employment and Unemployment Statistics, consisting of nine members appointed by the President. The Commission's specific mandate, set forth in the law, is to "identify the needs of the Nation for labor force statistics and assess the extent to which current procedures, concepts, and methodology in the collection, analysis, and presentation of such statistics constitute a comprehensive, reliable, timely, and consistent system of measuring employment and unemployment and indicating trends therein."

The act requires the Commission to report its findings and recommendations to the President and to the Congress within 18 months after the first five members of the Commission are appointed. The chairman was appointed July 28, 1977, and the remaining members were appointed on March 20, 1978. The report of the Commission is due to be issued in September 1979.

The basic task of the Commission is to explore the adequacy and validity of present definitions of the labor force. Its goal: to arrive at new standards, geared to current requirements, for measuring who should be counted as employed, unemployed, or not in the labor force.

SCOPE OF REVIEW

Considering the task of the National Commission on Employment and Unemployment Statistics, our review focused on the procedures for developing local unemployment estimates and the relationship between the States and BLS in carrying out the Federal/State program. We did not attempt to evaluate the official definition of unemployment used by BLS or the availability of alternatives for fund allocation.

We interviewed BLS, ETA, and Census officials and reviewed pertinent policies, procedures, records, and available studies that have been done concerning local unemployment. Inquiry was also made concerning internal audit coverage of unemployment statistics. We also interviewed State and local government officials and solicited the views of officials of State agencies we did not visit. We coordinated our effort with staff of the National Commission on Employment and Unemployment Statistics.

We made our review primarily at the national offices of BLS and ETA, four of BLS' regional offices, and selected State agencies within the BLS regions. BLS regional offices and States were selected to provide a broad geographic and demographic cross-section of the labor force. Local governments were selected with the assistance of State agency officials. The BLS regional offices and State agencies visited are listed below.

BLS Regional Offices

Boston
Chicago
Kansas City
San Francisco

State Agencies

Alaska	Massachusetts
California	Missouri
Connecticut	Nebraska
Hawaii	New Hampshire
Illinois	Oregon
Iowa	Rhode Island
Kansas	Vermont
Maine	Washington

CHAPTER 2

UNEMPLOYMENT STATISTICS ARE NOT RELIABLE FOR DISTRIBUTING FEDERAL ASSISTANCE TO LOCAL AREAS

BLS recognizes that its estimates of unemployment in cities, counties, and towns are not reliable. The data they are derived from are neither current nor localized enough to produce reliable figures. The statistics need to be improved to minimize the possibility of misallocation of Federal funds under current allocation formulas. Errors in these statistics could mean millions of dollars to some places.

Estimates of local unemployment are derived from a composite estimating technique that uses as its bases statewide sampling and unemployment insurance records. Since it took control of the program, BLS has taken important steps to improve these data sources. If the quality of local statistics is to be materially improved, however, the system must have better data on local uninsured unemployment. The proportions that unemployed persons not drawing unemployment compensation represent of total unemployment are likely to vary among localities, and the present procedures, using national averages to estimate their numbers, are obviously unsatisfactory.

BLS has not yet developed a means to better estimate local uninsured unemployment, but it has some research underway now. We believe it may be necessary for BLS to have additional help from State agencies in developing data needed to improve these estimates.

GLARING PROBLEMS EXIST IN ESTIMATING PROCESS

Under the BLS composite estimating technique, State agencies build employment and unemployment statistics for large urban and other State LMAs (comprising one or more counties) using procedures prescribed by BLS and known as the "Handbook" or "70-step" method. The Handbook estimates are developed by adding the numbers of employed and unemployed persons who are insured to estimates of those uninsured. These labor market statistics are then adjusted proportionately to agree in total with statewide statistics from the CPS.

To satisfy the needs of program agencies, the adjusted LMA statistics are broken down to smaller areas using labor force relationships among these areas obtained from (1) the 1970 decennial census, (2) population estimates, or (3) claims for unemployment compensation. Very small areas are assigned the same unemployment rates as the larger areas they are within.

Because estimates of employment and unemployment for LMAs developed from the Handbook procedures are the basis of local area statistics, a principal question to be addressed in evaluating the local statistics concerns the validity of the data used to build and disaggregate the LMA estimates. Various problems with the data can cause errors in local estimates.

The key problem is that certain data, which are used to estimate employment not covered by unemployment insurance programs and the unemployed who are not receiving unemployment compensation, are not direct measures but are based on their presumed relationships to other data. These relationships were based on studies of national data, and generally regional or area differences were not taken into consideration. In addition, many of the studies were done before 1960, and the relationships may no longer be valid even on a national level. Generally, the relationships are those established when the Handbook method was devised in 1960.

The use of relationships shown by unemployment insurance claims, the decennial census, and population estimates to break down LMA statistics to smaller areas also have obvious weaknesses. For example, employment and unemployment relationships derived from a census are not current, and the relationships of employment or unemployment to population are not likely to be the same in all areas.

A more detailed description of the BLS composite estimating technique and its problems is presented in appendix I.

PROBABLE INACCURACIES IN LOCAL AREA
UNEMPLOYMENT STATISTICS COULD BE
COSTLY TO SOME AREAS

An important part of producing a statistical series is providing information to guide users in interpreting and relying upon the data. The key which users look to for such guidance is specification of the coefficient of variation which indicates how far the estimate might be off with a given degree of confidence. BLS is able to provide this key for both national and State unemployment estimates based on the

CPS but not for local figures. Instead, BLS has stated on numerous occasions that the reliability of local estimates cannot be determined because they are not based solely on scientific sampling. Therefore, conditions exist for errors which could have large dollar consequences for some areas.

How good or bad are the figures? There is no overall quantitative answer to this question. Prospectively, the 1980 Census will provide the first opportunity for such an assessment. Considering the weaknesses in data used to produce local unemployment statistics, errors in the statistics are not only possible, they are probable.

Isolated studies performed in recent years have generated data on unemployment in a few counties and cities. Since BLS local estimates are used to distribute Federal money, it is not surprising that most of these studies seem to have been undertaken specifically because the BLS figures were perceived to understate the actual unemployment situations. All such studies we are aware of produced unemployment figures higher than--in some cases double--the official BLS estimates.

Although some of the studies appeared to use concepts and methods similar to the CPS, their results may not be directly comparable to the official estimates. BLS believes some of the differences between these data and its estimates could reflect, in part, differences in samples, survey objectives, conditioning of respondents, reference time periods, questions asked, interviewing techniques, interviewer experience, or definition of unemployment. But BLS does not contend its figures for the same reference periods were more accurate because it really doesn't know.

In the last few years, the Bureau of the Census performed some surveys other than the CPS which generated labor force data. These surveys used the same concepts employed in the CPS. One of these was the Survey of Income and Education conducted in about 151,000 households for the Department of Health, Education, and Welfare from April through July 1976. In Chicago, the Mayor's Office of Manpower analyzed the data collected in Illinois and produced estimates of the average unemployment rates for the Chicago SMSA and the city of Chicago during the interview period. These average rates compared with the averages of BLS rates for the same period as follows:

	<u>Survey of Income and Education</u>	<u>BLS rates</u>	<u>Survey as percent of BLS rates</u>
Chicago SMSA	10.2%	7.3%	140
City of Chicago	14.8	9.2	161

Note: Chicago is the only jurisdiction we know of that used data from the Survey of Income and Education to produce labor force estimates.

In addition to the Survey of Income and Education, the Census Bureau performed trial runs for the 1980 Census in three geographic areas during 1976 and 1977. Included in these pretests were 20-percent samples asking labor force questions similar to the ones to be used in 1980 and used on the CPS. At our request, the Census Bureau processed the data on two geographic areas and computed unemployment estimates for the county and two cities involved. Only two areas were requested because survey results for the third area (Oakland, California) were not readily accessible to the computer. The pretest results compared with BLS rates during the applicable periods as follows:

	<u>Census Pretest</u>	<u>BLS rates</u>	<u>Pretest as percent of BLS rates</u>
Camden, N.J.	20.1%	13.9%	144
Austin, Tex.	5.7	4.1	139
Travis County, Tex.	5.5	3.9	141

In commenting on the comparisons of BLS rates and those obtained from the Survey of Income and Education and pretests, the Census Bureau observed that one characteristic of BLS estimates is that they impose national seasonal patterns on local estimates. Over the course of a year any distortions caused by this would tend to average out. However, according to the Census Bureau, local estimates employing Handbook ratios are not likely to be fully representative of local seasonal variations in unemployment on a monthly or quarterly basis--such variations should be captured by the Survey of Income and Education and the census pretests.

Although the data gathered by the Census Bureau in the above programs produced results 39 to 61 percent higher than the BLS rates, drawing any conclusions concerning how well BLS estimates depict, on an overall basis, relative local

conditions from such sketchy information would be highly inappropriate. To make such an assessment would require valid measurements of unemployment with which to compare BLS statistics in at least a representative mix of localities across the country. Moreover, to increase the reliability of the results, such measurements would be needed for more than one reporting period. Even then, there could be doubts as to the applicability of the results to areas not included in such a study.

If errors in local area unemployment statistics are probable, what is their potential effect on the distribution of Federal assistance to local areas? To obtain an indication of the effect that inaccurate statistics could have on fund allocations, we focused our attention on titles II and VI of CETA, which provide funds for transitional public service employment.

Essentially, title II distributes funds on the basis of the numbers of unemployed in areas of substantial unemployment, while the title VI distribution is based on three factors--total unemployment in all areas, unemployment in excess of 4.5 percent in all areas, and unemployment in areas of substantial unemployment.¹

We simulated a theoretical distribution of funds using program data for CETA titles II and VI and 1977 unemployment estimates of BLS. We then recomputed the allocations for selected areas to determine the effects on allocations that estimation errors ranging from 10 to 40 percent could have. If a 5.0 percent unemployment rate missed the actual unemployment by 10 percent, the correct rate would be either 4.5 or 5.5 percent.

¹This discussion is based on CETA provisions before the amendments of 1978 (Public Law 95-524, Oct. 27, 1978).

POTENTIAL EFFECTS OF UNEMPLOYMENT VARIATIONS ON
ALLOCATION OF FUNDS TO SELECTED AREAS

1977

	Decrease unemployed					Base	Increase unemployed			
	-40%	-30%	-20%	-10%			+10%	+20%	+30%	+40%
City A										
Title II \$	-	4,931,071	5,632,203	6,332,515	7,032,003	7,730,673	8,428,525	9,125,561	9,821,781	
Title VI \$	7,649,355	15,207,647	19,557,632	25,098,947	30,630,123	36,151,765	41,663,901	47,166,560	52,660,344	
Unemployed	17,524	20,444	23,365	26,285	29,206	32,127	35,047	37,968	40,888	
Unemployment rate	5.76	6.72	7.68	8.64	9.60	10.56	11.52	12.48	13.44	
Consortium A										
Title II \$	-	-	-	-	-	2,597,930	2,833,548	3,069,073	3,304,505	
Title VI \$	2,566,762	2,994,138	3,421,393	4,380,124	5,941,438	10,814,731	12,675,117	14,533,848	16,391,504	
Unemployed	5,887	6,868	7,849	8,830	9,811	10,792	11,773	12,754	13,735	
Unemployment rate	3.84	4.48	5.12	5.76	6.40	7.04	7.68	8.32	8.96	
City B										
Title II \$	832,639	971,300	1,109,929	1,248,526	1,387,091	1,525,623	1,664,124	1,802,593	1,941,029	
Title VI \$	2,568,465	3,211,499	4,305,576	5,399,280	6,493,191	7,586,729	8,679,318	9,771,535	10,863,381	
Unemployed	3,457	4,033	4,609	5,185	5,761	6,337	6,913	7,489	8,065	
Unemployment rate	8.04	9.38	10.72	12.06	13.40	14.74	16.08	17.42	18.76	
City C										
Title II \$	-	-	-	25,324,179	28,072,152	30,807,298	33,529,707	36,239,467	38,936,667	
Title VI \$	30,689,687	35,744,886	40,783,241	91,318,402	113,252,550	135,035,370	156,669,770	178,156,310	199,497,240	
Unemployed	69,955	81,614	93,274	104,933	116,592	128,251	139,910	151,570	163,229	
Unemployment rate	4.44	5.18	5.92	6.66	7.40	8.14	8.88	9.62	10.36	
Consortium B										
Title II \$	-	-	-	-	-	12,706,638	13,848,456	14,988,080	16,125,516	
Title VI \$	12,591,243	14,679,716	16,765,329	20,558,137	28,188,300	51,997,629	61,037,816	70,052,482	79,042,896	
Unemployed	28,814	33,616	38,418	43,221	48,023	52,825	57,628	62,430	67,232	
Unemployment rate	3.66	4.27	4.88	5.49	6.10	6.71	7.32	7.93	8.54	
County A										
Title II \$	-	-	-	4,074,758	4,525,801	4,976,505	5,426,868	5,876,892	6,326,578	
Title VI \$	4,920,208	5,738,704	6,843,975	15,032,412	18,595,928	22,156,646	25,713,417	29,265,669	32,813,989	
Unemployed	11,278	13,158	15,038	16,917	18,797	20,677	22,556	24,436	26,316	
Unemployment rate	4.68	5.46	6.24	7.02	7.80	8.58	9.36	10.14	10.92	
Consortium C										
Title II \$	-	-	11,218,034	12,605,559	13,989,848	15,370,913	16,748,765	18,123,416	19,494,876	
Title VI \$	15,243,178	17,768,955	36,551,363	47,567,426	58,546,799	69,487,386	80,391,138	91,257,693	102,086,690	
Unemployed	34,862	40,673	46,483	52,294	58,104	63,914	69,725	75,535	81,346	
Unemployment rate	4.98	5.81	6.64	7.47	8.30	9.13	9.96	10.79	11.62	

Note: The above hypothetical allocations and reallocations to selected prime sponsors are based on labor force estimates for the total areas served by the prime sponsors. As a practical matter, where no allocations are indicated, prime sponsors could have and probably would have received Title II funds based on designation of areas of substantial--exceeding 6.5 percent--unemployment within the larger areas they served.

The data for title II show that, in programs with a trigger (a minimum unemployment rate for receiving an allocation), small differences in reported unemployment can have substantial financial impact when area unemployment rates are near the trigger level.^{1/} For instance, if reported unemployment for Consortium B had been 10 percent higher, that area would have been eligible for nearly \$13 million. Instead, it probably would have received funds only for a smaller area of substantial unemployment. (See note on p. 11.) Similarly, if unemployment in City C had been 20 percent lower, the city's allocation would have had to be based on designation of an area of substantial unemployment, which may have meant an allocation considerably less than \$28 million.

The data for title VI exhibit less sharp variations in funding because all areas receive some funds based on total unemployment, with "bonuses" for unemployment over 4.5 percent and for unemployment in areas of substantial unemployment. Even so, an increase of less than 1,000 unemployed in Consortium A, from 9,811 to 10,792, would have led to an allocation nearly double its hypothetical base allocation. Conversely, a drop of 576 in unemployment for City B, from 5,761 to 5,185, theoretically would have resulted in an allocation decrease of over \$1 million.

PROGRESS BEING MADE IN IMPROVING STATEWIDE STATISTICS AND UNEMPLOYMENT INSURANCE DATA

Since it was assigned technical responsibility for the local area unemployment statistics program, BLS' principal efforts have been to obtain better statewide statistics and to improve the accuracy of claims data at the State and county level used in Handbook computations. These improvements are important to the quality of local statistics, but we believe that appreciable improvement in how well local statistics depict relative unemployment problems in LMAs and below depends on filling the data gaps between insured and total unemployment at local levels. There has been very little effort by BLS in this area.

^{1/}In March 1978, the Office of Federal Statistical Policy and Standards issued a Report on Statistics for Allocation of Funds. This Report includes nine recommendations for improving allocation formulas.

The more important steps taken or planned by BLS to improve the quality of local statistics are discussed below.

Expansion of CPS to Improve Official Statewide Estimates

After BLS was assigned technical responsibility for the local area unemployment statistics program in 1972, it introduced the use of the CPS as a control over statewide estimates built from unemployment insurance records, steadily increasing its use to cover all 50 States, the District of Columbia, the 30 largest SMSAs, and 11 central cities. By 1976, the CPS was producing for all of these areas unemployment estimates that had, on an annual basis, statistical reliability meeting the BLS criterion.

These annual estimates were used to derive adjustment factors for monthly Handbook estimates for the States (and certain SMSAs) in the next year. The adjusted estimates became the official monthly figures published by BLS and, when distributed to the local areas, they were used for program allocations which require current monthly estimates. In 1977, it became apparent that the use of year-old data from the CPS to adjust Handbook figures produced questionable results, and BLS began planning to expand the CPS to provide monthly estimates of unemployment at the State level for all 50 States and the District of Columbia.

This expansion of the CPS, which the Census Bureau estimated would require the addition of 75,000 households to the survey, was to be completed by June 1981. Because of operational constraints on sampling supplementations to the CPS, the Census Bureau believed this to be the earliest possible completion date. In November 1977 the Census Bureau decreased its estimate to 50,000 additional households per month and revised the completion date to the fall of 1979. The additional annual cost to conduct the supplemental portion of the survey was estimated at \$15 million.

BLS' plans called for 10 States to start using monthly CPS data in January 1978. In the remaining 40 States and the District of Columbia, monthly Handbook estimates were to be adjusted by a 6-month moving average of CPS data, until CPS samples in these areas were increased sufficiently to provide monthly data.

Along with this increased use of the CPS, BLS discontinued annual CPS benchmarking for 30 SMSAs and 11 central cities. With the shift away from the use of annual CPS data, 29 of the SMSAs and all but one of the central cities were to be treated like all the other areas within their States. An additional central city, the District of Columbia, was to be treated like a State. Because of their large populations, the Los Angeles-Long Beach SMSA and New York City have enough households in the CPS with the current sampling ratio to meet the BLS reliability criterion for monthly estimates.

The BLS proposal to expand the CPS to obtain monthly statewide estimates was submitted to the Office of Management and Budget (OMB) in November 1977. OMB rejected the proposed expansion and suggested instead an expansion sufficient to provide quarterly estimates for each State. The use of quarterly data would necessitate legislative changes in programs which require monthly unemployment data.

Labor agreed with OMB that the long-term solution should be to change legislation to permit the use of quarterly data for each State. Labor proposed, however, that the plan to develop monthly data be continued and a shift to quarterly estimates be made after the required legislative changes had been obtained. Labor estimated that it could take two or more years to get the legislation changed. Labor believed that since monthly CPS data were already available in 10 States, it would be placed in a difficult position with the remaining 40 States. These States would see minimal improvement in their monthly estimates for several years, even though the data would be used for the allocation of Federal funds. According to Labor, this would lead to continued misallocations of Federal funds and the continued justified complaints of public officials.

In responding to Labor, OMB stated that under both approaches, monthly or quarterly CPS, 1979 allocation of Federal funds would be made on inconsistent monthly data. OMB stated that it made little program sense to expand the data now when both Labor and OMB agreed that, in the long run, the quarterly figures would provide better data. OMB noted that if the legislative efforts fail, the quarterly data expansion could then be expanded further to obtain monthly CPS data.

Quarterly CPS estimates for States would cost about \$12 million less annually than monthly data and would

require that approximately 40,000 fewer households be sampled monthly. Census officials noted that very little of the sample design and selection work that had already been started to expand the CPS for monthly estimates would be transferrable to the quarterly data project.

The ongoing cost of collecting data in the smaller number of added households necessary for the production of quarterly estimates would be on the order of \$3 million and 300 positions, as opposed to \$15 million per year and 1,200 positions, which the Census Bureau estimated would be required to provide monthly data after all developmental work was completed.

The Congress, in reauthorizing CETA in October 1978, continued to require the use of monthly data, and also, in effect, mandated return to the use of CPS data for the SMSAs and central cities for which such use had been discontinued. BLS informed us it will proceed with the CPS expansion planned for quarterly estimates because it will provide more reliable--6 1/2 percent coefficient of variation--annual average estimates for States. This should increase the validity of the CPS as a control over monthly Statewide Handbook estimates for the District of Columbia and those 40 States not deriving their official estimates directly from the CPS.

The optimum use level of the CPS on the local area unemployment statistics program is as yet undetermined. It involves consideration of cost, minimum program needs, and the possibilities for improving the Handbook estimates for the LMA levels and below. Regarding the weaknesses in the Handbook, BLS has not made improving its data problems a priority in the past, but the agency now has sponsored research which is to result in either an improved Handbook or a new estimation model (see p. 21).

The table which follows shows the additional costs that would be incurred in producing CPS data beyond the monthly estimates for 10 States and annual averages currently being produced for the remaining 40 States.

Approximate Additional Annual Costs
To BLS For CPS Unemployment
Estimates at Various Levels and Frequencies

<u>Level and Frequency</u>	<u>Additional Annual Cost to BLS (millions)</u>
States - quarterly	\$ 3
States, 30 largest SMSAs, and 11 central cities - quarterly	9
States and 150 largest SMSAs - annually	13
States - monthly	15
States - quarterly and 150 largest SMSAs - annually	18
States, 50 largest SMSAs, and central cities with over 500,000 population - quarterly	27
States and 281 SMSAs - annually	28
States- quarterly and 281 SMSAs - annually	33
States, 30 largest SMSAs, and 11 central cities - monthly	36
States and 150 largest SMSAs - quarterly	48
States and 150 largest SMSAs - monthly	93
States and 281 SMSAs - quarterly	93
States and 281 SMSAs - monthly	163
States and all counties - quarterly	500 - 750

1/ When these estimates were made it cost BLS about \$10 million annually to produce monthly CPS unemployment estimates for the Nation, 10 States, one SMSA, and one central city and annual CPS averages for the remaining 40 States. The additional costs shown here are based on BLS' minimum reliability criterion of a 10-percent coefficient of variation at a 6 percent unemployment rate.

Source: Data supplied by Census Bureau to National Commission on Employment and Unemployment Statistics and to BLS during FY 1978.

Efforts to Improve Claims Data

BLS, in cooperation with ETA and the States, conducted a State-by-State survey of the statistical and operational practices used in developing statistics from unemployment insurance claims records for March through June 1975. The survey disclosed that the unemployment insurance statistical records used to develop unemployment frequently were inaccurate, often based on misunderstood reporting requirements, and adversely affected by the use of antiquated and inefficient counting methods. The unemployment insurance data base survey revealed inconsistencies between States in the collection and tabulation of unemployment insurance statistics used for estimating unemployment.

After analyzing the results of the State unemployment insurance data base surveys, BLS offered assistance to the States in obtaining claimant data according to BLS specifications for use in preparing the local unemployment estimates. Three basic claimant groups--continued claimants, persons receiving final payments, and persons disqualified from receiving benefits due to separation issues--were identified and defined in terms of place of residence, reference period of unemployment, and the existence of earnings in the week of unemployment.

BLS offered to contract with State agencies to obtain claimant data needed for better local unemployment estimates. The contract deadline for fiscal year 1976 was September 22, 1976. As a minimum, the contracts were to provide county of residence claimant counts for claimants receiving compensation for the week including the 12th of the month. Delivery under these contracts was to be by December 31, 1977.

Thirty-three States and the District of Columbia entered into contracts with BLS for a total cost of about \$1.7 million. Seventeen States did not enter into these contracts. Of these,

- eight were developing redesigns of their systems but could not meet the delivery date of December 31, 1977,

- four could not meet the September 1976 deadline for contracting,

--two States would do the work without contracts,
and

--three were not interested in the project at the time.

In fiscal year 1977, 10 new States and 15 States that wished further improvements in their claimant counts contracted with BLS for about \$1.2 million. Delivery under these contracts was to be by December 1978. In fiscal year 1978, another new State contracted to improve its data. BLS expects the six States which did not enter into contracts to meet the minimum BLS requirement for claims data by county of residence.

Delivery on the data base contracts has been slow. Of the 34 States under contract with an original delivery date of no later than December 31, 1977, only 2 met their delivery date. An additional 15 States fulfilled their contracts as of September 1978, leaving 17 States that were at least 9 months late, with some expecting to be at least a year late. For those that contracted in the second round, one State had completed its contracted work by September 1978.

Delays in completing the contracting have generally fallen into four categories: (1) higher priority in other projects, (2) hiring freezes for people to work on the project, (3) delays in system design, and (4) delays in installation of equipment.

By January 1978, 37 States had claims data at least by county of residence or, in the case of New England States, by town or city. (BLS had originally planned on 47 States possessing the required claims data by January 1978, to implement changes it made effective that month in disaggregating multicounty LMA unemployment and employment to counties.) At least 29 States were scheduled to have data below the county level by December 1978. Size of the communities varies among the States.

The following schedules show the status of the States' efforts to obtain claims data by residence as of September 1978.

Claims Data by County of Residence 1/

<u>States having the data</u>	<u>States that were to have data by December 1978</u>	<u>Special status 3/</u>
Alabama	Hawaii	California
Alaska	Massachusetts 2/	Nebraska
Arizona	Michigan	
Arkansas	Oregon	
Colorado	Rhode Island 2/	
Connecticut 2/	Vermont 2/	
Delaware	Washington	
District of Columbia		
Florida		
Georgia		
Idaho		
Illinois		
Indiana		
Iowa		
Kansas		
Kentucky		
Louisiana		
Maine 2/		
Maryland		
Minnesota		
Mississippi		
Missouri		
Montana		
Nevada		
New Hampshire 2/		
New Jersey		
New Mexico		
New York		
North Carolina		
North Dakota		
Ohio		
Oklahoma		
Pennsylvania		
South Carolina		
South Dakota		
Tennessee		
Texas		
Utah		
Virginia		
West Virginia		
Wisconsin		
Wyoming		

1/Applicable to intrastate LMAs only.

2/No county governments, data applicable to towns and cities.

3/Residence is based not on an explicit county identifier but on mailing address. Nebraska has the data; California was to have it by December 1978.

States Expected to Have Place of Residence
Data Below the County Level by
December 1978

<u>State</u>	<u>Smallest size community</u>
Alabama	25,000
Arkansas	25,000
Connecticut	all <u>1/</u>
Delaware	25,000
Georgia	25,000
Illinois	25,000
Iowa	all
Kansas	25,000
Kentucky	25,000
Louisiana	25,000
Maine	all
Maryland	25,000
Massachusetts	all
Michigan	<u>2/</u>
Minnesota	50,000
Mississippi	25,000
Nebraska	25,000
New Hampshire	all
New Jersey	all
New Mexico	3,000
Oklahoma	5,000
Pennsylvania	25,000
Rhode Island	all
Tennessee	25,000
Vermont	all
Virginia	all <u>3/</u>
West Virginia	50,000
Wisconsin	50,000
Wyoming	25,000

1/All denotes 2,500 and above population unless otherwise noted.

2/Only Detroit was certain.

3/Independent cities.

More Up-to-Date Residency Employment Ratios

There are inadequacies in the factors used to adjust employment to a residence basis. These are discussed in appendix I. To lessen these inadequacies, BLS contracted with the Department of Commerce's Bureau of Economic Analysis (BEA) to prepare annual resident employment estimates for all counties. The BEA data were to replace Census data in the computation of residency adjustment factors for nonagricultural wage and salary employment.

In November 1976 BEA submitted its proposal to produce an update of the residency adjustment factors by county through 1975. BLS expected to be able to use the BEA data to produce new residency ratios for January 1978 employment estimates. Although the BEA data were delivered to BLS in time for use in preparing the January estimates, BLS encountered problems in using the BEA data. There was not sufficient time to develop and review the ratios for all counties. A BLS official working on the revision of residency ratios told us that the new ratios could be made available for use by the States in January 1979, but a policy decision was made in BLS not to introduce any further revisions in the methodology until the National Commission on Employment and Unemployment Statistics issues its report.

EXPANDING ROLES OF STATE AGENCIES MAY BE THE KEY TO OBTAINING CERTAIN DATA NEEDED FOR LOCAL STATISTICS

Actions BLS has taken to improve statewide estimates and unemployment claims data are important to obtaining better local statistics, but local statistics will not be acceptable until there are assurances that they represent the best practicable measure of relative conditions in sub-State areas. No assurances exist at present because the Handbook's buildup of statistics for sub-State areas does not provide for sub-State variations in the levels of employment and unemployment outside the unemployment insurance system.

BLS has not updated the Handbook factors for estimating important segments of the unemployed--such as entrants and reentrants to the labor force--because it knows that with the CPS control over statewide statistics, such an update would have to be carried below the State level to have an impact on the relative portrayal of local joblessness. BLS has not opted to undertake specific research

of the magnitude necessary to do that. Instead, BLS contracted with Mathematica Policy Research, Inc., in September 1978, for a study to develop and evaluate several models for estimating local area unemployment, including a revised Handbook. This study is to be completed by September 1980.

State agencies recognize that the Handbook method requires substantial improvement and many State agency officials stated that the Handbook cannot be used alone to provide local estimates comparable across multistate geographic areas. Nevertheless, a number of State analysts think the Handbook could be streamlined and improved enough to contribute to better local statistics. They indicated that if important parts of the Handbook, such as the procedures for estimating new entrants and reentrants, and agricultural employment and unemployment, were updated and regionalized, the Handbook would be the best vehicle for estimating local unemployment.

Many State officials pointed out that the advantages of the Handbook are:

- State agency personnel are familiar with it.
- It uses actual counts of unemployment insurance claims which are becoming more inclusive as unemployment insurance coverage is broadened.
- It would be much less expensive than sampling at the local level.
- It imposes no response burden on the public.

Several State agency officials suggested that the CPS be used periodically to gather data to update Handbook factors and to tailor Handbook relationships to various regions. Others, however, indicated that the States should be given leeway to establish such factors and relationships in their areas.

It seems to us that it will be difficult, if not impossible, to establish and maintain a viable program for local unemployment statistics without expanding the roles of State agencies. The basic purpose of such statistics is to indicate the extent of unemployment in local area job markets and unless data more specific to local markets

can be inputed to the estimating process, the statistics will not be materially improved.

States have various sources of information which might be used or adopted for use in providing such critical input; e.g., records on business, taxes, welfare, and employment services. In addition, a number of States have done research in the past on labor force estimating and some State agency officials said that one reason more research wasn't done by States was a feeling that it wouldn't be used.

CHAPTER 3

OTHER ASPECTS OF PROGRAM NEED IMPROVED

FEDERAL/STATE COOPERATION

The Federal/State cooperative agreements under which local area unemployment statistics are produced do not provide guidance on some important aspects of the effort. As a result, controversies and disagreements have arisen which can make a difficult task even more so.

Agreements are needed which specifically cover the procedures for and responsibilities of the partner agencies with respect to funding the cost of the program in the States and proposing and evaluating changes in the methods used. The effects of the lack of guidance on these matters were much in evidence during our review.

COOPERATION ON LOCAL UNEMPLOYMENT STATISTICS IS ROOTED IN FEDERAL/ STATE EMPLOYMENT SECURITY PROGRAM

The local area unemployment statistics program depends on close Federal/State cooperation to produce the best possible results. Federal agencies are responsible for providing States with the technical guidance and funding necessary to develop the data. The States collect data, develop the estimates, and serve as the principal contact points for public inquiry concerning them. The foundation of this arrangement is the Wagner-Peyser Act of 1933 (29 U.S.C. 49). The act serves as the basic agreement between the Federal Government and the States to carry out employment service activities.

Employment service activities are part of the Federal/State employment security program established by the Wagner-Peyser Act and the Social Security Act (42 U.S.C. 501). The activities can be broken down into two parts: (1) employment service--a labor exchange for matching worker skills with job requirements, and (2) unemployment insurance--financial benefits to unemployed individuals. The U.S. Employment Service and the Unemployment Insurance Service, both of ETA, establish procedures and standards for operating the programs and provide guidance and technical assistance to the 50 States and the District of Columbia.

In addition to its basic role of finding jobs for people and people for jobs, the Employment Service also manages a labor market information program. The primary objective of the labor market information program is to develop data required for planning, operating, and evaluating Federal, State, and local employment and training programs. Overall responsibility for defining, managing, and operating the labor market information program lies with ETA national and regional offices. The actual development and analysis of the data is generally done by the research and analysis offices of States agencies. These offices also have been assigned responsibilities for the local area unemployment statistics program.

The labor market information system is funded by ETA with monies furnished primarily from CETA title III and employment service grants to the States. These funds are distributed to the State agencies according to workloads involved in labor market information activities. There is no specific assignment of resources for developing unemployment estimates.

ETA has identified a core of information which is essential to each State's labor market information program. All State agencies provide the core information, which is supplemented to meet the individual State and area needs. Core products of the labor market information program which the States are required to produce include (1) planning information prepared annually for all states, SMSAs, and CETA prime sponsor jurisdictions, including data on employment developments, unemployment trends, characteristics of the population, labor force, employed and underemployed; (2) current and projected occupational information to be released annually for all States and SMSAs and (3) monthly labor force information consisting of brief narrative reports and tables on area employment and unemployment trends.

Because of its close association with ETA activities at the State level, the local area unemployment statistics program before November 1972 was the total responsibility of ETA's predecessor--the Manpower Administration. At that time technical control of the program was transferred by the Secretary of Labor to BLS which had responsibility for Labor's other labor force statistics programs.

In effecting this transfer, ETA and BLS entered into an agreement which gave BLS responsibility for (1) the technical development and adequacy of the State and local area estimates and the statistical system designed to produce them and (2) assisting State agencies through its national and regional office staffs on technical matters to assure consistent data input and treatment, technical adequacy of State agency data, and comparability of techniques and estimates from State to State. The technical assistance responsibilities included reviewing, evaluating, and approving State estimates and providing consultation and guidance to the State agencies.

BLS also assumed the responsibility for the preparation and issuance of instructions to the States. With respect to the operational implications of such instructions, BLS was to seek ETA's advice and concurrence prior to distributing the instructions to the State agencies. BLS also assumed the responsibility for the continuing research efforts to improve the methodology and techniques.

Within BLS, regional offices implement policies established by the national office, provide technical services, and represent the national office in dealing with State agencies.

Responsibilities of the BLS regional offices in the area of technical assistance and guidance to the States include: training State personnel, promoting the interchange of newly developed systems and techniques among States, and providing direct assistance in the preparation of estimates or other aspects of the work as required by the temporary inability of the States to perform them. In addition, the regional offices will determine that the prescribed methodology has been followed in the preparation of local area unemployment estimates, identify and clarify questionable estimates, and periodically review and certify the estimates.

BLS' DATA IMPROVEMENT EFFORTS PUT SQUEEZE ON STATE RESOURCES

The November 1972 ETA-BLS agreement which transferred the technical responsibility for the program to BLS did not transfer the funding of the local area unemployment statistics program within the State agencies. As part of the agreement, ETA and BLS agreed to conduct a survey of the State agencies to determine the staff-years of effort being used.

The agreement provided for ETA and BLS to agree, on the basis of the results of this survey, on the method by which this program should be budgeted and funded in the future and to establish other managerial controls that would be needed to assure that State agencies were providing and would continue to provide adequate resources for conducting the local area unemployment statistics program. Pending the outcome of the survey, ETA was to continue handling that portion of the State agencies' budget that pertained to the local area unemployment statistics program.

In February 1973, ETA reported on the results of its mail survey of State agencies on the staff-years of effort being used. A cursory examination by ETA officials of the figures for the local area unemployment statistics activities in the States showed, in their opinion, that the States had misinterpreted the instructions in the memorandum that requested the information. It was their opinion that many of the States overestimated time spent on methodology aspects or on the preparation of the data.

Many States apparently included analysis of the data which does not come under the local area unemployment statistics program. Such analysis is covered under the labor market information program, the responsibility for which remained with ETA. The ETA officials who examined the figures recommended that the data be rechecked with the States to insure that the figures covered only the activities intended and that they were comparable from State to State. The survey data were not rechecked and thus no agreement on the funding of State agencies or other managerial controls was ever reached.

Many State officials told us that BLS changes in the local area unemployment statistics program put a strain on State agency resources available to produce the data. The latest example of this is the BLS requirement for unemployment insurance claims by county of residence. BLS contracted with the States to obtain claimant data according to its specifications for use in preparing the local area unemployment estimates. The contracted services, which are crucial to the BLS plan to replace the census share disaggregation method with claims-based disaggregation for unemployment, were solely for use in the local area unemployment statistics program. In fiscal years 1976 and 1977, BLS contracted for about \$3 million with the States for the data base project.

Although the funding for the States to obtain the capability of collecting unemployment insurance data by place of residence was provided by BLS, funding for the continued collection of the data was not as clearly provided for. According to BLS officials, funding of the ongoing cost of the project by ETA was agreed to verbally by ETA and BLS. Neither BLS nor ETA knows how much it will cost to incorporate these new requirements into the system on an ongoing basis. ETA stated that no funds were available or anticipated for fiscal year 1979, when all States were supposed to be reporting the data by residence.

ETA did make a total of \$500,000 available to the States on a one-time basis in fiscal year 1978 to cover part of the cost of implementing the new requirement. The funds came out of the Secretary of Labor's CETA discretionary funds to assist those States that might be having difficulty absorbing the additional administrative costs.

Without continued funding for collecting the additional data, the States will be put into the position of having to produce more unemployment insurance data with the same level of funding and personnel. According to an ETA official, the quality of the data will suffer.

ETA's position concerning the local area unemployment statistics program has been that ETA's labor market information activities are not to be reduced by State agencies in order to accommodate increases in local area unemployment statistics workloads imposed by BLS. On the other hand, the States covered in our review stated that the unemployment statistics program has a high priority with them and data required by BLS will be delivered.

Since local area unemployment statistics are crucial to the allocation of Federal funds, ETA officials recognized that the States would give the unemployment statistics program top priority, even if it means diverting resources from ETA's labor market information requirements. State officials said that unless more funding is provided, they anticipated being unable to produce some reports mandated by the labor market information program. An ETA official told us Federal funding for labor market information activities in the States had been reduced in past years where core products were not produced and he indicated it could happen again.

PROCEDURES NEEDED FOR REVIEW AND EVALUATION
OF PROPOSED CHANGES

In January 1978, BLS made major changes in the procedures for developing State and local area unemployment estimates. The revised system combined methodological and basic data improvements with a new approach to the use of the CPS. The basic elements of the scheduled changes were

- the direct use of monthly CPS data at 10 State and 2 sub-State levels where the data meet the BLS reliability criterion;
- the use of a 6-month moving average adjustment to determine current monthly State levels in the remaining 40 States;
- the use of the Handbook distribution to adjust sub-State estimates to the CPS for all LMAs except the two authorized to use monthly CPS data; and
- the incorporation of improved unemployment insurance statistics in the State and area estimates, including the use of the claims-based unemployment disaggregation and the population-based employment disaggregation for breaking down multicounty LMAs.

Although BLS is convinced that these changes will improve the statistics generated by the local area unemployment statistics program, their implementation resulted in considerable criticism from BLS' partner agencies and other organizations concerned with the data.

At a June 1977 meeting of the Research and Statistics Committee of the Interstate Conference of Employment Security Agencies, the last such meeting before the changes, BLS officials discussed their ideas on new estimating methods. The discussion, according to the minutes of the meeting, centered on finding the best way to eliminate the impact of future annual revisions to the State and local area unemployment estimates. With \$4 million available, BLS was considering enlarging the CPS in the 19 largest States to permit monthly CPS estimates. For the remaining 31 States, annual revisions would continue to be used.

The Committee discussed the proposal with BLS officials and opposed the expansion of the CPS for only the 19 largest States. The Committee suggested that the goal of the sample expansion should be to produce annual benchmarks for all States with coefficients of variation of 7.5 percent or less. Thereby all States would benefit from the CPS expansion. A further suggestion to BLS was to work toward an annual coefficient of variation of 5 percent for all States. BLS' reliability standard is 10 percent or less for the States. Another suggestion of the Committee was that there be only one set of estimating procedures, i.e., all States benchmarking to the annual CPS average rather than allowing some to use the annual CPS average and some to use a monthly CPS figure.

On October 14, 1977, BLS informed State agency officials of the changes it was making in local area unemployment statistics methodology effective in January 1978. The State officials were invited to discuss the scheduled changes with BLS officials at a conference on October 25, 1977.

State agency officials we talked with were very critical of some of the changes and the way they were implemented. The officials stated that the primary objections raised at the October 25th meeting were

- the lack of lead time given the States to implement the changes,
- the lack of input allowed the States,
- the lack of comparability between the States during the 4-year phase-in period, and
- the impact of the new methodology on unemployment rates computed for SMSAs and large cities.

At the conclusion of the conference, the State agency officials passed a formal resolution requesting that BLS delay the implementation of the new procedures until the States and other interested parties had a chance to review them fully. The resolution proposing the delay said that BLS had (1) ignored the recommendations of the Research and Statistics Committee of the Interstate Conference of Employment Security Agencies, (2) had not provided adequate opportunity for review and analysis of the methodology and potential results, and (3) had proposed changes which could result in substantial errors and subsequent misallocation of Federal funds.

The Commissioner of Labor Statistics rejected the request to delay the changes, citing the importance of decreasing the annual revisions to the greatest extent practicable and increasing the reliability of the base data. The Commissioner noted that the eventual direct use of the CPS for all States was discussed with the Research and Statistics Committee at its February and June 1977 meetings as well as with the research directors at the October 1977 meeting.

State agency officials told us that they objected to not being given an opportunity to comment on the changes before they were formally announced by BLS. Regional BLS officials stated that the States were kept informed of the proposed changes via the Interstate Conference of Employment Security Agencies and that State agency representatives to the October 1977 meeting were requested to submit comments on the proposed changes.

The Chairman of the Research and Statistics Committee of the Interstate Conference told us that the October 14, 1977 memorandum was the first notice the States received regarding BLS' proposed changes for January 1978. The Chairman noted that BLS officials had addressed the June 1977 meeting and indicated changes BLS was considering, but that the changes discussed were not the ones actually made.

State officials told us that they were skeptical about the sincerity of the BLS request for comments on the proposed changes. They said that BLS had already published a detailed schedule for implementing the changes (see schedule below) which called for BLS regional office personnel to receive training in the new procedures only 3 working days after the due date for State comments. The State officials believed the short lead time and the detailed schedule meant that BLS did not intend to make any change to its proposal.

BLS Schedule for Introducing
Changes in Local Area Unemployment
Statistics Methodology

October 14, 1977	Draft of methodology changes sent to BLS regional offices, States, and Research and Statistics Committee for comment
October 17-19, 1977	Met with public interest groups
October 25-27, 1977	Met with State agency officials to present and receive comments on proposed methodology changes and to present due dates for State portion of process
November 11, 1977	Received regional office and State comments
November 16-18, 1977	BLS regional office training in new estimating procedures
November 18, 1977	Issued intructions on new methodology
November 29 - December 16, 1977	State agency training in new procedures

As indicated in the above schedule, BLS discussed its plans with public interest groups on October 17-19, 1977. The groups included the National Association of Counties, National League of Cities, and the Conference of Mayors. A BLS official told us that the groups did not see the proposed changes before the meetings.

On February 23, 1978, the Subcommittee on Census and Population of the House Post Office and Civil Service Committee held hearings concerning the impact of the methodology changes BLS had made the month before. In testimony before the Subcommittee, the Conference of Mayors representative agreed with BLS that there were serious problems with the old procedures. He also had problems with the new procedures. One of the Conference's recommendations was that the new procedures be delayed until the potential effects could be determined. To accomplish this, he recommended that data be collected for a period of time under both the old and new procedures.

The major changes in BLS methods of estimating local area unemployment which caused the Mayors Conference and others to voice concern were the elimination of separate CPS figures for 29 of the 30 largest SMSAs and 9 of 11 central cities, and breaking down SMSA estimates of unemployment and employment using the new bases of unemployment insurance claims (by residence) and population distribution, respectively. BLS officials told us that they are convinced these changes represent procedural improvements, but they acknowledged that they could not be certain of the effects the changes would have on estimates.

In early 1978 BLS made two internal analyses of the effects the changes would have had on 1977 estimates in 27 SMSAs that were then computed using CPS results for the SMSAs and in 63 counties that were part of large multicounty SMSAs that were not reported separately by the CPS. The results of these analyses, undertaken after the changes were implemented, are discussed below.

The BLS analysis of the data for the 27 SMSAs showed that eliminating individual benchmarks for the SMSA Handbook estimates would have resulted in the difference being evenly distributed. A comparison of estimates made by using the old and new methods--direct benchmarking and treating the SMSA the same as the remainder of the State--showed that for 13 areas the estimates were closer to the CPS annual average with the new method. For 3 areas there was no difference, and for 11 areas the estimates were closer to the CPS with the old method.

The above BLS analysis for these SMSAs did not measure the potential effect of the newly implemented claims and population bases for disaggregating SMSA unemployment and employment estimates to the counties within the SMSAs or the effect on the central cities for which BLS had previously used CPS benchmarks.

The other BLS analysis was aimed at ascertaining the potential effect of claims- and population-based disaggregations of LMA unemployment and employment estimates. This analysis covered eight States which were already using claims- and population-based disaggregation. It compared the official September 1977 rates developed for 63 counties in major LMAs in these States with the rates that would have resulted if the LMA estimates had been disaggregated using the census share method all other States had been using. These major LMAs were SMSAs which did not have

separate CPS benchmarks in 1977. For the 43 cities in these LMAs, claims data were not available; therefore, only the census share method could be used for comparisons below the county level.

BLS found that using the census share method to disaggregate to the 63 counties within the SMSAs would have produced unemployment rates for September 1977 higher than the official estimates in 25 counties, lower in 31, and about the same in 7. For the 43 cities within these counties for the same time period, the unemployment rates would have been greater than the official estimates in 20 cities, less than the official estimates in 14 cities, and unchanged in 9 cities.

The county and city analysis did not measure the effect that the improved unemployment insurance claims data by place of residence would have had on the estimates since claims data by place of work were not available for comparison. The objective of the analysis was to show the effect the claims/population and census share methods would have on breaking down the same data.

In summary, these two analyses of 1977 data, performed by BLS after the changes in methods were implemented, indicated only that the changes would produce different results. Since the analyses did not cover all the changes made because of a lack of data, the differences obtained did not fully indicate the variations in rates that might have resulted had the changes actually been implemented in 1977.

Because unemployment estimates are crucial factors in distributing Federal assistance to local areas, there should be determination of the potential effects of new procedures before they are used officially. This would enable BLS and program agencies to provide some advance warning to those areas that might be significantly affected by the changes.

CHAPTER 4

CONCLUSIONS, RECOMMENDATIONS, AND AGENCY COMMENTS

BLS estimates of unemployment in counties, cities, and towns are not reliable as indicators of unemployment in those areas. The potential error in the estimates cannot be measured, but the error range among areas could be wide. Also, in some areas, unemployment may have been consistently understated, while in others, consistently overstated.

There probably has been misallocation of funds under allocation formulas which use these poor statistics, but because potential errors in the statistics cannot be measured, the amount misallocated cannot be determined. Errors in these statistics could mean differences of millions of dollars to some areas.

In the time it has had responsibility for the local area unemployment statistics program, BLS has taken some important steps bearing on development of better statistics, most notably increased use of the CPS as a control over statewide totals and a program to improve baseline unemployment claims data. However, substantial improvement in quality of local unemployment estimates will require effort to deal with data deficiencies critical to the relative portrayal of the total unemployment pictures at the local level.

Estimates of the number of local jobseekers who, for various reasons, are not drawing unemployment compensation are the weakest links in local unemployment statistics. These estimates, based now on old, national relationships, need to be based on data reflecting current characteristics of local labor forces.

How data needed to better estimate local employment and unemployment outside the unemployment insurance system can be developed and how current it can be is yet to be determined. We believe it will be difficult, if not impossible, to obtain such critical data without expanding the roles of States in this statistical program. Because States are closer to local conditions, they probably would have the best chance of developing the needed data.

The feasibility of the States doing more than the arithmetic on the local area unemployment statistics program will have to be studied, but our discussions with State agencies

indicated that the States want to get more involved in establishing the techniques used in the program.

Some other aspects of the local area unemployment statistics program also need to be improved. Specifically, agreements between Labor and the States should include procedures and responsibilities for proposing, and assessing the effects of, changes in methods used and for funding the costs incurred by the States.

The effects of recent changes BLS made in its methods of estimating unemployment in large urban areas were not adequately assessed before the changes were officially implemented. Had this step been taken, localities could have been forewarned of possible changes in the Federal assistance they would receive, and BLS might have avoided some of the controversy that resulted from these changes.

Because State efforts on the local area unemployment statistics program are not funded specifically, the work competes for resources with other labor market information programs sponsored by Labor. A funding arrangement is needed that provides States adequate resources to accomplish their work on unemployment statistics.

RECOMMENDATIONS TO THE SECRETARY OF LABOR

We recommend that the Secretary initiate a Federal/State review of the problems experienced in estimating employment and unemployment in local areas. Particular attention should be given to the need to develop better estimates of local employment and unemployment outside the unemployment insurance system. Expanding the roles States have in the program to make use of their potential to provide data which are needed for such estimates should be fully explored.

Labor and the States should also agree on procedures to be followed in proposing and evaluating changes in the methods used to estimate local unemployment and the most efficient way of funding the cost of the program in the States. These matters as well as any changes in assignments of responsibilities under the program should be incorporated in the formal agreements between Labor and the States.

AGENCY COMMENTS

Department of Labor

On March 30, 1979, Labor commented on a draft of this report. Labor's comments on our recommendations are shown in appendix III.

Labor concurred with our recommendations except that it did not believe that a Federal/State review of the problems experienced in estimating unemployment in local areas was necessary. Labor said that such a review would simply duplicate the work of the National Commission on Employment and Unemployment Statistics. The Commission's report, to be issued in September 1979, will devote a major section to State and local labor force and unemployment data.

We recognize that the Commission has conducted a comprehensive review of the current methodology for developing State and local labor force data. Certainly, the problems with local unemployment estimates are now well defined. What remains to be resolved, however, is how to obtain the data needed for better estimates.

Our recommendation for a Federal/State review of the program is intended to promote cooperation between Federal and State agencies in solving the data problems that hamper development of better local unemployment statistics. As Labor pointed out in its comments, not all expertise in this program is centered in Washington. As a group, State agencies have a basic knowledge that comes from working in the program and from being involved in other labor market information activities carried on in the States. It seems to us important for Labor to be certain that State expertise has been fully drawn upon in developing a plan for improving local unemployment statistics.

Also, whether the plan calls for an improved Handbook or a new estimating model, States will be the focal points for its implementation. Constructive discussion of Federal and State perspectives and differing points of view concerning the development of better statistics could help lay the foundation for the successful implementation of the plan by enhancing understanding among the parties, if not total agreement.

Labor commented that a recurring theme of our report--the need for greater State participation in the development of estimating methodology--did not consider the varying degrees of capability of the States and implies that the States have unique data sources, statistical skills, and other resources that need only be tapped. According to Labor, involving all States in the development of concepts and estimating methodology would be costly and impractical.

Our interest in stressing the need for expanded roles of States in this program is twofold. As we indicated previously, we believe it is important for Labor to take full advantage of whatever capabilities States now have to help improve the quality of local statistics. Over and above this, it appears to us that a Federal posture that encourages State participation in deliberations on methodology could lead to more research by the States on estimating problems peculiar to each and would foster the further development of State capabilities and data sources. In the long term, this could be an important factor in attaining the substantial improvement needed in the program.

Labor's comment that involving all States in the development of concepts and estimating methodology would be costly appears to presuppose that the benefits of getting the States more involved in methodology deliberations would not be worth the cost--the usual criterion for labeling an activity too costly. This is, of course, not yet known. Moreover, there are intangible benefits of an improved Federal/State relationship that cannot be measured. As for Labor's view that such an endeavor would not be practical, it would depend on how it was organized. For example, dealing with States grouped by region or by common interests in particular problems would be more practical than dealing directly with all 50 of them.

Labor also expressed concern about the ability of States to complete developmental work in a timely fashion. It cited the delay in State delivery on the contracts for improving unemployment insurance data and stated that the reasons cited for the delay--other higher priority work, hiring freezes, and delays in system design and equipment installation--would probably be equally applicable to any project undertaken by the States. We believe Labor is overly pessimistic. Certainly, the performance

of States on projects will vary and be influenced by the resources made available for them and the difficulty of the tasks.

On our recommendation that Labor and the States agree on procedures to be followed in proposing and evaluating changes in the methods used to develop unemployment statistics, Labor agreed but pointed out that there are many other groups that should have the opportunity to comment on proposed changes. Labor indicated plans are being formulated to provide for this opportunity but observed that it is not in the interest of public policy to make the distribution of large amounts of Federal funds dependent on a consensual approach.

The goal of the local area unemployment statistics program is to arrive at objective estimates of unemployment. Because of the important uses of these statistics, it is understandable that there is wide interest in how the figures are arrived at and differing views on how to improve the process. It is not our intention that BLS base decisions on methodology improvements on a consensual approach. It is clearly BLS' responsibility alone to make the decisions on methodology which will accomplish the goal of this statistical program. Our recommendation is intended to help BLS make these decisions by providing for a systematic means of insuring that all possibilities are considered and adequately evaluated.

In summary, we believe that obtaining quality in local unemployment statistics will require improved cooperation between Federal and State agencies. Our recommendations were developed with that in mind.

Department of Commerce

On April 10, 1979, Commerce provided comments on our draft report by the Office of Federal Statistical Policy and Standards (OFSPS) ^{1/}, the Bureau of the Census, and the

^{1/}In October 1977, statistical policy functions were transferred from the Office of Management and Budget to OFSPS. OFSPS has responsibility for development and coordination of statistical policy, and in cooperation with statistical agencies, develops concepts and standards for statistical work.

Bureau of Economic Analysis. Technical comments of the Bureau of the Census and the Bureau of Economic Analysis were considered in preparing the final report.

OFSPS stated that it agreed that Federal/State consultation and cooperation for this type of program are very important. OFSPS said that the report provides some reasons why this cooperation should be improved, including a more clearly defined relationship. OFSPS further stated that it is very important, however, for the Federal agency (BLS) to maintain uniform estimation techniques across all States and to continue to take a strong role in assuring the quality of the statistics across the entire program. OFSPS said that uniform techniques are needed for allocations to sub-State areas because of the need to uniformly treat homogeneous areas that happen to lie on opposite sides of State boundaries.

BLS recognizes the need for maintaining uniformity in estimating techniques. The principal problem in estimating local unemployment is a lack of data on characteristics of local labor forces, rather than a lack of uniformity in techniques used. The Handbook uses the technique of ratio estimating in developing figures on various categories of employment and unemployment. The problem is it uses the same ratios for all areas. Ratios are needed which capture the differences in these relationships from area to area.

As we indicated, States may best be able to develop data needed to establish appropriate ratios for their areas; however, BLS would have to satisfy itself that the data developed by the States are adequate for that purpose.

OFSPS also stated that our report places a heavy emphasis on improving various data sources in order to improve the quality of the local area estimates. OFSPS believes there should be additional work on alternative estimation methodologies as well.

As we noted on page 22, BLS has contracted for research to develop and evaluate several models for estimating local area unemployment, including a revised Handbook.

BLS COMPOSITE TECHNIQUE FOR
ESTIMATING LOCAL AREA UNEMPLOYMENT

In developing unemployment estimates for thousands of counties, cities, and towns, BLS uses data from many sources, including administrative records of the unemployment insurance system and the CPS program for national and State labor force statistics. Development of national and State statistics, the methods of breaking down State statistics to local areas, and weaknesses in the process are discussed below.

NATIONAL UNEMPLOYMENT FIGURES

BLS derives monthly national unemployment estimates from the CPS, which consists of Census Bureau interviews with selected households throughout the country. As a result of these interviews, persons are classified as "employed," "unemployed," or "not in the labor force." The labor force is the sum of the employed and the unemployed.

The employed are defined as all persons who do any work at all as paid employees during the reference period (the week containing the 12th of the month) or who work for at least 15 hours without pay in a family enterprise. Also included as employed are persons temporarily absent from work for such reasons as illness, vacation, or strikes.

The unemployed are defined as all persons who (1) did not work during the reference week, (2) looked for work within the last four weeks, and (3) were available for work. Also included are those who were waiting to be called back to a job from which they had been laid off, or were waiting to report to a new job within 30 days.

Those who are neither working nor looking for work are considered not in the labor force. The unemployment rate is unemployment as a percentage of the labor force. Members of the Armed Forces and inmates of institutions are excluded from the data.

Results from the CPS sample are inflated to independent population controls ^{1/} to represent the Nation as a whole. Since they are based on a sample, the figures may differ from the results that would have been obtained had a complete census been taken. However, this sampling variability of national estimates can be measured, and confidence intervals can be established. For instance, in August 1978, the overall civilian unemployment rate (before adjustment for seasonal patterns) was 5.8 percent. The sampling variability of this estimate was 0.11 percentage points. This means that the chances are about 2 out of 3 that the "true" unemployment rate was between 5.69 percent and 5.91 percent.

STATE UNEMPLOYMENT ESTIMATES

The CPS is becoming increasingly instrumental in estimating State unemployment. To adapt the CPS to States, it was necessary to expand the sample in some States (see map on p. 54) and to increase the overall number of interviewed households from 47,000 to 56,000. This augmentation provided annual average estimates for each State and for the District of Columbia with a 10-percent or lower coefficient of variation (CV)--sampling variability--at a 6 percent unemployment rate. That is, if the annual average estimate of unemployment for a State were 100,000, the chances would be about 2 out of 3 that the "true" figure would be between 90,000 and 110,000.

At present, State CPS estimates are sufficiently reliable (CVs of 10 percent or less) for BLS to use them as the official monthly estimates for the 10 largest States and in the Los Angeles metropolitan area and New York City. In the remaining States, the CPS provides similar reliability on an annual average basis, and the CPS results are used as control figures for adjusting estimates built from unemployment insurance records.

^{1/}The Census Bureau prepares independent population controls by "aging" the most recent census counts of population by age, sex, and race, by adding births and net migration, and subtracting deaths. The civilian noninstitutional population is obtained by subtracting estimates for the institutional population and for the Armed Forces.

The procedures for building unemployment estimates from State unemployment insurance records and other data available to State agencies are known as the "Handbook" or "70-step" method. The Handbook was designed to approximate the outcome of a sample survey and explicitly sought to replicate CPS concepts and estimates by using administrative data and various ratio estimates. Following is a general discussion of the Handbook method of arriving at State employment and unemployment.

Employment

State agencies estimate wage and salary employment covered by their unemployment insurance programs using data from a sample of employers (the 790 program--also called the establishment or payroll survey) and data from the unemployment insurance system. These estimates are on a place-of-work basis and are adjusted to a place-of-residence basis using relationships between the most recent census data and establishment data at the time of the census. These "Census/790 ratios" also adjust for dual jobholding.

State agencies estimate employment not covered by unemployment insurance using data from the most recent census, updated by factors supplied by BLS. A combined estimate for domestic workers, the self-employed, and unpaid family workers is thus developed and labeled "all other nonagricultural employment." This estimate is apportioned between domestics and self-employed and unpaid family workers on the basis of the distribution at the time of the 1970 census.

To estimate agricultural employment, State agricultural employment levels from the 1970 census are projected using factors developed from State agricultural employment estimates of the Department of Agriculture's Economics, Statistics, and Cooperatives Service. The sum of covered and noncovered employment represents total employment.

In January 1978, unemployment insurance coverage was extended to some domestic workers and farm workers. Therefore, the State agencies must exclude from the estimates of domestics and agricultural employment those persons who are newly covered and counted in the estimate of covered employment. Alternatively, State agencies may use the estimates of total domestics and total farm workers if they exclude newly covered domestics and farm workers from the estimates of covered employment and unemployment.

Unemployment

The State agency estimates of unemployment begin at the local unemployment insurance claims offices. The basic data provided by the local offices are counts of claims for unemployment insurance, counts of those who have exhausted their benefits, and counts of persons disqualified from receiving benefits.

Persons filing for benefits for the week containing the 12th of the month constitute the claimant count. All claimants with any earnings are to be excluded from the count of the unemployed. State agencies record the number of claimants who exhaust their benefits each month and estimate the number who remain unemployed using a "survival" factor provided by BLS. States record the number of persons disqualified from receiving benefits and estimate the number remaining unemployed using a separate survival rate procedure. They estimate the number of unemployed who delay filing or never file a claim for benefits using a formula based on the number of initial claims and the insured unemployment rate.

State agencies estimate unemployment not covered by unemployment insurance using certain relationships between unemployment rates in covered and noncovered work. The relationships used are based on national figures from studies conducted in the 1950s. The implicit assumptions are that these relationships would apply to each State and have not changed appreciably over the years.

The sum of covered and noncovered unemployment is called "experienced unemployed." The sum of the experienced unemployed and the employed is designated the "experienced labor force."

In addition to the unemployed who had worked in covered or noncovered jobs, "new entrants and reentrants" to the labor force must also be estimated by State agencies. These are persons who were not in the labor force before their current spell of unemployment. This group of unemployed consists mainly of (1) young people job hunting for the first time or returning to the search after periods of schooling and (2) married women reentering the job market.

The number of new entrants and reentrants is presumed to be related both to the level of experienced unemployed and to the overall size of the experienced labor force.

State agencies first determine a youth population ratio (population age 14 to 19 as a percentage of population age 20 and over). Depending on this youth population ratio and on seasonal factors supplied by BLS, particular proportions of the experienced unemployed and of the experienced labor force are summed to estimate total new entrants and reentrants.

The sum of experienced unemployed and labor force entrants is total unemployment. The sum of employment and unemployment is the labor force.

Adjusting State Handbook estimates for CPS results

State agencies develop independent Handbook estimates for the State as a whole and for about 2700 LMAs (see footnote on p. 3). The LMAs exhaust the geographic area of the State.

State Handbook estimates are linked to prior CPS estimates to provide current adjusted estimates. This is known as extrapolation. At the beginning of each year, BLS revises the extrapolated Handbook estimates for the year just completed on the basis of CPS annual average estimates for each State. This is called benchmarking. Employment and unemployment are benchmarked separately. Benchmarking is done because the Handbook estimates are not considered as reliable as CPS estimates, due to differences in State unemployment insurance laws, ^{1/} the limitations of the Handbook method, and errors in the unemployment insurance data. As mentioned on page 42, it is not necessary to benchmark in 10 States because the monthly CPS provides the official rates.

In the past, benchmarking has resulted in large revisions to previously published data because the same extrapolation adjustment was used for an entire year. Therefore, BLS procedures now provide for State agencies to compute moving average extrapolation adjustments using the relationship of the State CPS average for the latest 6 months to the State Handbook average for the same period. LMA Handbook estimates are adjusted proportionally to add to the statewide extrapolated Handbook estimates.

^{1/}On April 5, 1978, GAO recommended that the Congress establish uniform eligibility standards for unemployment insurance benefits (HRD-78-1).

BREAKING DOWN STATE FIGURES TO LOCAL AREAS

The first step in disaggregating State unemployment estimates to sub-State areas is actually accomplished in the building of Handbook figures for all LMAs within the State and adjusting these LMA estimates to agree in total with the State Handbook estimates, as adjusted for the CPS results. Therefore, breaking down State figures involves disaggregating adjusted LMA estimates of employment and unemployment into smaller area estimates. This disaggregation is done for all counties and for those cities, towns and areas in the LMAs which are eligible for CETA or public works money, the smallest of which are now 10,000 population (CETA). Although areas smaller than this were eligible for antirecession assistance, the legislation provides that additional data not be generated for this program. Therefore, these smaller areas were assigned the same rates as the county or, where appropriate, parts of the county they are in .

Breaking down LMA statistics requires separate disaggregation of employment and unemployment estimates. The bases of these disaggregations are as follows.

Employment disaggregation

Employment is allocated to counties on the basis of total population distribution using latest annual Census Bureau estimates, provided the State is using the claims-based disaggregation of unemployment (discussed below). Employment is distributed below the county level using proportions representing the distribution of county employment found in the 1970 census. This is called the "census share" method. For those smaller areas where the 1970 census did not tabulate employment, proportions representing the distribution of 1970 county population are used. This is called the "population share" method.

Unemployment disaggregation

To disaggregate LMA unemployment estimates to counties, when claims data are tabulated by county of residence, State agencies separate the total unemployment estimate into three components--experienced unemployed, entrants estimated as a proportion of experienced unemployed, and entrants estimated as a proportion of the experienced labor force (see p. 44). Different bases are used to distribute each of these components within the multicounty LMAs. The estimate of experienced unemployed is distributed according to the number

of unemployment insurance claimants residing in each county; entrants based on the estimate of experienced unemployed is distributed according to the counties' shares of population 20 years of age and over at the time of the 1970 census; and entrants based on the estimate of experienced labor force is distributed to each LMA county on the basis of 1970 population 14 to 19 years of age. These procedures together are known as "claims-based disaggregation".

When claims data are not tabulated by county of residence, the census share method is used to disaggregate unemployment to the county. Below the county level, the census share or population share techniques are used. However, in those areas where unemployment insurance claims are available by residence below the county level, BLS permits State agencies to use claims-based disaggregation for unemployment and population-based disaggregation for employment. Some States can now do this (see p. 20).

WEAKNESSES IN BUILDING LMA ESTIMATES OF EMPLOYMENT AND UNEMPLOYMENT

The Handbook has been a tool of State agencies since it was devised. The following description of its data development problems is based on our review of the Handbook procedures and discussions with BLS and State agency personnel.

Employment data

The establishment survey, combined with unemployment insurance coverage rates, provides the basic counts of covered employment. Some analysts consider the establishment survey a good indicator of employment in the manufacturing sector of the economy but less reliable in other areas. Its weakest area is the services industry, that sector of the economy where the greatest employment growth is occurring. Additionally, the basic estimates of wage and salary employment are adjusted to a residence basis using relationships between the 1970 census and the establishment survey for the same period. These relationships are believed to be outdated by shifts in population and employment centers since 1970.

Two components of the estimate of total employment that are especially imprecise are agricultural employment and the combination of domestics and nonagricultural self-employed and unpaid family workers. This latter combination is referred to as "all other" nonagricultural employment.

The base data for Statewide agricultural employment are provided by the quarterly sample of the Economics, Statistics, and Cooperatives Service of the Department of Agriculture. Because there is a lag in receiving Agriculture data, yearly data changes are used to determine annual benchmarks, generally in April, and current monthly estimates are projected from these benchmarks using factors derived by Agriculture. The State monthly estimate is allocated to counties on the basis of 1970 census relationships. This method was devised by BLS in 1973 and revised in 1975 when the Agriculture Department sample was changed from monthly to quarterly. Adjustments are made between benchmark periods using quarterly changes in the Agriculture data. This leads to constant revisions of the agricultural employment estimates during the year. Some States believe the allocation of Agriculture data to the county level is poor.

The combined estimate of "all other" nonagricultural employment is derived using a complicated estimating technique devised in the early 1960s and updated in 1973. The procedure uses 1970 census figures for all other employment by local area, establishment survey results on employment at the national and local levels in 1970 and for the present, and CPS estimates of all other employment at the national level in 1970 and for the present. Basically, the procedure updates the 1970 census figures by the changes in local establishment survey results between 1970 and the present as adjusted for the relationship between changes in the CPS estimates and national establishment survey results. The presumption which can cause error at the local level is that over the years a change in the relationship between local employment reported by the establishment survey and all other local employment is proportional to changes in the relationship at the national level. The movement of businesses alone could make that presumption wrong at the local level.

Unemployment data

On the unemployment side, the only "hard" data are the counts of current unemployment insurance claimants. Unemployment insurance laws differ from State to State on such points as eligibility, disqualifications, duration of benefits, and waiting periods. Also, the extent and quality of the data vary among States. In spite of these problems, unemployment insurance data represent a potentially solid base upon which to build estimates of the number of unemployed

in LMAs. Recognizing this, BLS has made a commitment to improve this base data. (This BLS effort is discussed on page 17.)

Other unemployment related to insured employment is estimated using "survival rates" and other assumed relationships and ratios. For instance, 95.2 percent of those who exhaust their regular unemployment benefits are presumed to continue to be unemployed the next week, and 95.2 percent of that 95.2 percent are presumed to remain unemployed the following week and so on.

This .952 weekly "survival rate" to estimate unemployed exhaustees is based on 1977 national CPS data on the continued duration of unemployment of persons unemployed at least 15 weeks. These CPS data refer to all long-term unemployed, not just unemployment insurance recipients. It is likely that the work history, earnings record, occupation and industry mix of persons who collected unemployment insurance benefits differ from those of all long-term unemployed. No regional, State, or local variations are taken into account. Additionally, some State analysts feel that when extended benefit programs go into effect, direct counts of extended benefit recipients should be used.

State agencies count the number of persons disqualified from receiving benefits and estimate the number who remain unemployed from one month to the next, using a .523 monthly survival rate. This rate is based upon 1977 national CPS data on duration of joblessness for all unemployed persons. Like that of the survival rate for exhaustees, the assumption of this procedure is that those disqualified from receiving unemployment insurance payments because of separation issues (fired for cause) are similar to other unemployed persons and, again, regional variations are not taken into consideration.

Those persons who would be eligible for unemployment compensation but for some reason delay filing or never file a claim for benefits are estimated using either an assumed factor for delayed filing or a factor based on current unemployment insurance records. The proportion of delayed filers to initial claims goes down as the insured unemployment rate goes up. These formulas have not been changed since the Handbook was first published. They are based on field studies conducted before 1960 in a few States. Nonetheless they are used throughout the country. At least one State--Kansas--has done field studies on the relationship between delayed filing and onset of unemployment. However, BLS insists

that the Handbook ratio be used, even though Kansas's studies might reflect more accurately that State's particular experience.

Estimates of the total number of unemployed persons who had been employed in jobs covered by Unemployment Compensation for Federal Employees and Railroad Retirement Board Unemployment Insurance are derived by multiplying the number of current claimants from these programs by adjustment factors to account for exhaustees, disqualified, and delayed- and never-filers. These adjustment factors are based on the data from the State unemployment insurance program. The relationships between total State-covered, total Federal-covered, and total Railroad Retirement Board-covered unemployment were specified in the original Handbook and have not been revised since 1960.

The numbers of unemployed persons who last worked in jobs not covered by the unemployment insurance system are estimated using relationships between joblessness in covered and noncovered employment that were determined by empirical studies in the 1950s. Nonprofit institution unemployment has been estimated using the same 2 percent unemployment rate since 1960, an assumption based on unpublished data for 1957 to 1959. Unemployment among domestics is assumed to be three-fourths of the State-covered unemployment rate. The unemployment rate of non-agricultural self-employed and unpaid family workers is one-fifth of the State-covered rate. State and local government unemployment is one-third of the State-covered rate or three-fourths of the Federal worker rate if there is significant Federal employment in the area. All these assumptions about the relationships of covered to noncovered unemployment rates are based on unpublished data for 1957 to 1959, do not take regional variations into account, and have been in use since 1960, in spite of changes in the way employment in these industries is estimated.

When the method of computing a single estimate of total agricultural employment was devised in 1973, a change was made in the method of computing agricultural unemployment. The agricultural unemployment rate was to be a particular proportion of the State-insured rate (as before), but the proportion would be different for each month of the year, ranging from .406 in May to .738 in December. These proportions were derived by weighting the separate factors for agricultural wage and salary workers and for self-employed farmers and unpaid family farm workers by national CPS monthly employment levels.

In essence, the relationship between State-covered and agricultural unemployment is still based on observations made in the late 1950s, and the weighted averages have not been revised since 1973. Large farms are now covered by unemployment insurance. Thus, a larger proportion of the agricultural employment that remains uncovered by unemployment insurance will now be made up of self-employed farmers and unpaid family farm workers.

The unemployed who had last worked in jobs covered by unemployment insurance, together with those who had worked in noncovered jobs, constitute the "experienced unemployed." A third class of unemployed is new entrants and reentrants to the labor force. These are estimated using factors based on assumptions about the relationships between entrants and experienced unemployed, the size of the experienced labor force, the proportion of youth in the population, and the month of the year. These relationships were determined using data from 1950 to 1964. The seasonal factors are updated annually by BLS, however. Again, regional differences are not considered, except insofar as youth population ratios are specific to each State and area.

Labor force entrants are mostly women and youth. The assumptions about the relationship of entrants to other labor force components have not been modified since 1966 even though women and youth constitute a much larger part of the labor force now than a decade ago. This is one of the most significant parts of the Handbook since labor force entrants accounted for 42 percent of total national unemployment in 1977.

WEAKNESSES IN DISAGGREGATING LMA ESTIMATES

BLS prescribes several methods for disaggregating LMA estimates of employment and unemployment to the county level and below. The major thrust now is to develop the capability of State agencies to break down LMA estimates using the claims-based disaggregation method discussed on page 46. Currently, BLS requires the use of claims-based disaggregation at the county level when the necessary claims data are available by residence and permits its use below the county level if State agencies can and want to use it.

There are some assumptions made in BLS disaggregation procedures that can cause problems in distributing LMA employment and unemployment to subareas. On the employment side, the

LMA estimate is distributed on the basis of the Census Bureau's latest population estimates for areas encompassed in the LMA. This presumes that the employment/population ratio is the same in all jurisdictions, an assumption that obviously is not valid in all areas. In July 1977, BLS published 1976 CPS annual averages for 11 large central cities. In 9 of the 11 cases, the employment/population ratio was lower in the central city than in the SMSA as a whole. The same pattern was evident in the data for 5 years earlier. Using population to distribute LMA employment could therefore overstate central city employment and understate employment in the suburbs.

There are two other problems with using total population to allocate employment. First, LMA employment estimates cover only those persons 16 years of age and older while population estimates used, in nearly all cases, are totals of all ages. In the past, the Census Bureau has not published annual age-group estimates by county, but county estimates now are available by 5-year age intervals and the Bureau plans to make this series part of its permanent program, with publication lagging about 6 months behind the estimates of total population.

Also, LMA employment does not include military, but population estimates do. As part of its population estimating program, the Census Bureau obtains from the Defense Department estimates of station strength for each military installation. The use of only civilian population could alter the results substantially in areas with military bases. Several States have requested and obtained approval from BLS to exclude military from population estimates used to disaggregate employment.

On the unemployment side, claims-based disaggregation distributes LMA unemployment to subareas using unemployment insurance claims and population data from the 1970 census. Population data for 1970 is used to allocate to subareas the LMA estimate of persons just starting to look for work (entrants and reentrants to the labor force). These estimates are, therefore, based on population relationships that are now 9 years old.

The LMA estimate of experienced unemployed is distributed to subareas using unemployment insurance claims. The important assumption in this procedure is that the relationship between the experienced unemployed drawing unemployment compensation and the experienced unemployed not drawing benefits (persons who are not eligible, or have exhausted their benefits, or for some reason have not filed claims) is the same in all

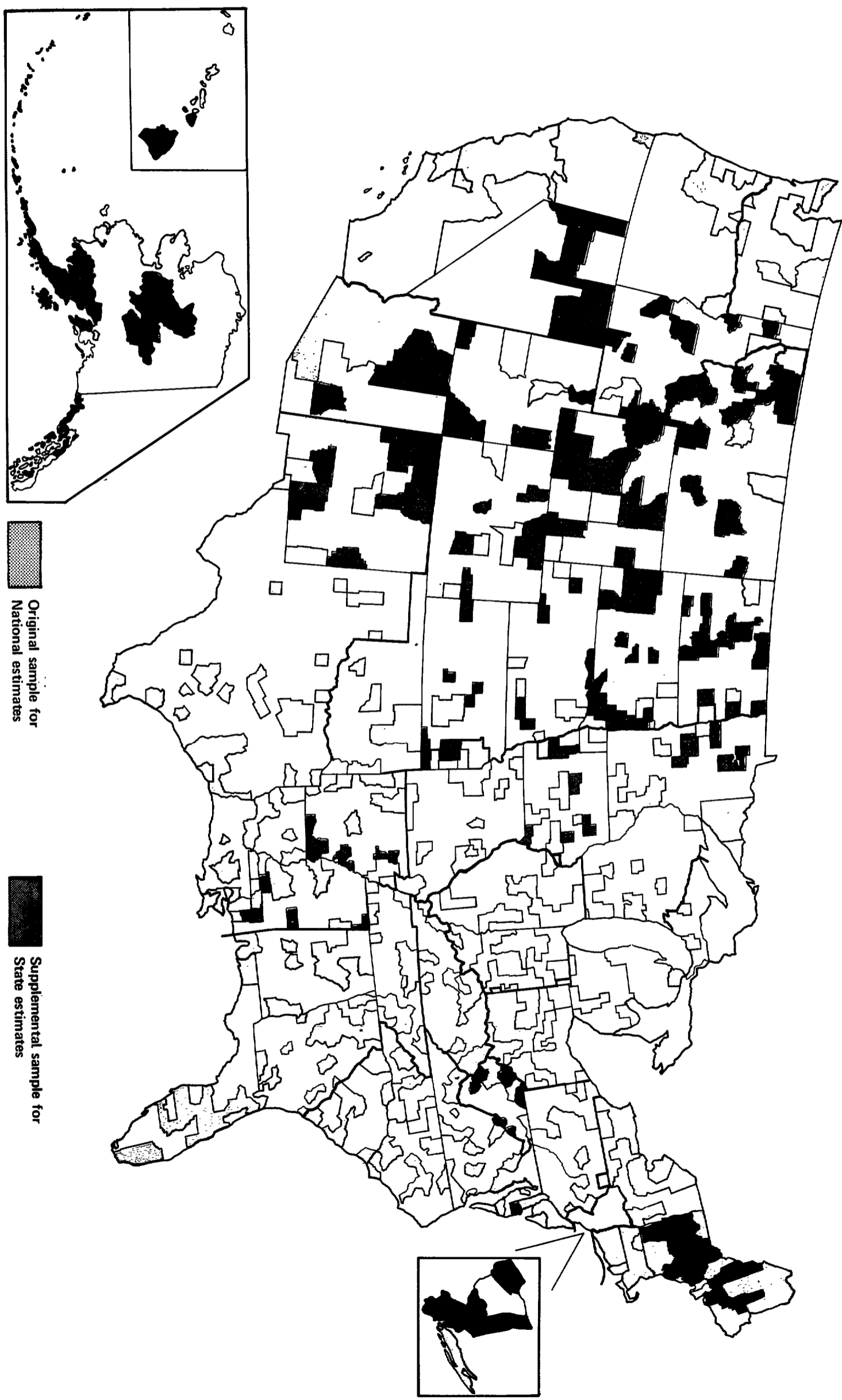
areas of the LMA. This assumption, of course, may be erroneous. For example, some analysts believe that proportionately fewer experienced unemployed in central cities file for unemployment insurance than in suburban areas because of ineligibility or unfamiliarity with the program. There were no data available, however, to indicate how significant the difference in such relationships might be. Labor informed us that studies concerning monetary ineligibility and its effect on the unemployment estimates are now being conducted by seven States under contracts funded by BLS.

In those LMAs where claims-based disaggregation is not yet available and in areas below the county level where specific estimates are required, employment and unemployment are disaggregated using either the census share or population share methods. (See p. 46.) These methods lock the distributions into conditions existing in 1970. Using the census share method, an area with no unemployment problem in 1970 officially will have no unemployment problem until the 1980 census, no matter how much conditions in the area deteriorate in the interim.

The same is true of employment disaggregation using population. Haines, Alaska is a small community whose employment estimate is based on Census population figures. Between 1975 and 1977, Haines lost its two principal employers and subsequently a large segment of its population. Yet the official data showed an increase in employment in Haines.

Incorporations or changes in legal boundaries also complicate disaggregation based on decennial census data. In Missouri, a local organization in Hayti Heights found that 40 percent of the adult population surveyed did not have a job but would like to work, about the same proportion as were actually working. This community could not be certified for eligibility under the Public Works Employment Act because the Missouri Division of Employment Security could not arrive at an estimate for the area since it was not a census reporting district in 1970.

CURRENT POPULATION SURVEY SAMPLING AREAS -- JULY 1978



APPENDIX II

Ohio	2,626
Oklahoma	684
Oregon	767
Pennsylvania	3,043
Rhode Island	449
South Carolina	639
South Dakota	909
Tennessee	1,039
Texas	3,204
Utah	819
Vermont	629
Virginia	1,240
Washington	988
West Virginia	679
Wisconsin	1,044
Wyoming	757
Total	<u>65,408</u>

APPENDIX II

2,228
551
619
2,537
382
496
671
855
2,525
679
432
1,047
790
561
893
569
<u>52,599</u>

CURRENT POPULATION SURVEYSAMPLE SIZE BY STATEMARCH 1978

<u>State</u>	<u>Households in sample 1/</u>	<u>Households actually interviewed</u>
Alabama	1,032	877
Alaska	1,062	759
Arizona	755	584
Arkansas	743	616
California	5,695	4,768
Colorado	1,116	867
Connecticut	786	662
Delaware	455	343
District of Columbia	389	304
Florida	2,366	1,830
Georgia	1,338	1,093
Hawaii	461	373
Idaho	824	589
Illinois	2,657	2,171
Indiana	1,512	1,186
Iowa	922	789
Kansas	867	702
Kentucky	910	759
Louisiana	1,130	874
Maine	782	533
Maryland	976	839
Massachusetts	1,584	1,311
Michigan	2,321	1,853
Minnesota	1,183	948
Mississippi	821	650
Missouri	1,354	1,098
Montana	842	641
Nebraska	654	529
Nevada	593	477
New Hampshire	600	441
New Jersey	1,777	1,484
New Mexico	748	579
New York	4,467	3,527
North Carolina	1,334	1,077
North Dakota	836	631

1/The total households figure includes 9,940 units found to be vacant or otherwise ineligible for interview.

U.S. DEPARTMENT OF LABOR
OFFICE OF THE SECRETARY
WASHINGTON

MAR 30 1979

Mr. Gregory J. Ahart
Director
Human Resources Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Ahart:

We appreciate the opportunity to comment on the draft report, Quality Local Unemployment Estimates: A Challenge for Federal and State Statistical Communities, prepared by the General Accounting Office.

The report gives an adequate description of how State and Local Area Unemployment estimates are made and identifies a number of problem areas. Some specific comments on sections of the report are given in the statement attached to this letter. Before addressing the recommendations, we would like to comment on some of the conclusions that have been reached in the report.

A recurring theme is the need for greater State participation in the development of estimating methodology. The fundamental problem with this view is that it does not consider the varying degrees of capability of the States, and implies that the States have unique data sources, statistical skills and other resources that need only be tapped. Certainly not all expertise is centered in Washington. However, involving all States in the development of concepts and estimating methodology would be costly and impractical.

One aspect of improving the estimates is cleaning up the unemployment insurance data base, as these data bases are the foundation of the total unemployment estimates. This was an area in which the resources and capabilities of the States could be utilized effectively and the program to improve the unemployment insurance data was, therefore, carried out entirely by the States. There are, however, other areas where State participation is not practical. As was noted in the report, an important need is to improve the estimates of the unemployed not

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covered by unemployment insurance. About half of the Handbook estimate of unemployed not covered by unemployment insurance are "new and reentrants" i.e., those who are not covered by unemployment insurance because they are newly entering the labor force, or are reentering it after having been out of the labor force for some period of time. States have no unique data sources for this group of unemployed persons. Improvement of the estimates for this group requires either extensive household surveys to develop information, or the application of sophisticated econometric techniques. This is not within the current responsibilities of the State agencies. If the State agencies were to participate in such an endeavor, agreement on the study approach (and close monitoring of the conduct of the study) would be imperative.

Another aspect that must be considered is the ability of the States to complete developmental work in a timely fashion. Our experience with States in improving the unemployment insurance data base is not very encouraging. As noted in the report, State delivery on the data base contracts has been slow. Only two States met their scheduled delivery dates, and half of the States were nine or more months late. The reasons cited for the delay--other higher priority work, hiring freezes, delays in system design, and delays in the installation of equipment--would probably be equally applicable to any project undertaken by the States.

Comments on the recommendations shown on page 97 of the report are given below.

Recommendation: The Department of Labor should initiate a Federal/State review of the problems experienced in estimating unemployment in local areas.

We do not concur. The Congress established a National Commission on Employment and Unemployment Statistics with the passage of the Emergency Jobs Programs Extension Act of 1976. This Commission, chaired by Dr. Sar Levitan, has conducted a comprehensive review of the development of State and local area labor force unemployment data over the past year. The Commission has issued a draft report giving its finding and recommendations. This

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report devotes one of its five major sections to State and local area labor force and unemployment data. The final report will be issued in September 1979, and the Secretary of Labor is provided, by law, six months to evaluate the report and its recommendations. In light of the recency of the review conducted by the Commission, we believe that a Federal/State review under the auspices of the Department of Labor would simply duplicate the work of the Commission.

Recommendation: Particular attention should be given to the need to develop techniques to estimate local employment and unemployment outside the unemployment insurance program.

We concur. The Commission also identified this need and has discussed it in its draft report. The need is being addressed by the Bureau of Labor Statistics as part of the plan for a redesign of the estimating methodology which is being done by an outside consultant.

Recommendation: The feasibility of expanding the roles States have in the program to make use of their potential to provide this data...should be fully explored.

We concur. This will be addressed in the redesign effort now under way. The statement of work in the Request for Proposal that served as the basis for the contract to redesign the methodology, specifically identified the need for the redesigned estimating methodology to be able to take advantage of important variables peculiar to each State.

Recommendation: The Department and States should also agree on procedures to be followed in preparing and evaluating changes in the methods used to develop unemployment statistics...

We concur. There is a need for all parties including the State employment security agencies (SESA's), prime sponsors, and public officials to be informed of proposed changes and to have the opportunity to comment on them. The Congress recognized this need when it reauthorized the Comprehensive Employment and Training Act in October 1978, and the Bureau of Labor Statistics is in the process of formulating a program to meet this goal. Our plans for this program include consultation with the

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States in their role as the producers of the data since changes in the unemployment estimating process often impose work generating responsibilities on the State employment security agencies which can best be evaluated by State personnel responsible for generating estimates.

It should be noted, however, that the recommendation seems to assume that the interests of prime sponsors and local public officials will be represented by "the States" and that if DOL and "the States" can agree, all will be well. However, many large cities seem to have views which vary substantially from those of the State employment security agency. Further, in our experience, opinions vary among States. Even within a State the problems may be viewed quite differently by the Governor's office, the Administrator of the employment security agency, and the research staff of that agency.

In view of the above, we believe most firmly that while States, prime sponsors, and local public officials should have the opportunity to comment on proposed changes (and the plans being formulated to meet the intent of Congress provide for this opportunity through the Federal Register and other means), it is not in the interest of public policy to make the distribution of large amounts of Federal funds dependent on a consensual approach.

Recommendation: The Department should agree on the most efficient way of funding the cost of the program in the States. Assignments of responsibilities under the program should be incorporated in the formal agreements between the DOL and the States.

We agree that there should be a review and reassessment of the funding of the program to the State agencies and the Department of Labor will undertake such a study.

Sincerely yours,



R.C. DeMarco
Inspector General-Acting

Enclosure

(275010)

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