(c) Interstate price differentials

Although a fairly comprehensive investigation has recently been made of interstate differences in price trends, there is still no information on the differences in price levels among the various States. Such a study is needed to determine the extent to which interstate differences in money income reflect real income differences, a consideration of importance in using the estimates for allocating grants-in-aid. Needless to say, a study of this type would require close cooperation with the Bureau of Labor Statistics and the Department of Agriculture.

(d) Gross regional product

It is clear that the development of an estimate for each State of gross product and its components would add an important body of data on the economic structure and development of various areas of the United States. Such estimates would provide a variety of useful information—for example, they would provide comparisons of regional expenditure patterns, distributions of important categories of goods produced by geographic area, and estimates of personal savings in the various States, and would permit an analysis of the geographic impact of changes in demand for particular categories of goods. Although the difficulties of deriving gross product estimates by geographic areas are very great, consideration should be given to the possibility of preparing such estimates. Exploratory studies on several components of the gross national product (for example, producers' durable goods and houses) might be undertaken first and the list could be enlarged after some experience with the practical problems is obtained. Such studies would provide interesting insights irrespective of whether the derivation of the entire gross product proved feasible. It would also provide a firmer basis than now exists for assessing the difficulties and estimating the costs of preparing the complete range of gross product estimates for each State.

(e) Other national accounts

Further work might also be done to extend the input-output tables, the balance of payment statements, the flow-of-funds accounts, and the balance sheet in directions that would improve their adaptation to regional analysis. Although work of this type has progressed much less than that on the income and product accounts, some estimates—generally preliminary and exploratory in nature—have been prepared at several of the Federal Reserve banks. Regional input-output tables are perhaps of greatest potential usefulness, since they would help to improve and check the existing income and product data and would provide a basis for estimating gross and net flows of goods among regions. However, considerable refinement of all three of these relatively new and still evolving techniques of summarizing national economic activity will be required before they can be applied to regional analysis.

CHAPTER X—SIZE DISTRIBUTIONS OF INCOME

Distributions of personal income by size classes broaden the picture of the economy that is obtained from other data in the national income and product accounts. They are useful for many purposes—as a
description of how widely income is distributed among the Nation's family units; as an indication of the relative welfare of various groups in the community; as an aid in understanding consumer decisions to spend and save; as a basis for the formulation of marketing programs and policies by business; as a guide for governmental policies to improve the earning capacity and living conditions of low-income persons; and as a basis for measuring the relative tax burdens of the various income classes.

Like most statistics in national accounts, size distributions of income are more meaningful when they are available periodically—if not annually—and when they are broken down for significant groups in the population. We know, for example, that in the United States income is now much more equally distributed than it was in the 1920's and much of the strength of our economy in the postwar period has been attributed by some economists to this change in the distribution of income. Whether the distribution of income is changing—and the direction and size of the change—is information which is necessary for the development of both public and private policies. For this reason, the committee believes that size distributions of income should remain an integral part of the national accounts, and that the data underlying these distributions should be improved in order to obtain more reliable estimates.

The only available set of income distribution estimates that is integrated with total personal income as shown in the national accounts is prepared by the National Income Division.54 The blowup statistics derived from sample field surveys of family income as well as those from individual income-tax returns fall considerably short of these income totals, partly because nonmoney items of income are almost entirely excluded, but to a considerable extent also because of understatement of the various money items. Moreover, the relative amount of income understatement in the primary data varies considerably among types of income and also from one year to another. By adjusting to the annual income totals for separate types of income, and by integrating the field survey data with the basic information from tax returns, the National Income Division provides a size distribution series that is more comparable over time than the survey or tax return data, and that can be interpreted in conjunction with the income totals from the national income and product accounts.

Although considerable progress has been made in recent years in improving the statistical techniques for making estimates of income size distributions, these advances have not—and, indeed, cannot—overcome the gaps in our knowledge about the income of important groups in the population. To fill these gaps, it will be necessary to allocate more resources to obtain information to improve the corrections for understatement of income embodied in the source material and to provide more adequate material for combining the various sets of basic data.

1. INTEGRATION OF FIELD-SURVEY AND TAX-RETURN DATA

Field-survey and tax-return data cannot be directly integrated because of two major problems: First, the reporting unit is different in the two sets of data; and second, the income concept is not identical.

The reporting unit in field surveys is the family or unattached individual required for purposes of income size distributions, and the family income that is used as a basis of classification by income size in these surveys covers a wider range of money income items than the tax return statistics. On the other hand, survey data generally suffer from substantial understatement of income due in large part to the faulty recollection by respondents of their incomes. Field surveys are particularly weak for the income ranges at both the lower and the upper ends of the income distribution. Tax return data are, of course, weakest at the lowest end of the income scale, because persons with incomes below the income tax filing requirements do not file returns unless they are eligible for refunds.

In view of the deficiencies in the two sets of data, the cheapest method of obtaining distributions of money income by income classes would be to utilize the best information in each source. To do this correctly, it is necessary to have sufficient information to bridge the two sets of data. Such a bridge can be constructed by multiple cross-classifications of family units in the field surveys by income-size classes, by numbers of earners in the family, and by the types of incomes received by each income recipient in the family. By matching a sample of the income recipients covered in the field surveys with the tax returns they file, it is possible to reclassify the tax return tabulations by size of family income.

This is, in essence, the method now used by the National Income Division, but the latest data for establishing a bridge between field surveys and the corresponding tax return data are for the year 1949. Since the intervening years have produced numerous changes in the economy, it is essential that new and more current cross-classifications be obtained as soon as possible. The committee recommends that, in connection with its annual surveys of income, the Census Bureau should provide these cross-classifications periodically, say, once in every 3 or 5 years. We also recommend that a subsample of the census sample be matched with the corresponding tax returns for these years in order to complete the bridge between the two sets of data.

Unlike the 1949 study, the new matching studies should concentrate more on the upper end of the income scale in order to obtain a larger number of matched income-tax returns in the top income sector than in 1949 when the sample of matched cases was small in the top income ranges. Although consumer units in all income classes should be covered in the sample that is selected for matching, a larger than proportionate number of upper-income census families and unattached individuals should be drawn.

Another important data gap would be filled if tax returns filed by members of farm operator families—the persons reporting farm income and, separately distinguished, other persons in the family—were separately tabulated by income classes as part of the matching study. The National Income Division now attempts to remove the tax returns filed by all these persons before combining the returns into family units, because income size distributions are developed from other data sources in the case of farm operator families. The Internal Revenue Service has provided a special tabulation for persons reporting farm proprietors’ income by income classes, but the necessary data for other members of the farm family can be obtained only by a matching study of the type proposed here.
2. CORRECTION FOR UNDERSTATEMENT OF INCOME

The available evidence suggests that, even after reports of field surveys and tax returns are matched and appropriately combined, the resulting distributions fall substantially short of accounting for total personal income received. The missing income consists to a large extent of entrepreneurial and property incomes. Since these income items are not distributed proportionately by income classes, some factual basis is needed for allocating the missing incomes by income levels.

One of the sources of data used for making these allocations has been the audit control studies conducted by the Internal Revenue Service for returns filed in 1948 and 1949. In these studies, a scientific sample of individual income-tax returns was drawn and each return was subject to a full field audit by trained internal revenue agents. Although the studies were used primarily for evaluating administrative techniques of tax enforcement, they also yielded information on underreporting of incomes by taxpayers. As of this time, all of the information on income errors for the 1949 survey has not yet been tabulated. Moreover, a similar study was made for the year 1950, but no income information has been tabulated as yet in a form that would be useful for correcting income size distributions for understatement of incomes.

The committee urges that the information from the 1949 and 1950 audit control studies be tabulated by the Internal Revenue Service as soon as possible to provide estimates of the amounts of each type of income disclosable by audit, by the income classes used in Statistics of Income. These tabulations should be made available to the public—except to the extent that they involve confidential information—in order that non-Government research students be given the opportunity to use them in analytical studies of income size distributions.

Tabulation of the 1949 and 1950 audit control studies will not satisfy the needs for the future, since the understatement of incomes on tax returns among income classes and types of income may not remain the same for a long period of time. Accordingly, it would be desirable to have such surveys at least once in every 5 years as a basis for allocating the missing income. The committee recognizes that these surveys are expensive. Nonetheless, we believe that the purpose for which they would be used is important enough to warrant the expenditure of the necessary funds, particularly since they would provide extremely useful data for administrative purposes as well. With individual income-tax receipts at a level of about $35 billion, the expenditure of funds for locating returns with tax errors and for evaluating the efficiency of auditing techniques cannot be regarded as a luxury. We also suggest that the Internal Revenue Service should design the tabulations in consultation with the National Income Division in order to avoid the loss of key information needed for statistical purposes by inadvertence and also to avoid tabulation of unnecessary information.

3. SPECIAL STUDY FOR TOP INCOME TAX RETURNS

Because the National Income Division’s family income distribution series is determined to a large extent by the pattern of income changes over time shown by Federal individual income tax returns, the revised
income size distributions will reflect the decrease that occurred in the number of Federal individual income tax returns reporting high incomes between 1950 and 1953. In view of the general increase in incomes and in particular the almost certain increase in upper bracket salaries in this period, the decrease is puzzling and merits close investigation. One thing the Internal Revenue Service can do immediately to shed light on this question is to prepare for the years 1950–53 size distributions of tax returns, by source, on the basis of the income as reported less net capital gains. Such distributions should also be prepared for subsequent years, since the National Income Division must in any case adjust the data for capital gains. In addition, the committee recommends that a sample of top income tax returns in 1950 or 1951 be selected, and the returns for the same individuals located, insofar as possible, for succeeding years through, say, 1955. Detailed tabulations of all the income and deduction items, including the details of the capital gains, and related schedules reported on their tax returns by this sample in successive years might throw light on some of the reasons for the decrease in the number of returns in high-income brackets and would, in addition, make an important contribution to our understanding of the financial situation and activities of families at the top of the income pyramid.

4. SOURCE PATTERNS OF INCOME FROM THE FIELD SURVEYS OF FAMILY INCOME

To appraise and adjust the income distributions from the sample surveys in the light of available information on totals for the various types of income, tabulations in terms of source patterns of income are needed. These tabulations should show, for families and unattached individuals in each income class, the aggregate amount of each major type of income reported in the blown-up sample survey, and the number of consumer units reporting that type of income. Since relative understatement of income in the surveys differs for the various types of income, and since the relative importance of the various types of income differs among income brackets, source patterns provide a basis for adjusting the survey results in the light of the independently determined totals for the various types of income.

Source patterns should be tabulated separately for farm operator families, nonfarm families, and unattached individuals partly because the three groups differ greatly with respect to the types of income comprising their total income. If the sample permits, the nonfarm group should be subdivided by major occupation of the family head in order to make possible the derivation of adjusted distributions for important subgroups of the population.

5. IMPROVED DATA FOR FARM FAMILIES

Limitations in the income size distributions for farm families (i.e., families operating farms as defined in the census of agriculture) reflect the fact that total net farm income is substantially understated in practically all sample surveys of farm family income, and even more so in income tax returns. Thus we cannot be certain that the basic shape of the family income distribution for farm families, as measured for example by the Lorenz curve, is even approximated by the primary
data. Nor can these data be used to measure changes in the farm income distribution over time because the results have been obtained from successive surveys which differ substantially from one another.

The committee recommends that a major effort be devoted by the Department of Agriculture to experimentation with alternative methods of enumeration until improved results are obtained, i.e., until the estimates from one year to the next are consistent and conform reasonably well with the annual net farm income totals. These surveys should be designed to cover nonmoney income from farming, as well as the usual money income, to fill an important data gap that accounts for a significant fraction of farm family income.

6. DATA ON LOW INCOMES

One of the important uses of income size distributions is to identify the population at substandard levels of living and the causes of low-income status. A considerable amount of information is already available on the characteristics of low-income groups, but our knowledge falls considerably short of what is needed for policy purposes.

In fact, we are not absolutely certain at the present time about the exact number and proportion of the Nation's family units in the lowest end of the income distribution. Estimates based on the two currently available field surveys of income, by the Census Bureau and by the Federal Reserve System (in cooperation with the Survey Research Center of the University of Michigan), vary widely. Part of the difference may be accounted for by differences in the coverage of the two surveys. But even after adjustments for these differences are made, the variations in numbers of family units below the $2,000 income level are still relatively large. The committee suggests that a major effort be made by the agencies conducting the surveys to determine the reasons for the differences in their figures.

Apart from the question of numbers, there is need for obtaining considerably more information about the low-income groups in order to identify them properly. Low incomes may result from lack of education, age, unemployment, illness, widowhood, broken families, discrimination, and other causes. The relative importance of some of these problems is known approximately, but a complete catalog of all of the causes is not available. For the immediate future, identification of the socio-economic characteristics of low-income units is probably one of our most important problems of data collection.

The committee recommends, therefore, that particular emphasis be placed by field surveys in the near future on low-income units. This will require more adequate samples for the low-income classes in order to provide statistically reliable estimates of the numbers of families and unattached individuals in the various socioeconomic groups mentioned above. Special efforts should also be devoted to improving the data for low-income families by means of special probing questions or other devices. Requiring special attention is the extent to which the

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65 See Characteristics of the Low-Income Population and Related Federal Programs, selected materials assembled by the staff of the Subcommittee on Low-Income Families of the Joint Committee on the Economic Report, 84th Cong., 1st sess. (1955). Additional information may be expected from the work of the New York State Interdepartmental Committee on Low Incomes.

66 Ibid., pp. 40-43.
number of low-income units, particularly unattached individuals, may be overstated in the surveys because the units are enumerated and their family status determined in 1 year whereas the income information obtained pertains to the preceding year in which they may have had entirely different living arrangements, e.g., lived as members of another family unit on whom they were dependent for support. Finally, an effort should be made to obtain income histories covering a period of several years to determine the persistence of low incomes among families over a period of time. The census of 1960 will provide many data on the characteristics of low-income groups. We attach special importance to the satisfactory tabulation of these data since much meaningful information could thus be provided at low cost.

7. EXPENDITURES AND SAVING BY INCOME CLASSES

No agency of the Government is now collecting, or planning to collect, information on the expenditure patterns of the various income classes for the country as a whole. The last countrywide urban study of this kind was made by the Bureau of Labor Statistics for the year 1950, and even these data were not completely tabulated until recently—with funds provided by a private foundation to the University of Pennsylvania. A similar farm survey has just been completed by the Department of Agriculture.

The committee believes that surveys of expenditures and saving by income classes should be a regular part of the statistical programs of the Federal Government. Plans should eventually be made to make such surveys once every 5 years in sufficient detail to provide estimates of the outlays by consumers for the major categories of expenditures (e.g., food, clothing, shelter, consumer durables, etc.). However, before such surveys are made on a regular basis, considerably more experimentation will be needed to refine techniques of data collection in order to reduce nonreporting or underreporting by respondents.

We also call attention to the report of the consultant committee appointed by the Federal Reserve Board on Consumer Survey Statistics, which made specific recommendations for the improvement of the survey of consumer finances conducted by the Michigan Survey Research Center of the University of Michigan for the Federal Reserve Board. The survey of consumer finances provide material for appraising the economic situation of households and for understanding and predicting consumers' behavior. We believe that immediate action should be taken to implement the recommendations of the consultant committee.

8. INCOME HISTORIES

The income of a family unit in one particular year is the result of both permanent and transitory factors. Lengthening of the period

67 In its budget for the fiscal year 1958, the Bureau of Labor Statistics requested funds for conducting such surveys in 4 to 6 of the 46 cities in which prices are collected for the Consumer Price Index. At the time this budget was prepared the Bureau indicated its intention to request such funds annually to make surveys in a different group of cities each year. Final congressional action has not been taken on the 1958 request.
covered will yield size distributions of income that are more representative of income status than annual data. We have already called attention to the need for such information in connection with the analysis of the incidence of low incomes. Information of considerable value could also be obtained for higher income groups by concentrating on income histories of family units for more than 1 year.

To obtain this information, it is necessary to collect income data for the same family units over a period of years. Field surveys cannot easily be used for this purpose because it is difficult to obtain reliable responses from respondents for the distant past. Accordingly, reliance would have to be placed primarily on a sample of identical tax returns filed with the Internal Revenue Service for the necessary information. The committee recommends that the methodology and problems that will arise in connection with such a study be studied in a pilot project based on a small sample of tax returns, with the view to establishing a permanent method of collecting information on the income histories of identical taxpayers. Since tax returns will not cover the low-income groups adequately, consideration should also be given to the possibility of using more refined methods of interviewing through field surveys of low-income units to round out the picture of income histories that would be obtained from tax returns.

9. CHANGES IN THE METHODS OF INCOME DISBURSEMENT

As the economy has grown and the tax system has changed, methods of compensation and of withdrawing income from corporations have been greatly altered. The reliance on pensions, deferred compensation and stock options in lieu of cash wages and salaries, the conversion of ordinary incomes into capital gains, the growth in importance of business expense accounts that cover items of personal consumption, and the use of personal trusts to split incomes among members of the family is likely to have had an important impact on the relative size distribution of income. Since the National Income Division relies heavily on the bookkeeping records of business firms and on the tax returns of individuals to estimate the size and distribution of personal income, their estimates do not take into account many of these changes in income disbursements that have occurred in recent years.

Unfortunately, it is difficult to prescribe procedures for remedying this situation, since the required information is not readily available in official sources. It is important, nonetheless, that the developments described above should be carefully examined by competent research workers. The committee suggests that private research organizations and universities would be the most appropriate agencies for conducting such analysis. In order to make these studies possible, the collecting agencies of the Federal Government, particularly the Internal Revenue Service, should provide research workers maximum feasible access to official records. It will be necessary also to have the cooperation of business firms and financial institutions to supplement the data from Federal Government records.

The committee also urges the Conference on Research in Income and Wealth to encourage research in this area and to make available its facilities for an interchange of views by those interested in participating in such research. We also urge the conference to devote at
least one session at one of its annual meetings to a discussion of these
difficult and complex but important matters.

10. REGIONAL, STATE, AND COUNTY DISTRIBUTIONS

Requests are frequently made by Government officials, research
workers, and businesses for breakdowns of the national income size
distributions by region, for particular States, and even for counties.
The collection and tabulation of data to such detail requires samples
of a size that would be prohibitively expensive and it is doubtful
whether the Federal Government should devote its resources, except
for the decennial censuses, to the collection of these data. There is
no reason, however, why the State governments cannot undertake to
make such sample surveys either directly or through competent
sampling organizations. The Census Bureau has cooperated on a
number of occasions with State governments on a contract basis. This
year, for example, it is conducting special income field surveys for
New York State and the District of Columbia. The committee hopes
that the Bureau will be able to continue to satisfy in the same co-
operative spirit similar requests in the future.

11. PLANS FOR THE 1960 CENSUS

It seems likely that, as in the preceding censuses, income informa-
tion relating to the income year 1959 will be collected in the 1960
census for a large sample of the population.
The committee has been informed that in all probability a house-
hold schedule will be used rather than the line schedule which was
employed in the 1950 census. This change will have an important
bearing on the usefulness of the income data, since it will be feasible
to collect information separately for each family member rather than
for the family head and for all other family members as a group. The
committee strongly recommends that this change be made.
The committee also believes that the next decennial census should
be made the occasion for a concerted effort on the part of other Fed-
eral agencies to fill many of the statistical gaps in our knowledge about
income size distributions. Plans should now be made for: (1) match-
ing studies between census data and tax returns; (2) tabulation by the
census of cross-classifications for combining census and tax return
data; (3) an audit control survey by the Internal Revenue Service
to obtain estimates of underreporting on tax returns; (4) more de-
tailed census questions to obtain better data on the characteristics of
the low-income groups; and (5) a supplementary survey designed to
obtain estimates of expenditure and saving patterns by income groups
and by other significant characteristics of consumers. We would
hope that future decennial censuses will continue the collection of such
data. With appropriate supplementation by smaller and less ambi-
tious sample surveys in intercensal years, the Nation would then have
a continuous body of data on income size distributions which would
shed adequate light on numerous important economic and social
questions.

12. PUBLICATIONS OF ESTIMATES

The National Income Division generally prepares preliminary size
distribution estimates for the Nation as a whole within 6 or 8 months
after the end of the year. For example, distributions for calendar year 1955 were published in the June 1956 issue of the Survey of Current Business. At this early date, data from the Survey of Consumer Finances are generally available, but the tabulations based on the Census Bureau surveys are not yet complete, and no data are available from tax returns. Accordingly, the estimates for the top income brackets are little more than extrapolations from the last year for which all of the source material is available, with heavy reliance on the assumption that the shape of the income distribution reflected in the Lorenz curves for the major sectors (e.g., farm families, nonfarm families, wage-earning families) has remained unchanged.

Although it is true that Lorenz curves change very little from year to year, wide variations in the distribution of income by size classes may occur even if the changes in the Lorenz curves are small. In view of the facts that the estimates can be misinterpreted by those who are familiar with the approximate techniques that must be used in preparing current estimates, the committee questions the desirability of publishing size distributions of income before survey and tax-return data are available. We recognize that, for some purposes, rough estimates based on constant Lorenz curves are sufficient. Such extrapolations as are now made should be done informally and quickly—if at all—and the results distributed to persons or organizations in mimeographed form with a warning about the character of the estimates. It would be better to avoid giving widespread circulation to such estimates in order to prevent the inevitable misinterpretations that now occur.

13. INCOME CONCEPT USED IN SIZE DISTRIBUTIONS

At the present time, the income size distributions prepared by the National Income Division are based to a large extent on the personal income concept used in the national income accounts. "Family personal income"—the concept used—is equal to personal income less the income of members of the Armed Forces living on military posts, the income of the population in institutions, and the income of nonprofit organizations. The decision to use the personal income concept as a basis for the income size distribution estimates was made in order to provide a close tie-in with the aggregate personal income data that are now widely used.

The committee recognizes that the use of different income concepts makes for confusion. However, we believe that, in this particular case, there is little virtue in enforcing consistency, particularly when some departures have already been made with respect to the income recipient units included in the size distribution totals. It is doubtful whether, for most uses to which the data are put, the concept used at the present time is applicable. Moreover, use of the present definition of family personal income requires the allocation of imputed interest derived by individuals from commercial banking and the property income earned by life-insurance companies to the various size classes which can be done only on a rather arbitrary basis.

To make the data more meaningful to most users, the committee recommends that the basic concept of income for size distribution purposes should be the sum of: (1) cash incomes earned in production, (2) transfer payments, (3) wages paid in kind, (4) the net rental
value of owner-occupied farm and nonfarm dwelling, and (5) the net
value of food and fuel produced and consumed by farm proprietors.
This concept would avoid the distortions in the size distributions that
would arise if all imputed items were neglected. At the same time,
it would limit the imputations to those items that are clearly neces-
sary to put the incomes of farm and nonfarm groups and of home
owners and renters on a comparable basis.

It would be desirable also to provide size distributions on the basis
of three additional concepts that have important practical and analyti-
cal usefulness. The first is a distribution based entirely on a cash
income concept; the second a distribution based on the revised family
personal income concept as defined above plus realized net capital
gains and losses; the third a distribution based on the national income
concept. The cash income concept is wanted by those who use the
data for marketing purposes. The concept inclusive of capital gains
is particularly important to evaluate the effect of profits realized as
a result of changes in the value of individual asset holdings during
inflation or depression. As indicated in chapter V, when data be-
come available, both realized and unrealized capital gains should be
introduced into the system of national accounts. It would be de-
sirable to add at the same time unrealized capital gains to the second
of the supplementary size distribution concepts suggested here. The
national income concept would show the effect on the size distribution
of income of all the imputed items that accrue to the benefit of in-
dividuals and of undistributed corporate profits.

14. CONSTANT-DOLLAR ESTIMATES

For some purposes, estimates of income size distributions using in-
comes in constant dollars are useful because they eliminate the effects
of price changes. The committee recognizes that adequate deflators
for the different types of families in the economy and for the dif-
ferent income levels are not available. Nonetheless, even approximate
estimates based on constant dollar figures would be helpful. We sug-
gest, therefore, that rough constant-dollar estimates be prepared when
the official estimates in current dollars are released. Initially, the de-
flation of incomes for price changes might be made on the basis of the
Consumer Price Index for urban and rural nonfarm families and the
index of prices paid by farmers for farm families. However, later
separate deflators might be developed at least for farm, rural nonfarm,
and urban families and, if possible, for unattached individuals and
high-income families.

CHAPTER XI. STATISTICAL ADEQUACY OF NATIONAL INCOME AND
PRODUCT ESTIMATES

1. GENERAL CONSIDERATIONS

To the extent that national income and product data are utilized for
public policy formulation, private decision making, and economic
analysis, users of the data have a decided interest in their reliability.
This concern is shared by the compilers of the figures—the staff of the
National Income Division and other Federal statistical agencies—who
exhibit a genuine professional desire to produce the best possible data,