Socioeconomic Data for Economic Development

An Assessment

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These data users could not have been reached without the cooperation of the executive directors of 23 economic development professional and trade associations (Appendix 1A). Understanding the importance of access to good data, these directors graciously arranged for us to inform their members about the survey. In addition, the National Association of State Development Agencies, the Council for Urban Economic Development, and the American Planning Association each kindly allowed us to hold a focus group with members at their national conferences.

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With great skill and unfailing good humor, Beth Martin prepared the many tables and figures that populate this report and saw to it that the authors need not worry about the intricacies of integrating text and charts into a single document.

While the report does set forth the opinions of project participants, its findings and recommendations, as well as any errors, are the sole responsibility of the authors.

Executive Summary

Introduction

Effective economic development requires an understanding of the dynamics of the regional economy—its current and recent performance, the evolution of its industry structure, the underlying reasons for these trends, and the challenges ahead. A critical means to gain such understanding is access to ***current, accurate socioeconomic data***.

The federal government has the primary role in providing socioeconomic data at the state and local level. However, many in economic development have voiced concern about the ability of federal statistical agencies to fulfill this role. These concerns are summarized in *A Path to Smarter Economic Development: Reassessing the Federal Role*, prepared by the National Academy of Public Administration (NAPA), and commissioned by the U.S. Economic Development Administration (EDA).[1] The report says that a lack of coordination among the federal statistical agencies, recent budget cutbacks, and the low priority often placed on regional data efforts have resulted in the existing data system not meeting the everyday needs of development practitioners for usable, reliable data that provide a complete picture of a region's economic activity.

In response to the NAPA report's observations, EDA funded this in-depth assessment of the nation's system for generating regional socioeconomic data. The purpose of this effort is to

- understand data user demographics, their work with data, their knowledge of data sources and uses, and their approach to learning about data;
- ascertain the extent to which data users' needs are being met by data providers, particularly federal statistical agencies;
- recommend ways in which user needs can be better met, specifically through actions by federal statistical agencies, economic development professional and trade associations, and EDA; and
- provide useful information to economic development practitioners about data sources and uses.[2]

Three means were used to collect information on data user characteristics and perceptions – an Internet-based survey (with 613 respondents), five focus groups and roundtables, and 20 telephone interviews.

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[1] National Academy of Public Administration, *A Path to Smarter Economic Development: Reassessing the Federal Role* (Washington, DC: November 1996).

[2] This project also has prepared two additional products to aid data users: *Socioeconomic Data for Understanding Your Regional Economy: A User's Guide* provides an overview of sources of regional socioeconomic data, means of accessing them, and best practices for analyzing them. EconData.Net (www.econdata.net) is a Web site that provides hyperlinks to 400 public, university, and private sources of regional socioeconomic data.

The Regional Economic Data System

In the United States, vast amounts of regional socioeconomic data are collected, analyzed, and disseminated by an array of several hundred independently operating federal, subfederal, private nonprofit, and private for-profit organizations. Of these groups, the federal statistical agencies are by far the most important for regional economic analysts. In fiscal year (FY) 1999, over 70 separate agencies in the federal government will collectively expend $3.9 billion to carry out this mission.

The federal statistical system is highly decentralized, in contrast to centralized arrangements found in most other developed countries. Moreover, the components of this decentralized system have been created in an *ad hoc* manner. Congress's primary pattern has been to create a new statistical organization to observe and measure activity in each major realm of emerging public policy concern or interest.

Three federal statistical agencies produce data important to regional analysts—the Bureau of the Census (Census), the Bureau of Labor Statistics (BLS), and the Bureau of Economic Analysis (BEA). Data generated by these organizations cover broad socioeconomic topics such as population, employment and unemployment, income and earnings, production, cost of living, and international trade. Most other federal statistical units focus on one specific dimension of the larger economy and society (e.g., transportation, energy, agriculture, and small business).

Parallel to, but less visible than, the ongoing ad hoc creation of disparate federal statistical organizations has been a sequence of special studies to examine the advantages and disadvantages of moving in the opposite direction and centralizing the federal statistical system. While centralization has not occurred, a series of mechanisms have been developed over time to coordinate federal statistical agency efforts. The primary mechanism is the Statistical Policy Branch (SP) of the Office of Management and Budget (OMB). In contrast to the wide scope of its mission, SP has a budget of under $1 million and maintains staff of only five. SP is advised by the Interagency Council on Statistical Policy (ICSP), which includes the heads of the major statistical programs. ICSP has become a key vehicle for the coordination of federal statistical activities and provides an umbrella for a number of multi-agency working groups.

Concerns about the federal statistical system mentioned in the NAPA report have echoed those of other observers in the early and mid-1990s. Today, representatives from federal statistical organizations point out that attempts to address a number of these issues have been made since the release of the reports.

While the federal government plays, by far, the dominant role in the collection, analysis, and publication of regional socioeconomic data, other types of organizations have roles as well. These organizations include state and local governments, universities, trade associations, other private nonprofits, and commercial organizations. Certain organizations have designated roles as data intermediaries, with a primary function of providing fast, low-cost access to data from multiple sources, and expertise to aid in data

choice and use. Examples of data intermediaries include Census Data Centers, university business and economic research centers, chambers of commerce, and data guides on the World Wide Web.

A Profile of Socioeconomic Data Users

Who are the users of regional socioeconomic data? How and why do they work with data? How do they learn about data sources and analytic techniques? In order to assess how well the current system for producing regional socioeconomic data is meeting the needs of users, the characteristics of the users themselves first must be understood.

Demographics: Respondents represent a diverse cross-section of data users in terms of type of work (practice, research), type of jurisdiction (state, metro, local, multi-area), and geography (rural, small metro, large metro). The majority are in senior positions in their organizations. On average, respondents have 13.5 years of experience.

Type of Work: Respondents' primary job activities are well distributed among five major categories, including: prepare economic analyses; design and implement policies and programs; organize and disseminate secondary data; collect and prepare primary data; and other. Most respondents' work involves not only the analysis of data but also the preparation of written narratives that describe, interpret, explain, or otherwise utilize the data. Over 70 percent are "frequent" data users.

Methods and Techniques: Respondents employ several means to obtain secondary socioeconomic data, although they rely on the World Wide Web more than any other. Most regularly use a number of basic analytic techniques (e.g., geographic comparisons, time series analysis, and multiplier/impact analysis); only a small percent regularly use more advanced techniques (e.g., regression analysis).

Context of Work: Respondents' analytic agendas are set primarily within, rather than outside of, their organizations. However, most respondents do not think the requests for analysis they receive are reasonable, and do not believe they have sufficient resources to carry out their responsibilities. They believe their work has an impact on the actions of their audiences. At the same time, they think that decision makers often do not carefully review data before making decisions.[3]

Knowledge and Learning: Respondents rate themselves positively in terms of knowledge about data sources and analytic techniques, but say they have room for improvement. The most popular means of education about data sources and analytic techniques is self-teaching (83 percent), followed by academic degree programs (61 percent). To a large extent, respondents are dissatisfied with the opportunities they have for new learning about data sources and methods.

[3] It may be that analysts believe their intended audiences review and act on the conclusions of the analysis, but do not carefully examine the data and arguments leading up to those conclusions.

Sophisticated Data Users: If good socioeconomic data analysis is fundamental to effective economic development, it would seem highly valuable to identify the characteristics of the best analysts and see how they differ from other data users. Understanding these differences can help inform actions aimed at improving data user capabilities. On the basis of answers to questions about analytic skills and abilities, one-fifth of respondents were considered to be "sophisticated."

- Sophisticated users are more likely to know how to build their capacity for analysis through using external resources (schooling, networking, electronic media), and are more likely to be effective in their work as a result.
- Based on their experience, sophisticated users are more optimistic about the possibilities of building data analysis capabilities and in being effective at work. They have learned how to learn. Less sophisticated data users are more likely to be pessimistic, and such beliefs likely become a self-fulfilling prophecy. They are less likely to attempt to become sophisticated because they are less aware of how to go about doing so.
- Data users in organizations covering large or multiple areas, and in organizations with peer networks, are more likely to be sophisticated because they are more likely to have opportunities to learn from others. The reverse is true for data users in more isolated (e.g., rural) situations.

User Perspectives on Regional Socioeconomic Data

To what extent do regional socioeconomic data users think that available data series meet their needs? To what extent do they think these data are accurate, timely, accessible, and in sufficient detail? What new data series would they like to see? How well do users think they are served by the various federal statistical agencies? What are their priorities for change?

Survey respondents provided ratings and comments for 52 data series and sources, organized by six categories of data providers (Census, BLS, BEA, other federal, state and local, and private). Key findings follow.

Utilization rates: According to the project survey, over 98 percent of respondents use federal data, 95 percent use data provided by state and local governments, but only two-thirds use data from private sources. Regarding specific federal agencies, 95 percent of respondents use Census data, 82 percent use data from BLS and state LMI agencies, 76 percent use BEA data, and 52 percent use data from other federal statistical agencies (e.g., Bureau of Transportation Statistics).[4]

[4] In part, variations in utilization rates reflect the relative breadth of various agencies' data offerings. For instance, data users are more likely to use Census data because of the comprehensiveness of that agency's

Knowledge and Awareness: Many data users are not aware of the existence of a large number of data series. While awareness is lowest for private series, many federal data series are not nearly as well known as they might be (e.g., Covered Employment and Wages from BLS, Regional Economic Information System from BEA). With few exceptions, sophisticated users tend to think more highly of, and be more knowledgeable about, individual data series and sources than other users. The results support the notion that many other users lack information about how to access and make best use of various series.

Role of Federal Government: Data users believe that, to best meet their needs, the federal government should have the dominant role in the operation of a nationwide system for producing socioeconomic data, and that this system should be adequately funded. Users say they can count on the federal government, much more than the private sector, to be objective, reliable, and ethical, and provide data that are consistent across the nation and are accessible at a reasonable cost. They want to see that Congress and the executive branch provide for the funding of statistical agencies sufficient to deliver accurate, current, detailed data in a timely manner.

Cross-Agency: In general, data users are very pleased with newly available electronic access to federal data via Internet and CD-ROM, though they think improvements can be made. There is some frustration that data topics and detail have not kept current with the transformation of the U.S. economy to one based on knowledge, services, and global trade, though improvements can be seen, for example, the development of the North American Industrial Classification System (NAICS). Users are especially vocal in their disappointment regarding the length of time needed to release data and a lack of geographic detail in certain series. In particular, users from small political divisions and rural counties say they need data specific to their areas. In addition, users want greater continuity in time series (fewer breaks), relaxed nondisclosure rules, and greater consistency across different data series measuring the same activity (e.g., jobs by place of work).

Bureau of the Census: More respondents use Census data than data from any other source; they are clear that the Census Bureau publishes a number of data series integral to their work. Data users' most frequent complaint about Census Bureau data is the long time lag between the collection and publication. A number of users are concerned about accuracy of some estimates as well. Many data users vigorously call for detailed intercensal socioeconomic data for small areas (e.g., census tracts); while many went on to support the development of the American Community Survey (ACS), a large number were not aware of the ACS. A number of respondents asked for a revival of recently terminated Census series, including nonresidential construction, regional retail sales, and manufacturing exports.

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set of data products, as compared to a more narrow and specialized set of offerings provided by other agencies.

Bureau of Labor Statistics: Users appreciate the frequency of monthly BLS series. In general, they have few complaints about the time between data collection and release of BLS reports. Concerns were voiced regarding accuracy (particularly of Local Area Unemployment Statistics [LAUS]), the uneven electronic accessibility of various BLS data series, through both BLS and its partner state labor market information (LMI) agencies; and lack of sufficient geographic coverage and detail. A number of users ask that BLS to provide more data on job skills, employee benefits, demand by occupation, gross flows in the job market (new hires, layoffs, quits), and temporary personnel agency activity.

Bureau of Economic Analysis: BEA data series have a lower rate of use among respondents, compared to Census and BLS, largely due to lack of awareness. Users at academic-based economic and business research centers use BEA data more frequently than users at other institutions. (BEA has strong links to these centers through its BEA User Group.) A number of users voice concerns about a decline of BEA funding for regional data, and the loss of the Regional Projections series.

Other Federal Agencies: Respondents were asked about 11 other federal statistical agencies. The offerings of these often quite specialized agencies are not valued nearly as highly as those of Census, BLS, and BEA . The average utilization rate for any one of the 11 agencies is only 22 percent. Many are not well known. Of course, some agencies are valued more highly, and known better, than others. In particular, over 30 percent of respondents make use of data from the Internal Revenue Service, the International Trade Administration (Department of Commerce), and the Economic Research Service (Department of Agriculture).

State and local government: A large majority of respondents use data from state and local governments, making them one of the most popular data sources. The type of data from state and local governments with the highest use rate is demographics (88 percent of respondents), followed by housing (78 percent), industry and employment (78 percent), taxes (75 percent), and travel and tourism (67 percent). While respondents find data from state and local governments very useful, they see substantial room for improvement. A large number of comments are critical of these data sources; this is understandable, as the availability and quality of data varies greatly from place to place. Complaints were received regarding data availability, accessibility, detail (by geography and industry), timeliness, accuracy, lack of funding, and statistical methodologies. Several commenters note data produced at the state or local level usually are not consistent with data produced elsewhere, so they prefer to use data from the federal government or from state governments produced under the federal-state cooperative system.

Private Data Providers: Data users give nongovernmental data sources decidedly mixed reviews. While many recognize that such sources fill gaps in data offerings from public sources, there are major concerns about cost, objectivity, and accuracy. Users say they employ private data sources to “supplement” governmental sources.

Data Intermediaries: Most respondents do not rely on intermediaries as their first means of accessing data – they find it more productive to use the Internet or buy the print publications. Even so, 84 percent of respondents say they frequently or sometimes use data intermediaries, making them an important means for accessing data. Some users found intermediaries to be an important, sometimes indispensable, resource. Intermediaries are particularly important for users who are less familiar with the workings of the data system, and to provide access to historical data not on-line. Respondents indicate that the value of the intermediary is very much a function of the abilities of its staff, and those abilities vary widely from intermediary to intermediary. With the emergence of the Internet, it appears that the role of intermediaries will increasingly shift from providing data access to aiding users in analyzing and interpreting data available electronically. Intermediaries agree, but say they need additional materials and assistance to support their new role. They would like to see appropriate training and materials provided by intermediary sponsors, including Census, BEA, and BLS.

Priorities for New Data Series: Although government and private sources provide much socioeconomic data, data users say they have difficulty obtaining data on certain topics important to economic development. A near majority of survey respondents want access to turnover and worker skills data, and a quarter to a third want access to data on interstate cost-of-living differences, labor productivity, educational performance, and service-producing industries. In the survey, focus groups, and roundtables, users also asked for data on New Economy activity (e.g., emerging industries and clusters, innovations), business investment in plant and equipment, home-based businesses, utility costs, and contingent workers.

Organizational Barriers to Meeting Data Needs

On the part of both regional data users and the federal government, a number of organizational barriers impede the meeting of data user needs.

- ***Users of regional socioeconomic data are not well organized to collectively identify their needs and articulate them to federal statistical agencies.*** Lack of user knowledge, combined with the diversity and fragmentation of the user base, have led to a situation in which most users are in contact with very few other users to compare and act on unmet needs. With over 20 national trade and professional associations, it is difficult for the economic development community to speak with one voice. Moreover, trade and professional associations have not adequately developed consensus on, and given voice to, data user needs.
- ***A lack of consensus within the economic development community inhibits the communication of data user needs.*** Historically, consensus has not existed on the ends and means of, and best practices in, economic development. Federal statistical agencies, had they tried to reach into the development community, would have had difficulty

in quickly grasping the nature of regional socioeconomic data users and their needs.

- ***The system for providing regional socioeconomic data is not transparent, making it difficult for users to comprehend.*** In particular, the decentralized federal statistical system is complex. Even the most sophisticated data users have difficulty knowing the full range of available regional data.
- ***Key federal statistical agencies have limited information about the needs of their regional data users. As a result, they are not making fully informed choices about how best to serve these customers.*** The three primary agencies indicate that, at present, they do not have means in place to regularly and directly interact with and hear from the full range of regional data users regarding their needs.
- ***Agencies do not adequately work together to aid data users in understanding how data series covering similar topics (e.g., employment) differ and how to best employ these series in combination.***
- ***Budgets for producing subnational data series are insufficient.*** In the three primary statistical agencies, the budgets for subnational data have not kept pace with the demand for such data. The result is that data series important to regional analysts have been eliminated, and the detail and frequency of other series have been cut back.
- ***The Statistical Policy Branch of the Office of Management and Budget lacks adequate resources.*** With only five staff, SP cannot carry out its oversight and coordination functions to the degree required. In general, budget limitations have meant that SP cannot treat the particular needs of regional data users with the same level of priority as other, more pressing data concerns.
- ***Federal statistical agencies lack a strong constituency of regional data users that could support higher program budgets.*** The underutilization of regional socioeconomic data, insufficient agency contact with and understanding of certain customers, and a fragmented and undertrained user base have combined to produce a weak, unorganized constituency for federal statistical agencies and their program budgets with respect to regional socioeconomic data.

Recommendations

To better meet regional data user needs, increase the use of federal regional data, and build an active constituency for federal socioeconomic data, the recommended strategy is to address the key barrier to these ends, ***insufficient communication*** between and among data users and providers. The key components of the strategy follows.

Data user guides for the perplexed. To overcome regional data users' widespread lack of knowledge concerning what data are available, EDA has asked the

authors to prepare two resources. The first is *Socioeconomic Data for Understanding Your Regional Economy: A User's Guide*, a reference for finding and using data for regional analysis. The second is EconData.Net, a Web site providing 400 links to federal and other data series and sources. EDA has provided funding through April 2000. Actions to be taken:

1. The authors will explore opportunities to publish updated editions of the *User's Guide*. As the system for producing regional socioeconomic data is in constant flux, the *User's Guide* will be out of date in a short while.
2. The authors will seek sources of funding to maintain the EconData.Net site. Funding options include users, federal and other data providers, and nonprofit organizations.

Direct communication mechanisms. Data providers need to better understand how analysts use data, learn how well analyst needs are being met and how they might be better met, and inform analysts of changes in data offerings. Data users need to take the initiative to communicate their thoughts and experience. Facilitating communications between users and providers requires approaches that can overcome the high level of fragmentation on both sides. Such approaches include the representation of data users before federal statistical agencies; expanded use of the Internet; and more effective use of existing networks to provide data user feedback. Recommended actions:

1. EDA should facilitate the formation of a regional socioeconomic data committee composed of representatives from economic development trade associations, the Council of Professional Associations for Federal Statistics (COPAFS), and EDA itself. The primary purpose of the committee would be to represent the interests of regional socioeconomic data users through interaction with each of the three key federal statistical agencies (Census, BLS, BEA) and the proposed regional data working group of ICSP. (See discussion next page.)
2. EDA should explore arrangements with data providers, including Census, BLS, and BEA, to develop ongoing, real-time methods for obtaining feedback from and communicating with individual data users. The potential of EconData.Net to fulfill this need should be examined.
3. Federal data providers should consider creating on-line tools for surveying data users.
4. BEA should refocus and restructure the BEA Users Group so that its primary purpose is advising BEA on its data products, ensuring that a majority of members are active users of BEA data and are not data intermediaries.
5. BLS should see that regional economic analysts (in addition to LMI agencies) are given the opportunity to actively participate in the customer feedback mechanisms required by the Workforce Investment Act.
6. EDA and professional and trade associations should actively seek out data users' experience and issues at its various conferences, and see that the results are communicated to data providers through the regional socioeconomic data committee discussed in the first recommendation. (See discussion on workshops below.)
7. Census, BLS, and BEA should more actively seek to communicate to a wide range of data users major changes and improvements in data offerings.

8. Census, BLS, and BEA should use their Web sites to directly monitor the extent to which different types of data are used, and employ this information to make programmatic decisions about augmenting data series.

User education and training in data sources, analytic methods, and uses. Data users have indicated their need for more opportunities to learn about the tools and methods of regional socioeconomic data analysis. EDA and trade and professional associations can play lead roles in this regard. Further, data intermediaries can assist users in analyzing and interpreting data. However, intermediaries report that to carry out this role, staff need better training and materials. Recommended actions:

1. EDA should encourage the development of in-person and Internet-based training curricula on data sources and uses for economic development.
2. Professional and trade associations and EDA should provide workshops on regional socioeconomic data sources, analytic methods and uses, and presentation methods.
3. EDA should see that grantees required to prepare CEDS are given proper training in regional economic analysis. Training may be provided in workshops, on the Internet, and in a guide to strategic planning.
4. Key federal statistical agencies should jointly explore means by which data intermediaries can effectively expand their role in data analysis and interpretation. To build intermediary capacity in this regard, agencies should explore the joint preparation of training and materials (including Internet-based) for intermediary staff themselves. Also, agencies should examine the development of an Internet-based curriculum with which state data intermediaries, particularly those at teaching institutions, could train a wide range of data users in federal data sources and uses.
5. EDA should encourage peer interaction to promote learning about data and analytic techniques through means such as the Internet and trade association special interest groups. For example, EDA could encourage sponsors of economic development Web sites and listserves to promote discussion of data user questions and answers.

Coordination among federal statistical agencies. The potential exists for additional coordination among agencies to further address regional data user needs. Recommended actions:

1. The ICSP should indicate that meeting the needs of users of subnational data is an important function of federal statistical agencies.
2. OMB should see to the creation of a regional data working group, under the auspices of the ICSP, to coordinate and oversee various functions that support this statement. Coordination and oversight topics would include cross-agency data referencing, data compatibility, data sharing, program evaluation, user training, and agency responses to customer feedback.
3. To gain data user perspective, the ICSP regional data working group should periodically meet with the regional socioeconomic data committee discussed above.

Actions by federal statistical organizations. Federal statistical organizations should act on feedback from users, in line with the effective practice guidelines set forth by Committee on National Statistics. Agencies can begin by reviewing and acting on issues identified through this project. Further, regional data user needs cannot be fully met unless statistical budgets are increased. Sufficient increases are likely to come only if the constituency for regional data become more active and vocal. In the meantime, OMB can pursue additional funding for SP. Recommended actions:

Federal statistical agencies should

1. Take steps to increase user awareness of available series. Agencies should consider various means to inform analysts, including trade and professional associations and Web-based directories of regional data sources (such as EconData.Net).
2. Reduce the amount of time required between data collection and dissemination. Lack of timely data release is a major user frustration, particularly with regard to Census Bureau data.
3. Offer data in the geographic and industrial detail that meets user needs.
4. Expand the electronic dissemination of data offerings, and improve the user-friendliness of the formats.
5. Add new data series that reflect important economic dimensions inadequately examined at present, and consider resurrecting terminated series.
6. Provide users with value-added services that assist in data analysis (e.g., by providing rankings, geographic comparisons, time series, and location quotients on-line).
7. Increase cooperative efforts with other statistical agencies, as discussed above.

BLS should

8. Encourage the creation of uniform LMI policies with regard to access to BLS-funded aggregate and microdata. Variability of ES-202 access by state is of great frustration to data users and hinders economic development.

OMB should

9. At least double the staff of its Statistical Policy Branch.
10. Work with statistical agencies to ascertain the budgets necessary to meet data user needs, and be aggressive in seeking funding that allows these needs to be better met.

Conclusion

Socioeconomic data are critical to effective economic development. While the federal statistical system does a remarkable job of producing data that portray the complexities of the American economy and society, the system can be improved. Data users want to be heard, and want to work with federal data providers to bring about better outcomes for both parties. EDA's goals will be met if this project stimulates the improved communications and interactions needed to sustain a strong federal role in providing needed regional socioeconomic data.

Chapter One
Rationale, Audience, Approach

1.1 Introduction: Effective Economic Development Depends on Good Data

Economic development is about ***strategic intervention*** in a regional economy. To facilitate, guide, or promote a desired economic outcome, some public-purpose organization (such as a state or local development agency, a chamber of commerce, a governor's or mayor's office, a city council, or a state legislature) intentionally and purposefully seeks to influence the workings of the marketplace. The desired outcome may include (and certainly is not limited to) more jobs, better jobs, retained jobs, an improved quality of life, a more equitable sharing of economic well-being, or some combination thereof. The nature of the strategic intervention can take many forms, for example an incentive-based attraction program, a development finance program, a marketing program, a training program, an effort to build cluster organizations, an export promotion program, or the development of new and improved physical infrastructure.

To say that an intervention is strategic (intentional use of a specific means to bring about desired ends) is not to say that the intervention is necessarily ***effective***. Developing an effective intervention strategy requires, first and foremost, some ***understanding*** of the dynamics of the regional economy—its current and recent performance, the evolution of its industry structure, the underlying reasons for these trends, and the challenges faced for the future. With this understanding, economic developers can pick through the economic development toolkit to find and apply the appropriate tools for bringing about the desired outcomes.

The foundation for understanding the workings of the regional economy is ***data analysis***, the examination of data that describe various aspects of the economy's performance and structure. Data analysis, supported by qualitative tools such as interviews and literature reviews, enables economic developers to accurately identify and frame the issues and opportunities before a region. Good data and analysis are fundamental prerequisites to effective economic development.

For the most part, regional economic analysis relies on the use of ***secondary socioeconomic data***, data already collected, organized, and disseminated by other organizations. An extensive supply of secondary data is available in the United States. These data are primarily provided through or supported by the statistical agencies of the federal government. For economic developers, the three key federal statistical agencies are the Bureau of the Census (Census), the Bureau of Economic Analysis (BEA), and the Bureau of Labor Statistics (BLS).[1]

To fill gaps in knowledge not addressed by secondary data, data analysis can be aided to some extent by ***primary data collection***, through tools such as surveys. But

[1] Census and BEA are part of the Department of Commerce. BLS is part of the Department of Labor.

primary data collection must be used sparingly, as it can be difficult to design, can be expensive to carry out on a regular basis, and usually does not help one better comprehend the situation in other regions.

Fundamentally, then, the ability to understand the dynamics of a region's economy, and the issues and opportunities presented, is a function of the breadth, quality, and accessibility of secondary data, and the analyst's awareness of secondary data sources and methods for analyzing those data. In particular, the supply of secondary data emanating through federal efforts has a major impact on the ability to carry out effective regional data analysis and economic development.

However, many in the economic development field have voiced concerns about the type and quality of regional socioeconomic data available from U.S. statistical agencies. A number of these concerns are summarized in *A Path to Smarter Economic Development: Reassessing the Federal Role*, prepared by the National Academy of Public Administration (NAPA), and commissioned by the U.S. Economic Development Administration (EDA).[2] The NAPA study says that a lack of coordination among the federal statistical agencies, recent severe cutbacks in these agencies' budgets, and the low priority often placed on regional data efforts has resulted in the existing data system not meeting the everyday needs of development practitioners for usable, reliable data that provide a complete picture of a region's economic activity.

1.2 Purpose of Assessment

In direct response to the NAPA report's observations, EDA funded this in-depth assessment of the nation's system for generating regional socioeconomic data. The purpose of this effort is to

- understand the characteristics of data users and their work, including who the data users are, what they do, how they do it, and for whom they do it;
- assess the extent to which practitioners and researchers are aware of and know how to utilize existing data sources, and understand how they learn about sources and analytic methods;
- determine the extent to which development practitioner and researcher needs are being met by data providers, particularly federal statistical agencies;
- in light of these findings, recommend approaches through which the federal statistical agencies can better meet user needs and expand user knowledge and awareness;
- suggest means by which EDA and economic development professional and trade associations can aid their constituencies in articulating and addressing needs for data, information, and training; and

[2] National Academy of Public Administration, *A Path to Smarter Economic Development: Reassessing the Federal Role* (Washington, DC: November 1996).

- provide useful information to economic development practitioners about data sources and uses.

The audience for this report, then, is fourfold—the primary federal statistical agencies, the various trade associations that represent economic practitioners and researchers, the practitioners and researchers themselves, and EDA.

1.3 Approach to Assessment

Data User Needs, Awareness, and Skills

Three means were used to collect information on data user characteristics and perceptions—an Internet-based survey, a series of focus groups and roundtables, and telephone interviews. Through the assistance of 23 trade and professional associations (listed in Appendix 1A), approximately 6,000 economic development practitioners and researchers were asked (via e-mail, fax, newsletter, and Web site) to participate in an ***Internet-based survey*** regarding their socioeconomic data needs.[3] A total of 613 responses were received.[4] Respondents were asked to

- score 52 federal and nonfederal data sources in terms of usefulness;
- score 10 of the federal sources in terms of accuracy, detail, timeliness, and accessibility;
- comment on the extent to which their data needs are being met, both by federal and state agencies, and by data intermediaries (such as Census Data Centers); and
- state their priorities for data series improvements.

To build a profile of the background of respondents, and to assess the nature of any correlations between background and data series scoring, respondents also were asked to

- identify their job, the type of organization for which they work, and the type of economic region on which they focus;

[3] Respondents could only complete the survey with an Internet connection. It was recognized that Internet access is not ubiquitous among development practitioners. Through the American Economic Development Council and the National Association of Development Organizations, attempts were made to locate and interview practitioners who are without Internet access. These efforts led to the conclusion that nearly all practitioners, including those in rural areas, have Internet access, and those that do not are in that position as a matter of choice. The inhibition, it appears, is "cultural," and not a question of access to the technology. It was said that a relative few practitioners have discomfort with the notion of learning how to operate this new technology, and choose not to do so.

[4] While the trade and professional associations were the conduit for getting out the message, and they directed that message to their members, the survey was open to any nonmember who happened to encounter a message about the survey. About a quarter of respondents did not indicate membership in any trade or professional association.

- indicate the types of data-based analyses they undertake, the analytic techniques they use, the audiences for their analyses, and the sufficiency of resources for their work;
- score their data analysis skills and the impacts of their analytic work; and
- discuss their approach to learning about data and analytic techniques.

The full survey was quite lengthy, and could require over an hour to fill out, particularly if the respondent chose to offer responses to open-ended questions. In recognition of the survey's length, respondents were offered the option of forgoing questions of types of efforts and analytic techniques, and proceeding directly to questions about data series. Of the 613 respondents, 355 (58 percent) filled out the full survey, and 258 (42 percent) completed the shortened version.

Focus groups were held at three conferences sponsored by national economic development trade associations:

- Research Division Task Force, National Association of State Development Agencies (NASDA), fall meeting, New Orleans, Louisiana, November 21, 1997, with 16 state research directors of state development agencies in attendance.
- Council for Urban Economic Development (CUED), Washington Briefing: Economic Development Summit, Washington, DC, March 2, 1998, with six state and local economic development practitioners in attendance, along with representatives of Census and BEA.
- American Planning Association (APA), National Annual Conference, Boston, Massachusetts, April 7, 1998, with 30 economic development planners, researchers, and consultants in attendance.

In addition, discussions generated at two ***roundtables*** on regional socioeconomic data needs were utilized:

- State and Local Policy Program, Humphrey Institute of Public Affairs, University of Minnesota, conference on Innovations in Economic Development: The Evolving Direction of Economic Development in the New Economy, roundtable on "Using Economic Data to Understand Your Region in the Knowledge-Based Economy," facilitated by Andrew Reamer, April 7, 1997, with 35 state, regional, and local development practitioners, researchers, and consultants in attendance.
- Massachusetts Technology Collaborative, Innovation Forum: New Indicators for Measuring the Innovation Economy, Cambridge, Massachusetts, June 22, 1998, discussion on needs for and approaches to measuring the "innovation economy," with approximately 30 state and federal technology agency staff, university researchers, consultants, and foundation staff in attendance.

Twenty ***telephone interviews*** were held with expert economic development practitioners and researchers around the United States. The purpose of these interviews was to explore in greater depth the issues raised by the survey and focus groups, individual approaches to data analysis for economic development, and perceptions regarding the current system for generating and getting access to regional socioeconomic data. A list of persons interviewed is provided in Appendix 1B.

Federal Statistical System for Regional Socioeconomic Data

An understanding of the workings of the federal statistical system was developed through in-person and telephone interviews with statistical agency officials (listed in Appendix 1C) and review of a wide variety of government documents. Coverage included

- the structure of the federal statistical system, including the role of individual agencies and coordinating mechanisms;
- specific data program operations, plans and budgets;
- issues and challenges in collection and dissemination of regional socioeconomic data; and
- the nature of feedback links between data users and the agencies.

The findings regarding the workings of the federal statistical system were used to place the observations of data users in context, and to design recommendations that reflect current institutional realities, and so have a likelihood of implementation.

1.4 Structure of This Report

This report is structured as follows:

- Chapter Two reviews the current structure for the supply of regional socioeconomic data, including the structure of the federal system, and the roles of individual federal agencies, nonfederal data suppliers, and data intermediaries. The chapter also discusses the implications of this structure for meeting data user needs.
- Chapter Three provides a detailed profile of survey respondents, including the organizations they represent, the types of jobs they have, the types of analytic work they undertake and techniques they use, their approach to learning, and their perceptions of the impacts of their work. Differences are identified between sophisticated data users and others in terms of skills, approaches, and beliefs.
- Chapter Four characterizes data user perspectives regarding needs for socioeconomic data, perspectives on the extent to which various data series and sources are meeting those needs, and priorities and suggestions for improvements.

- Chapter Five provides conclusions based on the preceding analysis, and a series of recommendations. Agency- and data series-specific recommendations are given, as well as recommendations for building mechanisms for ongoing communication between data users and federal data agencies.

1.5 Companion Products

One finding of this assessment is that many development practitioners and researchers are not fully aware of the range of federal and nonfederal sources of regional socioeconomic data. In large part, this result stems from the fact that the federal data system is quite decentralized. To address that need, two additional products have been prepared as part of this project:

- *Socioeconomic Data for Understanding Your Regional Economy: A User's Guide* provides an overview of sources of regional socioeconomic data, means of accessing them, and best practices for analyzing them.
- EconData.Net (www.econdata.net) is a Web site that provides hyperlinks to close to 400 public, university, and private sources of regional socioeconomic data. The Web site was originally developed as an incentive for respondents to fill out the Internet survey (if they completed the survey, they were given the URL for the Web site). The size of the positive response to the site encouraged EDA to fund its authors to upgrade and maintain the site for one year (beginning April 1999), with the intent that the authors would seek additional sources of funding for subsequent years.

Chapter Two
The Regional Socioeconomic Data System

2.1 Introduction

In the United States, vast amounts of regional socioeconomic data are collected, analyzed, and disseminated by an array of several hundred independently operating federal, subfederal, private nonprofit, and private for-profit organizations. Of these groups, the federal statistical agencies are by far the most important for regional economic analysts. Federal law makes quite clear that a major mission of the federal government is to collect and provide publicly available data on the major dimensions of our society, economy, and citizenry. In fiscal year (FY) 1999, over 70 separate agencies in the federal government will collectively expend $3.9 billion to carry out this mission.

Historically, Congress and the executive branch have justified the federal statistical role and level of expenditure on several grounds:

- In order to design and implement appropriate and effective public policies, federal decision makers need ready access to statistics that are current, accurate, produced on a regular schedule, and consistent over geographic space and time.
- Socioeconomic data should be a public good, supported primarily by taxpayers. Society benefits from open access to accurate, current, consistent socioeconomic data by any interested party regardless of ability to pay.
- The federal government can be counted on to collect and disseminate socioeconomic data unbiased by motives other than the public welfare.
- High levels of respondent participation in certain data collection efforts important to decision makers can be achieved only through federal laws requiring such participation.
- A centralized federal role in data collection and analysis allows economies of scale not available to other data providers.

While the role of federal statistical agencies is primary, state and local governments, many universities, and a number of nonprofit and commercial organizations also are actively involved in socioeconomic data collection, analysis, and/or dissemination. Examples of nonfederal statistical organizations include state labor market information agencies, university business and economic research centers, chambers of commerce, for-profit input-output modeling services, industry trade associations, and lifestyle research services.

If the purpose of this study is to assess the extent to which the needs of regional socioeconomic data users are being met, it is important to have a detailed sense of the structure of the existing U.S. system for generating regional data. The nature of that

system is not especially clear to casual (and many experienced) observers. Consequently, this chapter provides an overview of the federal statistical system, in terms of structure and key players, as well as of various non-federal data providers and data intermediaries.

The chapter serves two other purposes as well. In recent years, the federal statistical system has been the object of a number of critiques, evaluations, and recommendations by the executive branch, Congress, and informed outsiders. The chapter provides a summary of these efforts—their findings and recommendations are pertinent to the particular purpose of this project.

As the primary aim of this project is to assess how well federal statistical agencies are meeting data user needs, it is helpful to understand the nature of any existing prescriptive behavioral guidelines under which statistical agencies are to operate. Two sets of guidelines, one provided by Congress and one by the Committee on National Statistics, are summarized.

In the discussion that follows, the reader might find it useful to keep in mind that a statistical organization can carry out one or more of the following activities:

- ***primary data collection*** – obtaining raw data directly from persons and organizations through surveys and administrative records (e.g., state labor market information agency [LMI] collection of covered employment and wage [ES-202] data from quarterly unemployment insurance premium payment records provided by business establishments);
- ***primary data analysis*** (e.g., BLS analysis of the raw ES-202 data provided it by state LMI agencies under cooperative agreement);
- ***secondary data analysis*** – analysis of data collected and organized by others (e.g., BEA utilization of ES-202 data in its Regional Economic Information System series); and
- ***data dissemination*** (e.g., dissemination of ES-202 data in electronic and printed formats by LMI agencies, BLS, and in a modified form by BEA); and
- ***data effort sponsorship*** (e.g., BLS funds state LMI agency collection efforts).

While for many data series, the same organization will be responsible for funding, collection, analysis, and dissemination, such is not always the case. BLS is a good example of the latter—it pays for the collection of primary data by others (states and Bureau of the Census), then analyzes these data itself. A number of private organizations obtain secondary data collected by the federal government, then aim to add new value through additional analysis, interpretation, and integration. In this chapter and Chapters Four and Five, the distribution of roles by organization for various data series is an integral part of the discussion.

2.2 The Federal Statistical System

This overview of the federal statistical system

- reviews the overall structure and evolution of the system;
- describes in some detail the mission, functions, and offerings of key federal statistical agencies;
- outlines the various mechanisms in place to coordinate and guide these agencies; and
- summarizes recent evaluations of the federal system and proposals for structural change.

2.2.1 Independent Array of Statistical Agencies

The federal statistical system is highly decentralized, in contrast to centralized arrangements found in most other developed countries (e.g., Statistics Canada). Moreover, the components of this decentralized system have been created in an *ad hoc* manner. Congress's primary pattern has been to create a new statistical organization to observe and measure activity in each major realm of emerging public policy concern or interest.

The beginnings of this approach can be traced back to 1866-67, when the precursors to the present statistics units in the departments of Treasury, Agriculture, and Education were created by Congress.[1] In the mid-19th century, agriculture formed the backbone of the U.S. economy, and the development of systems of public education was becoming widespread.

The predecessor of the Bureau of Labor Statistics was created in 1884, as industrial society, and concern about the condition of industrial workers, began to develop. While the Decennial Census was mandated by the Constitution adopted in the late 18th century, the Bureau of the Census was not permanently created until 1902. U.S. marshals collected the data for the first several censuses from 1790 onward; the federal government then transferred responsibility to state statistical agencies.[2] The centralization of the Decennial Census effort in a Census Bureau reflected the need for a more effective effort to measure the massive growth in the nation's population at the end of the 19th century, the emergence of technologies that allowed centralization, and the creation of large industrial concerns that demonstrated the benefits of such centralization.

Throughout the 20th century, the development of federal statistical capacity in new agencies coincided with the nation's focus on emerging realms of public policy. A few examples are illustrative:

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[1] Janet L. Norwood, *Organizing to Count: Change in the Federal Statistical System* (Washington, DC: Urban Institute Press, 1995).

[2] *Ibid.* In 1899, a temporary Census Office was created in the Department of the Interior to manage the 1900 Census.

- Precursor programs to the National Center for Health Statistics were developed in the Public Health Service as early as 1912, at a time when policymakers sought to address public health concerns, particularly in urban areas.
- In the 1940s, the Bureau of Economic Analysis was formed following the development of sophisticated means of measuring nationwide economic activity through a series of national accounts (primarily by Simon Kuznets, who won the Nobel Prize for his work in 1971). After World War II, the federal government committed itself to keeping the country on a path of economic health through actively managed fiscal and monetary policies. A system of national accounts was considered a fundamental prerequisite to effective economic policies.
- As part of its response to the mid-1970s energy crisis, Congress created the Office of Energy Information and Analysis in 1976, which the next year became the Energy Information Administration of the Department of Energy.
- The Small Business Administration (SBA) was founded in 1953 out of a concern about the high concentration of capital among major industrial corporations and a belief that a system of "full and free" competition required the government to encourage the development of small business. During the 1979-80 recession, after research first asserted that small businesses create the large majority of new jobs, Congress charged the SBA with tracking a wide range of small business indices and providing an annual report to Congress on the state of small business.
- The Bureau of Transportation Statistics (BTS) was created in 1991 as part of the Intermodal Surface Transportation Efficiency Act (ISTEA). ISTEA and the creation of the BTS reflected the perception of the need for transportation policies, programs, and data integrated across all modalities of transportation.

2.2.2 Key Agencies Producing Regional Socioeconomic Data

Three federal statistical agencies produce data important to regional analysts—Census, BLS, and BEA. Data generated by these organizations cover topics such as population, employment and unemployment, income and earnings, production, cost of living, and international trade. Each of the three agencies has a different focus, scope, and approach to its efforts:

- The Census Bureau examines and describes the detailed patterns of American population, quality of life, and economic activity at every level of geography. For the most part, the Census Bureau does primary research.

- BLS measures people at work – how many, in what industries, and with what earnings and purchasing power. BLS also relies on primary data, but it utilizes the Census Bureau and state LMI agencies to do the collection, following BLS guidelines.

- BEA is the nation's economic accountant, reconciling diverse financial and economic data into a single set of balanced accounts that provides a comprehensive view of the nation's economic activity. Among the three agencies, BEA offers the widest view of economic activity, measuring variables (e.g., proprietorships, military employment) that the other agencies do not. BEA relies almost entirely on secondary data provided by other federal agencies, including Census, BLS, and the Internal Revenue Service (IRS).

Census, BLS, and BEA are of primary importance to analysts because their data focus on a wide range of economic and demographic activity, and fill in economic development's "bottom line," the answers to the questions "Who are we and how are we doing?" Most other federal statistical units focus on one specific dimension of the larger economy and society (e.g., transportation, energy, agriculture, and small business). These latter agencies provide depth, rather than breadth; their data can help explain the answers to those bottom line questions and give a sense of the options for future development strategies.

The subsections below review in some detail the background and data products of the three key agencies, then a number of the other statistical units and their regional data offerings.

Census Bureau

The Census Bureau, part of the Department of Commerce, is the largest federal statistical agency. For FY 1999, Census has a budget of $1.40 billion, of which $860 million is for the 2000 Census.

As noted earlier, the Census Bureau was created in 1902 to take permanent responsibility for the Decennial Census. Throughout the 20th century, Congress has regularly charged the Census Bureau with producing other data series (e.g., Economic Census, annual population estimates, trade statistics) that increase understanding of demographic and economic structure and trends. Though its overall mission has not been specifically articulated in law, the sum of these explicit charges indicates that the Census Bureau is the one federal statistical agency that observes the detailed patterns of American lives and businesses at every geographic level.

Three types of Census Bureau data series are of particular interest to regional economic analysts—population, business activity, and housing. ***Population*** data series cover population size, personal characteristics (e.g., race, sex, age, educational

attainment, occupation), and household characteristics (e.g., composition, income). Population data series include the following:

- Decennial Census of Population and Housing – the census of the entire U.S. population, carried out every ten years
- Population Estimates Program – an annual series of population estimates, carried out in cooperation with states
- Population Projections Program – estimates of population, for states, to 2025.
- Small Area Income and Poverty Estimates Program – a periodic effort to model household income and poverty rates for counties
- Annual Demographic Survey of the Current Population Survey (CPS) – a survey of a sample of households that produces income and population characteristics data
- American Community Survey (ACS) – a forthcoming nationwide monthly survey, with annually published results, using types of questions found on the Decennial Census long form

Business activity data series describe, by industry, the aggregate size of the industry (in terms of jobs or value of shipments, for example), the number of companies and establishments, and measures of various aspects of business operation (such as cost of raw materials, investments in building and equipment, and imports and exports). Key business activity data series include the following:

- Economic Census – a census of most U.S. businesses, carried out every five years
- County Business Patterns – an annual series of employment and wages by industry
- Annual Survey of Manufactures – a yearly profile of manufacturing industry activity
- Foreign trade statistics – export and import activity by location

Housing data series describe housing types, conditions, ownership, costs, occupancy, and other characteristics. Census Bureau housing data series of use in regional analysis include the following:

- Decennial Census of Population and Housing
- American Housing Survey – periodic survey of housing characteristics in specific metropolitan areas (conducted on behalf of the Department of Housing and Urban Development)
- Construction statistics – residential construction permits and valuation, and sales of one-family houses
- Housing vacancy and homeownership – annual survey producing rates of housing vacancy and homeownership

As an aid to data users, the Census Bureau regularly prepares ***compendia*** that organize a wide variety of data series from Census and other sources. The *Statistical Abstract of the United States* is the most comprehensive, and best-known, compendium. Other Census compendia are organized at the geographic level and include *County and City Data Book*, *State and Metropolitan Area Data Book*, and *USA Counties*.

Census also provides a ***digital mapping database***, called Topologically Integrated Geographic Encoding and Referencing (TIGER). The TIGER database contains geographic features such as roads, railroads, rivers, lakes, political boundaries, and census statistical boundaries, covering the entire United States.

Through a variety of mechanisms, Census offers outside data users access to its "***microdata***," that is, data on individual persons, households, and establishments, with proper protection for confidentiality. The Census Bureau sells CD-ROMs and computer tapes of Public Use Microdata Samples (PUMS) from the Decennial Census, the American Housing Survey, CPS, and the Survey of Income and Program Participation (SIPP). Also, two Census units, the Center for Economic Studies and Statistics of U.S. Business, provide analysis, on a reimbursable basis, of corporate and establishment microdata from the Economic Census and the source file for County Business Patterns, respectively.

Bureau of Labor Statistics

The Bureau of Labor Statistics, part of the Department of Labor, is the second largest provider of socioeconomic data in the U.S., after the Census Bureau. The agency's FY 1999 budget is $420 million. BLS transfers a portion of its funds ($153 million) to the Census Bureau to manage the Current Population Survey (which provides monthly labor force status data) and to state LMI agencies to collect and analyze employment data.

In 1884, Congress created the organization that was to become BLS. Concise by today's standards, the 1888 language laying out the purpose of the agency remains in federal law, and is interesting to read in its entirety:

> The general design and duties of the Bureau of Labor Statistics shall be to acquire and diffuse among the people of the United States useful information on subjects connected with labor, in the most general and comprehensive sense of that word, and especially upon its relation to capital, the hours of labor, the earnings of laboring men and women, and the means of promoting their material, social, intellectual, and moral prosperity.

BLS provides three types of data series of interest to regional analysts—labor force status of persons (by place of residence), jobs and wages (by place of work), and prices and living conditions. ***Labor force*** data are prepared monthly through the Local

Area Unemployment Statistics (LAUS) program and describe labor force participation, employment, unemployment, and unemployment rate.

Job and wage (place of work) data are available through a variety of BLS-sponsored programs, including the following:

- Covered Employment and Wages (ES-202) – a quarterly collection of job and wage data from all employers participating in state unemployment insurance (UI) programs
- Current Employment Statistics (CES) – through a monthly survey, an estimation of job levels and hourly wages, by industry
- Occupational Employment Statistics (OES) – through an annual survey, an estimation of number of positions and average hourly wage by occupation, by industry
- National Compensation Survey (NCS) – annual survey of regions to determine wage and benefit data by occupation, with regions surveyed on a rotating basis
- Mass Layoff Statistics – monthly and quarterly data on mass layoff events, separated workers, and persons filing UI claims, for states and areas

Two key BLS data series deal with ***prices and living conditions***:

- Consumer Price Index (CPI) – an index of changes in the cost of various categories of consumer items
- Consumer Expenditure Survey – average annual consumer expenditure data, by detailed type of goods and services

As of July 1, 1999, BLS is charged with the implementation of Section 309 of the Workforce Investment Act of 1998 (WIA). The WIA supercedes the Job Training Partnership Act (JTPA), and replaces the local Private Industry Councils created under the latter with local Workforce Investment Boards. The program emphasis shifts from a focus on disadvantaged workers to one that provides workers of all types "with the information, advice, job search assistance, and training they need to get and keep good jobs—and provides employers with skilled workers."

Section 309 of the WIA requires the Secretary of Labor to develop and maintain a nationwide employment statistics system "(i)n collaboration with the Bureau of Labor Statistics and the States . . . ." The Senate committee writing the Senate version of the bill noted that the "committee believes labor market information (LMI) is an essential structural element supporting all other programs and services."[3]

In general, the WIA widens the purpose of the BLS statistics programs to support local workforce development efforts. The law lists the various types of data to be

[3] Committee on Labor and Human Resources, U.S. Senate, *Senate Report 105-109: Workforce Investment Partnership Act of 1997*, October 1997.

maintained as part of the national employment statistics program. While the large majority of data specified are now collected, some are not, particularly "skills trends by occupation and industry, with particular attention paid to State and local conditions." Moreover, it appears that the WIA will require an increase in the extent to which existing data are available at the local level. Further, the WIA requires that "employment and earnings information (be) maintained in a longitudinal manner to be used in research and evaluation."

Bureau of Economic Analysis

The Bureau of Economic Analysis is part of the Department of Commerce. In part because it has few primary data collection responsibilities, BEA is the smallest of the three key agencies, with a FY 1999 budget of $50 million. While nearly all data collected by Census and BLS are available for use in subnational analysis, the same is not true at BEA. BEA is broken into four major units—national, industry, international, and regional accounts. Though work in one unit may inform that in another, the portion of the budget devoted to the collection and preparation of data that can be used for subnational analysis is significantly smaller than the whole.

BEA has several major data products of value to regional economic analysts. The Regional Economic Information System (REIS) is the most comprehensive of the federal income and employment data series. REIS provides income data broken out by sources other than jobs earnings (including investment income and transfer payments) and job data beyond wage and salary jobs (including proprietorships and military employment). In producing REIS, BEA makes extensive use of data that are by-products of the administration of various federal and state programs, including unemployment insurance, Social Security, federal income taxes, veterans benefits, and military payroll.

BEA produces several other data products that reflect its role as the nation's economic accountant. These are useful to more sophisticated regional data users, and include the following:

- Regional Input-Output Modeling System (RIMS II) – output, earnings and employment multipliers by industry (471 detailed industries, 38 industry aggregations)
- Gross State Product (GSP) – estimates of gross state product and its components for two-digit SIC categories
- Foreign Direct Investment (FDI) – number, employment, payroll, and shipments or sales of foreign-owned U.S. establishments, by industry

Until recently, BEA prepared projections of employment, income, and gross product by state. However, this series was recently discontinued, due to budget cuts.

Other Federal Statistical Agencies

A large number of federal statistical agencies provide data on a specific topic, such as transportation, energy, or health, relevant to regional economic activity. A sample of agencies with regional economic data series includes the following:

- Department of Agriculture, National Agricultural Statistics Service – data on farm activities and prices, and the quinquennial Census of Agriculture
- Department of Commerce, International Trade Administration – data on exports for state and metro areas, plus the newly resurrected *U.S. Industry and Trade Outlook*
- Department of Education, National Center for Education Statistics – data on educational programs, achievement, attainment, and spending
- Department of Energy, Energy Information Administration – state energy consumption profiles, and data on energy production and reserves
- Federal Financial Institutions Examination Council (FFIEC) – Community Reinvestment Act (CRA) regional reports on small business and small farm loans, and a National Information Center with information on individual banks
- Department of Housing and Urban Development – a database on American cities and suburbs, and an on-line library
- National Science Foundation, Division of Science Resources Studies – data on R&D expenditures and workforce, science and engineering education, and patent activity
- Small Business Administration – profile of each state's small business economy
- Department of Transportation, Bureau of Transportation Statistics – the National Transportation Data Archive, a central resource for transportation statistics
- Department of the Treasury, Internal Revenue Service, Statistics of Income Division – annual individual income tax data for states and counties, and state-to-state and county-to-county migration data on a year-to-year basis

2.2.3 Coordination of the Federal Statistical Effort

Parallel to, but less visible than, the ongoing ad hoc creation of disparate federal statistical organizations has been a sequence of special studies to examine the advantages and disadvantages of moving in the opposite direction and centralizing the federal statistical system. Formal assessments of the federal statistical system have taken place in every decade of the 20th century.[4] However, centralization itself has never come to pass. Fears regarding the dangers of centralization, the investment of individual data

[4] For a full list of these efforts, see Table 2.2 of Norwood, *op. cit*.

agencies in the status quo, and financial and personnel costs all have facilitated the continuation of the decentralized approach.

While centralization has not occurred, a series of mechanisms have been developed over time to coordinate federal statistical agency efforts. The primary mechanism is the ***Statistical Policy Branch*** (SP) of the Office of Information and Regulatory Affairs (OIRA) in the ***Office of Management and Budget*** (OMB). In the 1930s, an independent statistical coordinating mechanism (the Central Statistical Board) was established, was soon folded into the Bureau of the Budget, and now exists as SP. The current mission of SP entails

- long-range planning;
- ensuring "that budget proposals of statistical agencies are consistent with system-wide priorities for maintaining and improving the quality of Federal statistics";
- coordination of federal statistical activities; establishment of standards, classifications, and other guidelines;
- evaluation of statistical program performance; and
- representation of the United States in international statistical activities.[5]

In contrast to the wide scope of its mission, SP has a budget of under $1 million and can maintain only a small professional staff, currently five.[6] The funding and staff devoted to statistical policy coordination was once far higher. In the late 1940s, the Bureau of the Budget had 69 staff devoted to this task. In the 1960s, the Statistical Policy and Coordination Office had a staff of 50.[7] By 1977, when that office was moved by Executive Order to the Department of Commerce, staff size for statistical policy and coordination was set at 25. When the Paperwork Reduction Act of 1980 returned the office to OMB, the office was provided with a staff of 15. However, many of these staff were soon deployed to other parts of OIRA. In recent years, SP has been comprised only of a Chief Statistician, an economist, a demographer, a methodologist, and a policy analyst.[8]

In part to augment this very small staff, SP actively utilizes committees composed of statistical agency personnel to address specific issues. Historically, SP has created special committees when it sought agency expertise and assistance, e.g., in the revamping of the industrial classification system. In the late 1980s, OMB created an ***Interagency Council on Statistical Policy*** (ICSP) to advise SP and OMB; Congress provided a legislative basis for this organization in 1995. ICSP, which includes the heads of the

[5] These activities are spelled out in Title 44, Chapter 35, section 3504(e) of the U.S. Code.

[6] Thus, the budget for the coordination and oversight of the federal statistical system is about 0.03 percent of funds received by federal statistical units.

[7] It should be noted that this larger staff was also responsible for review and clearance of all federal reporting requirements, a task now carried out largely by other OIRA staff.

[8] Information in this paragraph comes from Norwood, *op.cit.*, pp. 56-57, and United States General Accounting Office, *Statistical Agencies: Adherence to Guidelines and Coordination of Budgets*, (GGD-95-65, August 1995).

major statistical programs, has become a key vehicle for the coordination of federal statistical activities and provides an umbrella for a number of multiagency working groups.[9] In 1998, ICSP efforts included, among others, facilitating interagency coordination, enhancing Internet access to federal statistical data, redefining the industry classification system, and examining the impact of possible changes in standards for data on race and ethnicity.[10]

SP also sponsors a permanent ***Federal Committee on Statistical Methodology*** (FCSM) with about 20 members, drawn largely from the major statistical agencies.[11] Founded in 1975, the goal of the FCSM is "to improve the quality of federal statistics and the efficiency and effectiveness of statistical practice among federal agencies," and it regularly publishes working papers to this end (e.g., on the quality of federal data).[12]

Parallel to the ICSP and the FCSM is the ***Committee on National Statistics*** (CNSTAT) of the National Academy of Sciences-National Research Council. CNSTAT's mission is "to improve the statistical methods and information on which public policy decisions are based." CNSTAT was created in 1972 at the request of the President's Commission on Federal Statistics (one in the series of organizational studies mentioned above), and is composed entirely of statistical experts from universities and research institutions. CNSTAT "reviews the statistical programs of federal agencies and suggests improvements [and] . . . studies what data and methodology are needed to improve our understanding of the economy, the environment, public health, crime . . . and other topics for which public policy decisions are made."[13] Topics for study are selected by the Committee or requested by OMB, federal agencies, or Congress. Many current and recent studies directly concern state and local data, and include alternative methods for taking the Decennial Census, an evaluation of poverty estimates for small areas, a research agenda for the American Community Survey, and the appropriate design and use of cost-of-living indices.

2.2.4 Operating Guidelines for Federal Statistical Agencies

Two sets of guidelines for the operation of federal statistical agencies have been developed, one suggestive and specific and one mandatory and general. The suggestive set of guidelines, "Principles and Practices for a Federal Statistical Agency," was prepared by CNSTAT in 1992 on its own initiative after receiving a number of requests

[9] Fourteen major statistical organizations, defined as those whose primary mission is the generation and analysis of data, serve on the ICSP. These include Census, BLS, BEA, BTS, EIA, the National Center for Health Statistics, the Bureau of Justice Statistics, the National Center for Education Statistics, the Statistics of Income Division (IRS), the Economic Research Service and the National Agricultural Statistical Service in the Department of Agriculture, and statistical units at the Social Security Administration, the National Science Foundation, and the Environmental Protection Agency.

[10] Office of Management and Budget, *Statistical Programs of the United States Government: Fiscal Year 1999*, September 8, 1998, p. 39.

[11] Members are appointed as individuals, not as agency representatives.

[12] Quote taken from World Wide Web site of FCSM at www.bts.gov/other/fcsm/index.html.

[13] Quote taken from "Committee on National Statistics: Mission," on World Wide Web at www2.nas.edu.cnstat/216a.html.

from Congress and statistical agencies on "what constitutes an effective federal statistical agency."[14] The preface to the document says "the principles and practices articulated here are statements of best practice rather than legal or scientific rules." In sum, CNSTAT says, the ***principles*** of a federal statistical agency concern

- relevance to policy issues,
- credibility among data users, and
- trust among data providers and data subjects.

The ***practices*** of a federal statistical agency concern

- a clearly defined and well-accepted mission,
- a strong measure of independence,
- fair treatment of data providers,
- cooperation with data users,
- openness about the data provided,
- commitment to quality and professional standards,
- wide dissemination of data,
- an active research program,
- professional advancement of staff,
- caution in conducting nonstatistical activities, and
- coordination with other statistical agencies

Congress placed a short, general mandatory set of guidelines for statistical policy and coordination in federal law. Each statistical agency is to

(1) ensure the relevance, accuracy, timeliness, integrity, and objectivity of information collected for statistical purposes;
(2) inform respondents fully and accurately about the sponsors, purposes, and uses of statistical surveys and studies;
(3) protect respondents' privacy and ensure that disclosure policies fully honor pledges of confidentiality;
(4) observe federal standards and practices for data collection, analysis, documentation, sharing, and dissemination of information;
(5) ensure the timely publication of the results of statistical surveys and studies, including information about quality and limitations of the surveys and studies; and
(6) make data available to other statistical agencies and readily accessible to the public.[15]

[14] Committee on National Statistics, National Academy of Sciences, "Principles and Practices for a Federal Statistical Agency" (Washington, DC: National Academy Press, 1992).
[15] Title 44, Chapter 35, section 3506(e) of the U.S. Code.

In Chapters Four and Five, these guidelines will be used as context in assessing current and suggesting recommended activities of federal statistical agencies in serving regional data users.

2.2.5 Evaluations and Critiques

The discussion above indicates that the 20th century has seen an ongoing sequence of efforts to examine, rationalize, and improve the federal statistical system. These have continued unabated in the 1990s. For the purposes of this project, four recent efforts are of particular note:

- Boskin Working Group on Statistics (1989-90) – Michael Boskin, head of President Bush's Council of Economic Advisers, convened this group to address concerns about the nation's data system. The group chose not to recommend any organizational changes, and instead produced an Economic Statistics Initiative (ESI), with 38 recommendations to address specific problems and gaps in current data series.
- Janet Norwood's *Organizing to Count: Changes in the Federal Statistical System* (1995) – Urban Institute Senior Fellow and former Commissioner of BLS prepared this book regarding the need to restructure the federal statistical system.
- Congressional efforts (1995-99) – Over the last four years, Senator Daniel Moynihan (D-NY) and Congressman Stephen Horn (R-CA) have sponsored bills that would promote possible reorganization of the federal statistical system. While none of the bills have come to a floor vote, the Senate bill introduced in the 105th Congress was unanimously approved by the Committee on Governmental Affairs. Senator Moynihan has reintroduced his bill (S. 205) in the 106th Congress. The design of these bills in part has relied on studies of the statistical system by the General Accounting Office (GAO) in Congress.
- National Academy of Public Administration, *A Path to Smarter Economic Development: Reassessing the Federal Role* – As noted in Chapter One, this study identifies perceived deficiencies in the federal statistical system in serving economic development analysts, and provides general recommendations. This is the only effort of the four that specifically addresses the needs of regional analysts.

These various efforts collectively voice a large number of concerns about the federal statistical system. A summary of the key points is as follows:

- ***Insufficient statistical agency budgets*** – The Boskin Group, Norwood, and NAPA all suggest that statistical agency budgets are insufficient to fulfill agency missions. GAO shows that while the constant dollar federal statistical budget more than doubled between

1981 and 1995 (from about $1.15 billion to $2.51 billion in 1995 dollars), "the increase was less than the amount of funding that federal statistical agency officials believed would have been needed to adequately maintain the federal statistical system, given the changes in the economy and society."[16] NAPA expresses concern that "(w)hen cuts are made, they tend to result in reduced efforts for state and local data as opposed to national statistics."[17]

- ***Concerns about data quality*** – The Boskin Group in particular devoted much effort to identifying quality problems in certain data series (e.g., Consumer Price Index, trade, services). The GAO found that "The 1990 Census . . . for the first time produced results that were less accurate than those in the preceding census."[18]
- ***Incompatible data sets*** – Norwood and NAPA point out the difficulties that analysts have in making sense of data series from various sources that are not fully compatible.
- ***Constraints on agency ability to share data*** – The Boskin Group, Norwood, and Congressional sponsors echo a complaint made for decades that existing laws protecting confidentiality do not allow various statistical agencies to exchange data. As a result, some agencies must create anew data bases held by others (e.g., establishment lists).
- ***Duplication of effort*** – The Boskin Group, Norwood, and Congressional sponsors note that system fragmentation results in duplication of effort even when disclosure laws are not a constraint (often, but not always, because of constraints on data sharing). Norwood provides examples of various agencies asking the same population for the same types of data.
- ***Slowness in developing new tools and measures*** – The Boskin Group, Norwood, and Congressional sponsors indicate that the current system does not facilitate the timely development of new and improved tools and measures that capture emerging dimensions of the U.S. economy (e.g., advanced technology services).
- ***Data user confusion*** – NAPA says that the fragmentation of statistical sources "results in particular problems for local governments, community-based organizations, and small firms that lack the technical expertise to access and interpret much of the available data."[19]
- ***Lack of a strong constituency for statistical programs*** – At one Congressional hearing, it was suggested that the fragmentation of

[16] General Accounting Office, *Statistical Agencies: Adherence to Guidelines and Coordination of Budgets*, (GGD-95-65, August 1995), p. 41. A portion of the real increase has gone to fund new federal statistical responsibilities. The study does not examine the extent to which real budgets for data series existing in 1981 have changed over time.
[17] NAPA, *op. cit.*, p. 39.
[18] General Accounting Office, *Decennial Census: 1990 Results Show Need for Fundamental Reform* (GGD-92-94, June 1992).
[19] NAPA, *op.cit.*, p. 39.

statistical programs inhibits the development of a strong constituency to voice the need for effective statistical programs and adequate funding.[20]

- ***SP lack of resources and authority*** – GAO and Norwood go into some detail to describe how the current system does not provide SP with the resources and/or operating authority to address all aspects of its charge.[21] They say that particularly shortchanged are long-range planning and development of priorities, coordination among agencies, and a meaningful (rather than after-the-fact) budget review.

Chapter Four will show that day-to-day users of regional socioeconomic data echo several of these concerns. At the same time, representatives from federal statistical organizations point out that attempts to address a number of these issues have been made since the release of the reports.

- The federal statistical agencies are now in the process of implementing the utilization of the North American Industrial Classification System (NAICS), adopted in 1997 and with far greater detail regarding non-manufacturing industries and industries based on new technologies. NAICS will replace the Standard Industrial Classification (SIC), which has been in place for several decades.
- In response to the Boskin Working Group, BLS has improved the accuracy of the Consumer Price Index and the quality of covered employment and wage (ES-202) data.
- SP, ICSP, and individual statistical agencies have taken numerous steps to increase Internet access to their data. To provide data users with information on the array of federal statistical agencies, ICSP and SP have created the FedStats Web site. Census, BLS, BEA, and other statistical agencies each are continually increasing the amount of data available on-line.
- The primary statistical agencies are more actively coordinating their efforts. For instance, BLS reports that it meets regularly with BEA to discuss the utilization of BLS data in BEA series; is working with Census regarding a master list of establishments; and all parties are looking for ways to increase data sharing.
- To address long-recognized concerns about barriers to data sharing, the Clinton administration drafted and proposed passage of the "Statistical Confidentiality Act." First submitted to Congress in 1996, this proposal now has been incorporated into the various Congressional proposals described below.

[20] Testimony of Charles Waite before the Subcommittee on Government Management, Information, and Technology, Committee on Government Reform and Oversight, U.S. House of Representatives, March 26, 1998.

[21] General Accounting Office, *Statistical Agencies: Adherence to Guidelines and Coordination of Budgets*, (GGD-95-65, August 1995), p. 42-49; Norwood, *op. cit.*, pp. 53-59.

- The Clinton administration has requested statistical agency budgets to maintain programs and fill gaps. Congress has not provided all funds requested. For instance, according to the GAO, only half of the recommendations of the Boskin Working Group were funded.[22]
- As described previously, the Workforce Investment Act calls for the creation of a national employment statistics system, with improvements in the currently available employment statistics. Mechanisms for doing so are being put in place.

Though SP is not visible to most data users, observers' concerns regarding SP's lack of resources and authority deserves further discussion. Norwood indicates that SP's utilization of ICSP, FCSM, and CNSTAT appears to be critical to performing its mission; involvement of key statistical agencies appears to lead to higher quality, greater consensus, and more effective implementation; and SP's use of outside experts on important topics is of great value. However, she notes, these supporting resources cannot carry out all the functions assigned to SP:

> (L)ack of resources hampers the statistical policy group's efforts to promote the quality and integrity of federal government statistics. It operates as best it can by asserting leadership and attempting to stimulate activity by individual agencies within the system. At times, when issues cut across the programs of several agencies, SP establishes a new (interagency) committee. . . . But the more difficult tasks of coordination, planning, and development of government-wide guidelines and standards for statistical work in the federal government—as well as evaluation of agency statistical output, budget review, and coordination of all legislative proposals using statistics—must be done by statistical policy personnel themselves.[23]

Norwood's proposal (to consolidate statistical functions into a Central Statistical Board) and the bills introduced in the last three Congressional sessions contain many similarities. S. 205, the current proposal before Congress, has two titles. The first creates a Federal Commission on Statistical Policy to recommend whether the federal statistical system could be reorganized through consolidation of existing functions, how such consolidation could be achieved, and any other changes to improve the workings of the system. This Commission also is to carry out a number of other specific studies (e.g., review of the quality of statistics, coordination of data collection). The second title (essentially, the Clinton administration's "Statistical Confidentiality Act") strengthens legislative bases for statistical data confidentiality and expands the boundaries within which individual statistical agencies can share data without violating confidentiality.

S. 205 seems to reflect a consensus among those in Congress interested in the issue, in both houses and parties. Given the progress made in the 105th Congress by its

[22] United States General Accounting Office, *Statistical Agencies: Consolidation and Quality Issues* (T-GGD-97-78, April 7, 1997), p. 2.
[23] Norwood, *op. cit.*, pp. 53-54.

predecessor bill, S. 205 appears to have the potential to become law in some form. As has been the case in the past, however, the number of those interested in the issue of statistical policy and coordination is relatively small, which has made passage of any bill more difficult.[24]

Norwood provides an alternative proposal based on the existing decentralized structure. This proposal allows data sharing across agencies (similar to the approach in Title II of S. 205), creates some uniformity across federal departments with regard to the status of statistical units and personnel within those departments, and greatly expands the resources available to the Chief Statistician so that SP can fulfill its mission.[25]

In one paragraph, NAPA echoes Norwood's approach and priorities. It prefers consolidation, and as an alternative, calls for an increase in OMB personnel and authority for coordination. One impact of the NAPA study is, of course, the efforts of this project to understand and better meet the needs of data users. Again, it should be noted that the NAPA study was the only recent effort found that focused particularly on the extent to which the statistical system is meeting the needs of users of subnational data.[26]

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[24] Moreover, among those concerned are labor unions, which oppose moving BLS from the Department of Labor.

[25] Norwood recommends an increase in SP staff to 20 to handle day-to-day operations and the funding of a contractor-operated statistical research center (implemented through the National Science Foundation) "to undertake specific projects that require specialized personnel." Norwood, *op. cit.*, p. 83.

[26] However, the Senate Labor and Human Resources Committee report (*op. cit.)* on the Senate version of the WIA does indicate specific dissatisfaction with the ability of nation's LMI system to deliver local employment data, particularly for the purposes of workforce development. The committee criticizes that system, but not BLS. It notes:

> The legislation builds on the foundation of existing national data programs to create a nationwide system for information that will be integrated from local to State to national levels and comparable across States, enabling employers and job seekers to make informed choices.
>
> The committee finds that, despite widespread consensus about the kinds of data and information that should be included in an LMI system and that are described in the legislation, current LMI activities are simply not organized to produce them efficiently. Gaps in information, duplication of effort, and confusion of responsibilities can best be addressed by consolidating the currently fragmented governance structure for LMI.
>
> Consolidation at the Federal level underscores the responsibility of the Secretary of Labor and recognizes the key role of the Bureau of Labor Statistics (BLS) in LMI. The Secretary, in addition to rationalizing data responsibilities within the Department of Labor, will be responsible for coordination with all other interested federal agencies. The Bureau of Labor Statistics, which maintains essential LMI programs, has the expertise and the historical mission to design data and develop the LMI system. BLS fits the requirement that the agency charged with LMI responsibilities should be a neutral source, trusted by all education and training deliverers, and not itself a service deliverer. This requirement accords with the committee's vision that LMI should be the common element integrating the various institutions that deliver workforce development services.

2.3 Non-Federal Data Providers

While the federal government plays, by far, the dominant role in the collection, analysis, and publication of regional socioeconomic data, other types of organizations have roles as well. These organizations include state and local government, private non-profits, and commercial organizations.

Many state and local governments undertake regular or one-time analytic efforts to fill in gaps in federal data series, meet statutory requirements, or address other needs. Such efforts may involve primary data collection (e.g., a population census), utilize existing data (e.g., sales tax records), or use existing federal and state data to model demographic or economic activity.

In addition, state LMI agencies are active partners with BLS in the collection and analysis of data for most BLS-sponsored data series. Under this cooperative arrangement, BLS provides funding and guidelines to the state agencies for collection and analysis, each of which then prepares and publishes data for its respective state, and forwards the data to BLS for integration and publication into data series with nationwide coverage.

A multitude of private nonprofit and for-profit providers of regional socioeconomic data exists. Some data series provided by these organizations aim to add value to federal and other secondary data through manipulation (e.g., reorganization, modeling, filling in gaps). Other privately published data series are based on the independent collection and analysis of primary data. (Many of these series rely on federal data to provide control totals and adjustment factors.)

Categories of private-sector data series include demographic and consumer profiles, industry profiles, economic modeling, cost-of-living data, international trade data, and sector-specific data (e.g., real estate and construction, finance, tourism). Specific examples follow:

- American Chamber of Commerce Researchers Association – cost of living index
- Claritas – primary and secondary data on topics such as business and retail establishments, demographics, consumer spending, financial services, and media activity
- Coldwell Banker National Real Estate Index – index of commercial real estate prices and vacancy rates
- D&B MarketPlace – regional industry profiles and company-specific information utilizing Dun & Bradstreet account data on 10 million U.S. businesses
- DataMasters – on-line database providing cost-of-living comparisons for U.S. job markets
- Massachusetts Institute for Social and Economic Research (MISER) – export and import statistics, including a quarterly state export data

series that adjusts trade data from Census by imputing missing industry and state information
- National Association of Home Builders – data on housing sales, prices, and affordability
- Price Waterhouse Venture Capital Survey – data on venture capital investments
- Regional Economic Models, Inc. (REMI) – regional economic forecasting models that indicate economic and demographic impacts
- United States Travel Data Center – estimates of visitor spending and travel-related employment

As will be seen in Chapter Four, the consensus of data user opinion is that, for the purposes of regional economic analysis, nongovernmental data series can be useful adjuncts to, but not substitutes for, federal data. It is believed that the comprehensiveness, depth, trustworthiness, and regularity of federal data cannot be surpassed by the private sector. Moreover, while some nongovernmental data are available for free, most are relatively costly, as these organizations' data efforts are not supported by taxpayer dollars.

2.4 Data Intermediaries

Most federal and other statistical organizations are actively involved in disseminating, through print and electronic media, the data series they prepare. However, for many users, obtaining data directly from each source has certain limitations in terms of cost, time, access, and awareness (the user may not learn about the existence of relevant data series). In recognition of these limitations, an array of state, regional and local data intermediaries has been established to provide data users with fast, low-cost access to data, and to expertise to aid in data choice and use:

- ***Census Data/Information Centers* –** to facilitate access to its statistics, the Census Bureau sponsors three programs through which approximately 1,800 state and local organizations receive and disseminate Census data products. These programs include State Data Centers (SDCs), Business and Industry Data Centers (BIDCs, focusing on assistance to businesses and economic development agencies), and Census Information Centers (focusing on assistance to special population groups, such as minorities).
- ***State Labor Market Information Agencies*** – As an element of the federal-state partnership to provide unemployment insurance and a state labor exchange, every state has an LMI agency that compiles, publishes, and analyzes a wide range of labor-related information. Most LMI agencies also have a group of regional labor market economists, each of whom specializes in the economy of a particular substate area, usually a group of counties.

- ***College and University Business and Economic Research Centers*** – In the majority of states, colleges and universities operate research centers that compile data on and research the state economy. Typically, these centers analyze the current health and structure of the state economy and local economies within it, and provide library and Web access to a variety of data sources. Most of these centers are members of the Association for University Business and Economic Research (AUBER). Many are also part of the Census SDC/BIDC system.
- ***BEA User Group*** – BEA makes its regional estimates available through the BEA User Group, members of which include state agencies, universities, and Census Bureau SDCs (i.e., an amalgam of the intermediaries discussed in the previous three bullets). BEA provides its estimates of income and employment for all states and counties to these organizations with the understanding that they will make the estimates readily available to data users. The User Group has its beginnings in the pre-Internet, pre-CD days; members were the primary means of transmitting BEA regional data around the U.S.
- ***Federal Depository Libraries –*** Libraries that regularly receive federal statistical publications are members of the Federal Depository Library Program (1,400 libraries) or the Census Depository Library System (an additional 130 libraries). Many of these libraries have special government documents librarians who are familiar with the broad range of sources of socioeconomic statistics.
- ***Chambers of Commerce*** – In many communities, the local chamber of commerce gathers and disseminates data about the local economy. Economists and researchers who work for chambers of commerce are members of the American Chamber of Commerce Researchers Association (ACCRA).
- ***Regional Federal Data Offices –*** Census and BLS regional offices are an additional venue for examining agency-specific publications and obtaining technical assistance. Census operates 12 regional offices; BLS maintains eight.
- ***Internet Guides –*** A number of data intermediary Web sites are operated by universities, nonprofit, and for-profit organizations. Some provide direct access to regional socioeconomic data from a variety of sources. Others provide a set of hyperlinks that take the user to Web pages maintained by the data generator. Examples of the former include the Dismal Scientist (operated by Regional Financial Associates), Oregon State University's Government Information Sharing Project, the Geospatial and Statistical Data Center at the University of Virginia, and the Social Sciences Data Collection, University of California at San Diego. Examples of the latter include EconData.Net, a Web-based data intermediary service created through

this EDA-funded project, the University of Minnesota's Guide to On-Line Sources for Economic Development Data, and Bill Goffe's Resources for Economists on the Internet, University of Southern Mississippi.

Chapter Three
Profile of Socioeconomic Data Users

3.1 Introduction

Who are the users of regional socioeconomic data? How and why do they work with data? How do they learn about data sources and analytic techniques? In order to assess how well the current system for producing regional socioeconomic data is meeting the needs of users, the characteristics of the users themselves first must be understood. This chapter provides a profile of the users of regional socioeconomic data, drawn from the project survey. The profile of data users includes the following elements:

- ***Who they are*** – profile of respondents by type of organization, job title, primary job activity, and trade/professional association affiliation
- ***What they do*** – frequency and purposes of data analyses
- ***How they do it*** – approaches to analysis, including techniques, data sources, and presentation
- ***For whom they do it and with what results*** – influences on analytic agenda, reasonableness of requests and adequacy of resources, key audiences, and perceived impacts on these audiences
- ***What they know and how they learn*** – self-perceptions of analytic skills and knowledge, and access to learning opportunities in order to improve skills and knowledge
- ***How sophisticated users differ from others*** – the nature of differences between sophisticated data users and others with regard to techniques, approaches to learning, and effectiveness.

This profile serves three purposes:

- It furnishes the federal statistical agencies, EDA, and trade and professional associations with a detailed and nuanced sense of the characteristics of users of regional socioeconomic data.
- In describing users' backgrounds and work situations, the profile enables better interpretation of data users' perceptions of various data series and agencies (described in Chapter Four).
- The profile helps identify means to increase the analytic capabilities of data users.

The following sections provide a summary profile of data users. For interested readers, significantly more detail is provided in Appendix 3.

3.2 Survey Respondents and the Universe of Data Users

Before reviewing the profile of survey respondents, it is useful to consider the extent to which respondent characteristics may or may not reflect those of the universe of regional socioeconomic data users.

- ***The set of respondents contains a high proportion of frequent data users, likely higher than the regional socioeconomic data-using population at large.***

Over 70 percent of survey respondents label themselves as "frequent" data users, a figure presumably higher than that for the population of data users at large. As participation in the survey was self-selected, it is reasonable to think that those who responded tend to have greater experience and interest in data than those of nonrespondents.

- ***The set of respondents represents a diverse cross-section of data users in terms of type of work, type of jurisdiction, and geography.***

In carrying out this assessment, substantial input was sought and received from all major segments of the data user population. Data users were contacted through 23 diverse economic development professional and trade associations. Some of these associations have a jurisdictional focus (e.g., city, county, region, state), some have a focus by type of work (e.g., planning, economic development, economic research, regional science, technology), and some have a geographic focus (e.g., Northeast, Southern, Mid-America, California). (See Appendix 1A for full list.) As will be discussed in section 3.3, significant numbers of responses came from all segments of the user population.

- ***The percent of practitioners without access to the Internet, and so without opportunity to respond to the survey, appears to be quite small.***

To gauge the extent of lack of Internet access, a number of practitioners living in isolated areas were contacted through the assistance of the American Economic Development Council and the National Association of Development Organizations. These efforts led to the conclusion that nearly all practitioners, including those in rural areas, have Internet access, and that most of those who do not are in that position out of choice. The primary inhibition appears to be cultural, and not a question of access to the technology. A few, often older, practitioners indicated some discomfort with the notion of learning how to operate this new technology, and choose not to do so.

3.3 Who Are the Respondents?

- ***Respondents work in a diverse array of practice and research organizations and for a diverse clientele. They tend to be in senior positions in their organizations and have many years of experience in data analysis.***

- A little over half of respondents work in a practice-oriented organization (e.g., economic development agency, planning agency, Governor's office), and almost a third work in a research-oriented organization (e.g., academic department, academic business or economic research center).
- Two-thirds of respondents focus one bounded area, with much diversity concerning the type of political unit (e.g., town, city, county, metro area, and state) and character (rural, urban). Nearly a third serve clients across multiple areas.
- Respondents are widely distributed by type of professional position, with a strong emphasis on persons in positions of some seniority or authority (including senior staff, research directors, branch chiefs, organization directors, professors).
- Respondents have significant experience in socioeconomic data analysis. On average, respondents have 13.5 years of experience; the median number of years of experience is 10.

3.4 What Type of Work Do Respondents Carry Out?

➢ ***The large majority of respondents use data frequently.***

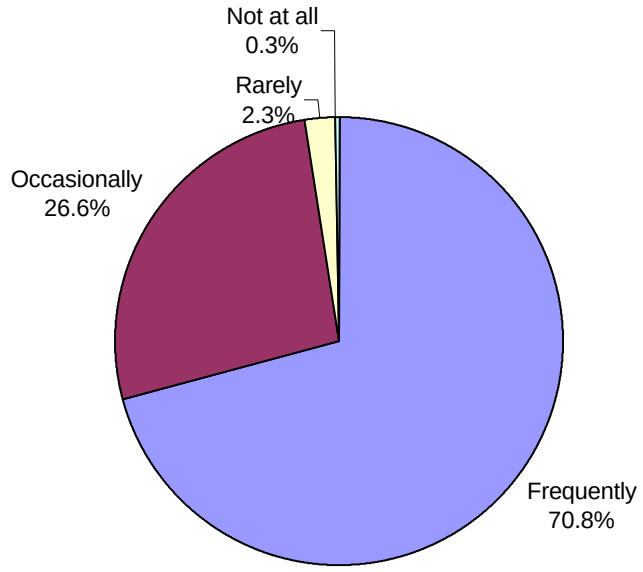
Seventy-one percent of survey respondents say they frequently use or analyze socioeconomic data (Figure 3-1).

➢ ***Respondents are quite diverse in the nature of their primary work activity and their work with data. Most respondents' work involves not only the analysis of data but also the preparation of written narratives that describe, interpret, explain or otherwise utilize the data.***

- The primary job activity of survey respondents is well distributed among five major categories: prepare economic analyses; design and implement policies and programs; organize and disseminate secondary data; collect and prepare primary data; and other.[1]
- Analysts and policy makers use data in a wide range of economic studies, including analysis of economic resources (e.g., workforce, financial capital, transportation infrastructure, land); analysis of regional economic performance (e.g., employment and income trends) and structure (e.g., industry mix); industry-specific analysis; impact analysis; and economic projections.
- The large majority of data users regularly write narratives based on data analysis. These narratives may describe or interpret socioeconomic data trends, explain public policy issues, or provide recommendations.

[1] Respondents could choose only one category.

Figure 3-1
Survey of Socioeconomic Data Users
Frequency of Data Use



N = 353

3.5 What Methods and Techniques Do Respondents Use?

- ***While respondents use a variety of means to obtain secondary data, they rely on the World Wide Web more than any other means.***

Respondents use multiple means to obtain secondary data, including the Web, print publications, CD-ROMs, and data intermediaries (Table 3-1). The Web is the most popular means of accessing data—95 percent of respondents either say that they frequently or sometimes use the Web to obtain data. Following in popularity are print publications (a close second), CD-ROMs and diskettes, and data intermediaries. Few respondents frequently use consultants.[2]

[2] While it does not appear that the respondent pool differs greatly from the universe of data users in access to the Internet, it does seem possible that the relative popularity of the Web among respondents could reflect in some part the fact that the survey was conducted via the Web—survey respondents may be more comfortable with this medium than nonrespondents.

- ***Over half of respondents frequently or sometimes collect primary data.***

A quarter of respondents frequently collect primary data, and another 40 percent sometimes collect primary data. Only eight percent never do.

- ***A majority of respondents make some use of microdata.***

- ***Respondents regularly use a number of basic analytic techniques. Only a small proportion of respondents regularly use more advanced techniques.***

The most popular basic techniques are geographic comparisons, time series analysis, and multiplier/impact analysis. Just a fifth of respondents frequently use advanced techniques such as linear regression and econometric modeling.

- ***The large majority of respondents who prepare data-based narratives say that, to be effective, one must be adept at certain arts of narrative preparation.***

Narrative-preparing respondents indicate that effective practice requires that one be adept at certain arts of narrative preparation, including presentation, informative graphs and charts, and using data to tell an interesting story.

Table 3-1
Survey of Socioeconomic Data Users
Extent of Use of Various Methods to Obtain Secondary Data

	Frequency of Use				Frequent Users of Data Access Means by Type of Data User	
	N = 354				N = 250	N = 94
Means of Data Access	Frequently	Sometimes	Rarely	Not at All	Frequent Data Users	Occasional Data Users
Web	70.6 %	24.9 %	4.0 %	0.6 %	72.4 %	64.9 %
Print publications	65.5	30.8	3.7	0.0	69.2	55.3
CD-ROMs, diskettes	50.0	34.6	10.6	4.9	57.3	28.3
Data Intermediaries	33.6	50.0	15.0	1.4	34.8	31.9
Consultants	5.7	22.1	43.0	29.2	5.7	6.5

Note: Table includes only frequent and occasional data users.

3.6 What is the Context of Respondents' Work?[3]

- ***Respondents' analytic agendas are set primarily within, rather than outside of, their organizations.***

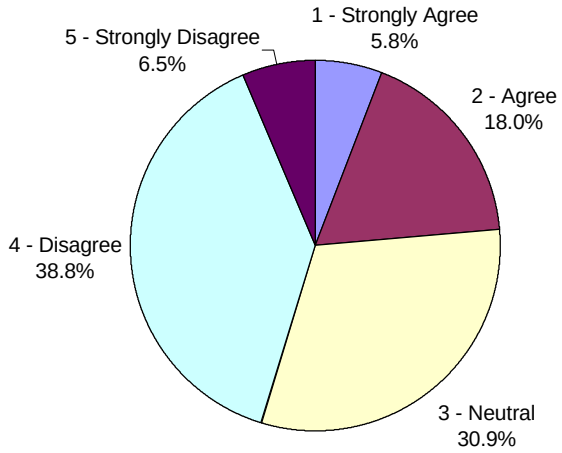
Respondents most frequently list themselves as a key influence on their analytic agenda, closely followed by policy makers and program managers, then fellow staff.

- ***Generally, respondents do not think the requests for analysis they receive are reasonable, and do not believe they have sufficient resources to carry out their responsibilities.***

Most respondents do not think the requests for analysis they receive are particularly reasonable (Figure 3-2). Only six percent of respondents strongly agree with the statement "The requests for analysis that I receive are appropriate, well thought out, and reflect an understanding of my time and resource limitations."

Further, most respondents do not think that they have sufficient resources to carry out their analytic work (Figure 3-3). Only seven percent strongly agree with the statement "I have sufficient resources to fulfill my analytic responsibilities in a complete and timely manner."

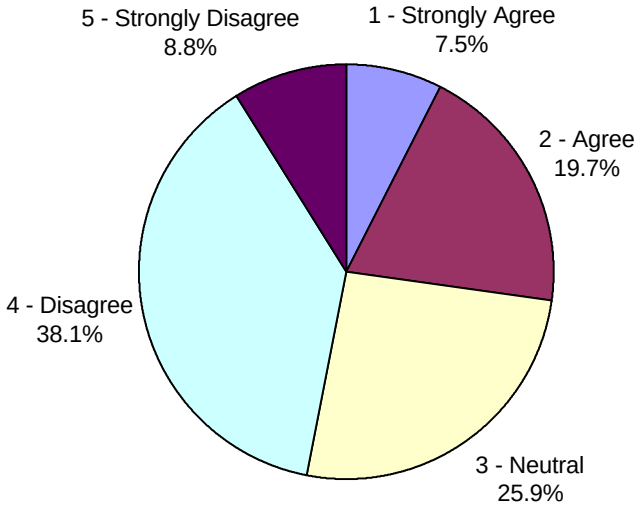
Figure 3-2
Survey of Socioeconomic Data Users
Agreement that Requests for Analysis Are Reasonable



N = 139
Mean 3.22

[3] Responses in this section were collected only from respondents whose primary job activity is preparing economic analyses or designing or implementing policies and programs (N = 154).

Figure 3-3
Survey of Socioeconomic Data Users
Agreement that Resources for Analysis Are Sufficient



N = 147
Mean 3.21

- ***Respondents prepare analyses for multiple and diverse audiences. They believe their work has an impact on the actions of these audiences. However, they think that decision makers often do not carefully review data before making decisions.***

The public at large and policy makers are mentioned as a primary audience by about four-fifths of all respondents. Targeted constituent groups and professionals at large are mentioned by many as well.

Table 3-2 indicates respondents' perceptions of the impacts of their work on these audiences. At first glance, these perceptions seem contradictory:

- On the one hand, only 17 percent strongly agree or agree with the statement "Decision makers look carefully at data before making decisions." (Mean score 3.23 on a scale of 1 to 5, with 1 meaning "strongly agree" and 5 meaning "strongly disagree")
- In addition, only 39 percent strongly agree or agree with the statement "My analyses have a significant impact on the understanding of how the economy operates." (Mean score 2.51)

- On the other hand, 69 percent of respondents strongly agree or agree with the statement "My analyses have influenced the actions of their intended audiences." (Mean score 2.01)

One possible explanation for reconciling the last bullet with the first two is that many analysts believe their intended audiences review and act on the conclusions of the analysis, but do not carefully examine the data and arguments leading up to those conclusions. Perhaps these analysts believe that their audiences lack the time, interest, or background to delve into the data and arguments, and find it most convenient to head straight to the findings and conclusions.

An alternative, and complementary, explanation is that perhaps to a large extent decision makers do not seek out data analysis prior to making decisions, but they are influenced by the data analyses when they are provided.

Table 3-2
Survey of Socioeconomic Data Users
Perceptions of Impacts of Data Analysis
N = 150

	Rating						
	1. Strongly Agree	**2. Agree**	**3. Neutral**	**4. Disagree**	**5. Strongly Disagree**	**Don't Know**	**Mean**
Decision makers look carefully at data before making decisions.	5.3 %	12.0 %	35.3 %	39.3 %	6.0 %	2.0 %	3.23
My analyses have a significant impact on the understanding of how the economy operates.	11.3	28.0	31.3	13.3	7.3	8.7	2.51
My analyses have influenced the actions of their intended audiences.	25.3	44.0	24.0	1.3	2.0	3.3	2.01

Note: Respondents include only those whose primary activity is the preparation of data analysis or the design or implementation of policies and programs.

3.7 What Do Respondents Know? How Do They Learn?

- ***Respondents rate themselves positively in terms of knowledge about data sources and analytic techniques, but say they have room for improvement.***

The majority of respondents think they are proficient at identifying and accessing appropriate data sources, have a complete and detailed understanding of data definitions, have a broad knowledge of analytic techniques, and are adept at using and integrating multiple data sources.

- ***Most respondents rely on learning-by-doing to master analytic techniques and learn about sources of data. They also use the Web and print publications to discover data sources.***

Most data users (83 percent) rely on self-teaching to learn analytic techniques and develop awareness of data sources, followed by academic degree programs (61 percent). The Web, learning-by-doing, and periodicals and bulletins are the three most frequently mentioned means used to stay up-to-date about sources of data (each used by over 70 percent of respondents).

- ***To a large extent, respondents are dissatisfied with the opportunities they have for new learning about data sources and methods.***

Only 37 percent of respondents are highly satisfied or satisfied with access to learning about data sources and methods, and only 30 percent are highly satisfied or satisfied with opportunities for interchange with other data users.

3.8 How Do Sophisticated Data Users Differ from Others?

If good socioeconomic data analysis is fundamental to effective economic development, it would seem highly valuable to identify the characteristics of the best analysts and see how they differ from other data users. Understanding these differences can help inform actions aimed at improving data user capabilities.

On the basis of mean respondent scores on five statements concerning self-perception of skills and abilities in data analysis, the top scoring one-fifth of respondents were considered to be "sophisticated." Ways in which more skilled and sophisticated respondents differ from the others are as follows:

- Sophisticated data users more frequently use data and employ advanced analytic techniques, compared to other users.
- Sophisticated data users rely far more on the electronic media to obtain data than do other users (Table 3-3).
- Sophisticated users are more likely to be responsible for preparing data analyses and narratives, duties requiring higher analytic skill levels.

- Users in larger and more populous areas are likely to be sophisticated. There is a dearth of sophisticated respondents in rural areas.
- Organizations with a data-focused mission (e.g., labor-focused organizations, university research centers) and that serve multiple clients (e.g., consulting firms) have a higher percentage of sophisticated respondents.
- Sophisticated users are more likely than other users to perceive that their work has an impact.
- Sophisticated data users are far more optimistic about the possibilities for improving the analytic capabilities of practitioners. In particular, they are more likely to believe that the skills of data analysis can be taught, that academic training can build skills, and that their opportunities for learning and peer interchange are satisfactory. And they are much more likely to have served as a mentor to others.

Table 3-3
Survey of Socioeconomic Data Users
Frequency of Use of Various Means to Obtain Secondary Data
by Sophistication of User

	N	Frequently	Sometimes	Rarely	Not at all
World Wide Web					
Sophisticated Users	73	84.9 %	0.0 %	1.4 %	13.7 %
Others	279	66.7	0.7	4.7	28.0
CD-ROMs and diskettes					
Sophisticated Users	73	74.0	1.4	1.4	23.3
Others	277	43.7	5.8	13.0	37.5
Print					
Sophisticated Users	73	63.0	5.5	31.5	0.0
Others	278	66.2	3.2	30.6	0.4
Data Intermediaries					
Sophisticated Users	73	28.8	0.0	27.4	43.8
Others	279	34.8	1.8	11.8	51.6
Consultants					
Sophisticated Users	71	7.0	28.2	43.7	21.1
Others	278	5.4	29.5	42.8	22.3

In general, then, sophisticated users appear to know how to build their capacity for analysis through ***utilizing external resources*** (schooling, networking, electronic media) and appear to be more effective in their work as a result. ***Sophisticated data users have learned how to learn.*** Cause and effect is suggested from the survey results. Data users in organizations covering large or multiple areas, and in organizations with data user peer networks in place, are more likely to be sophisticated, it would seem, because they are more likely to have opportunities to learn from others and experience in learning how to learn. The reverse is true for data users in more isolated situations.

Sophisticated users, then, are much more optimistic about the possibilities of building data analysis capabilities and, it would appear, of using those capabilities to be more effective in impact. Less sophisticated data users are more likely to be pessimistic, and such beliefs likely become a self-fulfilling prophecy. They are less likely to attempt to become sophisticated because they are not as aware of how to go about doing so. A challenge for federal statistic agencies, economic development professional and trade associations, and EDA is to develop means to break through to the large base of less sophisticated users, particularly those in planning agencies and rural areas, by developing tools and mechanisms with which these users can build their skills and confidence. Recommendations in this regard are provided in Chapter Five.

Chapter Four
User Perspectives on Regional Socioeconomic Data

4.1 Introduction

To what extent do regional socioeconomic data users think that available data series meet their needs? To what extent do they think these data are accurate, timely, accessible, and in sufficient detail? What new data series would they like to see? How well do users think they are served by the various federal statistical agencies? What are their priorities for change?

This chapter seeks to answer these questions through a review of data user perspectives as elicited through the project survey, focus groups and roundtables, and interviews. The chapter examines

- the extent of survey respondent ***reliance on various data organizations***, including federal statistical agencies, state and local governments, and the private sector;
- survey respondent ***ratings of 52 data series and sources***, from both the public and private sectors;
- agency-by-agency and series-by-series, ***details of data user perspectives*** regarding the usefulness, detail, accuracy, timeliness, and accessibility of existing data series;
- user priorities regarding the ***development of new data series*** that would address currently unmet needs;
- user perspectives regarding the role that ***data intermediaries*** play in their work; and
- the ***key themes*** that emerge from the above analysis.

As in Chapter Three, general findings will be provided in the main chapter text, with tables, figures, and more detailed discussion in Appendices 4A-4C.

4.2 Utilization Rates by Data Organization

Survey respondents were asked to indicate the various data organizations on which they rely, including the federal government, state and local governments, and commercial and nonprofit organizations. Respondents using federal data were then asked to indicate whether they use data provided by the Bureau of the Census (Census), the Bureau of Labor Statistics (BLS) and state labor market information (LMI) agencies, the Bureau of Economic Analysis (BEA), and "Other Federal Agencies."

Over 98 percent of respondents use federal data, 95 percent use data provided by state and local governments, and only two-thirds use data from private sources (Figure 4-1). Regarding federal data agencies, 95 percent of respondents use Census data, 82 percent use data from BLS and state LMI agencies, 76 percent use BEA data, and 52 percent use data from other federal agencies.[1]

Of those respondents that use federal data, 94 percent work with data from more than one federal agency. Of the remaining six percent, almost all use only Census data. For each of BLS, BEA, and Other Federal, only one or two respondents say they obtain federal data only from that category.

Additional findings and observations are as follows (with tables and further discussion in Appendix 4A):

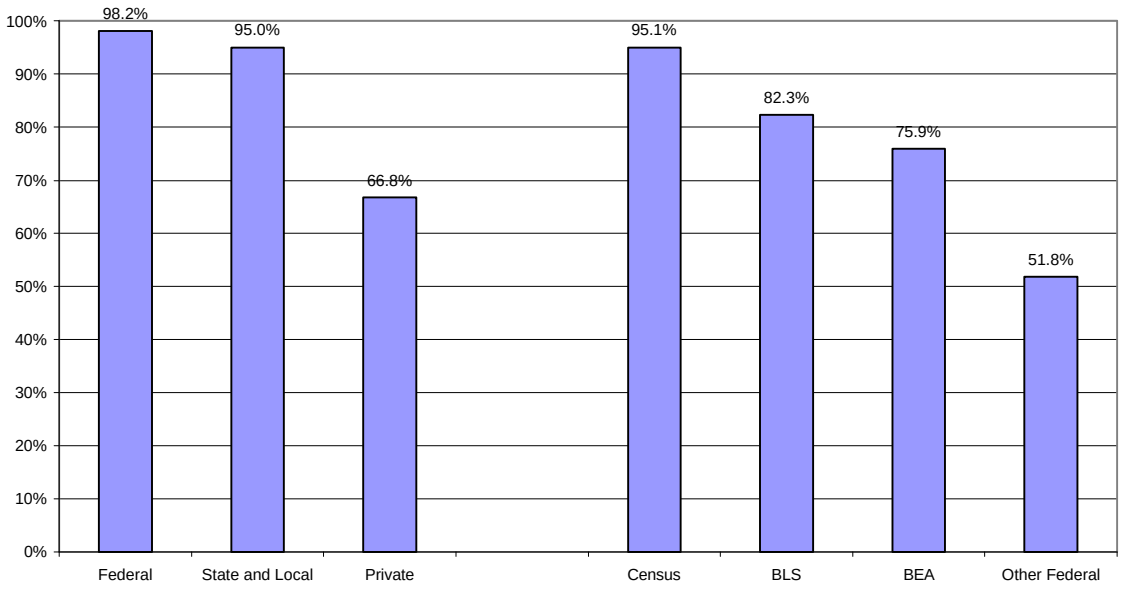
- In part, variations in utilization rates reflect the relative breadth of various agencies' data offerings. For instance, data users are more likely to use Census data because of the comprehensiveness of that agency's set of data products, as compared to a more narrow and often more specialized set of offerings provided by other agencies.
- While the percentages of sophisticated users who work with Census data and privately provided data are about the same as those for other users, greater percentages of sophisticated users work with BLS, BEA, and other federal data. This suggests that awareness of and knowledge about non-Census data sources is not complete among other data users.[2]
- Utilization rates significantly differ by type of user organization.[3] All planning agency respondents use Census data; all workforce development agency respondents use BLS data; and a higher-than-average percentage of academic economic and business research centers use BEA data.
- For the most part, utilization rates do not significantly differ by service area or character. Differences do appear for BEA data (lower use rates for substate areas), private data providers (lower for rural areas), and other federal providers (lower for substate areas).

[1] In the following discussion and charts, mention of BLS should be read to include both BLS and its state labor market information agency (LMI) partners. Some survey respondents appear not to be aware that they are using LMI employment and industry data produced in cooperation with BLS. Ten percent of respondents say they use employment and industry data from state and local government agencies, but do not use data "produced jointly by state labor market information agencies and the Bureau of Labor Statistics, such as estimates of state and local payroll, employment, unemployment rates . . ."

[2] While the raw data indicate that a smaller percentage of sophisticated users utilize state and local data, this is not a statistically significant difference. At the same time, this pattern suggests the possibility that sophisticated users may be more likely to go straight to BLS for certain data, while others may be more likely to go to the LMI agency.

[3] The term "utilization rate" describes the percentage of respondents who say they use a data source, not the frequency with which they use it.

Figure 4-1
Survey of Socioeconomic Data Users
Utilization Rate by Category of Data Source



N = 548 for federal and private
N = 544 for state

- For the most part, utilization rates also do not differ significantly by primary activity of respondent. Again, rates do differ for BEA data (lower among those who design or implement policies and those who collect and prepare primary data).

4.3 Ratings for Data Series and Sources

Survey respondents provided ratings for two sets of data sources. First, respondents were asked to rate ten individual federal data series along five dimensions—usefulness, accuracy, detail, timeliness, and accessibility. These ten series were deemed by the authors likely to be of most interest to economic development practitioners and researchers. Second, respondents were asked to rate 42 other data sources and series in terms of usefulness only. These sources and series include 29 federal, five state and local, and eight commercial and nonprofit.

A review of the survey findings yields the following observations (with tables and additional discussion in Appendix 4B):

- The Census Bureau has six of the top seven data series in terms of usefulness (percentage of respondents finding the series useful); all Census series but two are in the top 25. All five state and local government data series are in the top 15. While BLS has only one

series in the top 10 (Local Area Unemployment Statistics, ranked 10th), all its series but one are in the top 25. For BEA, only its Regional Economic Information System (REIS) data made it into the top 25. Other than business directories, less than a majority of respondents say they find any of the private or nonprofit data sources of use. And not even a third of the respondents find any of the other federal data sources of use, with the one exception of the Internal Revenue Service.

- Demographic series are found to be of use by the largest number of respondents.
- Most employment and income series are found useful by a good majority of respondents.
- Among series that describe the cost of living and doing business, those most frequently found of use include tax data from state and local governments, the Consumer Price Index (CPI), and the National Compensation Survey (NCS).
- Data series that focus on one particular sector of the economy (e.g., transportation, housing) are found not useful by a visible proportion of respondents. This is logical, as all respondents are not interested in all sectors and activities.
- Lack of awareness of various data series seems to be an issue. For a significant number of Census, BLS, and BEA data series, a quarter or more of the respondents indicate that they are not aware of that series, even though they use other data from the same agency. Moreover, a substantial proportion of respondents uses no data from BLS, BEA, other federal agencies, and private sources.
- With few exceptions, sophisticated users tend to think more highly of, and be more knowledgeable about, the data series and sources than other users. The results support the notion that other users tend to lack information regarding how to access and make best use of each data series.

Respondents were asked to rate ten federal data series for five characteristics—usefulness, accuracy, detail, timeliness, and accessibility. The series for which perspectives were sought included:

- From the Census Bureau – the Decennial Census, the Economic Census, County Business Patterns, and the Current Population Survey (CPS);
- From BLS and its state LMI agency partners – Local Area Unemployment Statistics (LAUS), Current Employment Statistics (CES/790), Covered Employment and Wages (ES-202), and Occupational Employment Statistics (OES); and
- From BEA – Regional Economic Information System (REIS) Personal Income series and REIS Employment series.

Respondents were asked to rate each series for the five characteristics. Survey findings indicate the following:

- Across all ten series, respondents most value their usefulness, followed by accessibility, accuracy, detail, and timeliness.
- The Decennial Census ranks first in every category except timeliness, in which it ranks tenth. LAUS is ranked second best among the ten. OES received the lowest scores overall.
- Averaging series scores by agency, the Census Bureau receives the best mean rating in all dimensions except timeliness. Also, respondents appear more knowledgeable about Census series than series from BLS and BEA. Far fewer respondents say "don't know" to, or leave blank, the usefulness question for Census series than they do for BLS and BEA series.
- BLS receives the best mean rating for the timeliness of its data series, with has four of the top five series in that dimension. In contrast, the quinquennial Economic Census and the Decennial Census are ranked ninth and tenth, respectively, for timeliness.
- The scores for the ES-202 data series deserve particular attention. This series is ranked second in accuracy, third in detail, and fourth in timeliness, but last in accessibility.

4.4 Assessment of Data Providers

This section provides a synthesis of the ratings and comments gathered from survey respondents and focus group and roundtable attendees regarding the various categories of data providers—Census, BLS, BEA, other federal, state and local government, and private.[4] User assessments of individual data series and sources, on which these syntheses are based, are provided in detail in Appendix 4C.

Bureau of the Census

A number of themes emerge from a review of ratings and comments regarding Census Bureau data series:

- ***Highly useful*** – Almost all data users, irrespective of category, utilize data from the Census Bureau. Users are clear that the Census Bureau publishes a number of data series integral to their work. The general

[4] Collectively, survey respondents provided 36 single-spaced pages of comments regarding Census Bureau data, 23 pages regarding BLS, 17 pages on BEA, 10 pages on other federal sources, six pages on state and local government sources, 11 pages on commercial and nonprofit sources, seven pages on data intermediaries, and 28 pages of general comments regarding priorities for improvements in federal data collection and dissemination. The list of focus groups and roundtables is provided in Chapter One.

demographic and economic data series are most widely valued, with specialized data series less so (as they are not of use to all analysts).

- ***Lack of timely release*** – Data users' most frequent complaint about Census Bureau data is the long time lag between the collection and publication. Series for which this concern is specifically voiced include the Decennial Census, the Economic Census, County Business Patterns, the Annual Survey of Manufactures, the Census of Governments, and the American Housing Survey.
- ***Need for intercensal socioeconomic data*** – The second most frequent request is for detailed intercensal socioeconomic data at a level of geographic detail below the level of counties and towns (e.g., census tracts). Many of these comments go on to support the development of the American Community Survey (ACS). However, a large group of comments do not reflect an awareness of the ACS.
- ***Lack of awareness*** – Respondents do not appear to be fully informed about the breadth of data available from the Census Bureau. In addition, respondent comments show a widespread lack of awareness about the ACS, as mentioned, and the new Small Area Income and Poverty Estimates program.
- ***Mixed views on accuracy*** – A visible minority of users indicate a concern about the accuracy of certain Census series, including the Decennial Census, Population Estimates, Current Population Reports, and TIGER.
- ***Mixed views on accessibility*** – Users express concern about the accessibility of Census Bureau data. Comments on the Census Web site are quite mixed, ranging from the very positive ("Census has one of the best Web pages") to the very negative ("extremely user unfriendly").[5]
- ***Call for revival of discontinued series*** – Data users want to see the return of nonresidential construction, regional retail sales, and manufacturing export series.

Bureau of Labor Statistics/LMI Agencies

The themes that emerge from a review of ratings and comments regarding BLS-sponsored data series include the following:

- ***Useful*** – About 82 percent of survey respondents say they use BLS data, below only the 95 percent figure for the Census Bureau. Persons at labor or workforce development organizations, understandably, have the highest utilization rate of BLS data (100 percent); persons in academic departments have the lowest (60 percent). Data series with the highest use rates are LAUS, CPI, CES/790, and NCS.

[5] It should be noted that since the time of the survey, the Census Bureau Web site has undergone a reorganization.

- ***Current and timely*** – Users appreciate the frequency of monthly series, such as LAUS and CES/790. In general, they have few complaints about the time between data collection and release of BLS reports.
- ***Concerns about accuracy in survey-based series*** – Some users voice concerns about the accuracy of several BLS data series based on surveys, particularly LAUS and OES.
- ***Greater geographic detail*** – For BLS series that have nationwide coverage (e.g., LAUS, CES/790, ES-202), a significant number of users would like to see finer geographic detail. For series that provide data only for selected areas (e.g., CPI, NCS), users would like to see an expanded number of areas covered.
- ***Mixed reviews of accessibility*** – Respondents do not think BLS has a consistent or user-friendly approach to data accessibility. Users' ability to easily access data varies greatly from series to series. For instance, while some series are accessible at the BLS Web site (e.g., LAUS, CES/790), others (e.g., ES-202 and OES) must be accessed through individual states, which differ in their ability and willingness to serve data users. Comments regarding the BLS Web site are mixed – while users appreciate data availability, many find the multiple screen approach cumbersome.
- ***Additional measures*** – A number of users ask that BLS expand the breadth of its subnational data series. Areas of suggested expansion include skills measurement, employee benefits, actual (in contrast to projected) demand by occupation, the gross flows in the job market (new hires, layoffs, quits), job vacancies, and temporary personnel agency activity. Several users specifically requested the revival of a discontinued series that measured employee turnover (new hires and layoffs). (See Section 4.6 for general discussion of user demand for data not now available.)
- ***Variability among state LMI agencies*** – Users say that state LMI agencies vary greatly in their ability and willingness to serve users.
- ***Lack of awareness*** – Many data users are not familiar with a number of BLS data series. For example, fully a quarter of respondents who use other BLS data say they are not familiar with the usefulness of ES-202 data.

Bureau of Economic Analysis

The themes that emerge from a review of ratings and comments regarding BEA-sponsored data series include the following:

- ***Useful*** – A high proportion (76 percent) of survey respondents use BEA data; however, this figure is below those for Census (95 percent) and BLS (82 percent). Persons at academic-based economic and

business research centers have the highest rate of use (84 percent); consulting firms have the lowest (55 percent). The Regional Economic Information System is the most popular series.

- ***Lack of awareness*** – Part of the reason for the lower usage rate of BEA data, compared to Census and BLS, is lack of awareness among the breadth of data users, particularly occasional data users and those outside the academic community.
- ***Concerns about timeliness*** – Data users have concerns about the length of time required by BEA to publish all of its various regional series.
- ***Accessibility issues*** – In general, users do not cite lack of accessibility as a major concern, though several would like to get more data directly from the BEA site, and several complain about the cost of RIMS II multiplier sets. However, until recently, BEA offered a far lower percent of its data through its Web site than did Census and BLS; this relative lack of accessibility may have hindered user awareness that certain BEA data series exist.
- ***Concerns about funding*** – A number of users voice concerns about a decline of BEA funding for regional data, and the loss of the Regional Projections series.

Other Federal Agencies

As noted in Chapter Two, over 70 separate federal agencies have statistical functions. While the three federal agencies of most interest to regional economic analysts are discussed above, many other agencies disseminate data valued by analysts. This section reviews data user perspectives on 11 of these agencies, chosen because they publish subnational data used by some regional analysts.

In general, the offerings of these agencies are not valued nearly as highly as those of Census, BLS, and BEA (Table 4-1). On average, only 22 percent of respondents find the data of one of these agencies of use. Nor are these agencies as well known as those discussed above. Of course, some agencies are valued more highly, and known better, than others. In particular, over 30 percent of respondents make use of data from the Internal Revenue Service (Treasury), the International Trade Administration (Commerce), and the Economic Research Service (Agriculture). The National Marine Fisheries Service (Commerce) and the Army Corps of Engineers are least valued as data sources, with fewer than 11 percent of respondents finding these of use.

Table 4-1
Survey of Socioeconomic Data Users
Usefulness of Select Federal and Other Data Series
N = 548

	How Useful?				Left Blank	
	Very	Somewhat	Not	Don't Know	Use Data in Category	Don't Use Data in Category
Bureau of the Census						
Population Estimates	57.5 %	28.6 %	1.6 %	5.1 %	2.2 %	4.9 %
Statistical Compendia	49.6	29.0	2.7	10.6	3.1	4.9
TIGER	43.2	20.6	6.6	22.6	2.0	4.9
Annual Survey of Manufactures	30.8	37.6	6.6	16.4	3.6	4.9
Census of Governments	19.7	36.3	8.4	26.5	4.2	4.9
Current Construction Reports	18.1	36.1	12.2	24.6	4.0	4.9
American Housing Survey	17.7	38.9	12.4	23.2	2.9	4.9
Census of Agriculture	17.0	29.7	16.6	28.5	3.3	4.9
Foreign Trade Statistics	16.2	29.0	18.2	27.0	4.6	4.9
Bureau of Labor Statistics						
Consumer Price Index	48.7	21.9	5.7	4.4	1.6	17.7
National Compensation Survey	30.7	35.0	5.7	9.3	1.6	17.7
Consumer Expenditure Survey	23.7	30.5	10.0	15.0	3.1	17.7
Occupational Projections	18.4	37.0	11.5	13.5	1.8	17.7
Mass Layoff Statistics	10.6	23.4	18.8	26.5	3.1	17.7
Bureau of Economic Analysis						
Regional Projections	18.6	32.7	11.7	9.9	3.1	24.1
RIMS II	18.2	26.6	7.3	20.1	3.6	24.1
Gross State Product	17.5	32.3	10.2	13.3	2.6	24.1
Foreign Direct Investment	7.8	26.6	16.2	22.1	3.1	24.1
Other Federal						
Internal Revenue Service	16.6	17.5	2.6	14.2	0.9	48.2
International Trade Administration	14.1	18.1	4.7	14.1	0.9	48.2
Economic Research Service	13.1	17.2	4.4	16.2	0.9	48.2
National Center for Education Statistics	11.9	17.2	3.8	17.0	2.0	48.2
Bureau of Transportation Statistics	9.5	14.4	6.2	20.3	1.5	48.2
Small Business Administration	8.9	18.6	3.8	19.7	0.7	48.2
National Science Foundation	8.9	14.2	6.0	19.9	2.7	48.2
Energy Information Administration	7.3	13.0	6.8	22.4	2.4	48.2
U.S. Geological Survey	5.7	13.1	8.9	22.3	1.8	48.2
National Marine Fisheries Service	4.6	7.5	11.3	26.6	1.8	48.2
Army Corps of Engineers	3.1	10.0	10.4	25.5	2.7	48.2
State and Local Governments						
Demographic	68.4	19.5	2.0	6.2	0.9	2.9
Industry and Employment	49.6	28.5	6.0	11.7	1.3	2.9
Housing	47.8	30.3	6.4	11.7	0.9	2.9
Tax	47.4	27.0	5.3	15.0	2.4	2.9
Travel and Tourism	32.1	34.9	10.4	17.5	2.2	2.9
Commercial and Nonprofit						
Business and Trade Directories	27.0	26.5	3.6	7.5	2.2	33.2
ACCRA Cost of Living Index	19.2	21.7	5.5	19.3	1.1	33.2
Sales & Marketing Management	17.3	23.7	6.8	17.5	1.5	33.2
National Association of Home Builders	7.3	22.1	5.5	29.6	2.4	33.2
U.S. Travel Data Center	7.1	15.5	7.5	34.3	2.4	33.2
Coldwell Banker National Real Estate Index	6.9	11.7	8.0	37.4	2.7	33.2
Price Waterhouse Venture Capital Survey	3.8	9.9	8.6	42.3	2.2	33.2
Case-Shiller-Weiss Residential Real Estate Index	2.4	7.3	8.4	46.4	2.4	33.2
Unweighted Means						
Bureau of the Census	30.0	31.8	9.5	20.5	3.3	4.9
Bureau of Labor Statistics	26.4	29.6	10.3	13.7	2.3	17.7
Bureau of Economic Analysis	15.6	29.6	11.4	16.3	3.1	24.1
Other Federal	9.4	14.6	6.3	19.8	1.7	48.2
State and Local	49.1	28.0	6.0	12.4	1.5	2.9
Private and Nonprofit	11.4	17.3	6.7	29.3	2.1	33.2

State and Local Governments

State and local governments independently collect and publish a range of socioeconomic data, on topics such as demographics, industry and employment, housing, taxes, and travel and tourism. The availability and characteristics of such data will vary, of course, from government to government.

The large majority of survey respondents find data from state and local governments of use, making them one of the most popular data sources. The type of data from state and local governments with the highest use rate is demographics (88 percent of respondents), followed by housing (78 percent), industry and employment (78 percent), taxes (75 percent), and travel and tourism (67 percent). In fact, two-thirds of respondents find demographic data very useful, and a near majority finds industry and employment, housing, and tax data very useful. These figures likely do not reflect completely unbiased opinions, as several types of organizations responsible for collecting and disseminating such data are represented in the survey, including academic business and economic research centers and workforce development organizations.

While respondents find data from state and local governments very useful, they see substantial room for improvement. A large number of comments critically assess these data sources; this is understandable, as the availability and quality of data varies greatly from place to place. Complaints were received regarding data availability, accessibility, detail (by geography and industry), timeliness, accuracy, and lack of funding. Questions are raised about statistical methodologies. Several commenters note that as data produced at the state or local level usually are not consistent with data produced elsewhere, they prefer to use data from the federal government or from state governments produced under the federal-state cooperative system.

Private Data Providers

Governments are not the only source of socioeconomic data. A large number of for-profit and nonprofit organizations in the private sector publish such data as well. Some of these data series are value-added versions of federal series; others reflect primary data collection. Data users were asked to give their views on nongovernmental data sources, and to rate eight such sources, chosen as representatives of a far larger pool.

Data users give nongovernmental data sources decidedly mixed reviews. While many recognize that such sources fill gaps in data offerings from public sources, there are major concerns about cost, objectivity, and accuracy:

- ***Cost*** – Commenters note "the problem is price," "cost is always an issue," "they seem to cost too much," "cost is my biggest problem," and "it's just so horribly expensive to buy some of these resources."
- ***Objectivity and accuracy*** – Data users say that the federal government is more objective, "trustworthy," and "reliable" as a producer of high-quality statistics, and has greater "intrinsic integrity." Some say that

private-source methodologies are not always clearly spelled out, and so are suspect.

Data users say they utilize private data sources to "supplement" governmental sources:

- "They fill a useful role, at least partly because federal sources are no longer covering these areas or do not do so frequently enough to be timely."
- "I treat these sources with caution, but my clients want a number, any number, and that is better than no number/data at all."
- "Would not use them if other, more timely public data sources existed. But very necessary."
- Private data sources are "no substitute for government data series."

A number of users, wanting to decrease their reliance on private sources, urge the federal government to expand its data collection efforts. For instance: "There is a dire need for a public source of info on construction activity (units, square footage, value) by detailed type by state and local area! Census bureau reports are totally inadequate. FW Dodge reports are prohibitively expensive!"

The eight sources that respondents were asked to rate and comment on are listed below in the order of data user popularity. Many respondents say they are not knowledgeable about one or more of these data sources, particularly those towards the bottom of the list.

- Privately published business and trade directories – printed and electronic databases listing individual companies, with information on products, employment, sales, and services.
- American Chamber of Commerce Researchers Association (ACCRA) Cost of Living Index – a comparison of the cost of living for 300 regions of the country, issued quarterly.
- *Sales & Marketing Management* magazine – providing annual data on income and consumer spending for states, counties, and metro areas.
- National Association of Home Builders – a national trade association, providing monthly data on housing sales, prices, and affordability.
- U.S. Travel Data Center – a service of the Travel Industry Association of America, providing estimates of visitor spending and travel-related employment for states and counties.
- Coldwell Banker National Real Estate Index – a quarterly index of commercial real estate prices and vacancy rates by metro area.
- Price Waterhouse Venture Capital Survey – quarterly and annual data on venture capital investments by state.
- Case-Shiller-Weiss Residential Real Estate Index – an index of residential housing prices, by metro area.

Data Intermediaries

As discussed in Chapter Three, data users rely on a variety of means to access data. While users most frequently obtain data from the source, via the Web, print, or CD-ROM, data intermediaries also are an important means of data access. A third of data users say they frequently utilize data intermediaries; 50 percent say they sometimes use intermediaries (Table 3-1). Hence, it is valuable to ascertain data user perceptions of this means of data access.

Data users are somewhat satisfied with the services they receive from intermediaries. On a five-point scale (with 1 meaning "highly satisfied"), respondents were asked to "rate your satisfaction with intermediary sources of data, such as libraries and university business research centers." The mean score to this question is 2.43. Sophisticated users give intermediaries a better score (2.29) than other users (2.47), but the difference is not statistically significant. A plurality (42 percent) are satisfied, and over a quarter are neutral on the question (Figure 4-2). When scores are calculated by organization, respondents from academic business and research centers, perhaps not surprisingly, give the best score (2.19).

The last point suggests the possibility of a bias among intermediaries themselves regarding how well they are serving their clients. Respondents in academic-based business and economic research centers were asked to rate their agreement with the statement "Our clients think the data and services we provide are very valuable." On a five-point scale (with 1 meaning "strongly agree"), the mean score given by 34 research center respondents to this question is 1.47, with seventy-four percent of respondents strongly agreeing with the statement (Figure 4-3).[6] In contrast, only 15 percent of respondent customers are highly satisfied.

The disparity between the answers from clients and from the research centers may be explained in one of two ways. Research centers as a group, or the research center respondents in this survey, could be a cut above the universe of intermediaries across the U.S. It is true that reference librarians at Federal Depository libraries likely are not as well trained in the specifics of regional socioeconomic data as are staff in highly specialized facilities such as research centers. And the survey did not ask respondents to distinguish among types of intermediaries. On the other hand, it may be that the survey results are evidence of some disparity between the beliefs of data intermediaries at large and their customers.

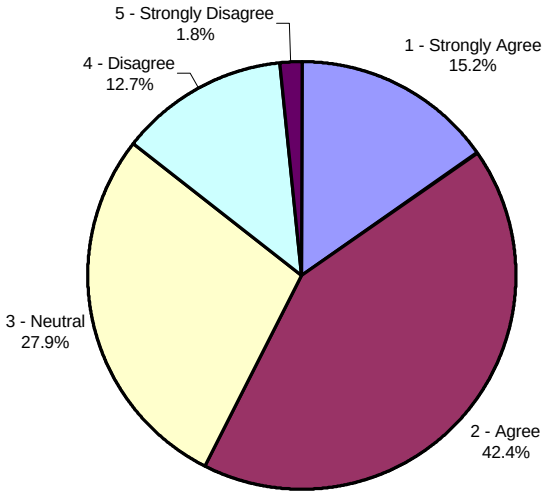
Comments by survey respondents regarding their experiences with intermediaries shed some light on the distribution of satisfaction scores. (Examples of comments can be found in Appendix 4C.)

[6] The self-evaluation question could be asked only of one subset of the intermediary universe, academic-based business and economic research centers, the only organizational category in the survey that by definition is composed of intermediaries. While the labor/workforce development category does appear to contain a few respondents from state labor departments (as reflected in their e-mail addresses), it was not possible to determine which respondents in that category are formal intermediaries and which are not.

- Many users found intermediaries to be an important, and sometimes indispensable, resource. Intermediaries are particularly important for users who are less familiar with the workings of the data system, and to provide access to historical data not on-line.
- Respondents indicate that the value of the intermediary is very much a function of the abilities of its staff, and those abilities vary widely from intermediary to intermediary. Some respondents have positive experiences with staff, others less so. One concern is that research librarians do not understand how socioeconomic data are used.
- A number of respondents are less than satisfied with intermediary service because of two other factors – poor organization of material, and time lag in intermediary receipt of current publications.
- Most respondents do not rely on intermediaries as their first means of accessing data – they find it more productive to use the Internet or buy the print publications.

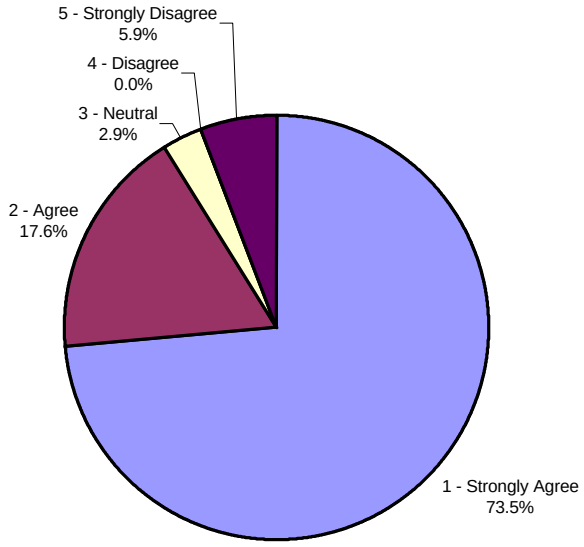
While intermediaries may not be the most used means for accessing data, they will continue to be important to persons who need some guidance in navigating the data system. It would seem that the role of intermediaries will increasingly shift from simply providing access (quite important in pre-Internet days) to adding value for the user to the data available electronically, as well as providing access to historical data that are not, and will not likely be, on-line. Adding value probably will require increased staff training regarding the nature and uses of the data, and perhaps a more realistic understanding of customer satisfaction and dissatisfaction regarding services currently provided.

Figure 4-2
Survey of Socioeconomic Data Users
Satisfaction with Data Intermediaries



N=283

Figure 4-3
Survey of Socioeconomic Data Users
Business & Economic Research Center Respondents -
Belief that Clients Highly Value Services



N=34

4.5 Priorities for the Development of New Data Series

Although government and private sources provide a plethora of socioeconomic data, data users say that data are not available on certain topics important to economic development. They would like to see the government take steps to see that such data are collected and published.

For each of seven topic areas, survey respondents were asked to indicate if there are "particular questions that you cannot answer or economic events or trends you cannot analyze because of lack of data." The results (shown in Figure 4-4) indicate that a near majority of respondents lack access to turnover and worker skills data; a quarter to a third lack access to data on interstate cost-of-living differences, labor productivity, educational performance, and service-producing industries; and 17 percent lack access to international trade data. The most frequently requested data are in topic areas largely under the purview of BLS.

A statistically significant higher percentage of sophisticated users answer affirmatively for labor turnover and international trade data (Figure 4-5). The chart suggests that sophisticated users are not getting data in these categories any more easily than other users are. (In other words, their sophistication is increasing their demand in a few categories, but does not seem to increase their access to supply.)

The results by organizational type are particularly interesting (Table 4-2). Labor-focused data (turnover, skills, productivity, education) and service-industry data are sought by higher percentages of practitioners than by respondents in other organizational categories.[7] Higher percentages of researchers want cost-of-living data and trade data. In every category except for trade data, a smaller percent of client-serving respondents say they lack data access.

When asked about unmet data needs, members of the three focus groups and the University of Minnesota roundtable also put labor-related data at the top of their lists. Topics mentioned include skill levels, education, employee turnover, and contingent workers. They also echoed the need for more detail regarding service industries and international trade.

[7] As discussed in Chapter Two, the Workforce Investment Act of 1998 (WIA) requires the Secretary of Labor to develop a nationwide employment statistics system that includes "skill trends by occupation and industry, with particular attention paid to State and local conditions." This component of the WIA takes effect July 1, 1999.

Figure 4-4
Survey of Socioeconomic Data Users
Percent of Respondents Indicating Inadequate Data Availability, by Topic

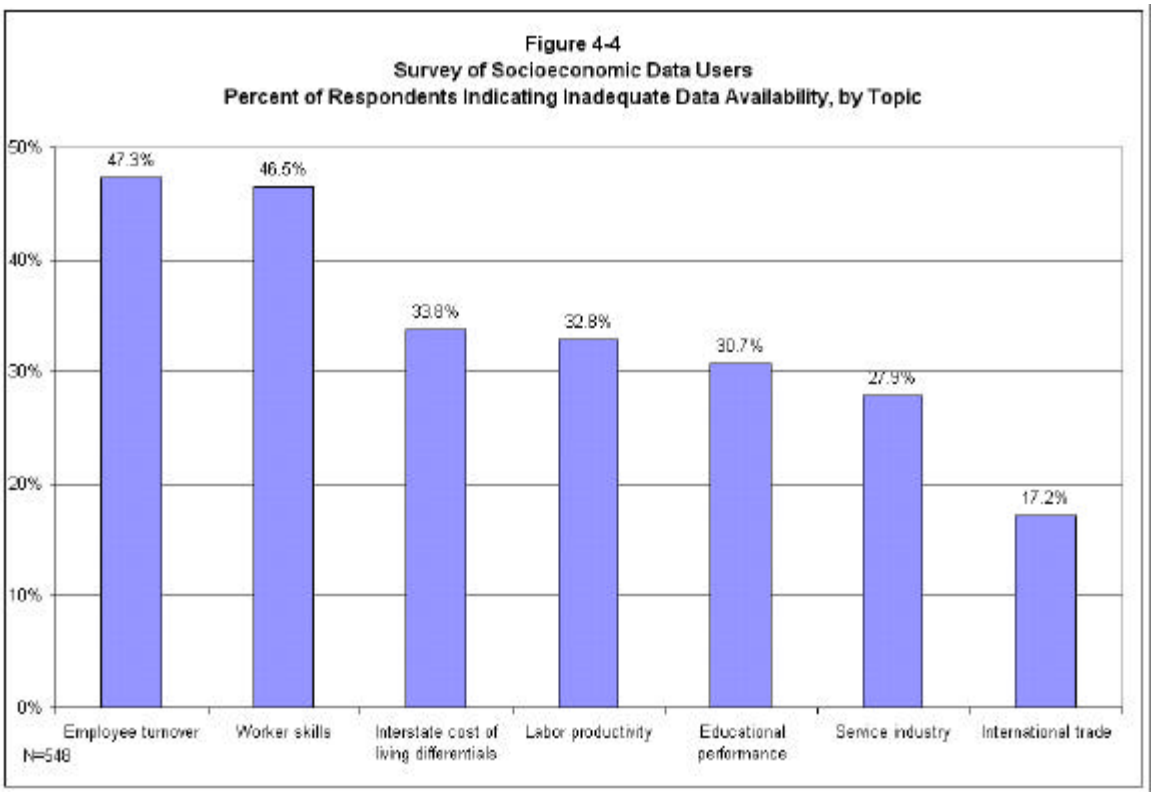


Figure 4-5
Survey of Socioeconomic Data Users
Percent of Respondents Indicating Inadequate Data Availability, by Topic and User Sophistication

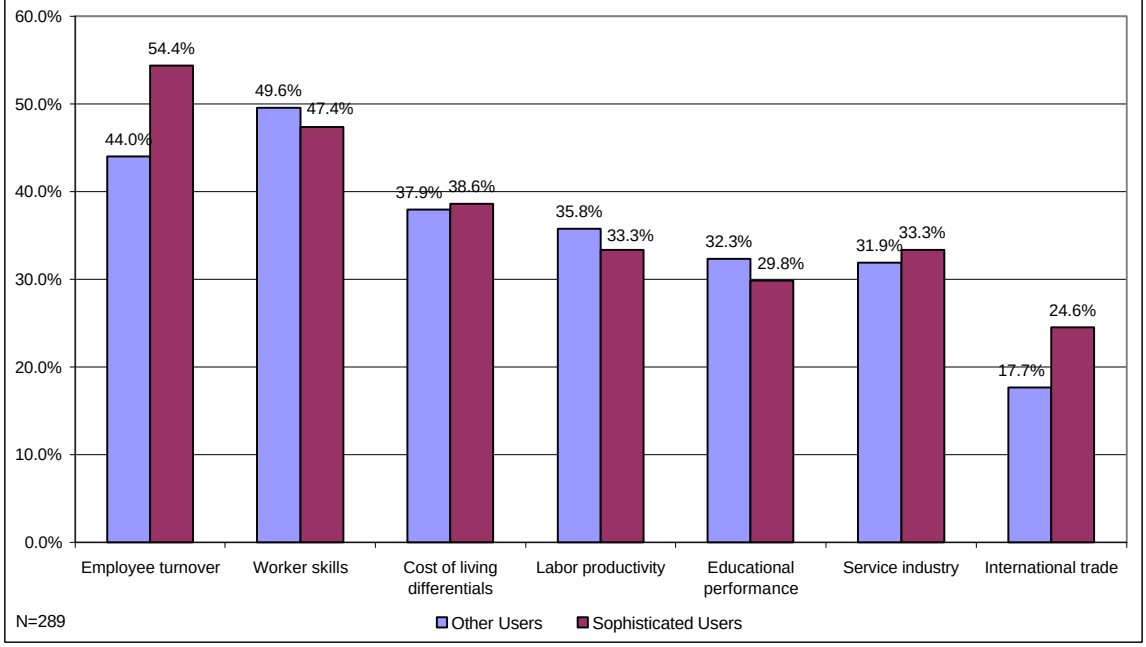


Table 4-2
Survey of Socioeconomic Data Users
Percent of Respondents Indicating Inadequate Data Availability, by Topic and Data User Organization

Type of Data User Organization	N	Employee Turnover	Worker Skills	Cost of Living Differentials	Labor Productivity	Educational Performance	Service Industry	International Trade
Practice-oriented	270	54.4 %	57.0 %	33.7 %	40.4 %	33.0 %	31.5 %	14.1 %
General practice	212	53.3	57.1	34.4	40.1	32.1	31.1	15.1
Economic Development or Commerce Organization	134	56.0	64.9	35.8	50.0	37.3	35.1	19.4
Planning Department or Agency	78	48.7	43.6	32.1	23.1	23.1	24.4	7.7
Specialized practice	40	65.0	62.5	27.5	40.0	35.0	25.0	5.0
Labor or Workforce Development Organization	23	95.7	82.6	43.5	39.1	47.8	21.7	8.7
Publicly Sponsored Business Extension Service	14	28.6	35.7	7.1	42.9	21.4	28.6	0.0
Development Finance Corporation	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Technology Development Organization	1	0.0	100.0	0.0	100.0	0.0	100.0	0.0
Executive/legislative	18	44.4	44.4	38.9	44.4	38.9	50.0	22.2
Office of Public Chief Executive	13	46.2	38.5	38.5	38.5	30.8	46.2	15.4
Legislative Organization	5	40.0	60.0	40.0	60.0	60.0	60.0	40.0
Research-oriented	186	37.6	37.6	40.3	28.0	33.3	29.0	22.6
Academic-based Business or Economic Research Center	104	40.4	43.3	45.2	33.7	37.5	34.6	22.1
Academic Department	55	29.1	29.1	38.2	16.4	25.5	23.6	25.5
Other Research Organization	27	44.4	33.3	25.9	29.6	33.3	18.5	18.5
Client-serving	46	34.8	37.0	17.4	30.4	8.7	23.9	23.9
Consulting Firm, specializing in economic development	24	45.8	41.7	16.7	33.3	12.5	25.0	12.5
Consulting Firm, not specializing in economic development	12	25.0	33.3	8.3	25.0	0.0	25.0	41.7
Business, Industry, or Trade Association	10	20.0	30.0	30.0	30.0	10.0	20.0	30.0
None of the above	43	55.8	30.2	23.3	11.6	25.6	4.7	4.7
(blank)	3	66.7	33.3	33.3	0.0	66.7	33.3	33.3
GRAND TOTAL	548	47.3	46.5	33.8	32.8	30.7	27.9	17.2

In the survey, focus groups, and roundtables, data users provided requests for new and expanded data series in addition to those listed in the survey:

- New Economy measures – Users want data on economic activity that reflect the changing face of the U.S. economy, and changing values regarding economic outcomes. For example, they ask for data on emerging industries such as biotechnology, telecommunications, new media, and sustainable development industries. Participants in the Massachusetts Technology Collaborative forum want to see measures such as counts of product and process innovations; funding and students in continuing technical education programs; and migration of graduate degree recipients. Of particular interest to many data users is finding ways to portray regional industry clusters that cut across a number of industry classifications.
- Capital investment – Several respondents want to see more detail and frequency regarding business investment in plant and equipment. Comments include "I'd like to see a data series that captures business investment on a regional basis"; "The data on investments in plant and equipment and capital stock are not very detailed and do not come out often enough"; and "Would like to see investment stock and investment flows by industry have more detail as to type of equipment investments and more detail in industry census reports on types of equipment being acquired."
- Public finance – One commenter laments the demise of the Advisory Commission on Intergovernmental Relations (ACIR), which regularly published public finance data series for states and local governments, particularly regarding taxes.
- Utility cost data – For the purposes of business attraction, focus group members say access to a comprehensive data base of utility costs by area is important to have.
- Home-based businesses – In light of the large-scale expansion in the numbers of home-based businesses, focus group and University of Minnesota roundtable members would like to see data on this phenomenon.
- Contingent workers – Participants in the University of Minnesota roundtable note that currently temporary workers are not tracked by the industry of their work site; as personnel agency employees, they are listed as being a part of business services. Roundtable members say the inability to understand the distribution of contingent workers by industry hinders their ability to follow industry-specific employment trends.

One current effort by the federal government to provide data in more useful industrial categories is the implementation of the North American Industrial Classification System (NAICS). Compared to old Standard Industrial Classification (SIC) code, NAICS provides a greater level of disaggregation for service-producing

industries and an organization that better reflects new technologies. Data using the NAICS codes will first appear in the releases of the 1997 Economic Census.[8]

Many data users are hopeful that the new NAICS code will provide them with a more useful level of industrial detail. However, the majority of users are not well informed about the forthcoming changes. In rating their level of agreement with the statement "I have a good working knowledge of NAICS," respondents' mean score is 3.09 (on a 1-5 scale, with 1 meaning "strongly agree"). Only 34 percent strongly agree or agree with this statement. Users who are knowledgeable voice concern about the impact of the NAICS implementation on their ability to prepare time series, as statistical agencies indicate that most historical data will not be reclassified to NAICS categories, due to budget constraints.

4.6 Key Themes

The review of user perspectives on data series and sources suggest a number of key themes:

Data users have a strong desire for ready access to current, accurate, detailed socioeconomic data. Users clearly and repeatedly communicate the importance of the availability of good data to their professional effectiveness and satisfaction.

Data users believe that, to best meet their needs, the federal government should have the dominant role in the operation of a nationwide system for producing socioeconomic data, and that this system should be adequately funded. Users say they can count on the federal government, much more than the private sector, to be objective, reliable, and ethical, and provide data that are consistent across the nation and are accessible at a reasonable cost. They want to see that Congress and the executive branch provide for the funding of statistical agencies sufficient to deliver accurate, current, detailed data in a timely manner.

Data users want to see new and resurrected data series that measure aspects of the economy not now examined. Users are frustrated that data topics and detail have not kept current with the transformation of the U.S. economy to one based on knowledge, services, and global trade. Desired data include those that measure labor market activity, New Economy activity, cost of living, and trade.

In addition, users are not happy that budget cuts have eliminated several long-standing series. Specifically, users ask for the revival of Census's manufacturing export series; regional retail sales data; and nonresidential construction; BLS's labor turnover data; and BEA's regional projections series.

[8] Members of the NASDA focus group thought that the federal government did a good job of contacting data users like themselves for input on the proposed NAICS structure.

Data users want to see improvements in existing data series with regard to accessibility, detail, timeliness, and accuracy. Some series meet these criteria better than others; series that fall short differ from one another in how they do so.

Users are especially vocal in their disappointment regarding the length of time needed to release data and a lack of geographic detail in certain series. In particular, users from small political divisions and rural counties say they need data that are specific to their areas.

Data users are especially pleased about the recent widespread utilization of the Web as a means for providing data access. However, a large number of comments were received asking for even more data to be placed on the Web, and for Web and CD-ROM data formats that are more user-friendly and easily retrievable.

A common request of users, particularly those in smaller areas, is for frequent intercensal updates of the Decennial Census. A large number of these users are not aware of the forthcoming ACS; the remainder are quite excited by the new survey.

Users also bring up several additional concerns concerning agency-wide and federal government-wide policies:

- Continuity – Data users want access to historical data, and they want those data in a format and structure compatible with current data. They are concerned about the series breaks about to be engendered with the implementation of NAICS.
- Nondisclosure – Users, particularly those in rural areas, want to see relaxation of nondisclosure policies.
- Cross-series consistency – Several users articulate their difficulties working with data series from different agencies that seek to measure the same activity (e.g., jobs by place of work). Members of the one focus group say that many analysts mistakenly mix and match data from various job series, resulting in spurious conclusions.
- Accessibility – A number of users find the broad array of available data difficult to get one's arms around, and ask that one Web site be devoted to providing links to various sources of regional data. Several users also indicate that, even with the electronic availability, the availability of data in print publications continues to be important.
- Data for federal grant applications – Data users point out that grant applications from some federal agencies, such the Departments of Housing and Urban Development and Transportation, require the insertion of data that are no longer collected by the statistical agencies, or are not available in the detail required. Users would like to see greater coordination between data providers and granting agencies so that required data are indeed available.
- Value-added – Data users see opportunities for federal statistical agencies to provide value-added services. Several would like to see statistical agencies calculate and make available basic indicators for all

areas (e.g., location quotients, Gross State Product/wages ratio). Also, one user notes, "Opportunities to contract with federal agencies to obtain special data series should be more clearly marketed. There are offices that will do this work, but finding them is impossible."

Data users have a need for greater information and education regarding the sources and uses of socioeconomic data. Through their direct requests, observations, and misperceptions, data users indicate that they have large-scale needs for help concerning understanding statistical sources and uses.[9]

First and foremost, users need substantial assistance in learning about the various sources of data. The federal statistical system is decentralized and idiosyncratic; non-federal data sources have these characteristics to an even greater extent; there has been no centralized mechanism for guiding users as to what data exist, how they are collected, and where to find them; and it is rare to find training on regional data sources. Throughout the survey, respondents regularly indicate that they did not realize individual series exist. Sample comments reflect this knowledge gap:

- "I think I use a broad range of stats, but you mentioned several here I had no clue about."
- "This survey was very nicely done. As a user of some data, I was awed by how many data sets you covered that I don't even know about."
- "Some of these items listed, I had no idea that they existed. If they are to be used, there needs to be a better way of informing those that may have a need for them."
- "Some data mentioned in the survey are not known to me. Maybe greater marketing efforts on some of these databases would be helpful . . . ."
- "Perhaps because I'm self-taught, I didn't know some of these series existed . . . ."
- "Probably the main reason the data are not so useful to me is my own lack of understanding of what is available & how to access it in a timely manner."
- "Every piece of data needs an explanation of what it is, what it's measuring, and how it's collected in layman's terms."
- "In general, I would like to see more information about the methods used to collect, analyze, and interpret data."
- "What I would most like is a good index of all the information that is available. Some of the sources listed in this survey sounded interesting and useful, but I do not know how to access them."

[9] To place these needs in some context, one member of the Council for Urban Economic Development focus group pointed out that many of the nation's 3,000 counties have but one person doing economic development, among other duties, with little training in that field.

Second, not only do data users need to know where to find data, they need better understanding of how to use data, and which data are appropriate in what circumstances. Sample comments show this training need:

- "It's clear that the federal interagency statistical group needs to do a better job not just with Web links (they do that) but with tutorials describing what kind/sources of data are best for what purposes and why they are collected/disseminated by different agencies."
- "Access is less of an issue than understanding. What does it mean is an important question."
- "I would like more information and training in use of . . . economic and demographic data."
- "Provide training and resources to educate professionals on how to find and use the data."
- "Training courses on the use and conversion of data."

Some data users utilize statistical sources that are less reliable than they might realize. Sophisticated users tend to shy away from sources embraced by other users, such as regional projections and *Sales & Marketing Management*.

In Chapter Three, it was suggested that most data users do not know how to learn about data sources and uses, that they are pessimistic about their abilities to do so, but that the attitudes of sophisticated users show that learning how to learn is possible. To the extent that user training and education needs can be met, the current knowledge and attitude gap between sophisticated and other users should be narrowed considerably.

The third type of user knowledge gap concerns the nature of the federal statistical system. In bringing up their various concerns, users very rarely put them in the context of current statistical agency budget realities or the underfunded mechanism of Office of Management and Budget coordination. Increasing user knowledge about the federal statistical system can help lead to series-specific demands that reflect a more accurate understanding of the current nature on the system, and so have a better chance of implementation. In addition, such knowledge might stimulate a broader call to elected representatives and agency heads for funding levels that expand the realm of the possible.

Chapter Five
Findings and Recommendations

5.1 Key Findings

Findings of this assessment of the U.S. statistical system for producing regional socioeconomic data are as follows:

Data Users

- ***To be effective in their work, users need data that represent key dimensions of regional economic activity and are current, timely, accurate, detailed, and accessible.***
- ***Users differ significantly in the nature of their data needs.*** Users are found in a wide variety of organizational settings, differing in purpose and geographic scope.
- ***Users differ greatly in their knowledge about the sources and uses of socioeconomic data.*** In this, the assessment concurs with the report of the National Academy of Public Administration (NAPA).
- ***Most users lack adequate access to means for formal and informal learning about data sources and analytic techniques, and do not know how to gain such access.*** Few formal training programs in regional data analysis exist, and not many mechanisms that informally bring together data users are available. Most analysts learn their methods but on the job, "making it up as they go along." As a result, users are dissatisfied with current access to training programs and knowledgeable peers. Many feel isolated and lack confidence in their knowledge and abilities.
- ***Analysts' basic needs for data are being met.*** Users are able to obtain the data they need to understand the rudimentary workings of their regional economies.
- ***However, important data needs are currently unmet for a large number of analysts.*** Certain data series needed by users are not produced. To meet user needs, many existing series require improved timeliness, detail, accessibility, and accuracy. And, as noted above, most users are not fully aware of what data are available and how to obtain them.
- ***The recent advent of data dissemination via the Internet has been a substantial boon to data users, although its benefits have not been fully realized.*** Among survey respondents, the Web has become the single most popular means of data access. However, the advent of the Internet provides challenges for data users as well. The survey suggests that less experienced data users are less likely to use the Web to access data.

- ***Users of regional socioeconomic data are not well organized to collectively identify their needs and articulate them to federal statistical agencies.*** Lack of user knowledge, combined with the diversity and fragmentation of the user base, have led to a situation in which most users are in contact with very few other users to compare and act on unmet needs. With over 20 national trade and professional associations, it is difficult for the economic development community to speak with one voice. Moreover, trade and professional associations have not adequately developed consensus on, and given voice to, data user needs. Thus, data users have not been well positioned to articulate their needs with federal data providers.
- ***A lack of consensus within the economic development community also inhibits the communication of data user needs.*** Historically, consensus has not existed on the ends and means of, and best practices in, economic development. Federal statistical agencies, had they tried to reach into the development community, would have had difficulty in quickly grasping the nature of regional socioeconomic data users and their needs.
- ***As a result of insufficient knowledge and unmet data needs, data analysts are less effective in promoting strong regional economies than they otherwise might be.*** To the extent that decision makers do not understand regional economic realities, they cannot design and implement policies and programs that address those realities.

Data Providers

- ***The federal government has the central, primary role in the collection, organization, and dissemination of regional socioeconomic data.*** No other organization can provide the comprehensiveness, objectivity, respondent participation rate, reliability, accuracy, and economies of scale.
- ***The system for providing regional socioeconomic data is not transparent, making it difficult for users to comprehend.*** In particular, the decentralized federal statistical system is complex. Even the most sophisticated data users have difficulty knowing the full range of available regional data.
- ***As noted above, federal statistical agencies meet data users' basic needs. However, there is much room for improvement.*** In this, the study affirms the findings of recent studies of the federal statistical system, summarized in Chapter Two. Areas in which improvements are needed follow in the bullets below.
- ***The federal statistical system has been slow in developing new tools and measures that capture emerging aspects of the national economy.*** Currently published measures do not allow regional analysts to fully track the transformation of the economy to one that is

knowledge- and skill-based, service-based, churning in the creation and destruction of businesses and jobs, and integrated with the rest of the world in trade. The imminent implementation of the North American Industrial Classification System (NAICS) will be helpful to analysts (though they will lose time series continuity).

- ***There are barriers to data sharing among federal statistical agencies.*** Federal law limits microdata sharing among agencies, forcing the development of parallel, and sometimes conflicting, databases. Data sets prepared by different agencies on the same topic at times are unduly incompatible.
- ***Agencies do not adequately work together to aid data users in understanding how their respective data series differ, and how to utilize these series in combination.***
- ***Budgets for producing subnational data series are insufficient.*** In the three primary statistical agencies—Census, the Bureau of Labor Statistics (BLS), and the Bureau of Economic Analysis (BEA)—the budgets for subnational data have not kept pace with the demand for such data. The result is that data series important to regional analysts have been eliminated, and the detail and frequency of other series have been cut back.
- ***Key federal statistical agencies have limited information about the needs of their regional data users. As a result, they are not making fully informed choices about how best to serve these customers.*** The three primary agencies indicate that, at present, they do not have means in place to regularly and directly interact with and hear from the full range of regional data users regarding their needs. While several user committees are in place—the BEA User Group, the Census Advisory Committee of Professional Associations—these are not presently sufficient to the task. Both lack representation from regional practitioner organizations; the former is composed largely of data intermediaries and focuses on data distribution; the latter does not include regional economic researchers.[1] This is not to say that the agencies are deaf to unmet needs of regional data customers. For instance, the Census Bureau is to be commended for taking on the development of the American Community Survey and sophisticated on-line search engines such as American FactFinder. Overall, however, agencies' interaction with regional data users is substantially less than it should be. Agencies can take further steps in adhering to

[1] The BEA User Group is composed of 130 organizations, largely data intermediaries such as state libraries, LMI agencies, and university business and economic research centers. The User Group was created primarily in the days before PCs and the Internet as a means of distributing BEA data. The Census Advisory Committee of Professional Associations is composed of 36 representatives appointed by four professional associations—the American Economic Association, the American Marketing Association, the American Statistical Association, and the Population Association of America. The committee meets semi-annually; members have three-year terms. It was formed through a merger of four separate advisory committees, following a mandate to reduce the number of advisory committees.

principles and practices for cooperating with data users, as recommended by the Committee on National Statistics (CNSTAT).[2]

- ***Federal statistical agencies do not, in all cases, provide analysts with easy access to key regional data series, though access is improving. Agencies' efforts to disseminate data via electronic means have increased accessibility.*** While many series (e.g., the Economic Census, County Business Patterns) are now easily obtained in several formats, others (e.g., ES-202) are quite difficult to obtain in any form, print or electronic. Moreover, to the confusion of users, dissemination mechanisms can differ significantly from series to series within the same agency. In general, data access via the Web is improving substantially. In recent months, the Census Bureau in particular has made large strides, opening up the CenStats service to all users and redesigning its Web site. Across agencies, however, there is great variety in the user-friendliness of individual sites. Also, data often are not available in formats desired by many users (e.g., spreadsheet). In general, it appears that agencies could take additional steps towards the CNSTAT recommended practice on data dissemination.[3]
- ***Federal statistical agencies provide good access to many microdata sets, and that access is improving. However, users do not have easy access to all establishment microdata.*** Through a variety of efforts, the Census Bureau is building the capacity to allow users to manipulate microdata on-line, while protecting confidentiality. (BLS shares in this effort as cosponsor of FERRET, a means for accessing Current Population Survey and other survey data.) The Census Bureau and BLS also offer customized establishment data manipulation services, for a fee. And Census offers qualified

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[2] Committee on National Statistics, National Academy of Sciences, "Principles and Practices for a Federal Statistical Agency" (Washington, DC: National Academy Press, 1992). Regarding "Cooperation with Data Users," the CNSTAT report (p. 9) offers the following practice guideline:

> A statistics agency should consult with a broad spectrum of users of its data in order to make its products more useful. It should:
>
> - seek advice on data concepts, methods, and products in a variety of formal and informal ways, from data users as well as from professional and technical subject-matter experts.
> - seek advice from external groups on its statistical program as a whole, on setting statistical priorities, and on the statistical methodologies it uses.

Commentary on these principles (p. 18) indicates, "Needs of users can be explored informally, by forming advisory committees, or by undertaking formal surveys. The task is difficult and requires continual alertness to the changing needs of users and the existence of potential users." The report goes on to say, "An agency should be aware of the uses made of its data."

[3] *Ibid.*, p. 10. A recommended practice under the heading of "Wide Dissemination of Data" is, "Dissemination of data and information . . . should be timely and public. Avenues of dissemination should be chosen to reach as broad a public as reasonably possible." A following comment (p. 19) notes, "A good dissemination program involves not only reaching the potential users of the information, but also presenting the data in a form suitable to their needs."

researchers access to establishment and firm data at four research data centers, with more planned. However, at present, BLS is unable to offer a similar service regarding its establishment data (CES/790, ES-202, and OES); the primary barrier to such a service is the decentralized nature of the BLS/LMI system.

- ***The Statistical Policy Branch (SP) of the Office of Management and Budget (OMB) lacks adequate resources. It cannot carry out its oversight and coordination functions to the degree required, to the detriment of regional data users.*** SP has a staff of only five to oversee and coordinate the entire federal statistical system. Consequently, SP is unable to undertake planning, coordination, and program evaluation initiatives that focus on the needs of regional socioeconomic data users across all agencies. Working with its Interagency Council on Statistical Policy, SP has sponsored the creation of FedStats, an on-line resource for data user access to federal statistical agencies. In general, however, budget limitations have meant that SP cannot treat the particular needs of regional data users with the same level of priority as other, more pressing data concerns.
- ***Services provided by data intermediaries are uneven.*** Survey respondents provide mixed reviews regarding their satisfaction with aid received from data intermediaries. (Information is not available on satisfaction by type of intermediary.)
- ***Information technology, especially the Internet, is fundamentally changing the role that data intermediaries play.*** When data were available only in tapes, diskettes, and limited numbers of printed reports, intermediaries played an important role as repositories and distributors of data. With Internet distribution, intermediaries say their role is evolving from dissemination to analysis and interpretation.
- ***Intermediaries say they need additional materials and assistance to support their new role.*** They indicate that staff skills in analysis and interpretation are developed on the job. They would like to see appropriate training and materials provided by intermediary sponsors, including Census, BEA, and BLS.
- ***Due to insufficient statistical agency budgets, coordination, and customer contact, and to insufficient user training in data sources and uses, regional socioeconomic data provided by the federal government are underutilized.*** The use of regional data from federal statistical agencies is not as high as it might be.
- ***Federal statistical agencies lack a strong constituency of regional data users that could support higher program budgets.*** The underutilization of regional socioeconomic data, insufficient agency contact with and understanding of certain customers, and a fragmented and undertrained user base have combined to produce a weak, unorganized constituency for federal statistical agencies and their program budgets with respect to regional socioeconomic data.

5.2 The Root Problem – Lack of Communication

The findings above suggest that the central barrier to the increased use of regional socioeconomic data and increased data user satisfaction and effectiveness is ***insufficient communication*** between and among data providers and data users concerning data sources, uses, and needs. This communications problem has three sources:

- the historical lack of direct interaction between statistical agencies and individual regional data users;
- fragmentation among both data suppliers and users; and
- lack of training in methods of regional economic analysis.

In the era before the Internet and personal computers, not that many years ago, statistical agencies had few means to communicate directly with data users. They relied largely on designated data intermediaries—Census Data Centers, state LMI agencies, and members of the BEA User Group—to handle interactions with individual users.

The decentralized nature of the federal statistical system means that communication with data users, directly or through intermediaries, is largely the responsibility of each of over 70 statistical organizations. Statistical agencies that provide regional data vary in their understanding of regional data user needs. While the Statistical Policy Branch of OMB is in a position to organize a unified approach to communication with data users, regional and otherwise, its limited resources have been directed to more pressing issues.

The diversity of the data user community also makes communications more difficult. Users come from a variety of practice and research settings, and differ in their level of geographic focus. The fact that 23 associations were used to contact potential survey respondents indicates the extent to which the field does not speak with one voice.

Moreover, communication from data users is greatly inhibited by a lack of training in the basics of data sources and analysis. For the most part, professional and trade associations have not made training in data analysis a priority. Further, there has been little consensus in the field on the nature of best practices, data analysis, or otherwise. Lack of training means that data analysis is not a high priority for many practitioners and their associations; when data are a concern, lack of information, confidence, and knowledge about the complex statistical system usually prevent any action.

The situation within the development community is beginning to change for the better, however. Greater communication and cooperation is taking place among economic trade and professional associations, and between these associations and EDA. EDA and other organizations are beginning to systematically collect and disseminate best practices in the field, including in the realm of data analysis.[4]

[4] In January 1999, EDA and trade associations co-sponsored a forum on "State of the Art Practices in Economic Development for the 21st Century." For the second year, the National Association of State

5.3 Context – Evolution of the Field of Regional Economic Development

The diversity and lack of consensus within regional economic development has its roots in the evolution of the field. Over the last 40 years, in response to less stable regional economies, the field of economic development, and the base of regional socioeconomic data users, has grown and changed substantially. In the 1960s, users of regional socioeconomic data resided largely in academic institutions and planning agencies. Economic development activity was limited primarily to efforts by undeveloped areas to attract industry. Data needs of economic developers were relatively minimal, focusing on local economic performance (e.g., unemployment, job growth) and comparative wages. However, with the globalization of the world economy in the 1970s and 1980s, the nature of economic development changed significantly and the demand for data expanded greatly. In the face of increased international competition and capital mobility, regional economies throughout the U.S. became destabilized. With many manufacturing plants moving offshore or shuttered altogether, communities experienced a new vulnerability.

To replace departed businesses and strengthen the remaining economic base, almost every community in the country found that focused and aggressive economic development efforts had become a necessity. They were, whether they liked it or not, in competition with other communities worldwide. In response, over the last 20 years, there has been a substantial amount of experimentation in models and options for economic development at the state and local level. Through this process of experimentation, many practitioners have come to realize that in-depth socioeconomic data analysis became a necessity for effective economic development. To be competitive, communities need to understand the performance and structure of their economies, the strengths on which they can build and the weaknesses they need to address. However, there are no widely shared models of approaches to gaining this understanding. Effective "state of the art" approaches to analysis have been refined "on the job" through the work of a relatively small number of practitioners; these approaches have not been widely transmitted throughout the field.

The professional field of economic development has evolved from the "bottom up," from the "real world" needs of communities. Most practitioners (not only analysts) learn the field on the job. The field is too new for many skilled practitioners to have moved over to academia and training; moreover, most skilled practitioners lack the academic credentials required to teach degree programs. As a result, few good degree and training programs exist—most are less than five years old. Institutionalized means do not exist for transmitting the state-of-the-art from skilled practitioners to students, in contrast to fields such as medicine and engineering, where the best practitioners teach. Economic development has an education and training vacuum. Because the practice of economic development has evolved in an ad hoc, experience-driven fashion, there is, as

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Development Agencies and the American Chamber of Commerce Researchers Association are co-sponsoring an annual week-long training program in research methods for economic development practitioners, at George Mason University.

yet, little in the way of an accepted academic framework on which data-producing agencies can rely to inform their understanding of data user needs.

In sum, regional analysts are fragmented organizationally, lack consensus, and lack training. As a result, they have not been well positioned to initiate conversations, as a group, with federal data providers regarding their data needs. Federal statistical agencies, even if they had tried, would have had difficulty in quickly grasping the nature of regional socioeconomic data users and their needs.

5.4 Strategy for Taking Advantage of a Mutually Beneficial Opportunity

To better meet regional data user needs, increase the utilization of federal regional data, and build an active constituency for federal socioeconomic data, the recommended strategy is to directly address the key barrier to these ends, insufficient communication between and among data users and data providers. The key components of this strategy include the following:

- Guides for the perplexed – aids for increasing awareness and understanding of, and access to, federal and nonfederal data sources;
- Mechanisms for direct communications between data users and data providers – concerning how analysts use data and the nature of their data needs;
- Education and training – formal and informal means by which data users can learn from providers and more experienced users about the sources and uses of federal socioeconomic data, including methods and tools for economic analysis;
- Increased coordination and communication among federal statistical agencies with regard to regional data; and
- Actions by individual federal statistical agencies – to better meet regional data user needs.

Through this project, initial elements of this strategy have been implemented, including a first-time large-scale communication (via survey, focus groups, and interviews) from data users to data providers, a data user's guide, and a Web site with links to federal and other data sources. The key federal statistical agencies (Census, BLS, and BEA) have been fully cooperative throughout this project. EDA supported the development of the guide (*Socioeconomic Data for Understanding Your Regional Economy: A User's Guide*) and the Web site (EconData.Net). And numerous trade and professional associations have enabled the researchers to contact their members.

While these initial steps are positive, they are but the first necessary in a series of ***ongoing*** efforts by all parties involved to overcome existing communication gaps. Moreover, better communication is useful only if Census, BLS, and BEA respond to data user suggestions and concerns, to the extent that their resources allow. For their part, data users must be forthcoming and articulate in their needs, not only to the statistical

agencies, but to Congress as well, in arguing for adequate agency budgets. For user needs to be met, economic trade and professional associations need to take an active role in promoting adequate statistical agency budgets. EDA, as the primary representative of the economic development community within the federal government, has been playing and should continue to play a role of facilitation, providing the spark and the good offices to help establish communications mechanisms.

The recommended communications-focused strategy relies on two primary mechanisms. The first is increased face-to-face communication between federal data providers and the trade and professional organizations that represent the interests of regional data users. The second tool is the Internet.

The Internet is a crucial tool for enabling communication, in two ways. First, the Internet allows individual data users to quickly gain access to hundreds of on-line data series, and to custom-build their own data sets. Sites such as EconData.Net essentially serve as a concierge to this wealth of data. Second, the Internet enables direct communications between individual data users and data providers, going in both directions. Historically, when the tools of communication were the telephone, printed publications, hotel-based conferences, and the mail, the costs of organizing communications between data suppliers and data users were quite high. However, the advent of the Internet has greatly lowered these transaction costs to a small fraction of their historical levels.

The power of the Internet to address the communications gap is visible in the course of this project. The Internet has greatly reduced the time required to identify and understand a wide variety of data sources, provide the universe of data users with direct access to and explanation of these sources, and gather the perceptions of hundreds of users regarding their needs. Unlike printed publications, Internet-based data distribution can generate real-time data about the frequency of use of certain data series, so that statistical agencies can observe directly which data are most frequently used. A primary focus of this study's recommendations, then, will concern means by which data users, their representatives, and data suppliers can harness the Internet to their mutual benefit.

5.5 Implementing the Strategy – Recommendations

Recommended approaches to building each element of the strategy, and working from improved communications to increased data user satisfaction, are as follows:

Data user guides for the perplexed. To overcome regional data users' widespread lack of knowledge concerning what data are available, EDA has authorized the authors to prepare two resources. The first is *Socioeconomic Data for Understanding Your Regional Economy: A User's Guide*, a reference for finding and using data for regional analysis. The *User's Guide*

- reviews the offerings of federal statistical agencies,

- describes and compares sources of data by topic (e.g., population, employment, income, cost of living),
- identifies data intermediaries who can help users get needed data,
- discusses approaches to using data,
- provides references for further self-education, and
- lists key data sources to put in a library or access on-line.

EDA funded a publication run of 4,000 copies of the guide; it is distributing the document through its headquarters and six regional offices. The guide also is available at the EDA Web site in .pdf format. Reader response to the publication has been very positive.

The second socioeconomic data resource prepared by the authors is EconData.Net, a Web site providing links to a large number of on-line federal and other data series and sources. The site was initially created as an incentive for data users to take part in the project survey—they were told that if they completed the survey, they would be given the Web address of a page with a list of links to the various data series and sources mentioned in the survey. About 45 links were provided at first. Data users gave very positive feedback about the site, and asked that it be maintained. With initial EDA funding, the authors maintained the site and added another 80 links. From July 1998 through September 1999, the site received over 17,000 visits.

Recognizing the utility of this type of site for increasing user awareness of and access to data sources, EDA is providing additional funding to the authors to upgrade the site and to maintain it for one year (through April 15, 2000). As of October 1, 1999, EconData.Net was reorganized and expanded to include 400 links. Links are organized by subject matter and by provider (with a dedicated page for each of Census, BLS, and BEA). Links to multisource data collections and data intermediaries also are provided. The authors are seeking new sources of funding to maintain and site after the EDA grant agreement is completed.

Actions to be taken:

1. The authors will explore opportunities to periodically publish new editions of the *User's Guide*. As the system for producing regional socioeconomic data is in constant flux, the *User's Guide* will be out of date in a short while. Feedback suggests that the guide is a valuable resource.
2. The authors will seek sources of funding to maintain the EconData.Net site. Funding options include data users, federal and other data providers, and third-party nonprofit organizations. To be of best use to analysts, the EconData.Net site should be as current as possible.

Direct communication mechanisms. Data providers need to understand how analysts use data, learn the extent to which analyst needs are being met and how they might be met better, and inform analysts of changes in data offerings. Data users need to take the initiative to communicate their thoughts and experience. Facilitating

communications between users and providers requires approaches that can overcome the high level of fragmentation on both sides. Such approaches include the representation of data users before federal statistical agencies, expanded use of the Internet, and more effective use of existing networks to provide data user feedback.

The need exists to create a committee composed of Washington, DC-based representatives of regional data users who can interact with the three key federal statistical agencies and the Interagency Council on Statistical Policy (ICSP) on a regular basis. It is most appropriate for data users to be represented on a committee through their trade and professional associations. Many of the associations that represent economic development practitioners work closely with EDA; most of the associations that represent regional economic researchers belong to the Council of Professional Associations on Federal Statistics (COPAFS).[5] EDA should consider facilitating the formation of such a committee, working with economic development practitioner associations and COPAFS to determine appropriate representatives.

Through their various national and regional conferences, EDA and professional and trade associations should actively seek to understand how well user needs are being met and communicate findings to the regional data committee for presentation to the appropriate statistical organization. EDA requires certain grantees to prepare a Comprehensive Economic Development Strategy (CEDS); grantees need data to do so. EDA can be attuned to grantee issues in using data to prepare their plans. Associations, as their members' representatives, could become more active in getting user perspectives (e.g., through member surveys that most periodically carry out) and communicating the results to data providers.

With regard to the Internet, EDA officials perceive that a logical tool for developing and maintaining ongoing communications between multiple data users and providers is the EDA-sponsored EconData.Net Web site. Therefore, EDA is encouraging the authors to explore options for creating on-line two-way communication mechanisms. Options contemplated include a user comments page; short, targeted surveys on particular data series, carried out in cooperation with the data provider; and threaded discussions hosted by representatives of various statistical organizations. The use of the site for this type of communication is not being funded under the current grant agreement; consequently, additional sources of funding must be found. Data users have shown their readiness to provide their opinions on line; perhaps federal statistical organizations will participate in discussion as well. Statistical agencies also could consider creating their own on-line means of surveying data users.

Regarding provider-sponsored networks of data users, BEA could restructure its Users Group so that a wide range of BEA data users (including development and

[5] COPAFS seeks to bring the views of professional associations to bear on decisions affecting Federal statistical programs. Members of COPAFS with a focus on regional economic analysis include the American Chamber of Commerce Researchers Association, the Association for University Business & Economic Research, the Association of American Geographers, the Association of Public Data Users, the National Association for Business Economics, and the National Association of Development Organizations.

planning agencies) comprise a majority (rather than intermediaries), and refocus the function of the group from distribution to customer feedback. Users' relatively low awareness of BEA data suggests that the Users Group could play more of role in marketing. In the Workforce Investment Act (WIA), Congress has mandated that the Secretary of Labor, and by inference BLS, must pay attention to the satisfaction of a wide range of employment statistics users, including "Congress, States, localities, employers, jobseekers, and other consumers." In the customer feedback mechanisms that develop, BLS should ensure that regional economic analysts, including those from development organizations, are heard from.

Recommended actions:

1. EDA should facilitate the formation of a regional socioeconomic data liaison committee composed of representatives from economic development trade associations, COPAFS, and EDA itself. The primary purpose of the committee would be to represent the interests of regional socioeconomic data users through interaction with each of the three key federal statistical agencies (Census, BLS, BEA) and the proposed regional data working group of the ICPS. (See discussion below.)
2. EDA should explore arrangements with data providers, including Census, BLS, and BEA, to develop ongoing, real-time methods for obtaining feedback from and communicating with individual data users. The potential of EconData.Net to fulfill this need should be examined.
3. Federal statistical agencies should consider creating on-line tools for surveying data users.
4. BEA should refocus and restructure the BEA Users Group so that its primary purpose is advising BEA on its data products, ensuring that a majority of members are active users of BEA data and are not data intermediaries.
5. BLS should see that regional economic analysts (in addition to LMI agencies) are given the opportunity to actively participate in the customer feedback mechanisms required by the WIA.
6. EDA and professional and trade associations should actively seek out data users' experience and issues at their respective conferences, and see that the results are communicated to data providers through the regional socioeconomic data committee discussed in the first recommendation. (See discussion on workshops below.)
7. Census, BLS, and BEA should more actively seek to communicate to a wide range of data users major changes and improvements in data offerings.
8. Census, BLS, and BEA should use their sites to directly monitor the extent to which different types of data are used, and employ this information to make programmatic decisions about augmenting data series.

User education and training in data sources, analytic methods, and uses. Data users have indicated their need for more opportunities to learn about the tools and methods of regional socioeconomic data analysis. EDA and trade and professional associations can play lead roles in this regard. EDA could encourage the development of training curricula on data sources and uses, specifically designed for development practitioners and researchers. Both EDA and associations could offer workshops utilizing

these curricula. Also, EDA could consider funding the development of an Internet-based course on data analysis.

With the implementation of the CEDS process, EDA grantees will need guidance on how to prepare strategic plans. In providing this guidance, EDA should see that grantees are given adequate instruction in data research and analysis.

Intermediaries have a role to play in user education as well. Traditionally, federal statistical agencies produced regional data and data intermediaries distributed them, often providing personal service in doing so. However, through the Internet and CD-ROMs, federal statistical agencies are now distributing data directly to the majority of regional data users. Many intermediaries also are providing data access on-line. Thus, the percentage of data users who primarily rely on personal service from intermediaries to obtain data will continue to decline as more users gain comfort in using the Web. At the same time, intermediaries report, they are being asked to provide more assistance in data interpretation and analysis, but have little training in this type of service—most staff develop it "on the job."

These various trends suggest the need to emphasize and support the new role for intermediaries in providing "value added" services to data users—aid in understanding the nature of data sources and uses, and in analysis and interpretation. The types of intermediaries that could perform this role are those that focus primarily on socioeconomic data, that is, Census Data Centers, state LMI agencies, business and economic research centers, and business libraries. (This role would be less appropriate for general-purpose depository libraries.) However, intermediaries report that to carry out this role, they need better training and materials. Such training and materials could be developed with the support of the federal data agencies sponsoring these intermediaries.[6]

As intermediaries become skilled in providing one-on-one value added assistance, they could provide formal Internet-based courses in research and analysis to data users. Census, BLS, and BEA could jointly support curriculum development, and could see that their intermediaries receive proper instruction on how to provide these courses.[7] While these courses would not be economic development-specific (the target audience being far broader), they could be a valuable complement to the development-specific curricula discussed above.

The Internet also can serve as a vehicle for encouraging interaction and learning among data users, and overcoming data user isolation. EDA could encourage sponsors of economic development Web sites and listserves to take a role in promoting peer-based learning.

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[6] Even with the Internet, data intermediaries should always have a role in providing access to historical editions of various data series not available on-line.

[7] Through the early 1990s, Census had a substantial training division that provided its own courses around the country and prepared curriculum materials for Census Data Centers to use in creating local courses. The training effort was largely eliminated as a result of budget cuts.

Recommended actions:

1. EDA should encourage the development of in-person and Internet-based training curricula on data sources and uses for economic development.
2. Professional and trade associations and EDA should provide workshops on regional socioeconomic data sources, analytic methods and uses, and presentation methods.
3. EDA should see that grantees required to prepare CEDS are given proper training in regional economic analysis. Training may be provided in workshops, on the Internet, and in a guide to strategic planning.
4. Key federal statistical agencies should jointly explore means by which data intermediaries can effectively expand their role in data analysis and interpretation. To build intermediary capacity in this regard, agencies should explore the joint preparation of training and materials (including Internet-based) for intermediary staff themselves. Also, agencies should examine the development of an Internet-based curriculum with which state data intermediaries, particularly those at teaching institutions, could train a wide range of data users in federal data sources and uses.
5. EDA should encourage peer interaction to promote learning about data and analytic techniques through means such as the Internet and trade association special interest groups. For example, EDA could encourage sponsors of economic development Web sites and listserves to promote discussion of data user questions and answers.

Coordination among federal statistical agencies. While the ICSP has a number of working groups, it does not have one that focuses specifically on subnational data. To indicate the commitment of the federal government to meet the needs of regional data users, and to provide a vehicle for ongoing coordination among statistical agencies regarding regional data, OMB should consider creating a regional data working group. The aim of the working group would be to see that, with regard to regional data, the principles and practices recommended by CNSTAT are more fully addressed. Specific efforts of the working group could include

- creating an expanded set of statistical agency best practices with particular regard to regional data;
- encouraging additional cooperative efforts among data agencies (see examples below);
- advocating agency solicitation of, and meaningful response to, data user perceptions; and
- encouraging the wide dissemination of regional data by agencies, including the design of user-friendly Web sites.

Potential areas of additional cooperation among statistical agencies include

- more actively referencing other agencies' data sets as possible complements to an agency's own data;
- explaining how data series from various agencies might be used in combination;

- exploring ways in which data series measuring the same phenomenon (e.g., jobs) might be made more comparable; and
- jointly developing user training curricula described above.

Recommended actions:

1. The ICSP should indicate that meeting the needs of users of subnational data is an important function of federal statistical agencies.
2. OMB should see to the creation of a regional data working group, under the auspices of the ICSP, to coordinate and oversee various functions that support this declaration. Coordination and oversight topics would include cross-agency data referencing, data compatibility, data sharing, program evaluation, user training, and agency responses to customer feedback.
3. To gain data user perspective, the ICSP regional data working group should periodically meet with the regional socioeconomic data committee discussed above.

Actions by federal statistical organizations. Closing the communications gap between data users and providers is a necessary, but insufficient, step in better meeting regional data user needs. Federal statistical organizations should act on the information received from users, in line with the effective practice guidelines set forth by CNSTAT. Agencies can begin by reviewing and acting on issues identified through this project.[8]

Regional data user needs cannot be fully met unless statistical budgets are increased. Sufficient increases are likely to come only if the constituency for regional data become more active and vocal. In the meantime, OMB has options. In its annual budget requests to Congress, it can support statistical agencies seeking increased program funding. Further, OMB can substantially increase its financial support of SP. The effectiveness of the entire federal statistical system is harmed under current limited funding for SP.

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[8] The Workforce Investment Act of 1998, in specifying the nature of an employment statistics system, requires the Secretary of Labor to take steps that are consistent with many of the above recommendations, and with the needs expressed by data users in this study. More specifically:

- The system is to include the "wide dissemination of such data, information, and analysis in a user-friendly manner and voluntary technical standards for dissemination mechanisms."
- "(E)mployment and earnings information (shall be) maintained in a longitudinal manner to be used for research and program evaluation."
- The Secretary is not only to develop and maintain the employment statistics system, but see to its "continuous improvement." The Secretary shall, working with BLS and in cooperation with the states, prepare an annual plan that, among other charges, "include(s) a report on the results of an annual consumer satisfaction review concerning performance of the system" and "evaluate the performance of the system and recommend needed improvements, . . . with particular attention to the improvements needed at the State and local levels."
- The Secretary shall "(e)liminate gaps and duplication in statistical undertakings, with the systemization of wage surveys as an early priority."
- "(J)ustify the budget request for annual appropriations by describing priorities for the (next) fiscal year . . ."

Recommended actions:

Federal statistical agencies should

1. Take steps to increase user awareness of available series. In particular, efforts should be made to increase analyst awareness of BEA data, certain BLS series, and the data offerings of more specialized federal agencies. Agencies should consider various means to inform analysts, including trade and professional associations and Web-based directories of regional data sources (such as EconData.Net).
2. Reduce the amount of time required between data collection and dissemination. Lack of timely data release is a major user frustration, particularly with regard to Census Bureau data. Clearly, statistical agencies gain no benefit from delay, which seems largely a resource issue. Still, to the extent possible, agencies should seek to minimize delays. To promote understanding, they should also consider explaining to data users the reasons for the time lags.
3. Offer data in the geographic and industrial detail that meets user needs. As statistical agencies understand more clearly how analysts use their data, they should aim to provide data in the level of detail that more closely fits user needs (within restraints necessary to honor respondent confidentiality).
4. Expand and improve the electronic dissemination of data offerings. Each of the three key statistical agencies should aim to be provide the breadth of their data offerings via the Internet, and seek to improve the user-friendliness of their Web sites, in particular offering ease of use (e.g., visually appealing, clickable maps and lists, one- or two-step access to data) and multiple formats available for download (e.g., html, pdf., spreadsheet).
5. In light of user feedback, add new data series that reflect important economic dimensions inadequately examined at present, and consider resurrecting terminated series. Users say there is a particular need for workforce and knowledge-based economy data. Census should consider restarting retail sales, nonresidential construction, and manufacturing exports series.
6. Provide users with value-added services that assist in data analysis. For instance, once statistical agencies learn how regional analysts manipulate data, they can configure their Web sites to speed up the analytic process. Agencies could provide rankings, geographic comparisons, time series, and location quotients. As mentioned in previous discussion, statistical agencies can individually and jointly see to the offering of on-site training courses for data users.
7. Increase cooperative efforts with other statistical agencies, as discussed above.

BLS should

8. Encourage the creation of uniform LMI policies with regard to access to BLS-funded aggregate and microdata. Variability of ES-202 access by state is of great frustration to data users and hinders economic development. While increased access through BLS itself will be a great help, the states will remain important data distributors.

OMB should

9. At least double the staff of its Statistical Policy Branch.
10. Work with statistical agencies to ascertain the budgets necessary to meet data user needs, and be aggressive in seeking funding that allows these needs to be better met.

5.6 Conclusion

Socioeconomic data are critical to effective economic development. Development policies and programs can only be as good as the data on which they are based. Under difficult circumstances, the federal statistical system does a remarkable job of regularly producing data that portray the complexities of the American economy and society. However, data users clearly say the system can be improved, both in substance and in process. Data users want to be heard, and want to work with federal data providers to bring about better outcomes for both parties. EDA's goals will be met if this project stimulates the improved communications and interactions needed to sustain a strong federal role in providing needed regional socioeconomic data.

APPENDICES

Appendix 1A

Trade and Professional Associations Facilitating Member Participation in Data User Survey

Researcher-oriented

American Chamber of Commerce Researchers Association
Association of Public Data Users
Association for University Business and Economic Research
National Association for Business Economics
Regional Science Association International
Southern Regional Science Association
Western Regional Science Association

Practitioner-oriented

American Economic Development Council
American Planning Association
California Association for Local Economic Development
Council for Urban Economic Development
International City/County Management Association
Modernization Forum
National Association for County Community and Economic Development
National Association of Regional Councils
National Association of State Development Agencies
National Association of Development Organizations
National Conference of State Legislatures
National League of Cities
Northeast Economic Developers Association
State Science & Technology Institute
Southern Economic Development Council

Data Intermediaries

Steering Committee for State Data Centers, Census Information Centers, Business and Industry Data Centers

Appendix 1B

Expert Practitioners and Researchers Interviewed

Bradford, Richard, Utah County Business Development, Provo, Utah

Clarke, Marianne, Battelle Memorial Institute and the State Science & Technology Institute, Takoma Park, Maryland

Cox, Marny, San Diego Association of Governments, San Diego, California

Davis, Bill, California Association for Local Economic Development, Sacramento, California

Feser, Edward, Department of City and Regional Planning, University of North Carolina, Chapel Hill, North Carolina

Flynn, Thomas, Thomas Flynn Associates, Annapolis, Maryland

Ganzglass, Evelyn, National Governor's Association, Washington, DC

Henton, Douglas, Sherman Luk, and Brendan Rawson, Collaborative Economics, Inc., Palo Alto, California

Holden, Richard, California Employment Development Department, Sacramento, California

Holladay, J. Mac, Market Street Services, Atlanta, Georgia

Isaacson, Robert, Minnesota Department of Trade & Economic Development, Saint Paul, Minnesota

Kimel, Kris, Kentucky Science & Technology Council, Lexington, Kentucky

McLaughlin, Eileen, Picot Energy, Philadelphia, Pennsylvania

Munnich, Lee, State and Local Policy Program, Hubert H. Humphrey Institute of Public Affairs, University of Minnesota, Minneapolis, Minnesota

Padden, Jeffrey, Public Policy Associates, Ann Arbor, Michigan

Somerville, Tripp, Northwest Areas Foundation, Minneapolis, Minnesota

Wade, Donald, Magna Bank, Waterloo, Iowa

Waits, Mary Jo, Morrison Institute, Arizona State University

Wansley, J. David, Florence Chamber of Commerce, Florence, South Carolina

Watters, Annette, Center for Business and Economic Research, University of Alabama, Tuscaloosa, Alabama

Weiss, Jonathan, Office of the Vice President, White House, Washington, DC

Appendix 1C
Federal Statistical Agency Staff Providing Project Assistance

Bureau of the Census

Schneider, Paula, Principal Associate Director for Programs

Taueber, Cynthia, Demographic Statistical Methods

Kavaliunas, John, Marketing Services Office

Fortier, Michael, Data Access and Dissemination System

Knickerbocker, Frederick, Associate Director for Economic Programs

Ambrose, Frank, Governmental Communications Liaison, Customer Liaison Office

Bureau of Economic Analysis

Brown, Robert, Chief, Regional Economic Measurement

Knox, Hugh, Associate Director for Regional Economics

Kort, John, Chief, Regional Economic Analysis

Bureau of Labor Statistics

Bowler, Mary, Staff, Covered Employment and Wages

Brown, Sharon, Chief, Local Area Unemployment Statistics

Clayton, Richard, Chief, Covered Employment and Wages

Orr, Lois, Deputy Commissioner

Siegel, Lewis, Staff, Mass Layoff Statistics

Appendix 3A: Data User Profile Details

3A.1 Introduction

This appendix provides the reader with significantly greater detail regarding the profile of data users responding to the project survey. Each section is to be read in conjunction with the corresponding summary profile section. Detailed tables and graphs, further explication of the data, and discussion of survey instrument are provided.

3A.2 Survey Respondents and the Universe of Data Users

Frequency of data use. The opinions of frequent data users, and their high proportion in survey returns, are valued for several reasons. First, almost by definition, frequent data users are responsible for producing the greater portion of data analysis for economic development. Occasional data users do not regularly prepare regional economic analyses. Second, frequent data users are likely to have greater understanding of and insights about the current data system. In-depth interviews with knowledgeable data users were carried out for this reason. The frequent data users, then, are the core constituency for the federal statistical system that produces regional socioeconomic data.

At the same time, infrequent data users periodically do need to obtain and analyze data. The perceptions of over 200 "occasional" data users were obtained through the survey, allowing for greater understanding of these users' awareness, needs, perceptions, and skills. In addition, many of the focus group participants were occasional data users.

Cross-section by type of work, type of jurisdiction, and geography. An initial concern in contacting potential respondents only through trade and professional associations was that data users who are not members of these associations would be excluded, which could introduce some bias into the survey sample. However, a quarter of survey respondents claim no association affiliation.[1]

3A.3 Who Are the Respondents?

Organization and Clientele. Four types of organizations account for two-thirds of respondents (Table 3A-1):

[1] As the pool of potential respondents was reached entirely through associations channels, it is interesting that a large proportion of respondents claim no affiliation. Association contact lists may include persons whose membership has lapsed. It may be that within some organizations receiving notice of the survey, the task of completing the survey was handed to someone other than the association member. Nonmembers may have come across an association notice about the survey, or may have been told of the survey through a peer who belongs to an association.

- economic development agency (25 percent),
- academic business or economic research center (18 percent),
- planning agency (15 percent), and
- academic department (nine percent).

No other category contains more than five percent of respondents.

Table 3A-1
Survey of Socioeconomic Data Users
Distribution of Respondents by Type of Organization

Type of Organization	N	Percent
Practice-oriented	312	55.5 %
General practice	244	40.1
Economic Development or Commerce Organization	150	24.6
Planning Department or Agency	94	15.4
Specialized practice	47	7.7
Labor or Workforce Development Organization	28	4.6
Publicly Sponsored Business Extension Service	14	2.3
Technology Development Organization	3	0.5
Development Finance Corporation	2	0.3
Executive/legislative	21	3.4
Office of Public Chief Executive (e.g., Governor, Mayor)	15	2.5
Legislative Organization	6	1.0
Research-oriented	191	31.4
Academic-based Business or Economic Research Center	107	17.6
Academic Department	57	9.4
Other Research Organization	27	4.4
Client-serving	51	8.4
Consulting Firm, specializing in economic development	26	4.3
Consulting Firm, not specializing in economic development	14	2.3
Business, Industry, or Trade Association	11	1.8
None of the above	55	9.0
GRAND TOTAL	609	100.0

The patterns of respondent affiliation to trade and professional associations is consistent with distribution by type of organization (Table 3A-2). Associations with the highest frequency of membership among respondents include the American Planning Association, the American Economic Development Council, the Council for Urban Economic Development, and the American Chamber of Commerce Researchers Association.[2]

The geographic diversity of respondents' work is seen in Table 3A-3. Almost a quarter of respondents focus on a metropolitan or multicounty area, a fifth cover a single city, county, or town, and another fifth have a statewide focus. A small number have a multistate, nationwide, or international purview. And nearly a third serve clients across more than one of the preceding categories.

Table 3A-2
Survey of Socioeconomic Data Users
Trade and Professional Association Affiliations of Respondents
N = 613

Association	N	Percent
American Planning Association	156	25.4 %
American Economic Development Council	119	19.4
Council for Urban Economic Development	83	13.5
American Chamber of Commerce Researchers Association	82	13.4
National Association of Development Organizations	64	10.4
Southern Economic Development Council	58	9.5
Association for University Business and Economic Research	56	9.1
National Association of Regional Councils	54	8.8
Western Regional Science Association	49	8.0
National Association for Business Economics	47	7.7
National Association of State Development Agencies	39	6.4
Association of Public Data Users	34	5.5
National Association for County Community and Economic Development	24	3.9
National League of Cities	22	3.6
International City/County Management Association	20	3.3
Modernization Forum	17	2.8
Northeast Economic Developers Association	17	2.8
State Science & Technology Institute	15	2.4
Mid-America Economic Development Council	12	2.0
California Association for Local Economic Development	10	1.6
National Conference of State Legislatures	8	1.3

[2] Seventy-two percent of respondents indicate membership in at least one trade or professional association among 21 listed in the survey. Forty-three percent note affiliation with two or more, and 12 percent indicate links with four or more. Two organizations whose members were contacted for the survey, Regional Science Association International (RSAI) and the Southern Regional Science Association (SRSA), were not listed on the survey as they were added to the distribution listed only after the survey was posted on the Internet. In response to a request that members of RSAI and SRSA indicate their membership in a text message, four respondents who are members of one or both of these organizations did so.

Table 3A-3
Survey of Socioeconomic Data Users
Type of Organization by Jurisdictional Area, Percent Distribution

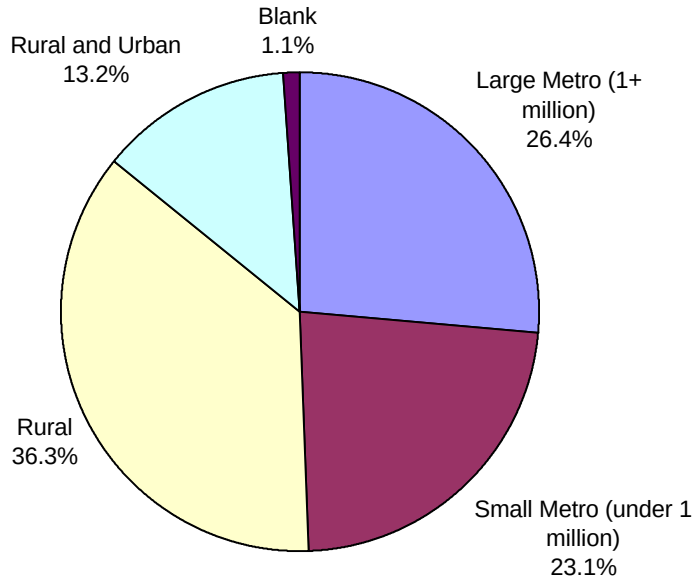
Type of Organization	N	City, county, town	Metro area or multiple counties	State	Multi-state region	U.S.	Beyond U.S.	More than one of above
Practice-oriented	312	31.7 %	30.4 %	24.7 %	0.6 %	1.0 %	0.0 %	11.5 %
General practice	244	35.2	36.9	17.6	0.8	0.4	0.0	9.0
Economic Development or Commerce Organization	150	38.7	28.0	22.7	1.3	0.7	0.0	8.7
Planning Department or Agency	94	29.8	51.1	9.6	0.0	0.0	0.0	9.6
Specialized practice	47	14.9	10.6	42.6	0.0	4.3	0.0	27.7
Labor or Workforce Development Organization	28	10.7	10.7	42.9	0.0	0.0	0.0	35.7
Publicly Sponsored Business Extension Service	14	21.4	7.1	50.0	0.0	7.1	0.0	14.3
Technology Development Organization	3	33.3	0.0	33.3	0.0	0.0	0.0	33.3
Development Finance Corporation	2	0.0	50.0	0.0	0.0	50.0	0.0	0.0
Executive/legislative	21	28.6	0.0	66.7	0.0	0.0	0.0	4.8
Office of Public Chief Executive (e.g., Governor, Mayor)	15	40.0	0.0	60.0	0.0	0.0	0.0	0.0
Legislative Organization	6	0.0	0.0	83.3	0.0	0.0	0.0	16.7
Research-oriented	191	8.9	15.7	16.2	3.1	2.1	3.7	50.3
University or College-based Business or Economic Research Center	107	6.5	21.5	13.1	2.8	0.9	2.8	52.3
Academic Department	57	12.3	10.5	14.0	3.5	0.0	7.0	52.6
Other Research Organization	27	11.1	3.7	33.3	3.7	11.1	0.0	37.0
Client-serving	51	7.8	9.8	3.9	5.9	9.8	2.0	60.8
Consulting Firm, specializing in economic development	26	3.8	3.8	0.0	3.8	15.4	0.0	73.1
Consulting Firm, not specializing in economic development	14	21.4	7.1	7.1	7.1	7.1	0.0	50.0
Business, Industry, or Trade Association	11	0.0	27.3	9.1	9.1	0.0	9.1	45.5
None of the above	55	18.2	23.6	21.8	3.6	3.6	0.0	29.1
Blank	2			50.0				50.0
GRAND TOTAL	611	21.3	23.4	20.1	2.1	2.3	1.3	29.5

Of those respondents who work in a substate area, over a third work in rural areas, a quarter are in large metro areas (1 million and above in population), and another quarter are in small metro areas (Figure 3A-1).

Professional Position and Experience. Respondents are widely distributed by type of professional position, with a strong emphasis on persons in positions of some seniority or authority (Figure 3A-2). The distribution of respondents by years of experience is consistent with the distribution by job title (Figure 3A-3).

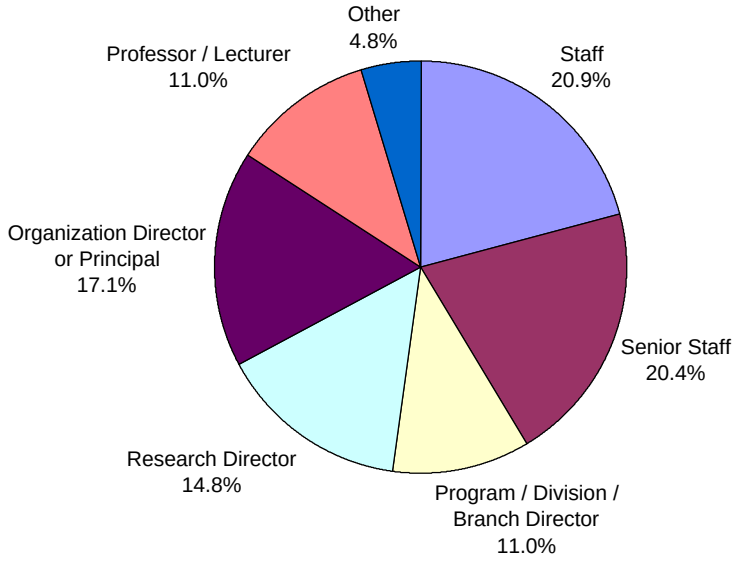
The distribution of respondents by professional position differs by type of organization (Table 3A-4). It is interesting to note that while over half of respondents in economic development organizations are organization directors or research directors, over two-thirds of planning agency respondents are senior staff or staff. This difference likely reflects the fact that that economic development is the primary mission at development agencies, but one of many substantive areas of focus in planning agencies.

Figure 3A-1
Survey of Socioeconomic Data Users
Substate Jurisdictional Areas by Character



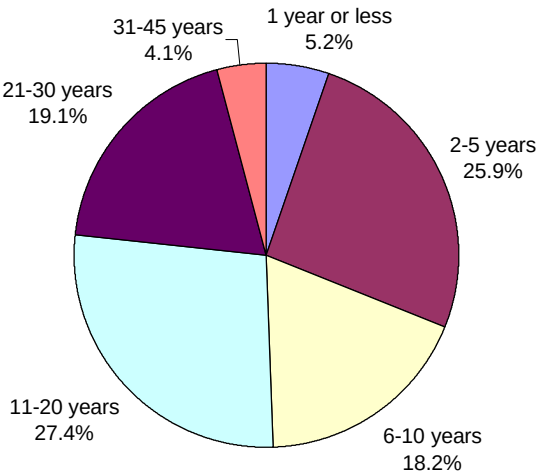
N = 273

Figure 3A-2
Survey of Socioeconomic Data Users
Percent Distribution by Job Title



N = 608

Figure 3A-3
Survey of Socioeconomic Data Users
Distribution by Years of Socioeconomic
Data Analysis Experience



N = 555

Table 3A-4
Survey of Socioeconomic Data Users
Type of Organization by Job Title, Percent Distribution

Type of Organization	N	Staff	Senior Staff	Program/ Division/Branch Director	Research Director	Organization Director or Principal	Professor/ Lecturer	Other
Practice-oriented	310	24.5 %	23.9 %	13.5 %	16.1 %	18.4 %	1.0 %	2.6 %
General practice	243	23.9	21.8	14.8	16.9	20.6	0.0	2.1
Economic Development or Commerce Organization	149	19.5	12.8	13.4	24.2	27.5	0.0	2.7
Planning Department or Agency	94	30.9	36.2	17.0	5.3	9.6	0.0	1.1
Specialized practice	47	31.9	23.4	8.5	14.9	10.6	6.4	4.3
Labor or Workforce Development Organization	28	35.7	28.6	10.7	21.4	3.6	0.0	0.0
Publicly Sponsored Business Extension Service	14	28.6	21.4	7.1	7.1	14.3	21.4	0.0
Technology Development Organization	3	0.0	0.0	0.0	0.0	66.7	0.0	33.3
Development Finance Corporation	2	50.0	0.0	0.0	0.0	0.0	0.0	50.0
Executive/legislative	20	15.0	50.0	10.0	10.0	10.0	0.0	5.0
Office of Public Chief Executive (e.g., Governor, Mayor)	14	14.3	35.7	14.3	14.3	14.3	0.0	7.1
Legislative Organization	6	16.7	83.3	0.0	0.0	0.0	0.0	0.0
Research-oriented	191	16.8	15.2	4.7	15.2	11.0	33.5	3.7
University or College-based Business or Economic Research Center	107	16.8	18.7	5.6	17.8	15.0	24.3	1.9
Academic Department	57	10.5	5.3	1.8	5.3	3.5	66.7	7.0
Other Research Organization	27	29.6	22.2	7.4	25.9	11.1	0.0	3.7
Client-serving	51	3.9	25.5	3.9	13.7	43.1	0.0	9.8
Consulting Firm, specializing in economic development	26	3.8	30.8	0.0	3.8	53.8	0.0	7.7
Consulting Firm, not specializing in economic development	14	0.0	21.4	0.0	14.3	50.0	0.0	14.3
Business, Industry, or Trade Association	11	9.1	18.2	18.2	36.4	9.1	0.0	9.1
None of the above	55	30.9	14.5	25.5	7.3	7.3	0.0	14.5
GRAND TOTAL	607	20.9	20.4	11.0	14.8	17.1	11.0	4.6

3A.4 What Type of Work Do Respondents Carry Out?

Frequency of Data Use. Seventy-one percent of survey respondents say they frequently use or analyze socioeconomic data. The percentage of frequent data users varies by type of organization. Academic-based organizations and consulting firms have a higher percentage of frequent data users than do other categories (Table 3A-5).

Table 3A-5
Survey of Socioeconomic Data Users
Frequent Data Users as a Percent of All Users, by Type of Organization

Type of Organization	N	Percent
Practice-oriented	178	68.5 %
General practice	137	68.6
Economic Development or Commerce Organization	85	65.9
Planning Department or Agency	52	73.1
Specialized practice	27	70.4
Labor or Workforce Development Organization	16	93.8
Publicly Sponsored Business Extension Service	8	37.5
Technology Development Organization	3	33.3
Development Finance Corporation	0	0.0
Executive/legislative	14	64.3
Office of Public Chief Executive (e.g., Governor, Mayor)	12	58.3
Legislative Organization	2	100.0
Research-oriented	111	79.3
Academic-based Business or Economic Research Center	67	80.6
Academic Department	28	85.7
Other Research Organization	16	62.5
Client-serving	34	73.5
Consulting Firm, specializing in economic development	20	80.0
Consulting Firm, not specializing in economic development	8	75.0
Business, Industry, or Trade Association	6	50.0
None of the above	29	48.3
GRAND TOTAL	353	70.8

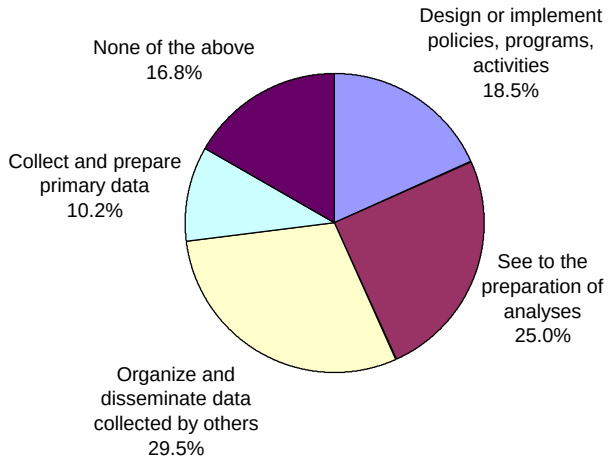
Nature of Work and Economic Analyses. The primary job activity of survey respondents is well distributed among five major categories (Figure 3A-4).[3] Economic analysts are more likely to use data than are policy makers and administrators. (Eighty-five percent of economic analysts say they are frequent data users, compared to 63 percent of respondents who design or implement policies and programs.)

Economic analysts and policy and program designers and implementers say that many types of economic analyses are important to their work (Figure 3A-5).[4] Sixty percent of respondents say that four or more types of analyses are important to their work. Only eight percent do just one type of analysis.

Three-quarters of respondents say they prepare written data-based narratives (Figure 3A-6). These narratives may describe or interpret socioeconomic data trends, explain public policy issues, or provide recommendations. They may be in the form of presentations, studies, reports, newsletters, monographs, articles, and books.

A majority of respondents in each category of primary job activity say that preparing narratives is part of their job (Table 3A-6). However, the extent and nature of narrative work is very much a function of primary job activity. For instance, nearly half of respondents whose primary activity is data collection do not write narratives. Over 40 percent of respondents whose primary activity is policy and program design or implementation say they prepare recommendations using data analysis.

Figure 3A-4
Survey of Socioeconomic Data Users
Primary Job Activity, Percent Distribution



[3] Respondents could choose only one category.

Figure 3A-5
Survey of Socioeconomic Data Users
Types of Analyses Important to Respondents
Frequency of Mention

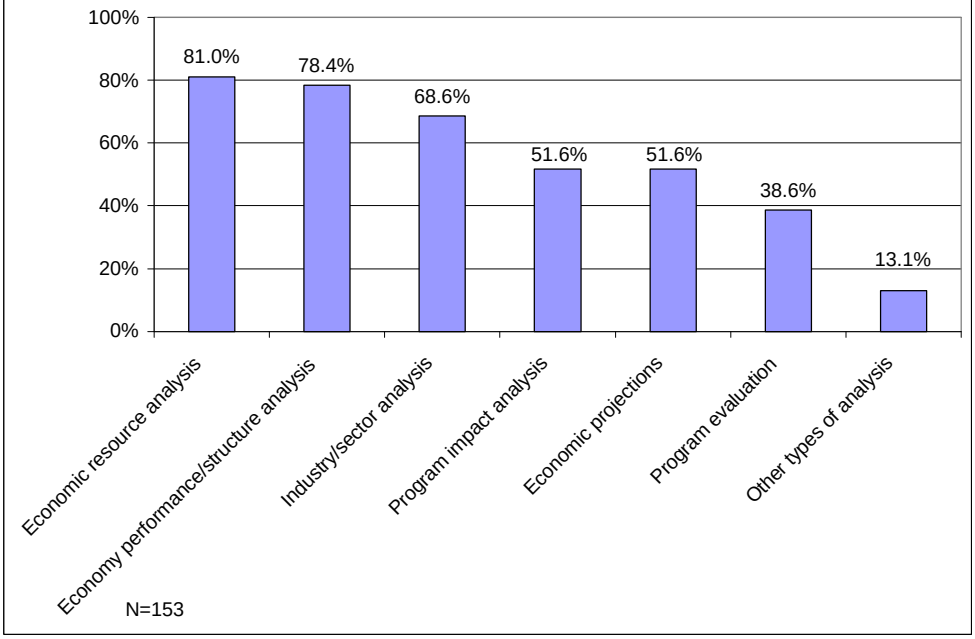
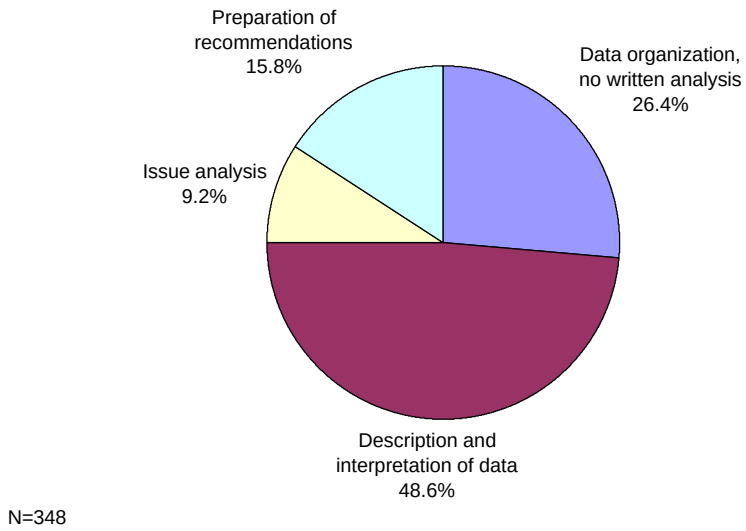


Figure 3A-6
Survey of Socioeconomic Data Users
Primary Nature of Work with Socioeconomic Data



[4] Respondents who collect or disseminate data were not asked questions about the nature of their economic analyses.

Table 3A-6
Survey of Socioeconomic Data Users
Nature of Work with Socioeconomic Data by Primary Work Activity
N = 346

		Nature of Work with Socioeconomic Data			
Primary Work Activity	**N**	**Organize Data without Narrative**	**Prepare Narrative that Describes and Interprets**	**Explain Public Policy Issues**	**Recommend Policy or Program Actions**
Collect and Prepare Data	35	45.7 %	40.0 %	5.7 %	8.6 %
Organize and Disseminate Data	104	39.4	54.8	1.9	3.8
See to the Preparation of Analyses	85	11.8	56.5	16.5	15.3
Design or Implement Policies	64	17.2	31.3	9.4	42.2
None of the Above	58	24.1	50.0	13.8	12.1
Total	346	26.4	48.6	9.2	15.8

3A.5 What Methods and Techniques Do Respondents Use?

Sources of data. In Chapter Three, Table 3-1 shows the percent of frequent data users who frequently utilize CD-ROMs and diskettes is double that for occasional data users. A possible explanation is that frequent users find it cost effective to build an in-house data library of CDs, and use the Web for other data, while occasional data users do not see the need to purchase CDs, and use the Web and print publications as needed.

Primary data. A significant fraction of users are actively involved in collecting their own data (Figure 3A-7). In every category of primary job activity, a majority of respondents say they frequently or sometimes collect primary data (Figure 3A-8).

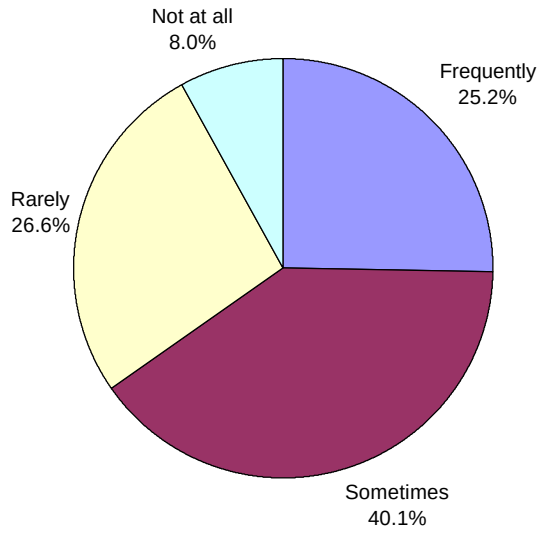
Microdata. Most respondents make some use of microdata (Figure 3A-9).

Analytic Techniques. Figure 3A-10 shows that five basic analytic techniques are each used by a substantial proportion of survey respondents. The one technique not widely used is the Herfindahl or concentration index.[5]

Only 21 percent of respondents frequently use advanced analytic techniques such as linear regression, covariance analysis, linear programming, and econometric modeling (Figure 3A-11). The percent of frequent users of advanced analytic techniques is highest in academic-based economic and business research centers (38 percent) and academic departments (26 percent). Among those who design or implement policies or programs, only 3 percent frequently use advanced analytic techniques.

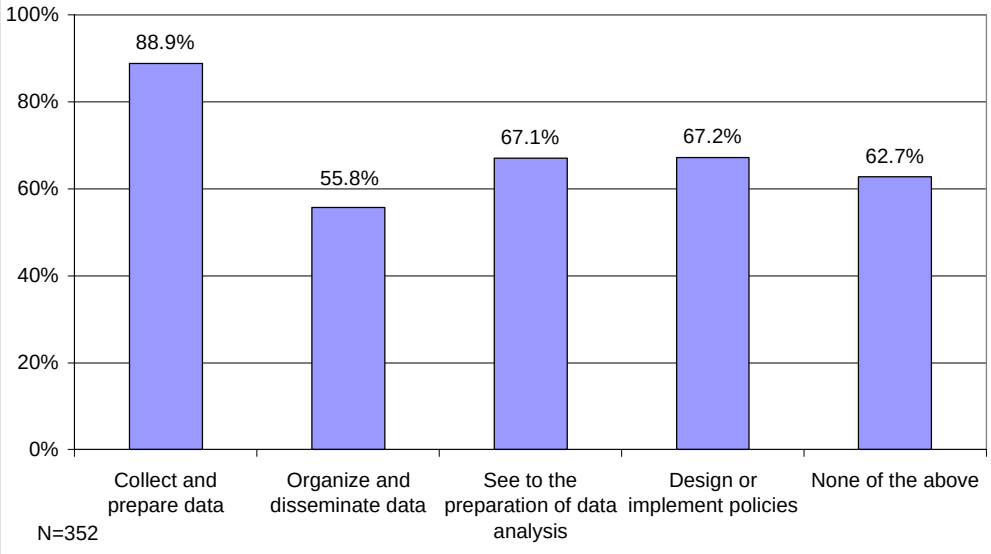
[5] Eighty-six percent of respondents note that they make use of two or more basic analytic techniques; 61 percent indicate they use three or more.

Figure 3A-7
Survey of Socioeconomic Data Users
Frequency of Primary Data Collection



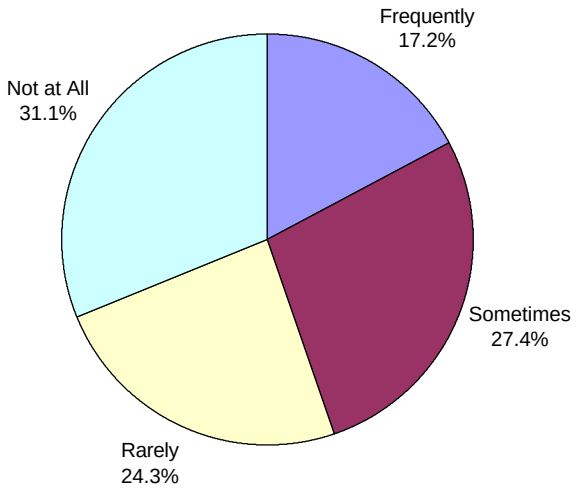
N=349

Figure 3A-8
Survey of Socioeconomic Data Users
Percent of Respondents Who Frequently
or Sometimes Collect Primary Data, by Primary Work Activity



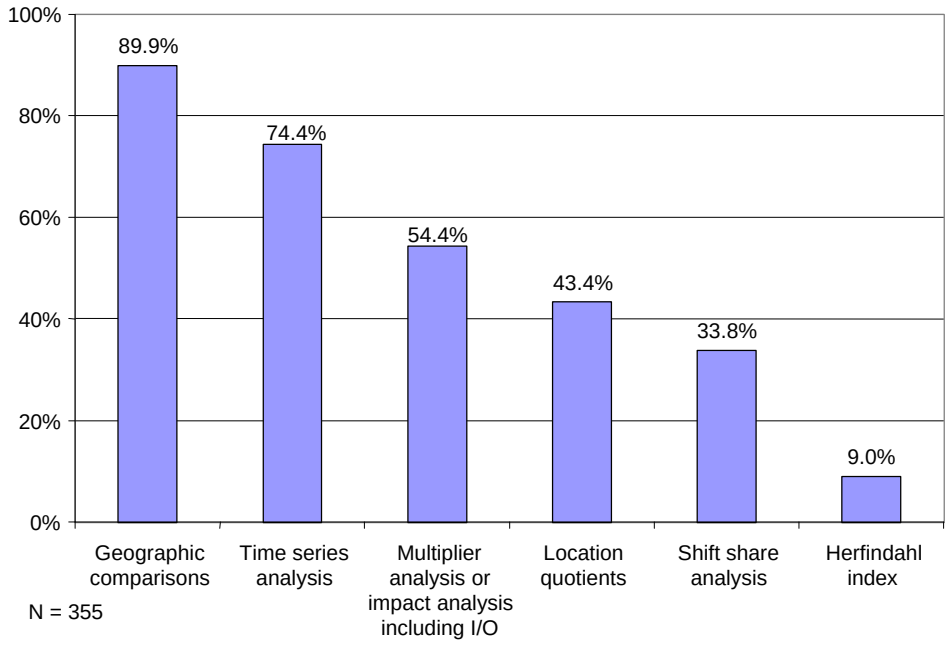
N=352

Figure 3A-9
Survey of Socioeconomic Data Users
Frequency of Microdata Use



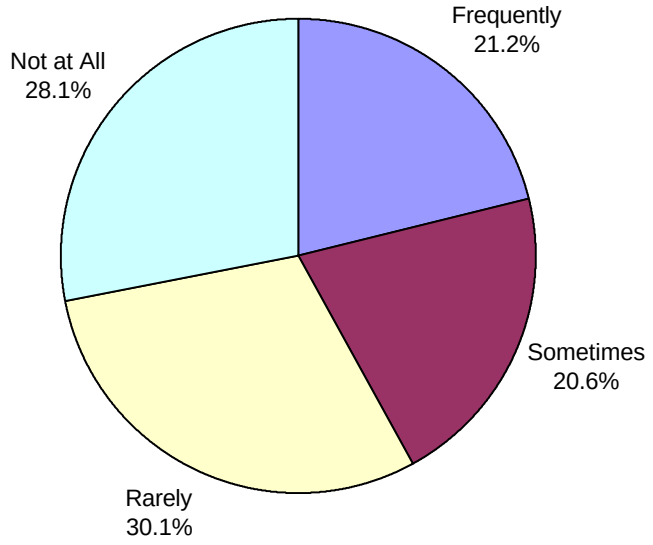
N = 354

Figure 3A-10
Survey of Socioeconomic Data Users
Use of Basic Analytic Techniques



N = 355

Figure 3A-11
Survey of Socioeconomic Data Users
Frequency of Use of Advanced Analytic Techniques



N = 349

The Art of the Narrative. Three-quarters of respondents are regularly responsible for preparing some form of narrative based on data analysis. In answers to several questions, the large majority of these narrative-preparing respondents indicate that effective practice requires that one be adept at certain arts of narrative preparation (Table 3A-7):

- Ninety percent of respondents strongly agree or agree with the statement "Good presentation is as important as good analysis in assuring that data have an impact on policy makers and the public" (mean score 1.58 on a scale of 1 to 5, with 1 meaning "strongly agree" and 5 meaning "strongly disagree").
- Seventy-nine percent strongly agree or agree with the statement "Creating informative graphs, charts, and tables is an important part of my work" (mean score 1.94).
- Fifty-one percent strongly agree or agree with the statement "The conclusions of economic data analysis are most effectively communicated through telling an interesting story about how the economy works" (mean score 2.41).

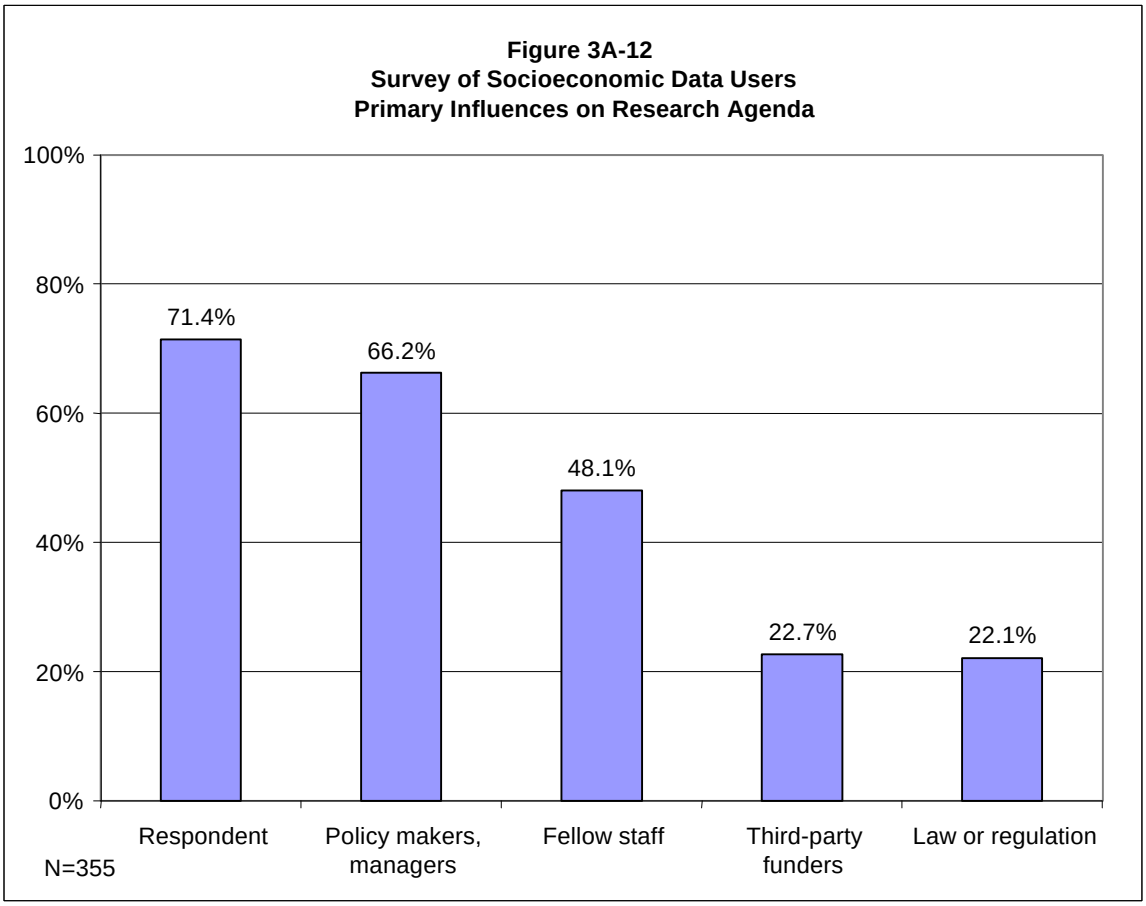
Table 3A-7
Survey of Socioeconomic Data Users
Narrative Teller's Ranking of Statements

		Rating						
Questions	**N**	**1. Strongly Agree**	**2. Agree**	**3. Neutral**	**4. Disagree**	**5. Strongly Disagree**	**Don't Know**	**Mean**
Good presentation is as important as good analysis in assuring that data have an impact on policy makers and the public.	258	58.5 %	31.4 %	5.4 %	2.7 %	1.9 %	0.0 %	1.58
Creating informative graphs, charts, and tables is an important part of my work.	260	45.0	33.8	8.5	6.5	5.8	0.4	1.94
Conclusions of data analysis are most effectively communicated through telling an interesting story about how the economy works.	259	18.9	32.4	27.0	10.4	2.7	8.5	2.41

3A.6 What is the Context of Respondents' Work?

Influences on Analytic Agenda. Respondents most frequently list themselves as a key influence on their analytic agenda, closely followed by policy makers and program managers, then fellow staff (Figure 3A-12). Seventy-two percent of respondents list more than one category of influence on their analytic agenda. Forty-two percent mention three or more.

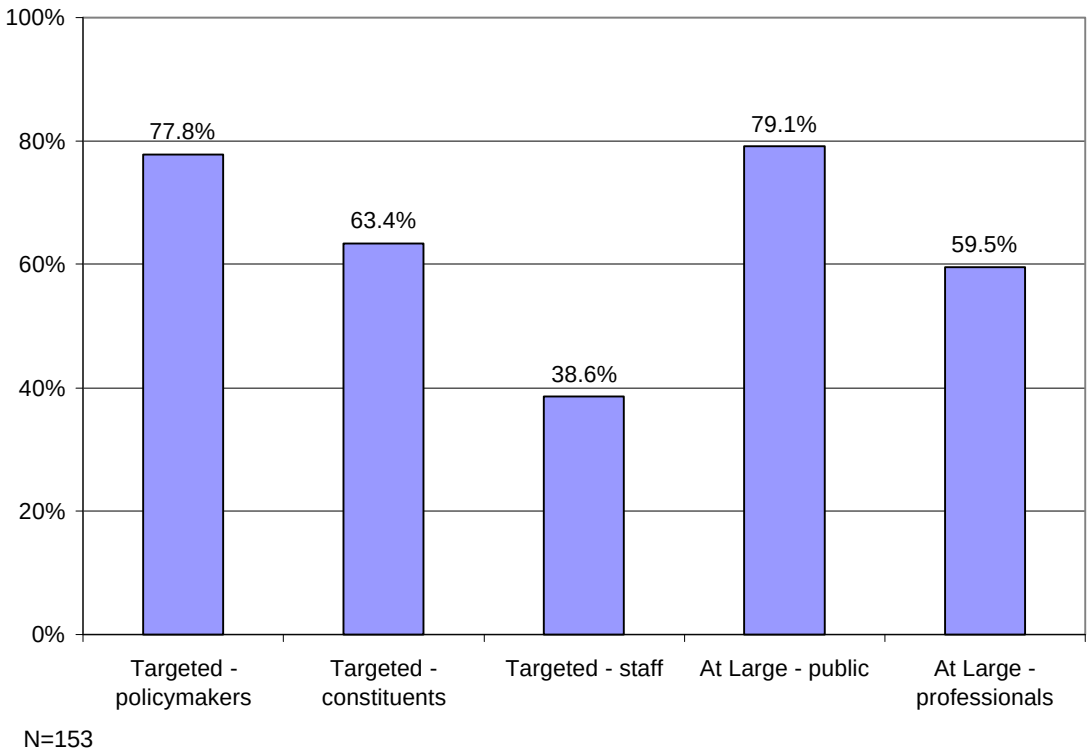
Figure 3A-12
Survey of Socioeconomic Data Users
Primary Influences on Research Agenda



Audiences and Impacts. Respondents prepare analyses for multiple and diverse audiences (Figure 3A-13). Internal staff are the only audience listed by a minority of respondents. Ninety-five percent of respondents say that their work has more than one category of audience. Sixty-six percent list three or more audience categories.

As discussed in Chapter Three, respondents tend to think their work has impact on their audiences, but that decision makers often do not carefully review data before making decisions. This divergent pattern of answers is most pronounced for analysts whose primary audience includes policy makers and program managers (Table 3A-8).[6]

Figure 3A-13
Survey of Socioeconomic Data Users
Primary Audience for Analytic Studies



[6] Note that nine percent of the latter group do not know the nature of the impact their analyses have had.

Table 3A-8
Survey of Socioeconomic Data Users
Perceptions of Impacts of Data Analysis, by Audience

	Primary Audience Includes Policy Makers and Program Managers?	N	1. Strongly Agree	2. Agree	3. Neutral	4. Disagree	5. Strongly Disagree	Don't Know	Mean
Decision makers look carefully at data before making decisions.	Yes	119	5.9 %	10.1 %	37.0 %	39.5 %	5.9 %	1.7 %	3.24
	No	232	8.2	24.6	28.0	29.7	7.8	1.7	2.99
My analyses have influenced the actions of their intended audiences.	Yes	119	26.9	47.1	19.3	1.7	2.5	2.5	1.98
	No	230	13.9	39.6	26.1	10.9	0.9	8.7	2.19

Note: Respondents include only those whose primary activity is the preparation of data analysis or the design or implementation of policies and programs.

Table 3A-9
Survey of Socioeconomic Data Users
Rating of Statements Regarding Knowledge About Data Sources and Analytic Techniques
N = 351

	1. Strongly Agree	2. Agree	3. Neutral	4. Disagree	5. Strongly Disagree	Mean	Std. Dev.
I am very proficient at identifying and accessing appropriate data sources.	23.4 %	38.5 %	27.6 %	7.4 %	3.1 %	2.28	1.01
I have a complete and detailed understanding of the definition of the various measures I use.	18.4	39.9	24.4	13.5	3.7	2.44	1.05
I have a complete and detailed understanding of the methods by which secondary data are collected.	9.8	35.2	31.7	20.5	2.9	2.71	0.99
I have broad knowledge of analytic techniques.	17.5	33.0	25.3	15.8	8.3	2.64	1.18
In examining specific economic questions, I am adept at using and integrating multiple data sources.	24.6	34.8	20.3	15.4	4.9	2.41	1.16

3A.7 What Do Respondents Know? How Do They Learn?

Knowledge about Data Sources and Analytic Techniques. Table 3A-9 shows respondent ratings for five statements regarding knowledge about data sources and analytic techniques. A majority of respondents strongly agree or agree with four of five questions; a plurality (33-40 percent) agree with each of the five. Only four percent of respondents strongly agree with all five statements, indicating that most respondents see room for improvement in some aspect of their analytic skills and knowledge.

The only statement for which a majority of respondents do not strongly agree or agree concerns their understanding of the methods by which secondary data are collected. Perhaps respondents believe that understanding data collection methods is not as essential to good analysis as knowing data sources and techniques for using those data.

Approach to Learning. Most data users rely on self-teaching to learn analytic techniques and develop awareness of data sources:

- The methods most frequently used for learning analytic techniques are self-teaching and academic degree programs. (See Figure 3A-14.) Over 90 percent of respondents list two or more methods; a third checked four or more.

- The three most frequently mentioned means used to stay up-to-date about sources of data are "surfing the Web." learning-by-doing, and periodicals and bulletins. (See Figure 3A-15) Ninety-four percent of respondents say they rely on two or more means for staying up-to-date; fifty percent use four or more means.

In general, it seems respondents rely on themselves first and foremost to learn about sources and methods. Relationships with co-workers and other peers are an important additional means. In this vein, 63 percent of respondents say that they have served as a mentor to others regarding the methods and techniques of data analysis.

Satisfaction with Learning Opportunities. Respondents are not fully satisfied with the opportunities they have for learning about data sources and methods (Figures 3A-16 and 3A-17).

Satisfaction with opportunities for learning and peer interchange is particularly low for respondents in economic development organizations, business extension services, and economic development consulting firms (Table 3A-10). Interestingly, satisfaction scores also are below average for respondents in academic departments. Scores are above average for respondents in labor or workforce development organizations (which include state labor market information agencies), academic-based economic and business research centers, and other research organizations.

It appears that persons in organizations with a mission of data collection and dissemination are more likely to have access to desirable opportunities to learn and meet peers on issues of data. Economic development practitioners seem to lack networks and organizations for sharing knowledge with peers.

Figure 3A-14
Survey of Socioeconomic Data Users
Important Means of Learning Methods of Data Analysis

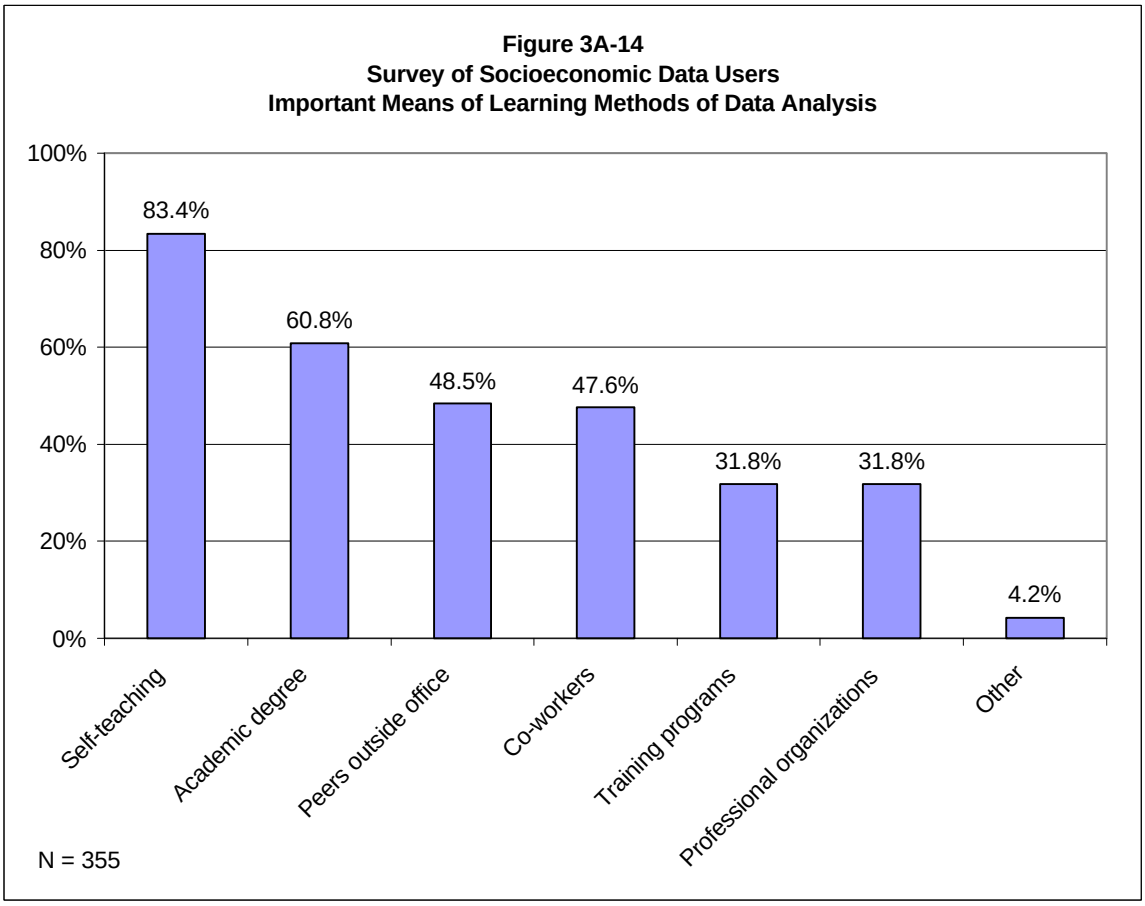


Figure 3A-15
Survey of Socioeconomic Data Users
Important Means for Keeping Up-to-Date About Data Sources

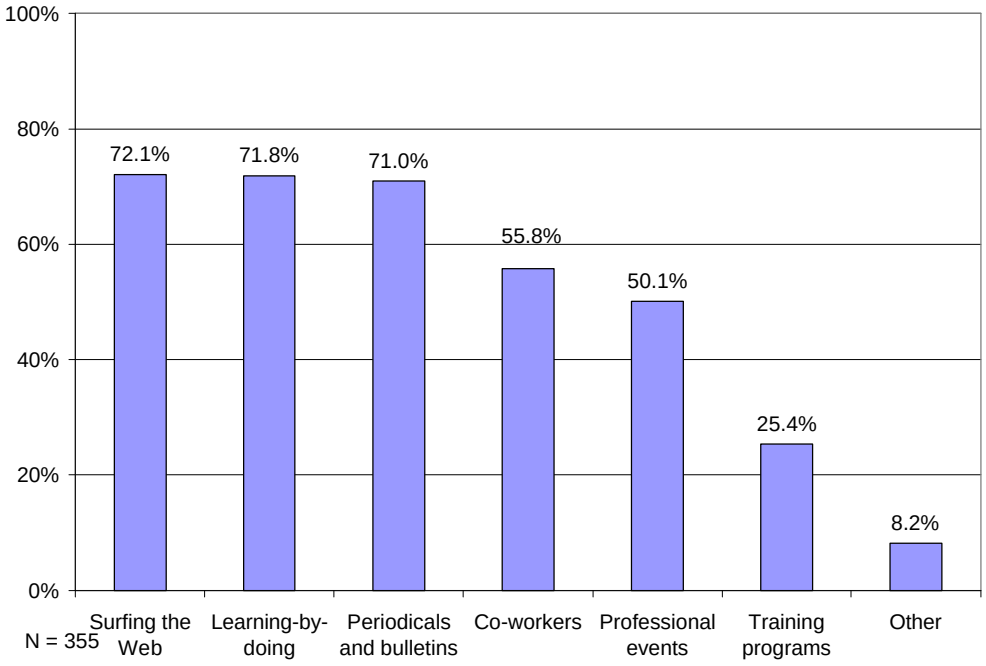
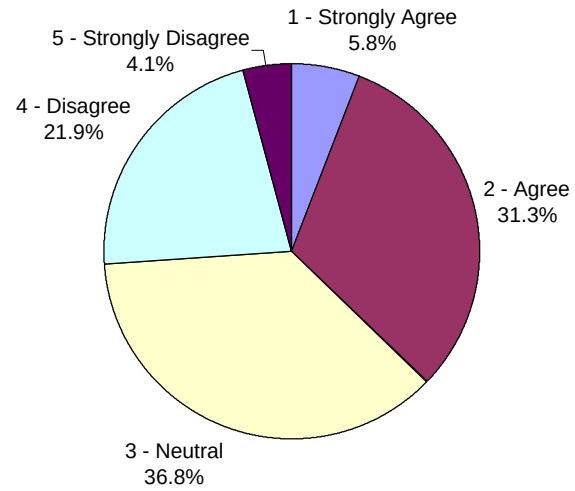
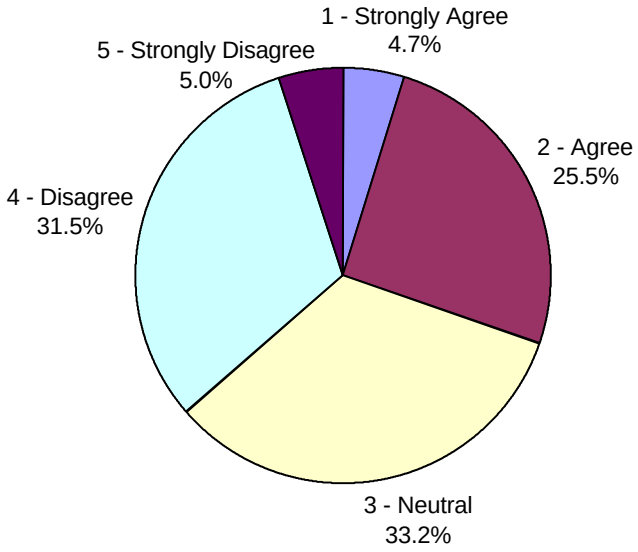


Figure 3A-16
Survey of Socioeconomic Data Users
Satisfaction with Access to Learning About Data Sources and Methods



N = 242
Mean 2.87

Figure 3A-17
Survey of Socioeconomic Data Users
Agreement that Opportunities for Interchange with Other Data Users Are Satisfactory



N = 337
Mean 3.07

Table 3A-10
Survey of Socioeconomic Data Users
Satisfaction with Opportunities for Learning and Peer Interchange, by Organization Type

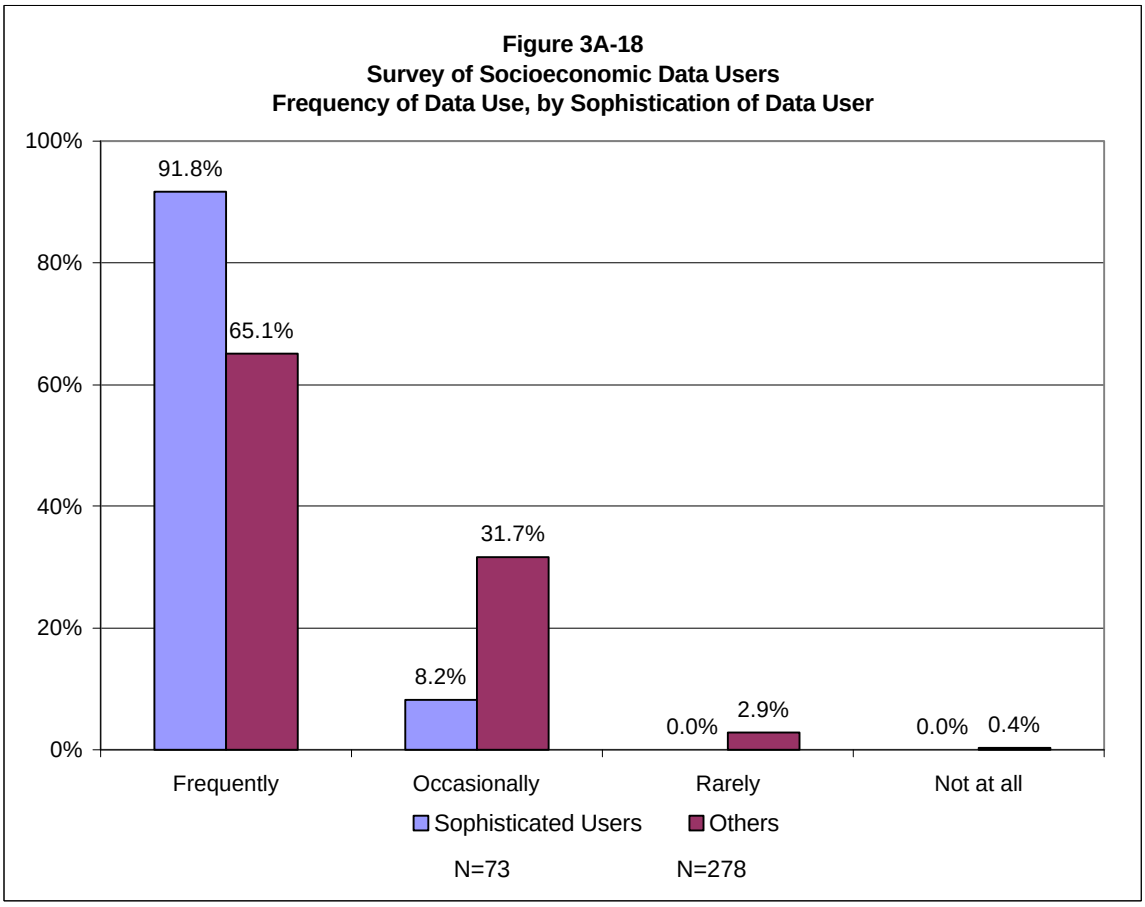
		Mean Scores Satisfaction with Opportunities for:	
	N	**Learning**	**Peer Interchange**
Labor or Workforce Development Organization	15	2.40	2.63
Consulting Firm, not specializing in economic development	8	2.50	2.86
Legislative Organization	2	2.50	2.50
Other Research Organization	16	2.63	2.38
University or College-based Business or Economic Research Center	66	2.65	2.77
None of the above	25	2.80	3.09
Office of Public Chief Executive (e.g., Governor, Mayor)	12	2.83	3.42
Planning Department or Agency	51	2.88	3.02
Academic Department	28	2.93	3.22
Consulting Firm, specializing in economic development	19	2.95	3.53
Business, Industry, or Trade Association	5	3.00	2.80
Economic Development or Commerce Organization	85	3.09	3.33
Publicly Sponsored Business Extension Service	8	3.63	3.63
Technology Development Organization	2	4.00	2.50
All	342	2.87	3.07

3A.8 How Do Sophisticated Data Users Differ from Others?

Table 3A-9 provides respondent ratings of five statements concerning self-perception of skills and abilities in data analysis. A mean skills score was calculated for each respondent by summing the respondent's self-rating across the five questions, then dividing by the number of questions answered. All respondents with a mean skills score of 1.6 or less were considered "sophisticated."[7] Seventy-three of 353 respondents (21 percent) were placed in the sophisticated group.[8]

- Sophisticated respondents, not unexpectedly, are far more likely to be frequent data users and employ advanced analytic techniques (Figures 3A-18 and 3A-19).

Figure 3A-18
Survey of Socioeconomic Data Users
Frequency of Data Use, by Sophistication of Data User



[7] As respondents are self-rated, it should be kept in mind that respondents may have misperceptions (i.e., they are worse or better than they think they are).

[8] Only respondents who filled out the long form of the survey answered the skills questions. Most, but not all, long-form respondents answered the five questions.

Figure 3A-19
Survey of Socioeconomic Data Users
Frequency of Use of Advanced Analytic Techniques, by Sophistication of Data User

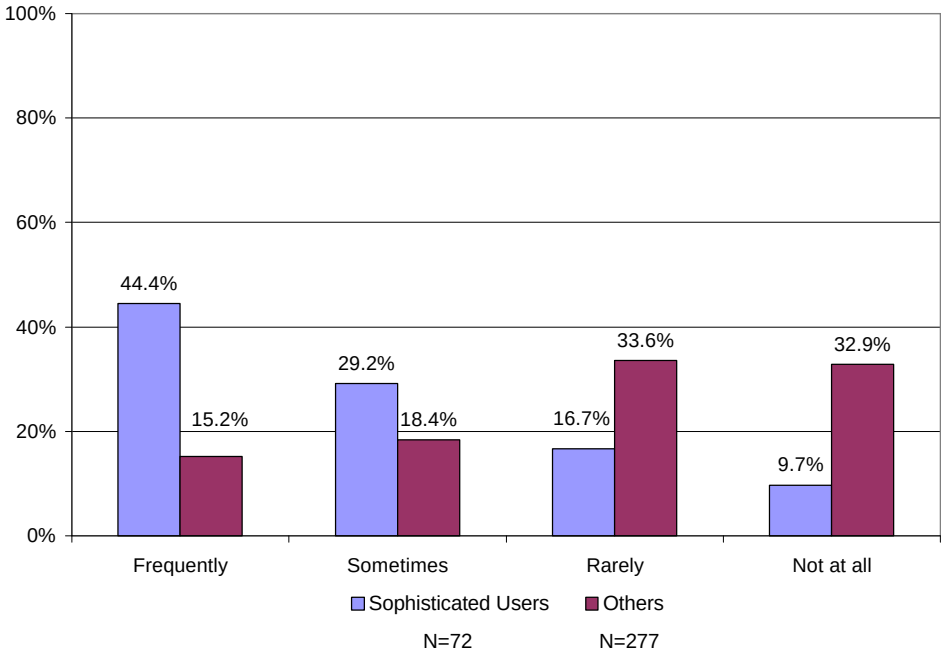
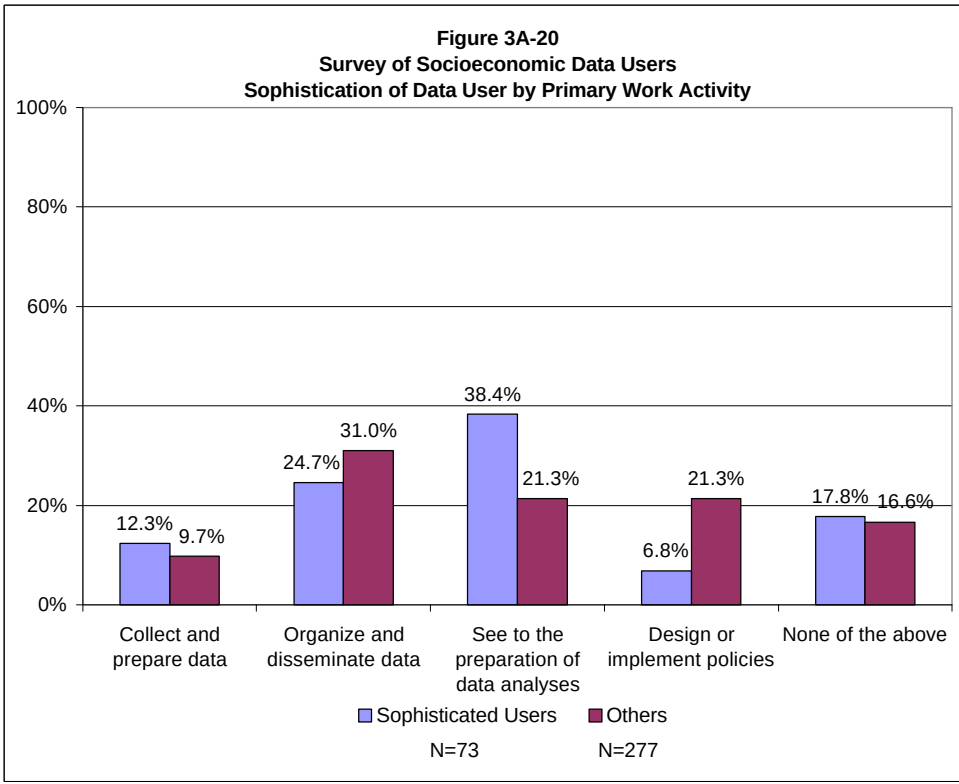


Figure 3A-20
Survey of Socioeconomic Data Users
Sophistication of Data User by Primary Work Activity



- Sophisticated data users are responsible for seeing to the preparation of data analyses in a proportion nearly double that for other respondents (Figure 3A-20). A relatively high percentage of sophisticated data users are responsible for preparing narratives that describe and interpret data trends (Figure 3A-21). And a higher percentage of sophisticated data users deem the art of the narrative important (Table 3A-11).

Figure 3A-21
Survey of Socioeconomic Data Users
Sophistication of Data User by Nature of Data Work

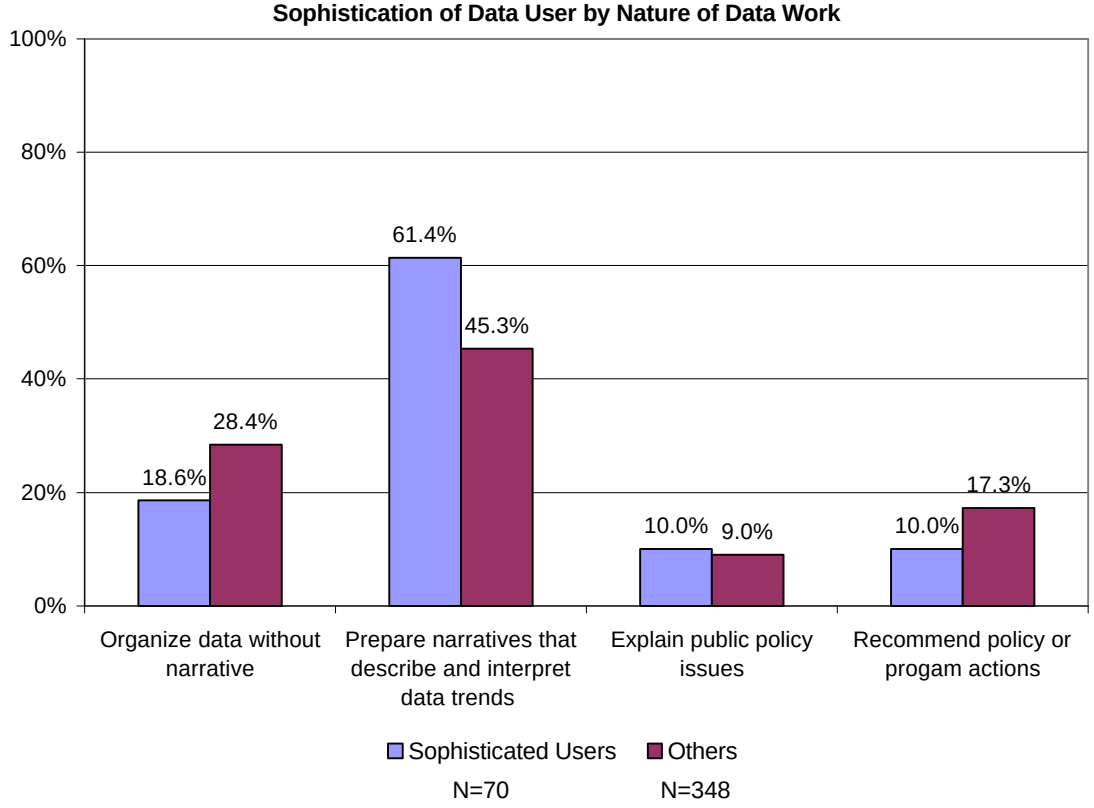


Table 3A-11
Survey of Socioeconomic Data Users
Rating of Statements About Presentation and Narrative, by Sophistication of Data User

	N	1. Strongly Agree	2. Agree	3. Neutral	4. Disagree	5. Strongly Disagree	Don't Know	Mean
Creating informative graphs, charts and tables is an important part of my work.								
Sophisticated Users	73	71.2 %	23.3 %	1.4 %	2.7 %	1.4 %	0.0 %	1.40
Others	277	35.7	37.5	11.9	8.7	6.1	0.0	2.12
Good presentation is as important as good analysis in assuring that data have an impact on policymakers and the public.								
Sophisticated Users	72	72.2	19.4	5.6	1.4	1.4	0.0	1.40
Others	278	55.8	34.9	4.3	2.5	1.8	0.7	1.59
Conclusions most effectively communicated through telling an interesting story.								
Sophisticated Users	72	15.3	40.3	31.9	6.9	4.2	1.4	2.44
Others	278	17.3	32.7	24.8	10.1	2.9	12.2	2.41

- Sophisticated users are less likely to be found in small and sparsely populated areas. (Table 3A-12).

Table 3A-12
Survey of Socioeconomic Data Users
Service Area, by Sophistication of Data User

	N	Sophisticated Users	Others
Service area			
U.S.	9	44.4 %	55.6 %
State	76	32.9	67.1
More than one of the above	115	26.1	73.9
Beyond U.S.	5	20.0	80.0
Metro area or multiple counties	67	13.4	86.6
City, county, or town	73	5.5	94.5
Multistate region	7	0.0	100.0
All	352	20.7	79.3
Character of substate service area			
Metro area over 1 million	40	15.0	85.0
Metro area under 1 million	31	12.9	87.1
Rural and urban mix	19	10.5	89.5
Rural	50	2.0	98.0
All other areas	212	28.3	71.7
All	352	20.7	79.3

Sophisticated users are less likely to be found in organizations that serve one substate area, including development organizations, planning agencies, and business associations (Table 3A-13). The presence of sophisticated users in planning agencies (8 percent) is particularly low. Organizations with a mission in data analysis (e.g., labor-focused organizations, university research centers) and that serve multiple clients (e.g., consulting firms) have a higher percentage of sophisticated respondents.

Table 3A-13
Survey of Socioeconomic Data Users
Organizational Type, by Sophistication of Data User

Organization type	N	Sophisticated Users	Others
Legislative Organization	2	50.0 %	50.0 %
Labor or Workforce Development Organization	16	43.8	56.3
University or College-based Business or Economic Research Center	67	29.9	70.1
Consulting Firm, not specializing in economic development	8	25.0	75.0
Consulting Firm, specializing in economic development	20	25.0	75.0
None of the above	28	25.0	75.0
Office of Public Chief Executive (e.g., Governor, Mayor)	12	25.0	75.0
Other Research Organization	16	25.0	75.0
Economic Development or Commerce Organization	86	17.4	82.6
Business, Industry, or Trade Association	6	16.7	83.3
Academic Department	28	14.3	85.7
Planning Department or Agency	52	7.7	92.3
Publicly Sponsored Business Extension Service	8	0.0	100.0
Technology Development Organization	3	0.0	100.0
All	352	20.7	79.3

- Sophisticated users are more likely to perceive that their work has an impact (Table 3A-14). In particular, they are far more likely to believe that their efforts increase understanding how the economy works. And they somewhat more agree with the notion that decision makers look at data before making decisions.
- Sophisticated data users are far more optimistic about the possibilities for improving the analytic capabilities of practitioners (Table 3A-15).

Table 3A-14
Survey of Socioeconomic Data Users
Rating of Statements on Impact of Data Analysis, by Sophistication of Data User

	N	1. Strongly Agree	2. Agree	3. Neutral	4. Disagree	5. Strongly Disagree	Don't Know	Mean
My analyses have a significant impact on the understanding of how the economy operates.								
Sophisticated Users	32	25.0 %	40.6 %	21.9 %	3.1 %	3.1 %	6.3 %	2.13
Others	118	7.6	24.6	33.9	16.1	8.5	9.3	2.93
My analyses have influenced the actions of their intended audiences.								
Sophisticated Users	32	40.6	46.9	3.1	3.1	3.1	3.1	1.77
Others	118	21.2	43.2	29.7	0.8	1.7	3.4	2.16
Decision makers look carefully at data before making decisions.								
Sophisticated Users	32	12.5	6.3	46.9	31.3	3.1	0.0	3.06
Others	118	3.4	13.6	32.2	41.5	6.8	2.5	3.36

Table 3A-15
Survey of Socioeconomic Data Users
Answers to Statements About Learning Methods and Opportunities, by Sophistication of Data User

	N	1. Strongly Agree	2. Agree	3. Neutral	4. Disagree	5. Strongly Disagree	Don't Know	Mean
My analytic work requires skills that can't be taught.								
Sophisticated Users	73	16.4 %	20.5 %	16.4 %	27.4 %	15.1 %	4.1 %	3.04
Others	276	3.6	13.4	17.0	32.6	27.2	6.2	3.71
Satisfaction with access to learning about data sources and methods								
Sophisticated Users	72	15.3	48.6	25.0	9.7	1.4	0.0	2.33
Others	279	3.2	25.8	38.7	24.4	4.7	3.2	3.01
Satisfaction with opportunities for interchange with other data users								
Sophisticated Users	72	9.7	40.3	30.6	16.7	2.8	0.0	2.63
Others	279	3.2	20.4	32.3	33.7	5.4	5.0	3.18

Most Important Ways Learned Methods of Data Analysis

	N	Degree	Self-teaching	Peers	Co-workers	Training programs	Prof. Orgs.	Other
Sophisticated Users	73	82.2 %	74.0 %	43.8 %	38.4 %	32.9 %	32.9 %	1.4 %
Others	279	55.6	86.0	50.2	50.5	31.9	31.9	5.0

Have you served as a mentor to others regarding the methods and techniques of data analysis.

	N	Yes	No
Sophisticated Users	70	94.3 %	5.7 %
Others	276	55.4	44.6

Appendix 4A: Utilization Rates of Categories of Data Sources

Utilization rates of various data source categories are provided by user sophistication and data use frequency in Table 4A-1. The percentage of frequent data users is about the same as that for occasional data users for most sources, with a major exception for BEA data.

Utilization rates of various data organizations significantly differ by type of user organization (Table 4A-2):

- All planning agency respondents use Census data. Planners tend to utilize small area data that only Census provides.
- All workforce development agency respondents use BLS data, which is logical given the focus of these agencies' work efforts.[1]
- A greater percentage of academic economic and business research centers use BEA data than do users in other major categories. This likely reflects historic links between BEA and these centers—many BEA and center staff know each other through the Regional Science Association International, and members of the BEA Users Group are primarily academic economic and business research centers.
- Researchers in academic departments have a relatively low reliance on BLS data. As these analysts have relatively long timeframes for their research compared to others, it may be that they prefer the comprehensiveness and detail of certain Census data series that come out once or twice a decade.
- While it is difficult to draw concrete conclusions from a small sample, it is interesting to note that data users in executive/legislative branch organizations have the highest utilization rates for BEA and other federal data. It may be that the variety of issues they address forces them to learn about and utilize several data sources.

To a large extent, utilization rates by source do not significantly differ by the service area or character (Table 4A-3). Some differences do appear, however:

- The utilization rate for BEA data by respondents serving cities, towns, and counties is significantly lower than that for respondents serving other areas. Perhaps the primary reason is that the county is smallest unit of analysis for BEA data. Lack of awareness about BEA data could be another reason.
- Data from private providers are not highly utilized in rural areas. Perhaps they cannot provide necessary detail.

[1] Some, but by no means all, of the workforce development organizations are LMI agencies. While respondents were not asked to name their organization or describe its work, the names of specific organizations can be inferred from respondent e-mail addresses.

- The percentage of respondents who use data from other federal sources increases with the size of the service area. This might be in part because a number of these sources only provide data at the state level. Again, lack of awareness may be an issue as well.
- For the most part, utilization rates also do not differ significantly by primary activity of respondent (Table 4A-4). The table does indicate that use of BEA data is significantly lower among those who design or implement policies and collect and prepare primary data; and it is higher for those who organize and disseminate data (perhaps as members of the BEA User Group) and see to the preparation of analyses. The use of data from private sources is relatively low among those who collect and prepare primary data.

Table 4A-1
Survey of Socioeconomic Data Users
Data Utilization Rate by Data Provider, User Sophistication, and Data Use Frequency

Percent Using Data Source

					Federal Sources:			
Sophisticated User	**N**	**Federal**	**State/Local**	**Private**	**Census**	**BLS**	**BEA**	**Other Federal**
Yes	57	100.0 %	91.2 %	71.9 %	98.2 %	91.2 %	89.5 %	66.7 %
No	231	98.3	96.1	71.0	97.0	83.5	77.1	51.1
All	288	98.6	95.1	71.2	97.2	85.1	79.5	54.2
Frequency of Data Use								
Frequent	201	99.5	95.5	72.1	98.0	85.6	86.1	56.7
Occasional	77	96.1	94.7	70.1	94.8	84.4	63.6	49.4
Rarely	8	100.0	100.0	62.5	100.0	75.0	62.5	50.0
Not at all	1	100.0	0.0	0.0	100.0	100.0	0.0	0.0
(blank)	1	100.0	0.0	100.0	100.0	100.0	0.0	0.0
All	288	98.6	95.1	71.2	97.2	85.1	79.5	54.2

Note: For sophisticated users, Chi square tests significant regarding difference in proportions at the .05 level for BEA and Other Federal, and the .15 level for BLS. The difference in proportion between frequent and occasional users using BEA data is significant at the .01 level.

Table 4A-2
Survey of Socioeconomic Data Users
Data Utilization Rate by Data Provider and Data User Organization

Percent Using Data Source

Type of Data User Organization	N	Federal	State/Local	Private	Federal Sources: Census	BLS	BEA	Other Federal
Practice-oriented	270	98.5 %	96.7 %	67.8 %	95.2 %	87.4 %	75.6 %	49.3 %
General practice	212	99.1	97.6	65.1	96.2	86.8	75.0	48.6
Economic Development or Commerce Organization	134	98.5	96.2	75.4	94.0	85.1	75.4	56.0
Planning Department or Agency	78	100.0	100.0	47.4	100.0	89.7	74.4	35.9
Specialized practice	40	97.5	92.5	77.5	90.0	90.0	72.5	42.5
Labor or Workforce Development Organization	23	100.0	100.0	69.6	91.3	100.0	82.6	30.4
Publicly Sponsored Business Extension Service	14	100.0	92.9	85.7	92.9	92.9	71.4	57.1
Development Finance Corporation	2	100.0	50.0	100.0	100.0	0.0	0.0	100.0
Technology Development Organization	1	0.0	0.0	100.0	0.0	0.0	0.0	0.0
Executive/legislative	18	94.4	94.4	77.8	94.4	88.9	88.9	72.2
Office of Public Chief Executive	13	100.0	100.0	76.9	100.0	92.3	92.3	69.2
Legislative Organization	5	80.0	80.0	80.0	80.0	80.0	80.0	80.0
Research-oriented	185	97.8	94.5	68.1	94.6	76.2	81.6	60.5
University or College-based Business or Economic Research Center	104	97.1	98.1	72.1	93.3	83.7	86.5	63.5
Academic Department	55	98.2	88.9	60.0	96.4	60.0	78.2	54.5
Other Research Organization	26	100.0	92.3	69.2	96.2	80.8	69.2	61.5
Client-serving	46	100.0	91.3	69.6	95.7	84.8	67.4	50.0
Consulting Firm, specializing in economic development	24	100.0	91.7	66.7	100.0	87.5	58.3	58.3
Consulting Firm, not specializing in economic development	12	100.0	91.7	75.0	83.3	91.7	66.7	33.3
Business, Industry, or Trade Association	10	100.0	90.0	70.0	100.0	70.0	90.0	50.0
None of the above	43	95.3	93.0	51.2	95.3	76.7	65.1	32.6
(blank)	4	100.0	66.7	75.0	100.0	50.0	50.0	50.0
GRAND TOTAL	548	98.2	95.0	66.8	95.1	82.3	75.9	51.8

Note: Chi-square tests for all data sources are significant at the .01 level.

Table 4A-3
Survey of Socioeconomic Data Users
Data Utilization Rate by Data Provider and Service Area

Percent Using Data Source

					Federal Sources:			
Service Area	**N**	**Federal**	**State/Local**	**Private**	**Census**	**BLS**	**BEA**	**Other Federal**
City, county, or town	115	96.5 %	94.7 %	71.3 %	92.2 %	81.7 %	64.3 %	41.7 %
Metro area or multiple counties	129	100.0	97.7	59.7	98.4	86.0	79.8	45.7
State	107	98.1	96.2	72.9	94.4	87.9	83.2	57.0
Multistate region	12	91.7	83.3	91.7	91.7	58.3	75.0	50.0
U.S.	12	100.0	75.0	58.3	91.7	91.7	66.7	66.7
Beyond U.S.	8	87.5	87.5	50.0	75.0	37.5	62.5	50.0
More than one of the above	163	98.8	95.1	64.4	96.3	79.8	77.9	59.5
(blank)	2	100.0	100.0	100.0	100.0	50.0	50.0	50.0
Grand Total	548	98.2	95.0	66.8	95.1	82.3	75.9	51.8
Character of Substate Service Area								
Rural	89	96.6	95.5	50.6	93.3	77.5	70.8	40.4
Rural and urban	30	100.0	100.0	60.0	100.0	90.0	80.0	33.3
Metro area under 1 Million	57	100.0	96.5	80.7	94.7	84.2	70.2	56.1
Metro area over 1 Million	65	98.5	95.3	72.3	96.9	89.2	73.8	41.5
Non-substate areas	307	98.0	94.1	68.4	94.8	81.1	78.5	58.3
Grand Total	548	98.2	95.0	66.8	95.1	82.3	75.9	51.8

Table 4A-4
Survey of Socioeconomic Data Users
Data Utilization Rate by Data Provider and Primary Work Activity

Percent Using Data Source

					Federal Sources:			
Primary Work Activity	**N**	**Federal**	**State/Local**	**Private**	**Census**	**BLS**	**BEA**	**Other Federal**
Collect and prepare primary data	28	100.0 %	100.0 %	64.3 %	96.4 %	85.7 %	71.4 %	50.0 %
Organize and disseminate data collected by others	86	100.0	95.3	70.9	97.7	89.5	89.5	48.8
See to the preparation of analyses	66	100.0	97.0	77.3	98.5	89.4	87.9	54.5
Design or implement policies, programs, activities	56	94.6	92.6	75.0	94.6	80.4	64.3	57.1
None of the above	51	98.0	92.0	62.7	98.0	76.5	72.5	62.7
(blank)	261	97.7	95.0	62.1	92.7	79.3	72.0	49.0
Grand Total	548	98.2	95.0	66.8	95.1	82.3	75.9	51.8

Appendix 4B: Ratings of Individual Data Series and Sources

4B.1 Introduction

Survey respondents provided ratings for two sets of data sources. First, respondents were asked to rate ten individual federal data series along five dimensions—usefulness, accuracy, detail, timeliness, and accessibility. These ten series were deemed by the authors likely to be of most interest to economic development practitioners and researchers. Then, respondents were asked to rate 42 other data sources and series in terms of usefulness only. These sources and series include 29 federal, five state and local, and eight commercial and nonprofit.[1]

The discussion below will first examine results for all 52 data series. It then will look at the responses for the two sets of data sources in turn.

4B.2 Usefulness and Awareness of Data Series and Sources

For each of the 52 data series and sources, Table 4B-1 provides the percentage of respondents

- who say the series or source is of at least some use in their work;
- who find the series or source to be of no use;
- who do not know about that particular series or source (or leave the question blank), but use other data in that organizational category; and
- who do not use data in that organizational category.

A review of the table yields the following observations:

- The pattern in the ranking of individual series and sources according to their usefulness is consistent with the previous findings regarding utilization rates by organizational category. The Census Bureau has six of the top seven data series in terms of usefulness (percentage of respondents finding the series useful); all Census series but two are in the top 25. All five state and local government data series are in the top 15.[2] While BLS has only one series in the top 10 (Local Area

[1] A data source may provide more than one data series. Individual data series are listed for Census, BLS, and BEA. For Other Federal, only agencies (sources) are listed. While 11 agencies were chosen to be included in the survey, many others could have been. Those thought most relevant to data users were selected. The State and Local Government category names types of data series. The Private and Nonprofit category includes both sources (e.g., U.S. Travel Data Center) and series (when a source is known for one series, e.g., ACCRA Cost of Living Index).

[2] Respondents were asked about the usefulness of "sources of data and information provided by state and local governments." They were not asked to identify the original sources of the data. Therefore, it may be that some of the data provided by state and local governments came from other sources, such as the Census

Unemployment Statistics, ranked 10th), all its series but one are in the top 25. For BEA, only its Regional Economic Information System (REIS) data made it into the top 25. Other than business directories, less than a majority of respondents say they find any of the private or nonprofit data sources of use. And not even a third of the respondents find any of the other federal data sources of use, with the one exception of the Internal Revenue Service.

- Demographic series are found to be of use by the largest number of respondents. The three top-ranked data series are the Decennial Census (89 percent), demographic data from state and local governments (88 percent), and the Census Bureau's Population Estimates series (86 percent). CPS ranks 6th (80 percent).
- Most employment and income series are found useful by a good majority of respondents. County Business Patterns is the most popular (84 percent), followed by the Economic Census (84 percent), state and local industry data (78 percent), Local Area Unemployment Statistics (LAUS) data (76 percent), REIS personal income data (72 percent), Current Employment Statistics (CES/790) data (67 percent), REIS employment data (67 percent), Occupational Employment Statistics (OES) data (60 percent), covered employment and wages (ES-202) data (56 percent), business and trade directories 54 percent), and Mass Layoff Statistics (34 percent). The relatively low figure for the ES-202 series is of particular interest, as these data can provide a level of industry and geographic detail for the universe of covered employers not found in other series. But, as will be discussed, ES-202 data are often difficult to access.
- Among series that describe the cost of living and doing business, those most frequently found of use include tax data from state and local governments (75 percent), CPI (71 percent), and NCS (66 percent). The American Chamber of Commerce Researchers Association (ACCRA) Cost of Living Index is somewhat less popular (41 percent).
- Data series that focus on one particular sector of the economy are found not useful by a visible proportion of respondents. This is logical, as most respondents do not have a special interest in any one sector. Data series labeled not useful by more than 10 percent of respondents include those focusing on housing, construction, agriculture, fisheries, travel and tourism, and foreign trade and investment. This is not to say the certain sectoral data series are not popular—the Economic Census (composed of many sectoral reports) and the Annual Survey of Manufactures certainly are. It may be that users deem certain sectors, such as manufacturing, more important than others. Interestingly, the Census Bureau has both the largest

Bureau. Also, it is likely that some respondents consider industry data provided by state LMI agencies in cooperation with BLS as being part of the state and local government category.

number of popular series and the largest number of series ranked least useful.[3]

- Lack of awareness of various data series seems to be an issue. For a significant number of Census, BLS, and BEA data series, a quarter or more of the respondents indicate that they are not aware of that series, even though they use other data from the same agency. Moreover, a substantial proportion of respondents uses no data from BLS, BEA, other federal agencies, and private sources. The table does not shed light on whether this lack of use is due to lack of awareness or lack of usefulness. However, as will be discussed later, respondent comments suggest that lack of awareness of offerings in a category is a major contributor to lack of use.

Respondent utilization rates for the 52 data series and sources can differ significantly by the organization of the respondent (Table 4B-2). The table shows that respondents in public chief executive and legislative offices, academic-based business and economic research centers, and economic development agencies are most likely to find the 52 data series and sources to be of use, as reflected in unweighted average utilization rates. (This table will be relied on in the discussion of specific series and sources in Appendix 4C).

[3] A respondent could only mark a series or source "not useful" if they used some other series or source in that organizational category. Hence, the "not useful" percentage likely is understated. Respondents who say they do not use any of the data in a particular category do so either because of some combination of lacking knowledge of data sources and finding the data sources not useful. However, the relative importance of each of these factors cannot be determined.

Table 4B-1
Survey of Socioeconomic Data Users
Users and Non-users of Individual Data Series and Sources
Percent of Respondents
N = 548

	Use agency data, and:					
	Find this series of use	Rank	Do not find this series useful	Do not know about this series, or left blank	Do not use agency data	Do not use federal data
Bureau of the Census:						
Decennial Census	88.5 %	1	0.7 %	5.8 %	3.1 %	1.8 %
Population Estimates	86.1	3	1.6	7.3	3.1	1.8
County Business Patterns	84.1	4	0.9	10.0	3.1	1.8
Economic Census	83.8	5	0.7	10.6	3.1	1.8
Current Population Reports	79.9	6	1.3	13.9	3.1	1.8
Statistical Compendia	78.6	7	2.7	13.7	3.1	1.8
Annual Survey of Manufactures	68.4	14	6.6	20.1	3.1	1.8
TIGER	63.9	19	6.6	24.6	3.1	1.8
American Housing Survey	56.6	21	12.4	26.1	3.1	1.8
Census of Governments	56.0	23	8.4	30.7	3.1	1.8
Current Construction Reports	54.2	25	12.2	28.6	3.1	1.8
Census of Agriculture	46.7	30	16.6	31.8	3.1	1.8
Foreign Trade Statistics	45.3	31	18.2	31.6	3.1	1.8
Bureau of Labor Statistics and LMI Agencies:						
LAUS	75.9	10	0.5	5.8	15.9	1.8
Consumer Price Index	70.6	13	5.7	6.0	15.9	1.8
CES/790	67.0	15	1.1	14.2	15.9	1.8
Area Wage Surveys	65.7	18	5.7	10.9	15.9	1.8
OES	59.7	20	1.8	20.8	15.9	1.8
ES-202	56.2	22	1.3	24.8	15.9	1.8
Occupational Projections	55.5	24	11.5	15.3	15.9	1.8
Consumer Expenditure Survey	54.2	25	10.0	18.1	15.9	1.8
Mass Layoff Statistics	33.9	37	18.8	29.6	15.9	1.8
Bureau of Economic Analysis:						
REIS Personal Income	71.7	12	0.2	4.0	22.3	1.8
REIS Employment	66.6	17	0.9	8.4	22.3	1.8
Regional Projections	51.3	28	11.7	13.0	22.3	1.8
Gross State Product	49.8	29	10.2	15.9	22.3	1.8
RIMS II	44.9	32	7.3	23.7	22.3	1.8
Foreign Direct Investment	34.5	35	16.2	25.2	22.3	1.8

	Use other federal data, and:					
	Find this source of use	Rank	Do not find this source useful	Do not know about this source, or left blank	Do not use other federal data	Do not use federal data
Other Federal						
Internal Revenue Service	34.1 %	36	2.6 %	1.5 %	46.4 %	1.8 %
International Trade Administration	32.1	38	4.7	15.0	46.4	1.8
Economic Research Service	30.3	39	4.4	17.2	46.4	1.8
National Center for Education Statistics	29.0	41	3.8	19.0	46.4	1.8
Small Business Administration	27.6	42	3.8	20.4	46.4	1.8
Bureau of Transportation Statistics	23.9	43	6.2	21.7	46.4	1.8
National Science Foundation	23.2	44	6.0	22.6	46.4	1.8
Energy Information Administration	20.3	46	6.8	24.8	46.4	1.8
U.S. Geological Survey	18.8	47	8.9	24.1	46.4	1.8
Army Corps of Engineers	13.1	50	10.4	28.3	46.4	1.8
National Marine Fisheries Service	12.0	51	11.3	28.5	46.4	1.8

Table 4B-1 (Continued)
Survey of Socioeconomic Data Users
Users and Non-users of Individual Data Series and Sources
Percent of Respondents
N = 548

	Use other state and local government data sources, and:				Do not use data from state and local governments
	Find these series of use	Rank	Do not find these series useful	Do not know about these series, or left blank	
State and Local Governments					
Demographic	8.8 %	2	2.0 %	7.1 %	2.9 %
Housing	78.1	8	6.4	12.6	2.9
Industry and Employment	78.1	8	6.0	13.0	2.9
Tax	74.5	11	5.3	17.3	2.9
Travel and Tourism	67.0	15	10.4	19.7	2.9

	Use other private or nonprofit data sources, and:				
	Find this source of use	Rank	Do not find this source useful	Do not know about this source, or left blank	Do not use private or nonprofit data sources
Private and Nonprofit					
Business and Trade Directories	53.5 %	27	3.6 %	9.7 %	33.2 %
Sales & Marketing Management	41.1	33	6.8	19.0	33.2
ACCRA Cost of Living Index	40.9	34	5.5	20.4	33.2
National Association of Home Builders	29.4	40	5.5	31.9	33.2
U.S. Travel Data Center	22.6	45	7.5	36.7	33.2
Coldwell Banker National Real Estate Index	18.6	48	8.0	40.1	33.2
Price Waterhouse Venture Capital Survey	13.7	49	8.6	44.5	33.2
Case-Shiller-Weiss Residential Real Estate Index	9.7	52	8.4	48.7	33.2

Unweighted Means by Organizational Category

	Find this source of use
Bureau of the Census	68.6 %
Bureau of Labor Statistics	59.9
Bureau of Economic Analysis	53.1
Other Federal	24.0
State and Local	77.1
Private and Nonprofit	28.7

Table 4B-2
Survey of Socioeconomic Data Users
Percent of Respondents Finding Data Series of Use, by Type of Organization

			Bureau of the Census						
Type of Organization	**N**	**Unweighted Mean**	**Decennial Census**	**Population Estimates**	**CBP**	**Economic Census**	**CPR**	**Statistical Compendia**	**ASM**
Practice-oriented	270	50.7 %	89.3 %	87.8 %	87.0 %	86.7 %	81.1 %	76.3 %	67.8 %
General practice	212	51.1	89.6	89.2	89.2	88.7	81.6	76.9	71.2
Economic Development or Commerce Organization	134	53.1	84.3	85.8	88.1	88.1	79.1	73.9	76.1
Planning Department or Agency	78	47.6	98.7	94.9	91.0	89.7	85.9	82.1	62.8
Specialized practice	40	44.7	85.0	80.0	75.0	75.0	75.0	67.5	45.0
Labor or Workforce Development Organization	23	49.5	91.3	91.3	78.3	73.9	87.0	73.9	39.1
Publicly Sponsored Business Extension Service	14	44.8	78.6	71.4	85.7	92.9	57.1	71.4	64.3
Development Finance Corporation	2	8.7	100.0	50.0	0.0	0.0	100.0	0.0	0.0
Technology Development Organization	1	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Executive/legislative	18	59.1	94.4	88.9	88.9	88.9	88.9	88.9	77.8
Office of Public Chief Executive	13	57.8	100.0	92.3	92.3	92.3	92.3	92.3	84.6
Legislative Organization	5	62.3	80.0	80.0	80.0	80.0	80.0	80.0	60.0
Research-oriented	185	54.0	89.2	85.4	83.2	82.7	85.4	85.4	76.8
Academic-based Business or Economic Research Center	104	58.6	89.4	89.4	88.5	85.6	89.4	86.5	85.6
Academic Department	55	46.5	89.1	78.2	70.9	74.5	78.2	87.3	65.5
Other Research Organization	26	51.6	88.5	84.6	88.5	88.5	84.6	76.9	65.4
Client-serving	46	44.5	87.0	78.3	84.8	78.3	50.0	69.6	50.0
Consulting Firm, specializing in economic development	24	45.9	91.7	83.3	91.7	79.2	45.8	75.0	58.3
Consulting Firm, not specializing in economic development	12	40.7	83.3	83.3	75.0	75.0	58.3	58.3	25.0
Business, Industry, or Trade Association	10	45.8	80.0	60.0	80.0	80.0	50.0	70.0	60.0
None of the above	43	44.1	88.4	90.7	74.4	81.4	83.7	76.7	60.5
(blank)	4	22.1	25.0	50.0	25.0	25.0	50.0	50.0	25.0
GRAND TOTAL	548	50.6	88.5	86.1	84.1	83.8	79.9	78.6	68.4

Table 4B-2 (Continued)
Survey of Socioeconomic Data Users
Percent of Respondents Finding Data Series of Use, by Type of Organization

			Bureau of the Census (Continued)				
Type of Organization	**N**	**Unweighted Mean**	**AHS**	**Census of Governments**	**CCR**	**Census of Agriculture**	**FTS**
Practice-oriented	270	50.7 %	52.2 %	52.2 %	50.4 %	47.0 %	38.5 %
General practice	212	51.1	53.3	52.4	51.9	46.2	39.2
Economic Development or Commerce Organization	134	53.1	47.0	51.5	58.2	38.1	49.3
Planning Department or Agency	78	47.6	64.1	53.8	41.0	60.3	21.8
Specialized practice	40	44.7	40.0	42.5	42.5	40.0	32.5
Labor or Workforce Development Organization	23	49.5	39.1	39.1	39.1	39.1	30.4
Publicly Sponsored Business Extension Service	14	44.8	50.0	57.1	57.1	50.0	42.9
Development Finance Corporation	2	8.7	0.0	0.0	0.0	0.0	0.0
Technology Development Organization	1	5.8	0.0	0.0	0.0	0.0	0.0
Executive/legislative	18	59.1	66.7	72.2	50.0	72.2	44.4
Office of Public Chief Executive	13	57.8	61.5	69.2	46.2	69.2	46.2
Legislative Organization	5	62.3	80.0	80.0	60.0	80.0	40.0
Research-oriented	185	54.0	61.1	68.6	64.3	50.8	60.0
Academic-based Business or Economic Research Center	104	58.6	60.6	74.0	74.0	62.5	65.4
Academic Department	55	46.5	65.5	65.5	49.1	34.5	54.5
Other Research Organization	26	51.6	53.8	53.8	57.7	38.5	50.0
Client-serving	46	44.5	54.3	39.1	43.5	32.6	39.1
Consulting Firm, specializing in economic development	24	45.9	45.8	37.5	41.7	41.7	33.3
Consulting Firm, not specializing in economic development	12	40.7	66.7	16.7	50.0	16.7	33.3
Business, Industry, or Trade Association	10	45.8	60.0	70.0	40.0	30.0	60.0
None of the above	43	44.1	67.4	46.5	51.2	44.2	30.2
(blank)	4	22.1	50.0	25.0	0.0	25.0	50.0
GRAND TOTAL	548	50.6	56.6	56.0	54.2	46.7	45.3

Table 4B-2 (Continued)
Survey of Socioeconomic Data Users
Percent of Respondents Finding Data Series of Use, by Type of Organization

			Bureau of Labor Statistics								
Type of Organization	**N**	**Unweighted Mean**	**LAUS**	**CPI**	**CES/790**	**NCS**	**OES**	**ES-202**	**Occupational Projections**	**CE**	**Mass Layoffs**
Practice-oriented	270	50.7 %	80.7 %	73.0 %	70.7 %	72.2 %	64.1 %	60.7 %	59.6 %	51.1 %	35.2
General practice	212	51.1	81.6	74.1	69.8	72.2	62.7	59.0	58.5	50.5	34.0
Economic Development or Commerce Organization	134	53.1	81.3	72.4	70.9	73.9	66.4	61.2	61.2	52.2	38.8
Planning Department or Agency	78	47.6	82.1	76.9	67.9	69.2	56.4	55.1	53.8	47.4	25.6
Specialized practice	40	44.7	77.5	62.5	75.0	70.0	72.5	65.0	65.0	47.5	42.5
Labor or Workforce Development Organization	23	49.5	100.0	78.3	95.7	87.0	95.7	87.0	87.0	56.5	60.9
Publicly Sponsored Business Extension Service	14	44.8	57.1	50.0	57.1	57.1	50.0	42.9	42.9	42.9	21.4
Development Finance Corporation	2	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Technology Development Organization	1	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Executive/legislative	18	59.1	77.8	83.3	72.2	77.8	61.1	72.2	61.1	66.7	33.3
Office of Public Chief Executive	13	57.8	76.9	84.6	76.9	76.9	61.5	76.9	61.5	61.5	23.1
Legislative Organization	5	62.3	80.0	80.0	60.0	80.0	60.0	60.0	60.0	80.0	60.0
Research-oriented	185	54.0	71.4	70.8	63.2	63.2	56.2	55.1	54.6	64.3	35.7
Academic-based Business or Economic Research Center	104	58.6	78.8	77.9	71.2	70.2	63.5	65.4	61.5	72.1	38.5
Academic Department	55	46.5	54.5	54.5	45.5	43.6	40.0	36.4	40.0	50.9	27.3
Other Research Organization	26	51.6	76.9	76.9	69.2	76.9	61.5	53.8	57.7	61.5	42.3
Client-serving	46	44.5	73.9	63.0	71.7	50.0	52.2	52.2	41.3	43.5	19.6
Consulting Firm, specializing in economic development	24	45.9	79.2	62.5	79.2	45.8	66.7	66.7	29.2	50.0	20.8
Consulting Firm, not specializing in economic development	12	40.7	75.0	75.0	58.3	58.3	33.3	33.3	50.0	50.0	16.7
Business, Industry, or Trade Association	10	45.8	60.0	50.0	70.0	50.0	40.0	40.0	60.0	20.0	20.0
None of the above	43	44.1	72.1	67.4	60.5	55.8	60.5	41.9	53.5	44.2	34.9
(blank)	4	22.1	25.0	25.0	0.0	25.0	0.0	0.0	0.0	25.0	25.0
GRAND TOTAL	548	50.6	75.9	70.6	67.0	65.7	59.7	56.2	55.5	54.2	33.9

Table 4B-2 (Continued)
Survey of Socioeconomic Data Users
Percent of Respondents Finding Data Series of Use, by Type of Organization

			Bureau of Economic Analysis					
		Unweighted			Regional			
Type of Organization	**N**	**Mean**	**REIS – PI**	**REIS – Emp**	**Projections**	**GSP**	**RIMS II**	**FDI**
Practice-oriented	270	50.7 %	72.2 %	65.6 %	50.4 %	44.4 %	43.3 %	30.7 %
General practice	212	51.1	71.7	66.0	50.9	41.5	42.0	31.6
Economic Development or Commerce Organization	134	53.1	70.9	64.9	49.3	49.3	41.8	38.1
Planning Department or Agency	78	47.6	73.1	67.9	53.8	28.2	42.3	20.5
Specialized practice	40	44.7	67.5	57.5	40.0	50.0	42.5	25.0
Labor or Workforce Development Organization	23	49.5	82.6	65.2	39.1	60.9	52.2	30.4
Publicly Sponsored Business Extension Service	14	44.8	57.1	57.1	50.0	42.9	35.7	21.4
Development Finance Corporation	2	8.7	0.0	0.0	0.0	0.0	0.0	0.0
Technology Development Organization	1	5.8	0.0	0.0	0.0	0.0	0.0	0.0
Executive/legislative	18	59.1	88.9	77.8	66.7	66.7	61.1	33.3
Office of Public Chief Executive	13	57.8	92.3	76.9	76.9	61.5	61.5	23.1
Legislative Organization	5	62.3	80.0	80.0	40.0	80.0	60.0	60.0
Research-oriented	185	54.0	78.9	74.6	60.0	64.3	53.5	47.6
Academic-based Business or Economic Research Center	104	58.6	84.6	83.7	65.4	69.2	58.7	50.0
Academic Department	55	46.5	72.7	63.6	52.7	56.4	49.1	49.1
Other Research Organization	26	51.6	69.2	61.5	53.8	61.5	42.3	34.6
Client-serving	46	44.5	56.5	58.7	37.0	43.5	39.1	19.6
Consulting Firm, specializing in economic development	24	45.9	54.2	54.2	33.3	41.7	33.3	8.3
Consulting Firm, not specializing in economic development	12	40.7	58.3	50.0	33.3	41.7	33.3	25.0
Business, Industry, or Trade Association	10	45.8	60.0	80.0	50.0	50.0	60.0	40.0
None of the above	43	44.1	60.5	51.2	37.2	32.6	27.9	18.6
(blank)	4	22.1	0.0	25.0	25.0	0.0	0.0	25.0
GRAND TOTAL	548	50.6	71.7	66.6	51.3	49.8	44.9	34.5

Table 4B-2 (Continued)
Survey of Socioeconomic Data Users
Percent of Respondents Finding Data Series of Use, by Type of Organization

			Other Federal									
		Unweighted										
Type of Organization	**N**	**Mean**	**IRS**	**ITA**	**ERS**	**NCES**	**SBA**	**BTS**	**NSF**	**EIA**	**USGS**	**ACE**
Practice-oriented	270	50.7 %	30.7 %	29.3 %	26.7 %	25.6 %	30.4 %	19.6 %	17.0 %	16.7 %	15.6 %	11.1
General practice	212	51.1	29.2	30.2	25.9	25.9	31.6	20.3	17.5	15.6	16.5	12.3
Economic Development or Commerce Organization	134	53.1	30.6	38.1	32.1	28.4	40.3	21.6	23.1	17.9	16.4	14.2
Planning Department or Agency	78	47.6	26.9	16.7	15.4	21.8	16.7	17.9	7.7	11.5	16.7	9.0
Specialized practice	40	44.7	25.0	22.5	20.0	20.0	25.0	5.0	10.0	10.0	7.5	2.5
Labor or Workforce Development Organization	23	49.5	17.4	17.4	4.3	21.7	17.4	0.0	13.0	13.0	8.7	4.3
Publicly Sponsored Business Extension Service	14	44.8	42.9	35.7	42.9	21.4	35.7	14.3	7.1	7.1	7.1	0.0
Development Finance Corporation	2	8.7	0.0	0.0	50.0	0.0	50.0	0.0	0.0	0.0	0.0	0.0
Technology Development Organization	1	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Executive/legislative	18	59.1	61.1	33.3	50.0	33.3	27.8	44.4	27.8	44.4	22.2	16.7
Office of Public Chief Executive	13	57.8	53.8	23.1	46.2	23.1	23.1	38.5	15.4	38.5	30.8	15.4
Legislative Organization	5	62.3	80.0	60.0	60.0	60.0	40.0	60.0	60.0	60.0	0.0	20.0
Research-oriented	185	54.0	45.4	42.2	40.0	37.8	26.5	33.0	34.6	28.6	25.4	15.7
Academic-based Business or Economic Research Center	104	58.6	52.9	45.2	43.3	41.3	30.8	36.5	31.7	33.7	27.9	14.4
Academic Department	55	46.5	32.7	40.0	38.2	30.9	18.2	30.9	40.0	20.0	21.8	16.4
Other Research Organization	26	51.6	42.3	34.6	30.8	38.5	26.9	23.1	34.6	26.9	23.1	19.2
Client-serving	46	44.5	21.7	28.3	19.6	19.6	23.9	23.9	28.3	15.2	15.2	13.0
Consulting Firm, specializing in economic development	24	45.9	25.0	29.2	33.3	25.0	25.0	29.2	33.3	16.7	12.5	16.7
Consulting Firm, not specializing in economic development	12	40.7	16.7	25.0	0.0	16.7	25.0	16.7	16.7	8.3	16.7	0.0
Business, Industry, or Trade Association	10	45.8	20.0	30.0	10.0	10.0	20.0	20.0	30.0	20.0	20.0	20.0
None of the above	43	44.1	20.9	11.6	25.6	25.6	18.6	14.0	9.3	14.0	16.3	16.3
(blank)	4	22.1	25.0	25.0	0.0	0.0	25.0	0.0	0.0	0.0	0.0	0.0
GRAND TOTAL	548	50.6	34.1	32.1	30.3	29.0	27.6	23.9	23.2	20.3	18.8	13.1

Table 4B-2 (Continued)
Survey of Socioeconomic Data Users
Percent of Respondents Finding Data Series of Use, by Type of Organization

			State and Local Government				
Type of Organization	**N**	**Unweighted Mean**	**Demographics**	**Housing**	**Industry**	**Tax**	**Travel & Tourism**
Practice-oriented	270	50.7 %	90.4 %	81.5 %	82.2 %	78.9 %	73.7 %
General practice	212	51.1	91.0	83.5	82.5	83.0	74.1
Economic Development or Commerce Organization	134	53.1	88.1	79.1	79.9	83.6	73.1
Planning Department or Agency	78	47.6	96.2	91.0	87.2	82.1	75.6
Specialized practice	40	44.7	85.0	70.0	80.0	52.5	72.5
Labor or Workforce Development Organization	23	49.5	95.7	87.0	87.0	52.2	82.6
Publicly Sponsored Business Extension Service	14	44.8	78.6	57.1	85.7	64.3	71.4
Development Finance Corporation	2	8.7	50.0	0.0	0.0	0.0	0.0
Technology Development Organization	1	5.8	0.0	0.0	0.0	0.0	0.0
Executive/legislative	18	59.1	94.4	83.3	83.3	88.9	72.2
Office of Public Chief Executive	13	57.8	100.0	84.6	84.6	92.3	69.2
Legislative Organization	5	62.3	80.0	80.0	80.0	80.0	80.0
Research-oriented	185	54.0	87.0	76.8	75.1	73.5	60.0
Academic-based Business or Economic Research Center	104	58.6	89.4	81.7	76.0	82.7	68.3
Academic Department	55	46.5	83.6	70.9	69.1	63.6	52.7
Other Research Organization	26	51.6	84.6	69.2	84.6	57.7	42.3
Client-serving	46	44.5	76.1	67.4	71.7	60.9	60.9
Consulting Firm, specializing in economic development	24	45.9	75.0	66.7	83.3	66.7	66.7
Consulting Firm, not specializing in economic development	12	40.7	75.0	75.0	50.0	50.0	50.0
Business, Industry, or Trade Association	10	45.8	80.0	60.0	70.0	60.0	60.0
None of the above	43	44.1	93.0	76.7	74.4	67.4	62.8
(blank)	4	22.1	50.0	50.0	50.0	50.0	50.0
GRAND TOTAL	548	50.6	88.0	78.1	78.1	74.5	67.0

Table 4B-2 (Continued)
Survey of Socioeconomic Data Users
Percent of Respondents Finding Data Series of Use, by Type of Organization

			Private							
Type of Organization	**N**	**Unweighted Mean**	**Business Directories**	**SMM**	**ACCRA**	**NAHB**	**USTDC**	**CB RE**	**PWC VC**	**CSW**
Practice-oriented	270	50.7 %	55.9 %	44.8 %	43.3 %	29.6 %	22.2 %	17.0 %	16.7 %	7.8 %
General practice	212	51.1	54.2	45.3	44.3	32.1	22.2	19.3	17.0	8.0
Economic Development or Commerce Organization	134	53.1	67.9	59.0	59.7	35.1	29.9	23.9	23.1	11.9
Planning Department or Agency	78	47.6	30.8	21.8	17.9	26.9	9.0	11.5	6.4	1.3
Specialized practice	40	44.7	70.0	37.5	32.5	12.5	17.5	5.0	10.0	5.0
Labor or Workforce Development Organization	23	49.5	69.6	26.1	39.1	17.4	8.7	8.7	4.3	4.3
Publicly Sponsored Business Extension Service	14	44.8	78.6	57.1	21.4	7.1	35.7	0.0	21.4	7.1
Development Finance Corporation	2	8.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Technology Development Organization	1	5.8	100.0	100.0	100.0	0.0	0.0	0.0	0.0	0.0
Executive/legislative	18	59.1	44.4	55.6	55.6	38.9	33.3	16.7	27.8	11.1
Office of Public Chief Executive	13	57.8	30.8	53.8	46.2	38.5	30.8	23.1	23.1	15.4
Legislative Organization	5	62.3	80.0	60.0	80.0	40.0	40.0	0.0	40.0	0.0
Research-oriented	185	54.0	51.9	39.5	37.8	28.1	23.2	17.3	10.3	10.8
Academic-based Business or Economic Research Center	104	58.6	52.9	46.2	43.3	30.8	26.0	22.1	11.5	13.5
Academic Department	55	46.5	49.1	27.3	25.5	21.8	18.2	9.1	7.3	3.6
Other Research Organization	26	51.6	53.8	38.5	42.3	30.8	23.1	15.4	11.5	15.4
Client-serving	46	44.5	58.7	37.0	41.3	45.7	21.7	37.0	17.4	21.7
Consulting Firm, specializing in economic development	24	45.9	58.3	37.5	33.3	50.0	29.2	37.5	20.8	16.7
Consulting Firm, not specializing in economic development	12	40.7	50.0	25.0	50.0	41.7	16.7	41.7	16.7	33.3
Business, Industry, or Trade Association	10	45.8	70.0	50.0	50.0	40.0	10.0	30.0	10.0	20.0
None of the above	43	44.1	39.5	27.9	39.5	16.3	23.3	14.0	7.0	4.7
(blank)	4	22.1	50.0	50.0	25.0	25.0	25.0	25.0	0.0	0.0
GRAND TOTAL	548	50.6	53.5	41.1	40.9	29.4	22.6	18.6	13.7	9.7

Table 4B-2 (Continued)
Survey of Socioeconomic Data Users
Abbreviation Codes

Census Bureau

CBP	County Business Patterns
CPR	Current Population Reports
AHS	American Housing Survey
ASM	Annual Survey of Manufactures
CCR	Current Construction Reports
FTS	Foreign Trade Statistics

Bureau of Labor Statistics

LAUS	Local Area Unemployment Statistics
CES/790	Current Employment Survey
ES-202	Covered Employment and Wages
OES	Occupational Employment Statistics
NCS	National Compensation Survey
CPI	Consumer Price Index
CE	Consumer Expenditure Survey

Bureau of Economic Analysis

REIS – PI	Regional Economic Information System – Personal Income
REIS – Emp	Regional Economic Information System – Employment
GSP	Gross State Product
FDI	Foreign Direct Investment
RIMS II	Regional Input-Output Modeling System

Other Federal

SBA	Small Business Administration
ERS	Economic Research Service
IRS	Internal Revenue Service
ITA	International Trade Administration
BTS	Bureau of Transportation Statistics
ACE	Army Corps of Engineers
USGS	U.S. Geological Survey
EIA	Energy Information Administration
NCES	National Center for Education Statistics
NSF	National Science Foundation
NMFS	National Marine Fisheries Service

Private

SMM	Sales & Marketing Management
PWC VC	PricewaterhouseCoopers Venture Capital Survey
CB RE	Coldwell Banker National Real Estate Index
CSW	Case-Shiller-Weiss Residential Real Estate Index
ACCRA	American Chamber of Commerce Researchers Association
NAHB	National Association of Home Builders
USTDC	U.S. Travel Data Center

4B.3 Rating Ten Data Series by Five Characteristics

Respondents were asked to rate each of ten federal data series for five characteristics on a 1-to-5 scale, with 1 being the highest. The following specific questions were asked:

- Usefulness – How important are these data to your work?
- Accuracy – Do you think the data accurately measure the real world?
- Detail – Are these data available for the geographic areas, industries, and occupational categories you need?
- Timeliness – Are these data collected and published often enough and quickly enough for your needs?
- Accessibility – Can you get the data easily, at a reasonable cost, and in a form you can use?

Table 4B-3 provides the mean ratings for each of the ten data series across each of the five characteristics. Patterns indicated by the table include the following:

- Across all ten series, the mean rating is highest for usefulness (1.83), followed by accessibility (2.18), accuracy (2.20), detail (2.43), and timeliness (2.81).
- The Decennial Census ranks first in every category except timeliness, in which it ranks tenth. (Over half of respondents find it highly useful.) LAUS is the second best ranked series among the ten, followed by County Business Patterns and CES/790, then Current Population Reports. The OES received the lowest scores overall.
- Averaging series scores by agency, the Census Bureau receives the best mean rating in all dimensions except timeliness. Also, respondents appear more knowledgeable about Census series than series from BLS and BEA. Far fewer respondents say "don't know" to, or leave blank, the usefulness question for Census series than they do for BLS and BEA series.
- BLS receives the best mean rating for the timeliness of its data series, with has four of the top five series in that dimension. In contrast, the quinquennial Economic Census and the Decennial Census are ranked ninth and tenth, respectively, for timeliness. The difference between the best score and the others is greater in the timeliness dimension than is so for any of the other dimensions.
- ES-202 ranked eighth in usefulness, second in accuracy, third in detail, but last in accessibility. As is explored more fully in Appendix 4C, data user comments suggest that this lack of accessibility is the primary reason the series is only ranked eighth in usefulness. Moreover, more respondents say "don't know" to, or leave blank, the usefulness question for ES-202 (43 percent) than for any other series.
- BEA's REIS personal income series is valued for both its usefulness (ranked fourth) and its accuracy (ranked fifth, but the series ranked

second through sixth are all quite close to one another). The good showing in usefulness likely reflects the fact that the series is the only one on the list that provides data on income from all sources, and that it is comprehensive in scope.

- Among the ten series, four focus primarily on jobs by place of work. Of these, County Business Patterns has the highest usefulness ranking, followed by CES/790, ES-202, and REIS employment. County Business Patterns also has the highest ranking for detail and accessibility. ES-202 was ranked highest for accuracy. CES/790 got the best score for timeliness.

Table 4B-3
Survey of Socioeconomic Data Users
Mean Ratings, Ten Federal Data Series by Five Characteristics
(on scale of 1-5, with 1 highest)

		Mean Ratings:											
	N	**Usefulness**	**Rank**	**Accuracy**	**Rank**	**Detail**	**Rank**	**Timeliness**	**Rank**	**Accessibility**	**Rank**	**Unweighted Grand Mean**	**Percent Don't Know or Blank in Usefulness**
Bureau of the Census:													
Decennial Census	489	1.44	1	1.98	1	1.84	1	3.27	10	1.83	1	2.07	10.8 %
Economic Census	463	1.84	6	2.14	3	2.39	4	3.26	9	2.23	8	2.37	15.5
County Business Patterns	466	1.72	3	2.15	4	2.25	2	2.91	6	2.02	2	2.21	15.0
Current Population Reports	445	1.85	7	2.19	6	2.46	5	2.62	3	2.18	7	2.26	18.8
Bureau of Labor Statistics and LMI Agencies:													
LAUS	419	1.67	2	2.36	9	2.49	6	2.22	1	2.04	3	2.16	23.5
CES/790	373	1.83	5	2.27	7	2.54	7	2.30	2	2.13	4	2.21	31.9
ES-202	315	1.91	8	2.12	2	2.38	3	2.71	4	2.57	10	2.34	42.5
OES	337	2.20	10	2.39	10	2.70	10	2.81	5	2.49	9	2.52	38.5
Bureau of Economic Analysis:													
REIS Personal Income	394	1.82	4	2.17	5	2.60	8	3.08	8	2.16	6	2.37	28.1
REIS Employment	370	2.01	9	2.28	8	2.68	9	2.93	7	2.14	5	2.41	32.5
Overall Unweighted Mean		1.83		2.20		2.43		2.81		2.18		2.29	25.7
Unweighted Mean by Agency													
Census		1.71		2.11		2.23		3.01		2.07		2.23	15.0
BLS		1.90		2.28		2.53		2.51		2.31		2.31	34.1
BEA		1.91		2.22		2.64		3.00		2.15		2.39	30.3

Sophisticated users tend to have a higher opinion about the various data series than do other users (Table 4B-4). The results support the notion that other users are more likely to lack information regarding how to access and make best use of each data series.

- For each characteristic, the mean rating by sophisticated users is higher than that of other users.
- Sophisticated users appear to be more knowledgeable than others. For each data series, a smaller percentage of sophisticated users leave the usefulness question blank or say "don't know" than was so for other users. The difference is particularly pronounced for CES/790, ES-202, and both REIS series.
- The difference in means scores is particularly pronounced for accessibility. For nine of the ten data series, the difference in means in accessibility scores is statistically significant. One explanation is that this difference is due to a difference in knowledge, that is, sophisticated users are more knowledgeable about how to access data than are other users, and conversely that other users are more apt to complain about accessibility because they are not fully aware of access options. Only for the ES-202 are the accessibility ratings relatively close, suggesting that even sophisticated users find access to ES-202 data relatively difficult.
- In the usefulness category, the largest gaps between sophisticated user and other user scores are for ES-202, REIS personal income, CES/790, and LAUS. In particular, the size of the gaps for ES-202 and REIS personal income suggest that their sponsors have not fully facilitated other users' appreciation of these series.
- Regarding accuracy, sophisticated users view ES-202, the Decennial Census, and the Economic Census as more accurate than other users.
- With regard to scores for detail, large gaps exist between sophisticated users and other users for ES-202, OES, Decennial Census, LAUS, and the Economic Census. Again, these differences may be due to lack of understanding of detail options and how to use them.
- For timeliness, interestingly, the biggest gaps between sophisticated and other users occur for the four BLS series plus Current Population Reports. This may suggest that sophisticated users are more aware of the frequency and timing of releases.
- Among the three agencies, BLS received the best overall mean score among sophisticated users. Moreover, BLS has the biggest gap in scores between sophisticated and other users, with roughly similar gaps for each of its series.
- BEA has the smallest gap between sophisticated and other user scores.

Table 4B-4
Survey of Socioeconomic Data Users
Mean Ratings, Ten Federal Data Series by Five Characteristics, by User Sophistication
(on scale of 1-5, with 1 highest)

	Sophisticated Users	N	Usefulness	Accuracy	Detail	Timeliness	Accessibility	Unweighted Grand Mean	Percent Don't Know or Blank
Bureau of the Census:									
Decennial Census	Yes	53	1.28 *	1.65 **	1.51 **	3.30	1.55 **	1.86	7.0 %
	No	212	1.50	2.02	1.90	3.37	1.95	2.15	8.6
Economic Census	Yes	51	1.67	1.90 **	2.30 *	3.41	1.76 **	2.21	10.5
	No	206	1.89	2.25	2.56	3.34	2.33	2.47	11.2
County Business Patterns	Yes	52	1.54 *	2.04	2.10	2.94	1.60 **	2.04	8.8
	No	204	1.77	2.25	2.30	3.06	2.09	2.30	12.1
Current Population Reports	Yes	51	1.98	2.17	2.51	2.50 *	1.92 **	2.22	10.5
	No	188	1.95	2.25	2.66	2.79	2.31	2.39	19.0
Bureau of Labor Statistics:									
LAUS	Yes	49	1.45 *	2.51	2.33 *	1.78 **	1.64 **	1.94	14.0
	No	180	1.71	2.48	2.60	2.38	2.12	2.26	22.4
CES/790	Yes	47	1.57 *	2.24	2.50	1.80 **	1.57 **	1.94	17.5
	No	156	1.85	2.38	2.71	2.44	2.20	2.31	32.8
ES-202	Yes	44	1.57 **	1.83 **	1.83 **	2.46 *	2.46	2.03	22.8
	No	139	1.97	2.18	2.52	2.82	2.55	2.41	40.1
OES	Yes	42	2.17	2.18 **	2.38 **	2.62 *	2.12 **	2.29	26.3
	No	144	2.27	2.47	2.93	2.95	2.53	2.63	37.9
Bureau of Economic Analysis:									
REIS Personal Income	Yes	50	1.52 **	2.19	2.46	3.20	1.73 **	2.22	12.3
	No	165	1.83	2.08	2.73	3.13	2.17	2.39	28.9
REIS Employment	Yes	46	1.91	2.17	2.91	3.15	1.82 **	2.39	19.3
	No	156	2.06	2.33	2.75	2.97	2.15	2.45	32.8
Unweighted Mean									
	Yes		1.67	2.09	2.28	2.72	1.82	2.11	14.9
	No		1.88	2.27	2.57	2.92	2.24	2.38	24.6
Unweighted Mean by Agency									
Census	Yes		1.62	1.94	2.10	3.04	1.70	2.08	9.2
	No		1.78	2.19	2.36	3.14	2.17	2.33	12.7
BLS	Yes		1.69	2.19	2.26	2.17	1.95	2.05	7.5
	No		1.95	2.38	2.69	2.64	2.35	2.40	14.1
BEA	Yes		1.72	2.18	2.69	3.18	1.78	2.31	4.8
	No		1.95	2.20	2.74	3.05	2.16	2.42	15.7

* Statistically significant at the .90 level
** Statistically significant at the .95 level

4B.4 Usefulness of 42 Data Series and Sources

Table 4B-5 provides the survey results regarding the usefulness of 42 federal, state, local, and private data series and sources.[4] Results for individual data series and sources are discussed in detail in Appendix 4C.

As with the ten series reviewed above, sophisticated users tend to think more highly of, and be more knowledgeable about, most of the 42 data series and sources than other users:

- Higher usefulness ratings from sophisticated users are particularly noticeable for foreign trade data (BEA Foreign Direct Investment, Census Foreign Trade Statistics, International Trade Administration) and a number of other federal agencies (the Internal Revenue Service, the National Science Foundation, and the Energy Information Administration).
- On the other hand, other users tend to think much more highly of *Sales & Marketing Management*, BEA Regional Projections, and the Census of Agriculture. (The difference regarding the latter may be due to rural areas having a smaller percentage of sophisticated users than urban areas, a survey finding in Chapter Three.)
- For almost every series, the percentage of sophisticated users who do not give a usefulness rating is less than for other users.

[4] It is unclear the extent to which respondents recognize that state and local governments provide both primary data and secondary data, and that many state industry data are provided through BLS sponsorship.

Table 4B-5
Survey of Socioeconomic Data Users
Usefulness of Select Federal and Other Data Series, by Sophistication of User

		How Useful?				
	Sophisticated User	Very	Somewhat	Not	Don't Know	Blank
Bureau of the Census						
Population Estimates	Yes	61.4 %	31.6 %	0.0 %	3.5 %	3.5 %
	No	55.6	31.0	1.3	6.5	5.6
Statistical Compendia	Yes	54.4	31.6	7.0	3.5	3.5
	No	47.8	29.7	3.0	12.9	6.5
TIGER	Yes	47.4	26.3	5.3	19.3	1.8
	No	40.9	21.6	8.2	22.8	6.5
Annual Survey of Manufactures	Yes	33.3	43.9	8.8	10.5	3.5
	No	27.2	40.9	5.2	19.4	7.3
Census of Governments	Yes	24.6	49.1	7.0	15.8	3.5
	No	20.3	34.5	9.1	28.9	7.3
Current Construction Reports	Yes	24.6	40.4	17.5	14.0	3.5
	No	18.1	34.9	12.1	28.0	6.9
American Housing Survey	Yes	12.3	36.8	19.3	26.3	5.3
	No	16.4	37.9	13.8	25.4	6.5
Census of Agriculture	Yes	14.0	42.1	19.3	19.3	5.3
	No	19.0	27.2	15.1	31.9	6.9
Foreign Trade Statistics	Yes	28.1	40.4	17.5	12.3	1.8
	No	13.8	29.7	17.7	29.7	9.1
Bureau of Labor Statistics						
Consumer Price Index	Yes	56.1	19.3	7.0	5.3	12.3
	No	44.8	25.4	6.5	4.7	18.5
National Compensation Survey	Yes	36.8	38.6	8.8	7.0	8.8
	No	27.2	37.5	6.5	9.9	19.0
Consumer Expenditure Survey	Yes	31.6	35.1	12.3	8.8	12.3
	No	21.3	32.6	10.9	15.2	20.0
Occupational Projections	Yes	22.8	35.1	24.6	8.8	8.8
	No	17.3	36.4	12.1	15.6	18.6
Mass Layoff Statistics	Yes	7.0	21.1	42.1	21.1	8.8
	No	9.6	24.5	19.2	26.2	20.5
Bureau of Economic Analysis						
Regional Projections	Yes	14.0	40.4	26.3	7.0	12.3
	No	20.3	29.7	11.6	10.8	27.6
RIMS II	Yes	21.4	37.5	17.9	12.5	10.7
	No	19.2	24.9	6.6	21.8	27.5
Gross State Product	Yes	24.6	45.6	14.0	5.3	10.5
	No	16.9	31.2	10.8	15.2	26.0
Foreign Direct Investment	Yes	12.5	35.7	23.2	17.9	10.7
	No	5.2	27.7	16.5	24.2	26.4
Other Federal Agencies						
Internal Revenue Service	Yes	36.8	17.5	0.0	12.3	33.3
	No	14.7	16.8	2.6	16.4	49.6
International Trade Administration	Yes	26.3	21.1	1.8	17.5	33.3
	No	14.2	19.0	5.6	11.2	50.0
Economic Research Service	Yes	19.3	17.5	14.0	15.8	33.3
	No	12.9	16.4	3.4	17.7	49.6
National Center for Education Statistics	Yes	17.5	45.6	10.5	24.6	1.8
	No	14.7	25.0	7.8	41.8	10.8
Bureau of Transportation Statistics	Yes	17.5	38.6	7.0	33.3	3.5
	No	12.9	24.1	10.8	42.2	9.9
Small Business Administration	Yes	7.0	24.6	10.5	24.6	33.3
	No	7.3	19.4	3.0	20.7	49.6

Table 4B-5 (Continued)
Survey of Socioeconomic Data Users
Usefulness of Select Federal and Other Data Series, by Sophistication of User

		How Useful?				
	Sophisticated User	Very	Somewhat	Not	Don't Know	Blank
Other Federal Agencies (Continued)						
National Science Foundation	Yes	15.8 %	31.6 %	17.5 %	33.3 %	1.8 %
	No	8.2	23.7	9.9	47.0	11.2
Energy Information Administration	Yes	15.8	21.1	15.8	42.1	5.3
	No	9.5	18.5	11.2	49.1	11.6
U.S. Geological Survey	Yes	10.5	22.8	21.1	42.1	3.5
	No	9.5	18.1	13.4	49.1	9.9
National Marine Fisheries Service	Yes	5.3	14.0	29.8	47.4	3.5
	No	4.7	9.5	18.1	57.8	9.9
Army Corps of Engineers	Yes	5.3	12.3	22.8	54.4	5.3
	No	5.6	15.5	15.9	52.2	10.8
State and Local Governments						
Demographic	Yes	50.7	15.1	4.1	5.5	2.7
	No	55.2	17.6	2.2	5.4	2.9
Industry and Employment	Yes	37.0	26.0	5.5	6.8	2.7
	No	38.7	28.0	4.7	9.0	2.9
Housing	Yes	45.6	35.1	8.8	10.5	0.0
	No	43.5	32.8	8.6	10.8	4.3
Tax	Yes	35.6	20.5	6.8	13.7	1.4
	No	37.6	24.4	3.9	12.9	4.3
Travel and Tourism	Yes	23.3	27.4	11.0	13.7	2.7
	No	24.0	30.5	8.2	15.8	4.7
Commercial and Non-Profit						
Business and Trade Directories	Yes	29.8	31.6	1.8	7.0	29.8
	No	29.7	25.4	4.3	8.6	31.9
ACCRA Cost of Living Index	Yes	17.5	36.8	5.3	10.5	29.8
	No	19.8	24.1	3.4	22.4	30.2
Sales & Marketing Management	Yes	10.5	29.8	14.0	15.8	29.8
	No	20.3	28.0	4.3	16.8	30.6
National Association of Home Builders	Yes	12.3	33.3	3.5	21.1	29.8
	No	7.3	21.1	5.2	34.5	31.9
U.S. Travel Data Center	Yes	5.3	22.8	10.5	31.6	29.8
	No	6.9	17.2	5.2	38.8	31.9
Coldwell Banker National Real Estate Index	Yes	4.1	13.7	6.8	30.1	23.3
	No	6.5	8.2	5.0	35.5	28.0
Price Waterhouse Venture Capital Survey	Yes	2.7	6.8	12.3	32.9	23.3
	No	2.5	9.3	5.0	39.1	27.2
Case-Shiller-Weiss Residential Real Estate Index	Yes	1.8	14.0	8.8	45.6	29.8
	No	2.6	6.5	6.5	52.2	32.3

N: 57 Sophisticated Users, 232 Other Users
Note: Chi square test for all series and sources statistically significant at the .95 level or greater.

Appendix 4C: Assessment of Individual Data Series and Sources

4C.1 Bureau of the Census

Census of Population and Housing

The Census of Population and Housing (the Decennial Census) is the most comprehensive and detailed primary data collection effort carried out by the federal government. Mandated by the U.S. Constitution, the Decennial Census is carried out once a decade, in years ending in "0". Basic demographic data (e.g., age, sex, race, marital status, Hispanic origin) are gathered from every household in the country through the "short form." A more detailed set of socioeconomic data is collected from every sixth household through the "long form" (e.g., education, place of birth, migration, labor force status, occupation, income). Until the full implementation of the American Community Survey, the Decennial Census is the only nationwide federal statistical effort that provides a wide range of socioeconomic data for small areas below the level of political subdivision (e.g., census tract, block group, zip code).

More respondents (89 percent) find the Decennial Census of use than any other data series or source. Comments include "major source of data for my needs," "very important and useful information," "my bread and butter," "I can´t live without it!" and "The Census data are a tremendous resource for everything I do—no other data source gives such critical geographical detail!" Respondents in planning agencies have the highest rate of use.

The frequency of the Decennial Census is a topic of much complaint. Users bemoan the lack of "long form" data between censuses; most of these commenters are not aware of the forthcoming ACS. Other topics were also commented on:

- Timeliness – Users express frustration with delays in the release of Decennial Census data, for example, "Some data are dated by the time they are available" and "The only problem was that it took so long for much of it to be released that it was essentially useless by the time it was released."[1]
- Funding and sampling – Commenters are adamant that the 2000 Census not be politicized and that funding be adequate. Typical is "I wish Congress would let the Census Bureau use the best statistical techniques to conduct the 2000 Census" and "Congressional meddling with Census 2000 is bad."
- Accuracy – Several respondents note inaccuracies in the 1990 Census and ask for improvements in the 2000 Census.
- Accessibility – Consistent with the high rating given the Decennial Census, most user comments regarding accessibility are positive.

[1] Census notes that the Census 2000 data will be placed on the Web, and so will be available to data users more quickly than in the past.

Several users would like to see pre-1990 Census data available on CD-ROM or on the Census Web site.

Population Estimates and Projections

The Census Bureau's Population Estimates Program annually provides population estimates (as of July 1) by age, sex, race, and Hispanic origin for states, counties, places, and minor civil divisions. These estimates are based on a variety of existing data series such as births, deaths, federal tax returns, Medicare enrollment, and immigration. Estimates are developed through the Federal-State Cooperative Program for Population Estimates. Census also produces a Population Projections series for states, by age, sex, race, and Hispanic origin. Currently, projections are available for 1995 through 2025, in five-year increments.

Population estimates and projections are very popular among data users, ranking third among series and sources in percentage of respondents calling them of use (86 percent). Fifty-eight percent call these series very useful. Knowledge about these data series is quite high—only 5 percent of respondents say they do not know about their usefulness. These series are particularly popular among respondents in planning agencies.

Comments on population estimates tend to be more positive than those for population projections. Contrasting examples include "Population Estimates are world class" and "population projections by state . . . are so inaccurate as to be useless." Several users mention concern about the accuracy of population estimates, particularly for small areas. One suggests providing the estimating error as part of the data table. Two users would like to see the Census Bureau put more resources into estimating domestic migration patterns.

American Community Survey

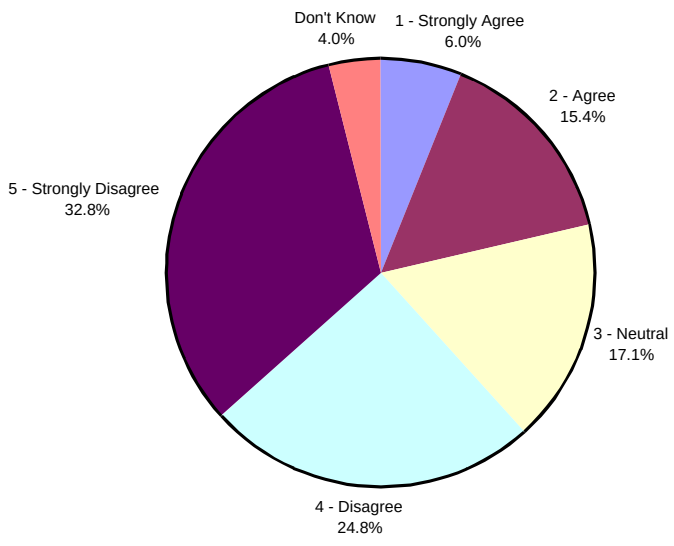
To address the problem of the infrequency of the Decennial Census, the Census Bureau is in the process of implementing the ACS—a monthly survey, with annual data publication, using the long form of the Decennial Census questionnaire. At full implementation, the ACS will achieve the same sample size as the Decennial Census—17 percent of households. In 1996, the Census Bureau began to develop the ACS at four sites around the U.S., and is adding more each year. By 2002, population characteristic estimates generated by the ACS will be available for all states and large metro areas; by 2008, estimates will be available for the smallest areas of the country.

The survey and focus group results clearly indicate that data users are not well aware of the ACS. Figure 4C-1 reflects survey respondent rating (on a scale of 1 to 5, with 1 meaning "strongly agree") of the statement "I have a good working knowledge of the Census Bureau's American Community Survey (continuous measurement) program." Barely 20 percent of respondents strongly agree or agree with the statement.

When asked their priorities for improvements in federal data collection, a number of respondents indicate the need for intercensal socioeconomic data, without referencing the ACS. Examples of comments include "It would be helpful to have population, housing, and other socioeconomic data available for years between the ten year census" and "We most need more frequent data for local areas similar to the Decennial and Economic Census reports." The need for intercensal data is very frequently mentioned, particularly by users in smaller areas. Hence, it is quite positive that the ACS has been developed and its implementation well underway.

Respondents aware of the ACS generally are quite positive and excited about the data to be made available. Again, this is so particularly for respondents from areas too small to be captured by currently available annual data series. Several pleas were made asking that the ACS be fully funded.

Figure 4C-1
Survey of Socioeconomic Data Users
Agreement with Statement regarding Knowledge of American Community Survey



N=351

Current Population Survey

The Census Bureau carries out the Current Population Survey (CPS) primarily to produce monthly statistics on labor force and unemployment for BLS. Census also uses the CPS to gather a variety of data not in public records, such as marital and family status, educational attainment, income, and geographic mobility; most of these data are gathered in the CPS Annual Demographic Survey conducted each March. The CPS sample, covering 50,000 households, is quite small compared to the U.S. population as a whole. Therefore, the CPS provides data primarily for the nation and multistate regions. Money income and educational attainment are provided at the state level. Also, CPS microdata files are available for use by researchers.

The survey indicates that CPS data are of use to almost 80 percent of respondents. Respondents in business and economic research centers have the highest rate of use. A number of respondents indicate that they use the CPS primarily for microdata analysis.

By far, the largest set of comments specifically on the aggregate CPS data concerns the lack of geographic detail—below the state level for some series, and below the multistate level for others. A typical comment is "Lack of geographic detail is a serious limit to usefulness." Also, several respondents say that the relatively small size of the CPS, even at the state level, raises accuracy concerns. For example, one commenter says "We do not use the state data from the CPS, since we view it as unreliable." It would seem that improvements in accuracy and detail can come about only through an increased CPS sample size, and such an increase is a function of funding availability and priorities.

Small Area Income and Poverty Estimates

The Census Bureau recently initiated the Small Area Income and Poverty Estimates program (SAIPE). Median household income and poverty rate estimates are made for states and counties; poverty rate estimates are made for school districts. The main objective of this program is to provide updated income and poverty statistics that are needed in the administration of federal programs and in the allocation of federal funds to local jurisdictions. The estimates are based on modeled relations between current income and poverty levels and income tax and program data available for counties and states for years following the Decennial Census. Data for 1993 were released during 1997-98; data for 1995 were recently released. No schedule has been set for future releases. This series in part replaces an annual small area per capita income estimates program that Census produced in the 1980s. Presumably, SAIPE will be replaced, or at least supplemented, by the ACS as it is implemented in the next decade.

At the time of the preparation of the survey, the authors were not aware of the existence of the SAIPE, so it was not listed in the survey. Survey responses suggest that the large majority of users also are not aware of the SAIPE. While a number of respondents asked for the revival of the old annual income series, no one mentioned the SAIPE as its replacement.

Statistical Compendia

The Census Bureau publishes a number of statistical compendia, compilations of data from a variety of Census and other sources. These compendia include the *Statistical Abstract of the United States*, *County and City Data Book*, *State and Metropolitan Area Data Book*, and *USA Counties*.

Census' statistical compendia are ranked seventh in terms of percentage of respondents finding them of use (79 percent). Fifty percent of respondents say the compendia are very useful. Awareness of the compendia is high—only 11 percent of respondents say they do not know about the compendia's usefulness. The compendia are particularly popular among respondents in academic institutions.

However, the compendia garnered relatively few comments. Most were positive. Several users would like to see the *County and City Data Book* published more frequently, and several would like to see a new version of *Historical Statistics of the United States: Colonial Times to 1970*, and last published in 1975.

County Business Patterns

County Business Patterns is an annual data series that provides wage and salary employment (mid-March pay period), annual payroll, and establishments by employment size category, up to four-digit SIC level, and covers all establishments except those in agriculture, railroad transportation, and government. Data are available for states, metropolitan areas, counties, and zip codes, and are extracted from the Census Bureau's Standard Statistical Establishment List (SSEL).[2]

County Business Patterns is ranked by respondents as the most useful of the various jobs-by-place of work data series. A number of users specifically praised the new availability of data at the zip code level. The data series is important enough to users that it generated a fair number of complaints and suggestions for improvements:

- Timeliness – The chief complaint among users is that County Business Patterns is not published quickly enough. Several commenters specifically asked that the series be released one year after the end of the calendar year for which the data are being published, rather than two, as is currently done.
- Disclosure – Many respondents feel frustrated by the disclosure rules that block out employment figures in instances that might reveal the job total of a particular establishment. Interestingly, no one noted that in instances in which the disclosure rule is triggered, County Business

[2] SSEL data on multiestablishment firms come from the annual Company Organization Survey. SSEL data on single-establishment firms come from a variety of sources, including the ASM, Current Business Surveys, and administrative records of the IRS and the Social Security Administration.

Patterns provides a letter code that places the job figure in a range (e.g., 250-499), while other series (e.g., ES-202) do not.

- Geographic detail – Many commenters want data below the county level. A number of these clearly are not aware that zip code data are available on CD-ROM. Other commenters ask that data be made available for cities and towns. No one commented on the tension between providing finer geographic detail and the ability to provide data without a large number of data suppressions.
- Industry detail – Complaints were made regarding the recent loss of industry detail by county.
- Comprehensiveness – A number of respondents want to see government establishments included. They seem to be unaware that County Business Patterns is derived from a data base (the SSEL) containing only nongovernmental establishments.

Economic Census

The Economic Census, a full-blown census of U.S. business establishments, is carried out every five years (years ending in "2" and "7") for a wide variety of industries. For the 1997 Economic Census, individual censuses were carried out for mining, utilities, construction, manufacturing, wholesale trade, retail trade, transportation and warehousing, information, finance and insurance, real estate and rental and leasing, professional/scientific/technical services, corporate management, administrative and support, waste management and remediation, educational services, health care and social assistance, arts/entertainment/recreation, accommodation and food services, and other services. The list of censuses for 1992 is less comprehensive. Measures include number of establishments (or companies); number of employees; payroll; measure of output (sales, receipts, revenue, value of shipments, or value of construction work done); and other data particular to industry (e.g., investment in plant and equipment). Data are available for states, metro areas, counties, cities and places, and zip codes. The Economic Census also carries out a company organization survey and a business owners survey, from which it produces several subnational data series, including those on enterprises, women-owned businesses, and minority-owned businesses.

The ratings indicate that the Economic Census is viewed by data users as a valuable statistical source. The two primary topics of concern are timeliness and geographic detail. A plurality of the comments focus on the long time lag between when the data are collected and published. Users say that the five-year break between censuses, and the approximately two years between data collection and publication, leaves them without current data for much of the time. A number of users say that substate data are available only for the more populated areas, and would like to have data for rural and subcounty areas.

Annual Survey of Manufactures

The Annual Survey of Manufactures (ASM) collects data from a sample of manufacturers in the years when the Economic Census is not conducted. The existence of an annual survey in manufacturing reflects the historical importance of that sector. Data are for states only and include employment, payroll, value added, cost of materials, value of shipments, and new capital expenditures.

The ASM ranks 14th among all data sources in terms of the percentage of respondents who find it of use (68 percent). However, only 31 percent say it is very useful. Awareness of the ASM is fairly high—only 16 percent of respondents do not know about its usefulness. In the survey, only a few comments were given regarding the ASM, one asking for quicker release and one asking for data presentation compatible with the Census of Manufactures.

Current Construction Reports

The Census Bureau provides monthly and annual data on residential construction permits and valuation for states and 30 metropolitan areas. The series ranks 25th in terms of percentage of respondents finding it of use (54 percent). Only 18 percent find it very useful. About a quarter of respondents do not know about the usefulness of the series.

Only three comments were received regarding the residential construction series, including a desire for greater geographic coverage. However, both on the survey and in the American Planning Association (APA) focus group, a number of comments were received imploring the Census Bureau to revive the recently discontinued (as of 1996) series of nonresidential construction permit data. Examples follow:

- "I was very disappointed when the Census Bureau discontinued collecting commercial building permit activity at the state and place level. I have not found another comprehensive source for this data in our state. Since they are still surveying these agencies for residential activity I couldn't see where there was any great cost savings in dropping these data items from their survey."
- "I was sorry to see nonresidential building permits (by permit-issuing place) discontinued."
- "Three things we used to get that we have been told are unavailable now (we were misinformed, perhaps?) are: the Area Wage Survey for our state's MSAs, the US Industrial Outlook, and the Industrial Building Permits. On the permits, we have had to go to the Dodge Report, which is (for us) extremely expensive."
- "I also was disappointed in the discontinuation of the commercial construction data in the construction series at the metro level. (This series is) very valuable for the analysis of local area economies and vital in the development of economic development policies and

> analysis of their success or failure. (It) should be brought back, (its) elimination was penny wise but pound-foolish."

Census of Governments

The Census of Governments is carried out every five years by the Census Bureau, simultaneous with the Economic Census, and provides data on government organizations, finances, and employment for all state and local governments in the U.S. Organizational data include location, type, and characteristics of local governments and officials; finances and employment data include revenue, expenditures, debt, assets, employees, payroll, and benefits.

The Census of Governments ranks 23rd in percentage of respondents finding the series of use (56 percent). Twenty percent find it very useful. Lack of awareness is an issue—over a quarter of respondents do not know about the usefulness of the series.

Relatively few comments were received regarding the Census of Governments—several urged a quicker publication schedule, and several asked for improvements in data categorization.

Foreign Trade Statistics

The Foreign Trade Division of the Census Bureau prepares export data by state of origin and customs district of export, and import data by customs district. Such data do not appear to be highly valued and understood by respondents. These series ranked 31st in terms of percentage of respondents finding the data of use (45 percent), and only 16 percent of respondents find them very useful. Eighteen percent say the data are not useful (the second highest figure among all series and sources surveyed). A quarter of respondents do not know about its usefulness.

The largest set of comments on foreign trade statistics concerns a desire by users for import data by state of final destination. Other respondents want information on service-producing industries, and greater industry detail.

Census of Agriculture

The Census of Agriculture, conducted in the same years as the Economic Census, provides data on farms, crops, animals, and operations, by state and county. Through 1992, the Census of Agriculture was the responsibility of the Census Bureau. As of the 1997 Census, that responsibility was transferred to the National Agricultural Statistics Service of the U.S. Department of Agriculture.

The Census of Agriculture ranks 30th among survey respondents in terms of the percentage who find it of use (47 percent). Only 17 percent find it very useful; over a

quarter have no opinion on the series usefulness. And only two comments were received on the series, one of which calls for an analog to County Business Patterns for agriculture.

American Housing Survey

The American Housing Survey (AHS) is conducted by the Census Bureau on behalf of the Department of Housing and Urban Development. Data are provided on apartments, single-family homes, mobile homes, vacant housing units, household characteristics, income, housing and neighborhood quality, housing costs, equipment and fuels, size of housing unit, and recent movers. Over a four-year period, data are published for 47 selected metropolitan areas, an average of 12 each year.

The AHS ranks 21st in terms of percentage of survey respondents who find it of use (57 percent). Eighteen percent of respondents find it very useful, and about a quarter have no opinion on its usefulness. On the survey, relatively few comments on the AHS were received—several call for additional geographic coverage, and one asks for quicker publication of the data. However, a number of members of the APA focus group say that AHS data are too aggregated for their needs. One comments, "We do aerial photos, because we cannot get the level of detail and accuracy we need on a timely basis. HUD/Census data are at too aggregate a level, we need a neighborhood level."

TIGER

Topologically Integrated Geographic Encoding and Referencing (TIGER) is a digital database of geographic features, such as roads, railroads, rivers, lakes, political boundaries, census statistical boundaries, etc. covering the entire United States. TIGER contains information about these features such as their location in latitude and longitude, the name, the type of feature, address ranges for most streets, the geographic relationship to other features, and other related information.

TIGER is ranked 19th in terms of percentage of respondents who find it of use (64 percent). Moreover, 43 percent of respondents find TIGER highly useful. Only 7 percent of respondents do not find TIGER useful. However, more could be done raise awareness of TIGER, as 23 percent of respondents have no opinion on the data source.

TIGER received a fair number of comments. Several respondents do not find it easy to use. Also, quite a few note that TIGER contains significant inaccuracies, and members of one focus group said that TIGER data are out of date. Several commenters ask for more refined and flexible boundary drawing.

Discontinued Data Series

A number of respondents complain about the elimination of four Census data series, and request their revival. These series include nonresidential building permits, retail sales, municipal per capita income, and manufacturing exports by state:

- Nonresidential building permits – See discussion above.
- Retail sales – Through 1996, the Census Bureau provided monthly and annual estimates of retail sales data for 19 states and four large metropolitan areas.
- Small area per capita income – As noted above, several respondents asked for the return of this series, apparently unaware of the recent development of the SAIPE.
- Manufacturing exports – Through 1992, the Census Bureau published estimates of manufacturing exports by state, based on data from the ASM and the Economic Census. One commenter writes "Losing the Census Bureau's Analytical Report on manufacturing exports hurt – reintroducing and extending to the rest of the economy would be ideal."

4C.2 Bureau of Labor Statistics/LMI Agencies

Local Area Unemployment Statistics

BLS's Local Area Unemployment Statistics (LAUS) data series provides monthly estimates of labor force, employment and unemployment for states, labor market areas (LMAs), counties, and cities. This series, known to most users as "LAUS data," is prepared by state LMI agencies using BLS guidelines. Estimates are derived from some combination of four sources, depending on the geographic area—the CPS, unemployment insurance (UI) claim data, the CES/790 survey of establishments, and ES-202 data.

A greater percentage of survey respondents (76 percent) find LAUS data of use than is so for any other BLS data series. Among respondents who know about the series, less than one percent say the series is not of use, the second lowest figure for any series or source mentioned in the survey. Comments include "invaluable," "these data have strong demand," and "couldn't operate without . . . unemployment data from BLS."

At the same time, data user opinions indicate a number of concerns:

- Detail – Users express desire for labor force data at a finer level of geographic detail than the county. Many users recognize that a larger sample size is needed to provide such detail.
- Accuracy – A number of users indicate concern about LAUS accuracy, for example, "confidence in accuracy has slipped" and "non-MSA county data not as accurate as desirable." Several suggest that

BLS provide error ranges; others asked that the sample size be increased to improve accuracy.

- Accessibility – Among the ten data series discussed in section 4.3.1, LAUS ranks quite high in accessibility. However, comments regarding accessing LAUS data via the BLS Web site are mixed, with several respondents saying the site is not "user-friendly."
- Awareness – While awareness of the LAUS series is high, users do not seem aware of a companion series, the Geographic Profile (GP). Several users want to see labor force data by part-time and discouraged workers. These data are available through GP, which provides greater labor force detail for states and metro areas (e.g., employment status by industry and occupation, hours worked, and weeks unemployed). Not one respondent mentions GP.

Current Employment Survey

The Current Employment Survey (CES or BLS-790) provides a monthly measure of nonagricultural wage and salary employment, and average hourly wage for nonsupervisory workers, by industry (typically one- and two-digit SIC code) for states and most major metropolitan areas. The CES/790 program surveys a sample of over 390,000 establishments, primarily through electronic means, supplemented by mail and fax. Data collection and analysis are handled primarily by the state LMI agencies under BLS guidelines.

Among the various data series and sources, CES/790 ranks 15th in percentage of survey respondents finding it of use in their work (67 percent). Fourteen percent of respondents say they do not know about the usefulness of the series, indicating it is not as well known as LAUS and CPI.

The largest groups of comments about CES/790 concern the desire for greater geographic and industry detail. Specific requests are made for data for rural counties, smaller metropolitan areas, subcounty areas, and more and finer industry classifications.

Understandably, users do not rate the accuracy of CES/790 as highly as series based on the universe, rather than a sample, of establishments (such as ES-202 and the Economic Census). Even so, the gap in the ratings is not that large (see Table 4B-3). Some users do express concerns about the accuracy of CES/790 under the new sampling methodology; others note the monthly numbers often are subject to substantial revisions.

Covered Employment and Wages (ES-202)

Covered employment and wages (ES-202) measures establishments, workers, payroll, and average wage for establishments covered by state UI laws and the Unemployment Compensation for Federal Employees (UCFE) program, nearly all employers except for nonfederal government employers. Quarterly and annual data are

available up to the four-digit SIC level for states, metropolitan areas, labor market areas, and counties. Employers provide the data to LMI agencies as they pay their unemployment compensation premiums. Of the various data series on jobs by place of work, the ES-202 series offers the most geographic and industry detail.

The survey ratings indicate that while ES-202 data are highly valued by those who are able to gain access to them, the series is underutilized, difficult to access, and not well known. The value of the series is reflected in high ratings for accuracy, detail, and timeliness, and the significantly higher rating provided by sophisticated users compared to other users (Tables 4B-3 and 4B-4). Members of several focus groups note that they actively use both ES-202 aggregate data and microdata.

Even so, among data series and sources, ES-202 ranks only 22nd in percentage of survey respondents who find it of use (56 percent). Issues regarding ES-202 include the following:

- Awareness – One quarter of respondents say "don't know" when asked about ES-202 usefulness, higher than any other BLS series except Mass Layoffs. The series is not well known even among sophisticated users – almost a quarter skipped the question of the series' usefulness.
- Accessibility – Lack of awareness likely is due in part to lack of accessibility. The ES-202 receives the lowest accessibility score of any of the ten series in Table 4B-3; sophisticated users' opinion of accessibility is not significantly different from other users (Table 4B-4). At present, users complain, ES-202 data are not accessible through the BLS Web site or a BLS CD-ROM. (State data at the four-digit SIC level are available annually in a printed BLS report.) While detailed data can be obtained from individual state LMI agencies, states vary greatly in their willingness and ability to provide the data. Giving access to the massive ES-202 data set while protecting confidentiality requires some commitment of state resources, and states have differing attitudes about making this commitment. No user commented on an existing service offered by BLS (and many states) to prepare customized data runs for users for a fee, suggesting that most users do not know of this service.
- Accuracy – While the ES-202 did receive a high survey score for accuracy, NASDA focus group members say that the quality of ES-202 data, particularly the geocoding of establishments, varies greatly from state to state. They note that some states buy Dun & Bradstreet data to get more accurate geocoding.
- Detail – A number of users seek finer geographic detail from ES-202 data. While not available in printed reports and Web sites, such data are available through customized runs, to the extent that disclosure limits allow.

- Timeliness – Several users also complain about the six-to-nine-month lag time between the end of a calendar quarter and the publication of data for that quarter.

BLS indicates that several improvements regarding availability of ES-202 data are in the offing. First, plans call for having 1997 data on the BLS Web site and available on CD by the end of 1999. Second, BLS is in the process of preparing the Longitudinal Database (LDB), which will contain linked data for all establishments with covered employees covered from 1990 forward. The full range of LDB data will be available in mid-2000, but only in Washington, DC, for researchers meeting certain BLS requirements.

Mass Layoff Statistics

The Mass Layoff Statistics (MLS) program provides monthly and quarterly data, by state, on mass layoff actions. Monthly data concern layoffs of 50 or more workers from a single establishment (based on filing of UI claims). Quarterly data concern extended mass layoffs, involving layoffs of 50 or more workers for at least 31 days duration.

The MLS series is the least valued of the various BLS series in the survey. About a third of respondents find the series of use, ranking it 37th among all series. Eleven percent find the series very useful. Almost 20 percent find it not useful, and nearly half of users did not answer the question.

Most of the comments on the MLS series point to its relative lack of usefulness:

- "M.L.S. Program is a great example of a program that has been rendered useless by BLS because of their lack of knowledge of what the customer wants."
- "Re: Mass Layoff Stats. What we really need is a clearer picture of all the stocks and particularly the FLOWS in the labor market. Layoffs, quits, accessions, and so forth down to fine geographic aggregation. We are so far behind, say, the Dutch in what we can analyze for our labor markets as a result of the lack of such data at the local and regional scale."

BLS indicates that MLS data will be placed on the agency Web site in the fall of 1999. Several users ask for the return of a broader BLS job turnover series discontinued in the 1980s; they say it measured both new hires and initial layoffs by state.

National Compensation Survey

For many years, BLS has conducted occupational wage surveys to ascertain average hourly wages for various occupations, for specific metro and nonmetro areas. In

a recent reorganization, these surveys are now carried out through the National Compensation Survey (NCS) of about 36,000 establishments nationwide. The NCS covers 154 metropolitan and nonmetropolitan areas, on a rotating basis. Annually, 30-35 large metro areas are surveyed. Smaller areas are surveyed on a less frequent basis.[3]

Almost a two-thirds of survey respondents find the NCS of use, ranking the series 18th among the various series and sources. Thirty-one percent find the series very useful. However, over a quarter of respondents say they do not know about the usefulness of the series, or leave the question blank. Comments point to a need for wage surveys that are more frequent and cover more of the country.

Occupational Employment Statistics

The Occupational Employment Statistics (OES) series annually provides employment and hourly wage data for over 750 occupations in over 400 nonagricultural industry classifications (two- and three-digit SIC level) for states and selected metro areas. The data are collected through an annual mail survey of 400,000 nonfarm establishments, carried out by the state LMI agencies under BLS guidelines. Detailed data by industry are available through state LMI agencies. The OES series was expanded in 1996 to include wage rate data, and to include all industries each year. In prior years, employment data were collected from each industry only once every three years. In the following analysis, it should be kept in mind that respondents only had experience with the old OES—1996 data were released soon after this project's survey was carried out.

The OES series is found to be of use by 60 percent of survey respondents, ranking 20th among the series and sources. While a number of respondents are quite enthusiastic about the OES ("This is one of the most important programs BLS has undertaken in years"), others are not. Among the ten series in Table 4B-3, the OES ranks last in mean usefulness rating. The series is not as well known as some others—almost 40 percent of respondents say they do not know about the series, or do not answer the question.

Among the ten series in Table 4B-3, the OES also ranks last in accuracy and detail, and ninth in accessibility. The most frequent comment received is to provide occupational data at a finer geographic detail. However, while concerns about accuracy are evidenced in the ratings, only one comment was received on that topic. The reason for the low accessibility rating may parallel that for ES-202 in that detailed numbers are not provided by BLS, but rather by the state LMI agencies, which vary in their ability to make the data easily available. As the BLS OES Web site notes, "Availability, format and medium of the data varies by State."

[3] The Workforce Investment Act of 1998 calls for the Secretary of Labor to "eliminate gaps and duplication in statistical undertakings, with the systemization of wage surveys as an early priority" (Title III, Section 309). BLS has several wage survey series, including CES/790, ES-202, OCS, and OES.

Occupational Projections

The Occupational Projections program provides short- and long-term estimates of changes in employment by occupation, by state. It is cosponsored by the Employment and Training Administration in the Department of Labor.

Fifty-six percent of survey respondents say they find the Occupational Projections series of use, a ranking of 24th among data series and sources. However, only 18 percent find it very useful, and 12 percent say they the series is not useful, a relatively high figure. About a third of respondents say they do not know about the series, say they do not use BLS data, or leave the question blank.

Relatively few comments were received on the Occupational Projections series. Several note its usefulness, and requests are made for finer geographic detail.

Consumer Price Index

The Consumer Price Index (CPI) includes an overall price index and indices for specific components of consumer expenditures, e.g., housing, medical, and food. The CPI is provided for 26 metropolitan areas; multistate averages by city size (e.g., metro areas of over 1.5 million in population in the West) are also given. Recently, there has been much controversy over the accuracy of the CPI. In response to these concerns, BLS has restructured the index to reflect observations that consumers change their consumption patterns in response to price changes.

More survey respondents (71 percent) find the CPI to be of use than any other BLS series except for LAUS. Almost fifty percent say the CPI is very useful. Six percent say it is not of use, and 24 percent say they do not know, say they do not use BLS data, or do not answer the question. Reflecting the demand for CPI data, the most frequent request for improvement in the CPI series concerns expansion of the number of areas for which a CPI is calculated. Several requests also are made to update the existing metro CPI indices more frequently.

Consumer Expenditure Survey

The Consumer Expenditure Survey (CE) provides information on the buying habits of American consumers, by income and consumer unit (families and single consumers) characteristics. Data are provided for 28 metropolitan areas for two-year periods, the latest being 1996-97. The data are collected in quarterly interview and weekly diary surveys of approximately 5,000 sample households. The interview survey includes monthly out-of-pocket expenditures such as housing, apparel, transportation, health care, insurance, and entertainment. The diary survey includes weekly expenditures of frequently purchased items such as food and beverages, tobacco, personal care products, and nonprescription drugs and supplies.

Fifty-four percent of survey respondents find the CE data of use, ranking it 25th among data series and sources. Twenty-four percent find the series very useful. About ten percent do not find it of use, and 36 percent say they do not know, say they do not use BLS data, or leave the question blank. Few comments were received regarding the CE series.

4C.3 Bureau of Economic Analysis

Regional Economic Information System

BEA's Regional Economic Information System (REIS) publishes two sets of complementary annual series for states, metro areas, and counties, one for personal income (including per capita income) and one for employment. REIS is the most comprehensive of the federal income and employment data sources, in that it includes income from all sources (including investment income, transfer payments, and noncash job earnings) and covers employment beyond wage and salary jobs to include proprietorships and military employment. In producing REIS, BEA makes extensive use of data that are by-products of the administration of various federal and state programs, including unemployment insurance, Social Security, federal income taxes, veterans benefits, and military payroll.

The REIS Personal Income series offers more detail than the REIS Employment series. While two-digit SIC detail for earnings is provided at both the state and substate levels, such detail is available only for state employment—metro and county employment data are at the one-digit SIC level.

Though the two REIS series are distinct, characteristics in terms of basic methodology, release dates, accessibility, and geography are largely similar. The following summarizes data user perspectives on REIS in general, with comments on individual series as appropriate.

Both in terms of ratings and comments, data users find REIS to be quite useful, with the Personal Income series seen as more useful than the Employment series.[4] This difference appears largely due to the combination of the greater industry detail provided by the Personal Income series, and its relative uniqueness. Several users note that the REIS Employment series is one of many employment series available. Seventy-two percent of survey respondents find the Personal Income series of use (ranking it 12th among the various series and sources); 67 percent find the Employment series of use (ranking 17th). Almost no one who uses either REIS series finds them not useful. The Personal Income series had the lowest percentage of respondents who indicate lack of usefulness (0.2 percent) of any of the 52 data series and sources rated; the Employment series had the fifth lowest score (Table 4B-1).

[4] BEA notes that the Employment series was originally created for in-house use, to aid in building the Personal Income series. It has only been with the distribution of the REIS CD-ROM that the Employment series has become widely available to users.

Data users tend to feel more positively about the Personal Income series. Twenty-nine percent of respondents find that series very useful, compared to 23 percent for the Employment series. Among the ten data series rated in Table 4B-3, the Personal Income series mean usefulness rating of 1.82 lagged only the Decennial Census, LAUS, and County Business Patterns. However, the Employment series mean score of 2.01 trailed all but OES.[5] Sophisticated users find the Personal Income series to be particularly useful, giving it a far better rating than other users (Table 4B-4).

A number of very positive statements about the usefulness of REIS in general, and the Personal Income series in particular, accompany these ratings:

- "This is one of the most requested series of information."
- "I use BEA personal income data on a daily basis."
- "Terrifically useful, especially in comparisons with changes in other areas."
- "We use all the county data we can find. It would be extremely hard to do our work without the county personal income and per capita income data . . . ."
- "I have found the Regional Economic Information System (REIS) that is put out by BEA to be very useful and in my opinion a good model for other agencies to use."

Data users provide perspectives on a number of other characteristics of the REIS series:

- Timeliness – Data users want to see the REIS series issued more quickly, particularly the county and metro releases, which lag the state releases by three-to-four months. Among the ten series rated in Table 4B-3, the two REIS series are seen as below average in terms of timeliness.
- Detail – Several users ask for subcounty data. Others want greater industry detail, particularly in the Employment series at the county level. In terms of detail, the Personal Income and Employment series rank eighth and ninth, respectively, among the ten series in Table 4B-3.
- Accuracy – A number of users are concerned about the number and size of the revisions made to REIS data. Comments include "There are too many revisions to the regional personal income data," "The revisions to the most recent data are often disturbing," and "Historical data revisions sometimes are very large, leading to concerns about

[5] As seen through their comments, few users seem to highly value the relative breadth of Employment series. A small number of comments note the usefulness of military employment. Interestingly, not one user discusses the value of proprietorship data, which is obtainable only through REIS. The authors of this report find the REIS employment series particularly useful because of the availability of proprietorship data, and imagine that that particular aspect of the REIS series is not well known.

accuracy." The Personal Income series is seen as more accurate than the Employment series (Table 4B-3).

- Accessibility – Survey respondents rate the two REIS about average in terms of accessibility (Table 4B-3). Comments are mixed. While some users very much like the REIS CD-ROM, others do not find it user-friendly. Several users want to see REIS data on the BEA Web site.[6]
- Awareness – Well over a quarter of survey respondents say they do not know about the usefulness of the REIS series, say they do not use BEA data, or leave the question blank. Among the data users who utilize BEA data, the REIS series are the best known. Even so, there is some lack of awareness about the Employment series among BEA data users (Table 4B-1). Sophisticated users are far more likely to be aware of both series than are other users.
- Education – A few users ask BEA to provide more documentation on REIS, including help in understanding various income definitions.

Gross State Product

BEA publishes estimates of annual Gross State Product (GSP) by industry, in current and constant dollar terms. The series also provides estimates of the components of GSP, by industry, including employee compensation, indirect business taxes, and property-type income. The GSP series runs from 1977 through 1997 (with 1997 data released June 1999).

About half of survey respondents find the GSP series of use (ranked 29th). A core of data users finds the GSP series of great value—18 percent say it is very useful. Comments include "The Gross State Product data are another very important series" and "GSP data are essential." However, 10 percent do not find the series of use. Moreover, 16 percent use BEA data but do not know about GSP, and 24 percent do not use BEA data.

The improvement in the GSP most frequently called for by data users is a reduction in the time needed to release the data. A number of commenters say they see a two-to-three-year time lag between the end of a calendar year and the time of publication. However, BEA's current release schedule appears faster than this, with 1997 data released in June 1999 (an eighteen month lag), and 1998 data due out in 2000. It may be that BEA has recently quickened the pace of release.

[6] The complete set of REIS data cannot be accessed through the BEA Web site. Some, but not all, of the series files can be downloaded; there is no query-based system. Many survey respondents do not seem aware that the data are available on query-based Web sites operated by the University of Virginia and Oregon State University, as no comment specifically mentioned these sites.

A smaller number of GSP users say they would like to see a substate version of the GSP series. One asks for a Gross County Product series, and another for a metro area series.

Regional Input-Output Modeling System

BEA's Regional Input-Output Modeling System (RIMS II) provides demand, income, and employment multipliers by 490 detailed industries and 38 industry aggregations, for states, counties, and multicounty regions. The multipliers are developed using the national Input-Output (I-O) table (currently 1992) and BEA's regional accounts (currently 1997), which are used to adjust the national I-O table to show a region's industrial structure and trading patterns. At the time of the survey, the cost of a set of regional multipliers was $600; it has since been lowered to $275.

RIMS II is found to be of use by 45 percent of survey respondents (ranking 32nd). Eighteen percent find the product very useful. However, a number of respondents say they use commercially available input-output models (IMPLAN is mentioned often) in lieu of RIMS II. One says that the "usefulness of RIMS II is being diminished by the growing emergence of enhanced products such as IMPLAN, which provide much faster turnaround and a much more user-friendly interface." Other commenters say they build their own regional I-O models, and that BEA's Benchmark I-O Accounts for the nation are of more importance to them. It is interesting to note that the percentage of sophisticated users who call RIMS II not useful (18 percent) is more than twice as high as for other users (seven percent).

Data user perspectives on RIMS II include the following:

- Currency of data – A number of users say that the usefulness of RIMS II has been diminished by its reliance on relatively old data. Several note that until recently the 1987 national accounts formed the basis for RIMS II. A typical comment is "RIMS II gets awfully old before it's ever updated."
- Detail – Five users say they want to see RIMS II disaggregate interstate trade flows by industry, including service industries.
- Accessibility – Several users complain about the cost of RIMS II. Comments include "RIMS II is too expensive relative to other sources for impact multiplier data," and "BEA charges WAY TOO MUCH for RIMS II multipliers." Users ask if RIMS II "could be made freely available and more accessible" via CD-ROM or the Web.
- Training – A number of users would like to have access to training on how to properly use RIMS II.
- Awareness – A large number of users are not knowledgeable about RIMS II. Twenty-four percent of respondents who use other BEA data say they do not know about the usefulness of RIMS II, in addition to the 24 percent of respondents who do not use BEA data at all.

Foreign Direct Investment

BEA regularly issues data and reports on foreign direct investment (FDI) in U.S. establishments. Data are obtained from a project that links BEA enterprise data on FDI with the Census Bureau's establishment data for all U.S. companies. The data are presented by detailed industry, country of owner, and state.

BEA's FDI series is used by a relatively small number of survey respondents—35 percent of respondents find the series of use (ranking 35th). The rate is highest (about 50 percent) among respondents at academic departments and business and economic research centers. This series is the least well-known of the BEA series—25 percent of respondents use BEA data but do not know about FDI's usefulness, in addition to the 24 percent of respondents who do not use any BEA data.

Users' main concern about the FDI series is its timeliness, noting the long time lag between the calendar year of the data and the time of release. For instance, 1992 data were released in June 1997. The 1992 series release appears to have been delayed for some time, considering that the 1991 data were published in September 1994.[7] As a result, several users thought the series had been discontinued.

Regional Projections

Through 1995, BEA periodically would issue 50-year projections (in five-year increments) of GSP, employment, income, earnings, and population, by state. However, due to budget cuts, BEA has discontinued this series.

Even though it had been discontinued three years prior to the survey, the regional projection series is the most popular BEA series after REIS—51 percent of respondents find it of use (ranking 28th). By far, the series is most popular among respondents from academic-based economic and business research centers, with 65 percent finding it of use. Interestingly, however, sophisticated users rate the Regional Projections series significantly lower than other users.

The most frequent comment regarding the Regional Projections series is a request for its revival. Several users are fervent on the topic, for example, "I would place high priority on continuing the BEA regional projection series" and " Too bad the regional projections were discontinued!!" One user gave a particularly thorough comment:

> The BEA should consider a consortium relationship with the users group to reinstate long-term regional forecasts. They do not have to be 50-year outlooks! Ten-year forecasts would be an effective and feasible approach.

[7] Annually, summary data from two calendar years prior are made available by state in the *Survey of Current Business*. Data for 1996 were published in June 1998. However, the publications of the detailed tables lag well behind.

> Many of us do such forecasts anyway, so it would not be that much more work to coordinate with the BEA and get some assistance from them. The public would benefit from the existence of a standardized, consistent set of regional forecasts (possibly with more than one scenario quantified).

4C.4 Other Federal Agencies

Internal Revenue Service

Through its analyses of Form 1040 income tax returns, the Statistics of Income Division of the Internal Revenue Service (IRS) annually makes available county-to-county and state-to-state migration data in terms of exemptions (used to approximate population), returns (used to approximate households), and income. Thirty-four percent of survey respondents find IRS data of use, with 17 percent finding them very useful. Use is highest among respondents in chief executive and legislative offices, and research-oriented institutions; use is lowest among respondents in client-serving firms. Sophisticated users value IRS migration data at a statistically significant higher level than other users. This series is a favorite among members of the NASDA focus group.

One respondent provides a particularly positive comment about IRS migration data:

> I have extensively used the migration data distributed by the Statistics of Income Division of the IRS. In my opinion, it's the best thing there is about that agency! We now have a good annual time series of state-to-state flow matrices going back to at least 1980-81. The new income migration data are interesting and I'm looking forward to working with this information further in the future.

A number of respondents would like to see migration data released on a more timely basis. However, the IRS says that 1998 migration data are available at present (July 1999), which does seem to be a relatively quick release.

International Trade Administration

The mission of the International Trade Administration (ITA) of the Department of Commerce is to promote the international competitiveness of U.S. industry. ITA's Office of Trade and Economic Analysis (OTEA) publishes state and metro area export data (generated by the Census Bureau), and a variety of national sector-specific data and information of use to regional analysts. OTEA's most well-known publication is the *U.S. Industry & Trade Outlook*, an annual review of trends and data across a large number of goods- and service-producing sectors. Publication of the *Outlook* had been halted after the 1994 edition, but was revived in 1998 in partnership with McGraw-Hill.

Thirty-two percent of survey respondents find ITA to be a useful data source; 14 percent find it very useful. Respondents based in academia have the highest use rates. Sophisticated users value ITA data at a statistically significant higher level than other users.

The most frequently received complaint concerns the termination of the publication of the *U.S. Industrial Outlook*; these respondents were not aware that the book had been resurrected. Several users would like to see OTEA carry the Census origin of movement (OM) export series, which describes exports by place of origin rather than by location of exporter (the EL series that OTEA currently carries).

Economic Research Service

The Economic Research Service (ERS) of the U.S. Department of Agriculture provides state, county, and regional information and data on rural economic activity, including commercial agriculture; food and consumer economics; and natural resources, energy, and the environment. Thirty percent of survey respondents find ERS to be a useful data source, with 13 percent finding it very useful. As might be expected, ERS data are least utilized by respondents working in large metro areas (with 12 percent finding ERS of use, compared to 33 percent of all other respondents). ERS drew only one comment from survey participants—a request that subcounty detail be provided for large, western counties.

National Center for Education Statistics

The National Center for Education Statistics (NCES) is the statistical arm of the Department of Education. NCES provides a wide range of data on educational programs, achievement, attainment, and spending, including post-secondary, for states and areas. Twenty-nine percent of survey participants find the NCES is a useful data source; 12 percent find it very useful. Use rates are highest among respondents in research-oriented institutions.

Comments regarding NCES are quite mixed. Some users find the data to be "very useful," "reasonably accessible," and on "the best federal Web site I know." Others call NCES data "duplicative of similar state sources," "inadequate," not reflective of "actual conditions," and "not accessible for research purposes."

Small Business Administration

The Office of Advocacy of the Small Business Administration (SBA) provides a variety of data on small business activity by state:

- Profile of each state's small business economy; data include number of firms, small business income, turnover, lending, industrial composition, job growth and minority- and women-owned businesses.
- List of federal Small Business Innovation Research (SBIR) and Small Business Technology Transfer Research (STTR) awards.
- Small business lending activity.
- Small business procurement activity with the federal government.

Twenty-eight percent of survey respondents find SBA data of use, with 9 percent finding the data very useful. The highest use rate (40 percent) is found among respondents at economic development agencies and chambers of commerce. Relatively few comments were received regarding the SBA; one asks for estimates of microenterprise and home-based business activity.

Bureau of Transportation Statistics

The Bureau of Transportation Statistics (BTS) is the Department of Transportation's statistical unit. BTS publishes regional transportation data by mode (e.g., trucking, mass transit, waterborne), type of travel (e.g., local personal, long-distance personal, freight transportation), and infrastructure (e.g., highways).

Twenty-four percent of survey respondents find BTS data to be of use; almost 10 percent say the data are very useful. Use rates are highest in public chief executive/legislative offices and academic institutions, and lowest in specialized practice organizations.

For the most part, commenters praise BTS, saying it is "user friendly," "offers many free and useful materials," and is "crucial for my studies." However, one person says "travel survey and commodity flow surveys are extremely disappointing in their coverage and construction." Another would like to see more substate detail.

National Science Foundation

The Division of Science Resources Studies in the National Science Foundation (NSF) provides state data on research and development expenditures and workforce (by sector), science and engineering education, and patent activity. It also makes available data on individual academic institutions and research centers.

Twenty-three percent of survey respondents find NSF data of use; nine percent find them very useful. Use rates are highest among respondents in research-oriented institutions. Few comments were received. Comments on the NSF Web site are mixed, with one respondent saying it is "something all providers could learn from," and another calling it "very difficult to use."

Energy Information Administration

The Energy Information Administration (EIA) of the Department of Energy provides energy consumption, production, and reserves data by location. Twenty percent of survey participants find EIA data of use; 7 percent find them very useful. Use rates are highest among respondents in chief public executive/legislative offices and academic business and economic research centers. The EIA received only one comment, that its data are quite useful.

U.S. Geological Survey

The U.S. Geological Survey (USGS), part of the Department of the Interior, publishes a wide array of natural resource data by location. Nineteen percent of respondents find USGS data of use; six percent find them very useful. Comments ask for better download capability for maps, and more data on non-metal scrap materials.

Army Corps of Engineers

The U.S. Army Corps of Engineers issues data on domestic waterborne commercial movements, including vessel trips and cargo, by port. Thirteen percent of survey respondents find the data of use; three percent find them very useful. One observer says that only analysts covering areas that include a port would find these data of value.

National Marine Fisheries Service

The National Marine Fisheries Service (NMFS) of the Department of Commerce publishes data on commercial fish and shellfish landings, employment, seafood processing, and prices. Twelve percent of respondents find these data of use; five percent find them highly useful. Commenters ask for greater coverage (in terms of species and water bodies) and geographic detail.

4C.5 Private Data Providers

Ratings and comments on eight privately provided data sources and series are as follows:

- Business and trade directories – Fifty-four percent of respondents find use for business and trade directories; 27 percent say they are highly useful. Primary use is to prepare small area employment estimates. However, users say that the accuracy of the data in these directories is often suspect, and the listings are usually incomplete. One notes, "I realize that these files were not intended for the purpose of doing small

area employment estimates, but they offer at least a decent starting point for this exercise."

- American Chamber of Commerce Researchers Association (ACCRA) Cost of Living Index – Forty-one percent of respondents say the ACCRA Index is of use; 19 percent say it is highly useful. The index is particularly popular among respondents at development agencies -- 60 percent use the index. However, a number of respondents say the ACCRA Index is not accurate—terms used include "of doubtful quality," "wildly inaccurate," "too weak," and "misleading." Several members of one focus group say the ACCRA Index is unreliable.
- *Sales & Marketing Management* (*S&MM*) – Forty-one percent of respondents say data in *S&MM* are of use; 17 percent say the data are highly useful. Again, respondents in development agencies have a relatively high use rate (59 percent). However, sophisticated users rate *S&MM* data significantly lower than other users. Some members of one focus group believe that the data are "flawed."
- National Association of Home Builders (NAHB) – Twenty-nine percent of respondents say data published by NAHB are of use; seven percent say the data are highly useful. NAHB data are most popular among consulting firms.
- U.S. Travel Data Center – Twenty-three percent of respondents say U.S. Travel Data Center data are of use; seven percent say the data are highly useful. The data are relatively popular among economic development agencies and consulting firms.
- Coldwell Banker (CB) National Real Estate Index – Nineteen percent of respondents say that the CB Index is of use, and seven percent say it is highly useful. Over a third of respondents in client-serving organizations use the index.
- Price Waterhouse Venture Capital (VC) Survey – Fourteen percent of respondents indicate the Price Waterhouse (now Pricewaterhouse Coopers) VC Survey is of use; 4 percent say it is highly useful.
- Case-Shiller-Weiss (CSW) Residential Real Estate Index – Ten percent of respondents say the CSW Index is of use; two percent say it is highly valuable.

4C.6 Data Intermediaries

On the importance of intermediaries as a resource:

- "Their presence is absolutely vital for ensuring access to the full extent of historical and current data. The specialized knowledge and resources built up in these groups/organizations/institutions preserves and extends the usefulness of work that otherwise would disappear under the weight of new information. The publication of much current data on the Internet and in other electronic formats should never be

allowed to obscure the fact that most past information is not so accessible—and that an informed staff member is a far better shortcut for most inquirers than a search engine!"

- "Librarians are outstanding, highly efficient, but underappreciated intermediaries for accessing data."
- "For data users who do not have formal training in data analysis and/or information systems, a professional library and staff can be invaluable."
- "Extraordinarily helpful and knowledgeable. Always willing to offer advice and training."
- "Libraries are critical resources. Federal and other government depository programs are very important to ensure that historic and trend data continue to be available to all."
- "Depository libraries are an efficient, economical way to access a wide variety of data."
- "Often is only source available to rural areas; willing to provide special studies."

On the value of an intermediary as a function of staff capabilities:

- "They are excellent resources for access data but are limited in their technical knowledge of data collection, limitations, and quality issues."
- "Most libraries are not familiar with data sources and their applications."
- "Staff may be very knowledgeable or not at all knowledgeable about specific data sources."
- "Very uneven responses. Librarians tend not to know much more than I do. They know what government documents exist, but not the practical application of those publications."
- "Sometimes hard to find a location that has very knowledgeable staff to assist in identifying appropriate sources/publications."

On dissatisfaction due to poor organization and lack of recent data:

- "It is often difficult to locate various sources of data in a public or university library. Sometimes it's in book format, other times on microfiche, and not organized in an accessible way. It seems like each library has its own system."
- "Too often socioeconomic data are scattered throughout the sources and are not carefully maintained."
- "Do not always contain exactly the information that I am looking for."
- "The availability of data from intermediary sources tends to significantly lag behind the availability of data on the Web from the original sources like BLS or the Census Bureau. Most have out-of-date data."

- "Much data available are dated; more funds need to be spent by the intermediaries to stay current."
- "They often don't have the most recent publications or all the data sources publications available."

On alternative means of obtaining data:

- "Direct access is much preferable to going through intermediaries."
- "It can be difficult to track down known data using intermediaries. I find it is often much more efficient just to procure the data from the primary source . . . ."
- "Major university libraries are a good source of data if you know what you are looking for and if they have good reference librarian. However, I have found that contacting the agency directly that produces the data is a much better and more efficient way to go, whether the contact is made in person or via the internet."
- "I haven't relied much on university business research centers. They vary significantly in how well equipped they are to provide access to socioeconomic data. Now that much data are available on the WWW, their role is less important."
- "As the Internet gets better, their role is diminishing."
- "In my experience, the Internet has become the best source of data because it is the most up-to-date and fairly accurate information. With intermediaries, there may be some information that I could not obtain from the Internet that I had to get through them, but much of the information is outdated by the time it is published."
- "It is quicker, easier and more rewarding to use the Internet."
- "From a time-cost point of view and with the proliferation of cheap ways to distribute data electronically, I would prefer not to spend a lot of time at an intermediary center if there are more convenient ways to obtain the same data via sources like the Internet."