

**Census Bureau Responses to the
Recommendations of the
Census Advisory Committee of Professional Associations
Made as a Result of the Meeting on April 22 - 23, 2004**

Recommendation 1

Employment Issues that Impact the Economic Statistics of the Census Bureau

Census Bureau Questions:

1. *Do you see advantages to the Census Bureau providing employment data independent of Bureau of Labor Statistics employment data?*
2. *Assuming accurate total employment data, is there value in the Census Bureau collecting and reporting a breakdown of categories below the total employment of the establishment? If so, what breakdown would be most useful – leased employment, temporary employment, contract employment, or some other categories of employment?*
3. *What direction should we take to measure leased employment in the 2007 Economic Census?*

“The American Economic Association Advisory Committee (AEA/AC) submits the following:

1. The prevalence of non-traditional employment relationships is growing and has become more important to economic dynamics. However, these relationships are difficult to track well in economic data because they are still evolving rapidly and they blur key aspects of the employer-employee relationships. These difficulties are suspected to underlie various discrepancies among important economic indicator series in both levels and dynamics. In addition, measures of key economic relationships such as capital/labor ratios, input/output relationships and productivity measures could be biased by misallocation of labor counts arising from use of these series.

Thus, the Committee enthusiastically endorses the proposed development of employment data that allows insight into the role of these new work relationships. These advantages stem from increasing knowledge about the work relationships themselves, and from opportunities to improve and reconcile other employment data series.

2. The Committee finds all three categories to be of interest, and is not aware of any others that should be added. However, it is possible that subcategories will be found

to be of interest. Thus, we suggest that the Census be open to this possibility as the project evolves. The relevance of these categories will depend on the use to which these data are put, and how resources should be allocated in their development.

3. The Committee endorses the Census recommendation to develop the suggested administrative data source with the IRS. However, it is likely that even this source can be usefully augmented or improved by targeted versions of the alternative approaches listed, such as additional questions on the Economic Census.”

Census Bureau Response

1. The Census Bureau accepts the Committee’s recommendation to continue developing employment measures that enhance insight into the role of new work relationships. We will continue to provide employment data independent of the Bureau of Labor Statistics employment data.
2. The Census Bureau will continue to investigate the best means of capturing data to inform analysis of these evolving work relationships (i.e., leased employment, temporary employment, and contract employment).
3. The Census Bureau will pursue an administrative records solution by continuing to work with IRS to find a mutually beneficial method to measure leased employment through tax collections. In addition, we will evaluate augmenting a possible administrative record solution through alternative approaches such as additional Economic Census questions. We are assessing the quality of the 2002 Economic Census reporting on leased employment and are evaluating the need for more cognitive work.

Recommendation 2

Coverage Improvement for the 2010 Census

The American Marketing Association

“The American Marketing Association Advisory Committee (**AMA/AC**) submits the following:

1. The **AMA/AC** commends the Census Bureau on its active research and development program to expand accurate coverage for the 2010 Census. While we appreciate the need to reduce costs, there must also be some accounting for quality. Self-responses should not be encouraged in situations where the quality is likely to be substantially less than would be obtained with personal visit interviews. By concentrating on net error instead of gross error, on item non-response instead of item validity, the Census Bureau may be overlooking the issues of validity and meaningfulness. AMA is suspicious of the data quality obtained from Internet surveys. Item non-response measures are deceptive since it is easy to build Internet surveys that ensure questions will be answered. However, this says nothing about item validity. Thus, the **AMA/AC** recommends that the Census Bureau (1) report on how it is measuring item validity, and (2) apply its item validity measure(s) to all proposed data collection alternatives.
2. The **AMA/AC** reiterates the recommendations made in April 1999, October 1999 and October 2001 with respect to Census 2000. In particular, that major communications programs be tested prior to implementation, that advertising copy continue to be tested quantitatively wherever possible, that communication testing associated with Census tests employ a robust methodology to assess effectiveness, and that the Census Bureau should control the design and oversee the execution of the communication effectiveness tracking research.

The **AMA/AC** appreciates the Census Bureau’s analysis that has already identified the types of individuals most likely to be undercounted or counted in error. Using these groups as the target audiences for the overall communication efforts, the Census Bureau should use their lead time to develop a disciplined communication program for each of the target audiences that are critical to reducing undercount and overcount errors in the 2010 census. The **AMA/AC** makes the following specific recommendations:

3. With respect to strategy development and message construction, we recommend that primary research be done both with members of the target audience and with members of the community organizations that will be channels for using the communication programs.
4. The **AMA/AC** recommends that the Census Bureau develop multiple creative approaches to communication initiatives that are critical to the success of the 2010

census. Through a rigorous program testing these initiatives, the Census Bureau will increase the likelihood that an effective, persuasive approach can be identified for each target audience.

5. The **AMA/AC** recommends that pretesting of messages should include both laboratory testing and in-market testing of programs. Laboratory testing will develop an understanding of whether the targeted individual understands the message and is motivated to respond in the anticipated manner. The Census Bureau should evaluate the response of both targeted individuals (e.g. young black males, parents of young children, college students) and community/organization partners in laboratory testing.
6. The **AMA/AC** recommends that the Census Bureau use the upcoming Census tests to also evaluate the in-market effectiveness of communications. The census tests will allow for a real world evaluation of the ability of planned channels to reach the intended target, understand the degree to which materials for organizational/media use are used as intended, and assess the degree to which messages overlap and conflict. The **AMA/AC** realizes that planning time is short leading up to these tests. However, taking advantage of the opportunity to understand the effectiveness of the communication strategies prior to their use in the 2010 census is critical to success.
7. The **AMA/AC** recommends that the Census Bureau evaluate how to use strong branding and creative linkages in the advertising to amplify the effectiveness of its limited media for coverage efforts. In a similar manner, it recommends that the Census Bureau evaluate, preferably with an in market test, how the campaign to increase phone and internet self response, might negatively impact its efforts with the targets of the coverage campaigns.
8. The **AMA/AC** requests that a review of the plans and timing for development of communication initiatives for the selected coverage and self-response target audiences for the 2010 census be an agenda item for a near future meeting.”

Census Bureau Response

1. Self Response and Item Validity

The decennial census questionnaire is a self-response instrument – neither enumerators’ opinions nor headquarters staff can override the choices respondents make for themselves. Consequently, respondents’ answers must be the ultimate measure of item validity.

Because item validity presumes that respondents understand what we are asking, we conduct extensive cognitive research to help us develop question wording. Questionnaire formatting and design also can make it easier for respondents to answer questions “correctly” as they complete the form.

Dr. Don Dillman (Washington State University) is one of the outside consultants whose expertise we utilize to help us design census forms that are easier to complete.

We will continue to evaluate coverage. In particular, we plan to focus on the effectiveness of our coverage questions as a way to reduce both undercounting and duplication and the effectiveness of revised residence rules wording, instructions, and presentation in making sure that everyone is counted once and in the right place.

Self-Response versus Personal Visit Interviews

The Census Bureau agrees that, in certain situations, personal visit interviews are preferable to self-response. In Census 2000 we performed the update/enumerate operation to target communities with special enumeration needs. These areas included American Indian Reservations, resort communities with a substantial amount of seasonally vacant housing, and colonias (largely Hispanic unincorporated communities along the Texas Mexican border). This operation enumerated approximately 1.2 million addresses. For Census 2010, we will continue to use personal-visit interviews, rather than self-response, in situations where we expect interviews to provide better quality data.

Net versus Gross Error

Although we discussed net error at the beginning of the presentation on plans for Coverage Improvement, we understand the significance of looking at gross error. We outlined our goals for coverage measurement in a presentation to the National Academy of Sciences Panel on the Research on Future Census Methods on September 11, 2003. At that time we noted that we plan to begin producing measures of gross coverage error (including its components) for Census 2010.

Internet Response Mode

Except for certain surveys in the Economic area, we generally try to avoid "hard edits" that force a respondent to answer. Although the Census 2000 Internet application did not include any form of hard edits meant to force respondents to answer questions, it sometimes used "soft edits" to encourage respondents to reconsider their answers. (For example, if a respondent gave his age as 125, the Internet questionnaire would show a message saying that his age "seems high", which might prompt him to check or reconsider his answer.)

Future research also should focus on how to use the Internet as a tool to increase data quality by implementing real-time data feedback and analysis.

The absence of real-time edit checks was partly because our goal was to make the on-line form replicate, as much as possible, the paper form. We did, however, include some post-submission, preprocessing edits. For example, if respondents indicated that the month of birth was "DE," we assume that it corresponded to the month, "December." We then translated it to a numerical equivalent, namely, "12." If we had

had more time for development, research, and experimentation, we would have incorporated some real-time analysis and feedback.

The Census 2000 Internet results (Census 2000 Evaluation Study A.2b) are on our Internet site.

2. The Census Bureau recognizes the need to test and evaluate the effectiveness of its communication programs prior to implementation in the 2010 Census. However, testing of our communications program is not one of our test objectives for the 2004 Census Test or the planned 2006 Census Test because such tests include only small parts of defined media markets and/or small parts of recognized governmental units and are inappropriate for implementing and evaluating a full communication program. Since paid advertising will comprise a large component of our 2010 Census communication strategy, we plan to select and work with a private sector public relations or advertising agency to develop our prototype communications plan. Given our current schedule for awarding the advertising contract in early 2007, our first opportunity to demonstrate the full communications plan will occur during the 2008 Dress Rehearsal.
3. Since 2003, we have been conducting focus group research with members of our target audiences and members of various targeted community organizations, in an effort to gather crucial insight into how to improve our communications strategy. Over the decade, we will continue to conduct focus group research and other research to gather recommendations. These recommendations will become a part of our 2010 planning efforts.
4. The initial step in developing an effective communications program is the construction of an audience segmentation model. Whereas, the Census Bureau developed an audience segmentation model for Census 2000, it needs to be validated both against Census 2000 outcomes with respect to public participation in that census as well as against the continually changing demographics in the country. That work is on-going. We also have started conducting focus group research with both targeted audiences and targeted organizations that serve them. Once we have awarded a contract to develop the communication and advertising contract for the 2010 Census, we will share with you information we have learned from our focus group research as well as our audience segmentation research for their use in designing the communication program for the 2010 Census.

Another key component of the communication strategy for the 2010 Census, particularly with respect to addressing coverage issues, will be our partnership program. Again, we have already started the process of soliciting ideas and recommendations during focus groups and other informal contacts with both governmental and nongovernmental organizations so that we can develop the most effective strategies for ensuring the participation in the census of their constituents.

5. Currently we are focusing on laboratory testing of mailing piece messages to be field tested as part of the 2006 Census Test. This process will continue and accelerate once we have selected an advertising firm for the 2010 Census; then we will use in-market testing.
6. The Census Bureau plans to test the effectiveness of mailing piece designs and motivational messages in the 2005 National Content Test and the 2006 Census Test. Both timing and design limitations of these two tests preclude extensive testing of broader communication strategies and messages. Our earliest opportunity to evaluate the broader communication strategies and messages for the 2010 Census will be the 2008 Dress Rehearsal.
7. We plan to examine issues relating to the effective use of branding and creative linkages with our public relations/advertising agency once we have awarded the 2010 advertising contract.

We tested the use of Internet and telephone as self-response options during the 2003 National Census Test. One primary goal of the test was to evaluate the public response to these options relative to response by paper. The results from the 2003 National Census Test suggest that a relatively low percentage (between 5 and 10 percent) of people who responded chose the telephone or Internet option. The majority of respondents chose the traditional paper option. We also plan to conduct additional testing of the Internet self-response option in the 2005 National Census Test, with a primary focus on evaluating data quality.

At this point, the Census Bureau has not made a decision about the use of Internet as a response option in the 2010 Census. The use of the telephone option, with live agents, was available in Census 2000 and currently is part of the baseline design for the 2010 Census. However, no decision has been made regarding the use of telephone interactive voice response (IVR) systems for census data collection. If the Census Bureau decides to employ these options in the 2010 Census, we will then address the extent to which we will promote these options as part of our overall communication strategy. Currently, given the small percentage of the total population that we believe might choose these options, we have no plans to evaluate the impact their promotion might have on our attempts to improve coverage of targeted populations.

8. We will place this item on the agenda for a future meeting.

The American Statistical Association

“The American Statistical Association Advisory Committee (**ASA/AC**) recommends that the Census Bureau focus on methods of capturing residency and related information that are cognitively easier and culturally relevant from the respondent perspective. The information could be captured in a way that allows the post hoc implementation of census residency rules. If it is not feasible to do this in the decennial census, then use this approach in the coverage measurement evaluation.

The **ASA/AC** recommends that the Census Bureau conduct a qualitative analysis of the notes of the brainstorming sessions that were conducted after the Census 2000, and that the analysis be conducted in the context of the census process:

1. find the person
2. provide them with a census form (or some other vehicle for enumeration)
3. effect participation
4. achieve accurate completion.

Furthermore, the **ASA/AC** recommends the Census Bureau:

1. work towards unique identification number for addresses on the Master Address File (MAF)
2. work on conceptual and operational definitions of group quarters
3. concentrate energies on GPS for non-urban areas.
4. explore the formation of a partnership with USPS.”

Census Bureau Response

The paper "Coverage Improvement for the 2010 Census" was an attempt to map the brainstorming ideas to various stages in the census process. The categories used in the paper don't quite match your recommended categories (find the person, provide them with a census form...) but they do attempt to tie the coverage improvement issues to specific components of the census process (Communication, Content, Language, Address List Development...). We agree that more qualitative work can be done in this area, including considering the categories you identified as the context of the census process, and we will attempt to do so as time permits.

1. *Develop Unique Identification Number for Addresses on the Master Address File (MAF)*

Every MAF record has a unique identifier. The MAF has had a unique identifier for each address since its inception.

2. *Improve Conceptual and Operational Definitions of Group Quarters (GQs)*

The Census Bureau has been working to improve both GQ definitions and the operations that are intended to identify them. For the 2004 Census Test, we tested revised definitions for college housing and skilled nursing facilities and tested a new operation (Group Quarters Validation). These new definitions and procedures are intended to improve GQ classification and identification.

We plan to revise the Group Quarters Validation questionnaire and test additional GQ definitional changes in the 2006 Census Test.

3. *Test GPS Effectiveness in Rural Areas*

We intend to test GPS effectiveness extensively in the 2006 Census Test. We plan to use the system nation-wide for Address Canvassing.

We also plan to capture GPS coordinates for every structure, which should be particularly useful in rural areas where enumerators cannot depend on city-style addresses. Another useful feature that we plan to test is the “You are here indicator”.

4. *Explore the formation of a partnership with the United States Postal Service (USPS)*

We already have an excellent, ongoing relationship with the USPS, which provides us with both semiannual and monthly file deliveries. The Postal Service has been especially cooperative. For example, they do special programming in order to meet our operational needs. We will continue to talk with them about additional ways that we can help each other to ensure a successful census enumeration.

We have an established relationship with the USPS for census planning as well, especially with respect to their role in delivering census mailing pieces.

The Population Association of America

“The Population Association of America Advisory Committee (**PAA/AC**) commends the Census Bureau for its rigorous and comprehensive efforts to reduce undercount and errors in counting (double-counting, reporting, and miscount errors.) We encourage the Census Bureau to shift some of its efforts from net undercount to a greater emphasis on reducing gross errors (regardless of type). The Census Bureau should also link specific solutions to specific problems. For example, it should develop specific strategies to reduce or eliminate the undercount of the immigrant population rather than resorting to generic approaches without a specific population in mind. Lastly, the Census Bureau should make every effort to anticipate problems of undercount and counting errors based on 2000 data and proposed changes in Census operations (e.g. use of the Internet) for the next decennial census. How will errors be reduced for special populations on the rise, including cohabiting couples with children, same-sex couples in marriages or civil unions, refugee populations and children living part time in more than one household?”

Census Bureau Response

Net versus Gross Errors

Although we discussed net error at the beginning of the presentation on plans for Coverage Improvement, we also understand the significance of looking at gross errors. We outlined our goals for coverage measurement in a presentation to the National Academy of Sciences Panel on the Research on Future Census Methods on September 11, 2003. At that time we noted that we plan to begin producing measures of gross coverage error (including its components) for Census 2010.

Problem-specific Solutions

We are attempting, with our research, to avoid a "one-size-fits-all approach" to coverage. As described in the paper, *Coverage Improvement for the 2010 Census*, presented to the PAA at the April, 2004 meeting, the Census Bureau attempted to conduct a “Root cause analysis” in order to discover the basic, underlying principles that affect coverage. Although, by definition, some of these elements will be common across many groups, it is not a process that has been tailored to address the most common problem and then applied to all situations. For example, we would like to know why we miss young children and people in large, complex households. If we can discover the underlying reasons for undercoverage in these situations, we will be able to address the problem of undercoverage for all groups that exhibit these characteristics.

Anticipate Problems

We are attempting to revise residence rules wording, instructions and presentations as well as relationship categories and definitions in an effort to address current coverage problems. Presenting these difficult concepts in a way that makes sense should help us improve coverage of our increasingly complex population. For example, cognitive testing planned for 2005 should help us understand the ways in which respondents interpret the relationship question (i.e., do people understand the question the way we mean it). We are also testing

changes in the relationship categories, wording, and formatting in order to make them more relevant to a wide range of relationships and living situations. In order to address some of the coverage problems listed in your recommendation, we included a coverage operation in the 2004 Census Test, and we are planning to include specific coverage research in the 2005 National Census Test and 2006 Census Test. Since the 2004 Census Test is still underway, the results will not be available for some time. We are, however, beginning to plan the 2005 Coverage Followup operation. The results of these tests will be cumulative, so that by the time of the next decennial census the questionnaire will include improved coverage questions and more effective wording, instructions and presentation for the residence rules.

Recommendation 3

Census/BEA/NSF R&D Link Project

Census Bureau Questions:

1. *In addition to the benefits described, what other benefits could the Census Bureau gain from conducting this study?*
2. *How will this agreement impact future data sharing request?*
3. *What other data sharing projects could the Economic Directorate benefit from undertaking?*

“The American Economic Association Advisory Committee (**AEA/AC**) submits the following:

1. The **AEA/AC** commends the goals of the data-sharing activities and commends BEA, the NSF and the Census Bureau for their efforts. The Committee believes this pilot project demonstrates the unambiguous gains from data sharing among federal statistical agencies. The Committee also believes there exists a large constituency of potential users who benefit from data not otherwise available than through data sharing.
2. The **AEA/AC** recommends that the participants in these efforts document the lessons they learned from their experiences. This written record should come from participants at all agencies. First, it will help forge agreement between agencies over the process. Second, it will make the gains durable, by helping these lessons survive the personnel turnover. Third, it should help highlight mechanisms to update the business register and to lead to understanding about matching data between agencies. Fourth, this guide could help BEA, NSF and the Census Bureau identify and streamline procedures that repeatedly arise during data sharing whenever possible. For example, the Committee recommends studying ways to avoid recreating the information technology security review at every project.
3. The **AEA/AC** recommends that the Census Bureau, BEA and other federal agencies continue to compare across samples, improve business registries at all agencies, and, having done that, improve key economic statistics that involve multiple agencies. The Committee believes it was useful to use the business registry to link surveys across agencies. As one example - data sharing between the Census Bureau and BLS also could illuminate the effects of employer provided training on firm performance and worker outcomes. The Committee also believes it will be useful to see the substantive benefits in terms of new knowledge gained about R&D flows.”

Census Bureau Response

The Census Bureau documented lessons learned from this effort in the final joint Census/BEA/NSF report. While some of these lessons learned were briefly presented in the paper, the final report will include more detailed information. The security offices of Census and BEA are currently developing a joint agreement to cover activity both at BEA and Census in response to the data sharing legislation. The Census Bureau's Security Office is currently looking into developing a similar agreement with BLS.

The Census Bureau and BLS are discussing a data sharing project which will compare their business registers, potentially leading to improvements for each agency's key economic statistics programs. The Census Bureau is open to discussing other potential data sharing projects with both BLS and BEA as they are the only agencies covered by the data sharing legislation. We will also discuss your recommendation on data sharing between the Census Bureau and BLS to study the effects of employer provided training on firm performance and worker outcomes. Upon the completion of the current Census/BEA/NSF R&D link project, all three agencies will be evaluating the benefits each agency received, including the knowledge gained about R&D flows.

Recommendation 4

Coverage Measurement Research Issues for the 2010 Census

The American Marketing Association

“The American Marketing Association Advisory Committee (**AMA/AC**) submits the following:

Census Bureau Question 1: Given that coverage measurement is not going to be used to adjust the 2010 census redistricting data, at what level of geography should we estimate gross and net coverage errors?

1. The decision not to adjust decennial census data on the basis of coverage measurement research implies a shift in focus from documenting and fixing coverage errors to getting coverage right in the first place. In this context, the **AMA/AC** believes that the purpose of coverage measurement research is not so much to demonstrate the level of coverage error, but rather to shed light on the sources of that error, and to evaluate the effectiveness of coverage improvement efforts. Accordingly:
 - o While it will be appropriate to generate a national estimate of net coverage error, it should not be a high priority to generate coverage error estimates for smaller areas such as census tracts. Tests of coverage improvement efforts should receive higher priority for resource allocation.
 - o Small area estimates of coverage error will be useful primarily when paired with tests of coverage improvement efforts, to demonstrate the effectiveness of those efforts.
 - o Given the above, it will be appropriate to conduct coverage measurement research in selected tracts or areas (vs. all tracts or areas).
 - o Coverage measurement research at the sub-national level should focus on gross errors rather than net errors.
 - o AMA generally endorses the idea that was suggested in the session of treating location information (including location errors) as a characteristic of the observations.

Census Bureau Question 2: We do not have data to estimate correlation bias except for two groups. Should we include a correction in our estimation methodology for correlation bias?

2. To the extent that coverage measurement research is done to evaluate coverage improvement efforts, rather than as a basis for data adjustment, correlation bias will not be an important issue.

If coverage measurement research is used for data adjustment, estimates of correlation bias should be incorporated into the adjustment procedures where available; however, we recognize that this may be counterproductive where different estimates will be compared, such as comparisons in estimated undercounts for Blacks vs. Hispanics.

Census Bureau Question 3: What criteria should be used to decide if the intercensal estimates should be adjusted?

3. AMA believes that intercensal population estimates should be adjusted for coverage errors if there is reason to believe that the estimates can be reliably improved. To the extent that coverage measurement research is done to evaluate coverage improvement efforts, rather than as a basis for data adjustment, it may not be useful in this regard.

We note that the bigger issue concerning adjustment of intercensal estimates relates to the possible use of ACS data in this regard.”

Census Bureau Response

1. We agree that a major goal of the Census Bureau’s 2010 Census Coverage Measurement (CCM) program is to evaluate the sources and magnitude of coverage error in order to improve the coverage of the next census.

We agree that our higher priority is to measure coverage error by census process but at the same time we recognize that it is also important to continue estimating national net coverage errors.

We agree that more resources will be allocated towards obtaining more reliable estimates of coverage error by census process.

We will not be able to conduct coverage measurement only for select tracts or areas because of the need to produce estimates of net and gross coverage error for the nation.

We agree that estimating gross errors below the national level is important, but this would be mainly to understand the sources of these errors by census operation.

We agree with the recommendation to think about the location of where a person is counted as a characteristic of that person. This will provide the flexibility to estimate gross errors for different levels of geography.

2. The Census Bureau concurs with the recommendation that estimation and correction for correlation bias become a more important issue if the coverage estimates are to be used for adjustment purposes.
3. We agree with the committee recommendation that the coverage measurement survey for 2010 be designed primarily to accomplish the major goal of evaluating the 2010 Census.

The American Statistical Association

“The American Statistical Association Advisory Committee (**ASA/AC**) submits the following:

Census Bureau Question 1: Given that coverage measurement is not going to be used to adjust the 2010 census redistricting data, at what level of geography should we estimate gross and net coverage errors?

The **ASA/AC** recommends that the Census Bureau consider using a definition of *gross coverage error* that is independent of the geographical characteristics of the individual concerned. That is, an under-coverage error would occur only when a person who should have been enumerated was missed completely by the Census. Over-coverage would occur only when a person was counted more than once, or a person who should not have been enumerated was counted (e.g. a fictitious person, the family pet, a deceased person, etc). Errors in *where* a person was enumerated would be considered as *errors in the characteristics of that person* (similar to errors in age, sex, race, etc.) and *not* as coverage errors.

ASA recommends the creation of a person level vector of characteristics that would include:

1. enumeration status (as “correctly” or “incorrectly” enumerated); and
2. assignments of geographic levels (e.g. block, place, state).

From this perspective, each person’s enumeration status counts only once, yet errors at different geographies are easily estimable.

It is not immediately obvious at what level of geography gross coverage errors should be estimated. Although, there are going to be some valid applications for these measures at almost every level of aggregation, lower level geographical units are most likely to prove valuable in understanding non-coverage processes. Given that these measures will not be used to make adjustment to the 2010 Census redistricting data, their most important application would appear to be assisting Census Bureau staff in understanding sources of coverage error. In this regard, examining errors at multiple levels may produce valuable insights.

Census Bureau Question 2: We do not have data to estimate correlation bias except for two groups. Should we include a correction in our estimation methodology for correlation bias?

ASA recommends that the Census Bureau consider correlation bias using variables such as urbanicity, poverty status and other variables rather than demographic variables alone.

The **ASA/AC** believes that corrections should be introduced wherever possible. We know precious little about those persons who escape enumeration both during the Census as well as during coverage evaluation surveys. It is not even clear that we have a complete

understanding of the relative effects of various demographic variables on correlation bias. Continued investigation of correlation noncoverage processes could well lead to improved enumeration in future Decennial Census efforts. We thus strongly encourage Census Bureau staff to continue their work on this topic.

The **ASA/AC** also encourages the Census Bureau to consider conducting ethnographic or other qualitative research to generate hypotheses regarding the social and behavior mechanisms that may be associated with correlation bias.

Consider alternative sources

The **ASA/AC** recommends the Census Bureau develop and use the American Community Survey (ACS) /Census methodology panel to test ways of using the ACS to:

1. identify problems in and upgrade the Master Address File (MAF) (for missed and mis-located housing units;
2. check on missed and mis-located persons in enumerated housing units; and
3. compare ACS/Census residence rules and define procedures to produce equivalent residence rule populations from ACS and Census.

Census Bureau Question 3: What criteria should be used to decide if the intercensal estimates should be adjusted?

The **ASA/AC** recommends that Demographic Analysis not be used to adjust the intercensal estimates. Another model should be developed. The adjustments should be consistent.

In consideration of the criteria that should be used to determine if intercensal estimates should be adjusted, the committee believes that it would be best if similar methodologies could be applied to both the Census and the intercensal estimates to the degree possible. The committee recognizes that there may be good operational reasons why this is not possible or practical. Consequently, we encourage Census Bureau staff to conduct a formal evaluation of the feasibility of applying coverage adjustment protocols to intercensal estimates.

The **ASA/AC** recommends that all coverage improvements be integrated with coverage measurement activities so that the utility of the improvements can be evaluated. Furthermore, plans for implementing coverage improvement methods should be based on (to the extent possible) evidence from coverage measurements.

The **ASA/AC** recommends that Demographic Analysis not be used to adjust the intercensal estimates. Another model should be developed. The adjustments should be consistent.

In consideration of the criteria that should be used to determine if intercensal estimates should be adjusted, the committee believes that it would be best if similar methodologies

could be applied to both the Census and the intercensal estimates to the degree possible. The committee recognizes that there may be good operational reasons why this is not possible or practical. Consequently, we encourage Census Bureau staff to conduct a formal evaluation of the feasibility of applying coverage adjustment protocols to intercensal estimates.

The **ASA/AC** recommends that all coverage improvements be integrated with coverage measurement activities so that the utility of the improvements can be evaluated. Furthermore, plans for implementing coverage improvement methods should be based on (to the extent possible) evidence from coverage measurements.”

Census Bureau Response

1. We like the recommendation to think about the location of where a person is counted as a characteristic of that person. This will provide the flexibility to estimate gross errors for different levels of geography.
2. Our methodology for correlation bias adjustment uses demographic analysis (DA) population estimates for the set of groups for which the correlation bias adjustment is made. As we only have DA estimates at the national level by age and sex for Black and Nonblack race groups, we cannot use variables such as urbanicity and poverty status in a correlation bias adjustment. In fact, for variables such as poverty status, that are collected on only a sample basis, their sampling error causes problems even with using them in a post-stratification for estimation. For variables that are available for 100 percent of the census cases, more predictive power will result as more geographic and demographic detail are used in tabulating such variables (even down to the individual level). For sample variables, increasing the detail increases the sampling error, which diminishes their predictive power.

We will explore ethnographic studies to provide insights into causes of correlation bias.

Currently the Census Bureau does not have plans to use the ACS for purposes of evaluating coverage issues. Using the ACS methodology panel as an alternative source of information presents some opportunities, but also some real concerns.

Using the ACS to assess person coverage will be a challenge. In addition to the residence rule differences, the ACS is collected without a specific reference date, such as April 1st. It would be critical that any considered modifications to residence rules concepts on the ACS questionnaire not create confusion for ACS respondents. There may be benefits for both the ACS and the 2010 Census from such research and we can consider this further (assuming funding of the budget initiative for the methods panel is provided), but intractable problems may exist.

The MAF is maintained by various means, including the use of Delivery Sequence Files (DSF) updates from the USPS, the Community Address Updating System (CAUS) targeting of high growth areas outside of DSF usability (more rural areas), and the Demographic Area Address Listing (DAAL). This maintained MAF, with its history indicating the program in which addresses have been added, is the starting point for census address updating operations. An updated MAF could be useful in understanding sources of address coverage issues.

3. To clarify the question that was posed, we will consider adjusting the 2010 Census results to form the base for the intercensal population estimates to be constructed after the 2010 census. We thus are interested in what criteria might be used to decide whether or not to construct and use such an adjusted base. (Note that such adjustment cannot be considered for the apportionment results as the Supreme Court decided that this would violate the Census Act, and we are not considering such adjustment for the redistricting results because we feel such an adjustment cannot be done and adequately evaluated by the deadline for release of the redistricting data.) The updates to this base (made over the decade to produce updated population estimates) will come from administrative data and estimates of births, deaths, and migration, the same components of change used in constructing the demographic analysis (DA) estimates used to evaluate the census results. The difference is that the DA results used to evaluate the census push the base back further into the past, whereas the intercensal population estimates use the previous census results as a base.

The Population Association of America

“Population Association of America Advisory Committee (**PAA/AC**) members are impressed with the detailed report on coverage measurement. Undercount/coverage/post-stratification issues have always focused on race, tenure, and other short form items because those data were available first. As ACS coverage improves, would it be possible to design a coverage measurement test using other variables (income, occupation, poverty) that ACS will have at the tract or block group level?”

Census Bureau Response

For variables such as income, occupation, or poverty status that are collected on only a sample basis, their sampling error causes problems with using them in a post-stratification for estimation. For variables that are available for 100 percent of the census cases, more predictive power will result as more geographic and demographic detail are used in tabulating such variables (even down to the individual level). For sample variables, increasing the detail increases the sampling error, which diminishes their predictive power.

Recommendation 5

Micro and Macro Data Integration: The Case of Capital

Census Bureau Questions:

1. *What level of priority does the Committee believe the statistical agencies, such as the Census Bureau, give to macro and micro data integration?*
2. *Does the Committee believe something like the hybrid methodology developed in this paper could improve capital measurement at the industry and higher levels of aggregation?*

“The American Economic Association Advisory Committee (AEA/AC) submits the following:

1. The Committee believes there are great benefits to integrating the collection of macro (aggregate) data with the collection of micro (establishment or firm) data. These benefits include -
 - a. With data available at the micro level, it is possible to aggregate up and provide industry-level statistics, which for the case of capital are data that in their current form are problematic.
 - b. The micro data are important in itself because their analysis in secure Census Research Centers has resulted in important contributions in basic research.
 - c. Analysis of the micro data improves survey design and processing and thereby improves aggregate statistics.
2. The Committee recognizes that these benefits are particularly salient with regards to the measurement of capital. Micro data on investment and capital is limited (particularly as compared with data on labor) and aggregation to industries is often crude. We applaud the Census Bureau’s efforts to make the best use of available data by integrating information from the ACES with information from BEA. For the ACES survey, further research is clearly warranted on the extent of response errors by multi-industry firms regarding industry classification. The Census Bureau should consider changes in the survey form or processing of the surveys that might minimize this problem. We urge the Census Bureau to place a positive value on the benefit of micro data and the measurement of capital stocks in the planning and operation of both the ACES survey and the ASM survey.”

Census Bureau Response

The Center for Economic Studies (CES) and the RDCs will continue to analyze Census micro data to forward basic research, and improve federal statistics. In addition, CES will work with the Census Bureau's Company Statistics Division (CSD) and the Bureau of Economic Analysis to find ways to implement some of the suggestions of our study. CSD will take into account the Committee's views as it reviews future versions of the ACES questionnaire.

Recommendation 6

Marketing the Local Employment Dynamics Partnership

“The American Marketing Association Advisory Committee (AMA/AC) commends the Census Bureau’s product development efforts in this economic product line. It is an excellent example of listening to customer needs and developing a product that will greatly assist in meeting those needs.

1. Appropriate marketing of this product is critical to ensure its success. AMA recommends re-allocating some of your product development time and resources towards those efforts. Some additional tactical recommendations include:
 - o Identify, prioritize, and conduct marketing research on your potential users. Some cost-effective techniques to consider include online focus groups and regional user meetings.
 - o Consider developing Interactive CD ROM tutorial programs to assist in marketing these products to each of the targeted segments.
 - o Consider directly marketing to consultants serving government and business – those who can re-package your data and more quickly disseminate it.
 - o Within the table cells, distinguish between not available (n/a) data and suppressed data.
2. Confidentiality is handled well currently on your web site. The development of prepared statements and dissemination procedures in advance will help to expedite your responses to future questions of confidentiality.
3. Products need to have names that are relevant, meaningful, and easily remembered by the target end users. All products come from the U.S. Census Bureau, and reference to the program or department creating the products adds unnecessary confusion. Fortunately, the program name, Local Employment Dynamics, is descriptive and easily understandable as a product name. It should be marketed as Local Employment Dynamics from the Census Bureau (and relevant partner, where applicable).”

Census Bureau Response

1. The Census Bureau and its partners recognize the critical importance of appropriately marketing the Local Employment Dynamics products, and we are devoting additional resources to that effort. Specifically:

- o At the annual workshop for state partners in February 2004, several states reported on marketing research with potential users. Based on their findings, the Census Bureau plans to fund additional followup work with key audiences such as the labor market information agency directors and workforce investment boards. We will continue to use conferences and custom presentations to get feedback from potential users, as well as using the state partners for comments on and suggestions for data products. We are looking into online focus groups and believe them to be a low cost and useful research tool.
 - o The Census Bureau plans to develop one or more mini-CDs that could be widely distributed to introduce potential users to LED data and to show them how to use the web site.
 - o Some direct marketing to consultants serving government and business is already happening through the participation of the Census Bureau and its state partners in many conferences and presentations. We will look into the usefulness of this avenue and consider additional ways to reach this audience.
 - o We will review instances where n/a is used in table cells to be sure it is used only to identify data that are not available and that it is not used to flag suppressed data.
2. The Census Bureau has recently developed messages and answers to frequently asked questions on data stewardship, confidentiality, and privacy as part of the release of required Privacy Information Assessments. These materials are used by all program areas to ensure consistent responses on confidentiality. Confidentiality assurances related to linked administrative records are part of these materials.
 3. The Census Bureau is updating materials from the Local Employment Dynamics partnership and is making sure that new materials use only the Local Employment Dynamics (LED) and Census Bureau names. In the future, we expect to produce new products with descriptive and easily understood product names such as Local Transportation Dynamics. The exception is for budget or program materials that have limited distribution to the Department of Commerce, Office of Management and Budget, and Congress. These materials describe the larger program -- Longitudinal Employer-Household Dynamics, of which LED is a part -- and use that name.

Recommendation 7

Proposed Methodology for Recognizing Statistical Uncertainty in Ranked Survey Estimates

“The American Statistical Association Advisory Committee (ASA/AC) commends the work of the Census Bureau in this area.

The ASA/AC recommends that before pursuing the Bayesian methods further, existing literature be consulted to establish the existence of conventional approaches, including the use of multiple comparisons. (References were provided in separate communications to specific Census Bureau staff immediately following the April 2004 CACPA meeting.)

If after reviewing the literature the Census Bureau decides to continue this line of research, then the committee recommends a sensitivity analysis of this methodology by separately varying:

1. Normality assumption
2. flat versus informative priors
3. state rankings that a priori are closer together (i.e., some that approach ties)

The Committee also recommends that the posterior probabilities be used to generate bounds on the rankings (e.g., 95 % confidence interval).

Concern was expressed that probabilities reported using this approach might be misleading because they do not reflect multiple testing (i.e., simultaneous inference). The committee encourages investigation of multiple comparison procedures such as Tukey-Kramer for distinguishing significant differences in the ranked data.”

Census Bureau Response

We are still at the development stage in this work and will definitely examine alternatives as we continue our work.

Regarding the suggestions for sensitivity analyses, a couple points are worth noting. First, the standard approach to recognizing statistical uncertainty in (unranked) survey estimates involves quoting hypothesis test results or confidence intervals developed from survey point estimates, their standard errors, and a normality assumption. (Justification for the normality assumption generally comes from the large samples involved.) We took this as a starting point, and while we could consider the effects of nonnormality, this would take us outside the scope of what we had in mind, and would raise questions about how to deal with nonnormality in recognizing statistical uncertainty in the unranked estimates. A similar comment applies to comparing results for flat versus informative priors. Standard survey results can be thought of as using flat priors, and use of informative priors in constructing the unranked estimates (with implications for the ranked estimates) raises more basic estimation

issues. Nevertheless, perhaps we should give some consideration to whether issues of nonnormality or informative priors become more relevant when ranked estimates are known to be of interest.

Regarding the suggestion that we examine what happens when estimates are close together, we can certainly do this when simulating data (and Rob Creecy of SRD has done some analyses of this sort). In actual applications this seems likely to arise naturally if the number of estimates being ranked is sufficiently large, and it did arise in the example of CPS state poverty rate estimates presented at the meeting.

Finally, we can examine confidence limits on ranks, though these may be so wide for most estimates (excepting minimum or maximum estimates that are substantially different from the next smallest or next largest estimates) as to not be particularly informative. On the other hand, that might be an appropriate point to convey to users, if it can be done clearly.

Recommendation 8

Core Based Statistical Areas and Combined Statistical Areas: New Geography for a New Decade

“The Population Association of America Advisory Committee (**PAA/AC**) salutes the Census Bureau for its research on metropolitan and micropolitan areas. The new designation (“micropolitan”) will be very useful to many data users, and the simplification of definitional standards will make those standards easier to understand than they were previously. We recommend that future research focus on the development of similar designations for sub-county areas, with those designations based on degrees of urbanization. We suggest that these designations be based on each of a variety of characteristics e.g., (density, commuting, and employment) rather than on a single combination of characteristics.

We further recommend that the Census Bureau explore the possibility of redesigning the CPS to support the reporting of data for micropolitan areas and non-core counties in both published documents and publicly released micro data files.”

Census Bureau Response

The Census Bureau is currently preparing plans for a research program on geographic classifications, and we will evaluate the feasibility of your suggestion.

The Current Population Survey is too small to identify individual micropolitan statistical areas or counties outside core based statistical areas (CBSAs). However, according to current plans, five-year average estimates from the American Community Survey will be available in 2010 for the smallest areas, including the least populous micropolitan statistical areas and counties outside CBSA counties.

Recommendation 9

Data Stewardship Program

The American Economic Association Advisory Committee

“The American Economic Association Advisory Committee (**AEA/AC**) feels that the Census Bureau’s Data Stewardship Program is a useful structure for addressing the Bureau’s needs to both protect privacy of respondents and make data usable. It is important that the Census Bureau has an active program that continually addresses issues of confidentiality and that publicly disseminates the steps taken to protect data privacy.

We urge the Stewardship Program to continue to support the needs of the research community subject to the Census Bureau’s obligation to protect privacy. We feel that the current internal access procedures and training policies ensure that the research community understands the importance of maintaining confidentiality. In publications, web site and other forums where Census information is disseminated to the general public, we agree that it is important to remind users of both the Census policy toward data confidentiality and the safeguards taken to protect data sources.”

Census Bureau Response

A team reporting to the Privacy Policy and Research Committee of the Data Stewardship Executive Policy Committee (DSEP) has just begun looking into this issue. The team’s goal is to identify alternatives for ensuring that data users will continue to have access to micro level data for public policy research and evaluation. Once the work of this group is completed, we will report our findings to the Census Advisory Committee of Professional Associations.

Another team of the DSEP is also developing messages for use in our publications, on the Web site, and in other forums that relay information to the general public about the Census Bureau’s fundamental principles and commitments, as well as explaining the legal and policy limitations that protect confidentiality. In addition, we are working with stakeholders, including the AEA, to recognize different groups’ concerns as they pertain to privacy, confidentiality, and data access and are seeking their input. This sometimes results in conflicting responses, but the goal is to establish communication among all parties, so that privacy and data access issues are not discussed in isolation. We see these efforts as critical towards laying a foundation of trust that will reassure future respondents.

The American Marketing Association

“The American Marketing Association Advisory Committee (**AMA/AC**) commends the Census Bureau for developing the Data Stewardship Program to ensure data confidentiality and privacy. Our recommendations to improve the Program include:

1. The most valuable asset the Census Bureau possesses is the trust that it has developed as a responsible and objective agency serving the public good. The data stewardship program must be communicated and implemented in a way that continually reinforces this trust.
2. While routine communications and forms should include a reference to the Census Bureau's privacy policies, the AMA Committee believes that proactive communications regarding privacy should not be a priority as such communications may backfire by raising latent concerns about privacy issues. This, however, is ultimately an empirical question. Given the amounts of money associated with even small changes in response rates, it may be worthwhile for the Census Bureau to test procedures for communicating confidentiality and/or non-disclosure policies, to see whether it is possible to obtain positive effects, at least within some targetable populations (such as Zip Codes with high immigrant or Hispanic populations).
3. The Census Bureau should, however, be prepared to vigorously respond to any negative publicity around a real or perceived breach of the privacy policies or data stewardship guidelines. Even if the Census Bureau does not proactively communicate its privacy policies to potential respondents, it must be prepared to quickly and vigorously respond to any negative publicity around a real or perceived breach of the privacy policies or data stewardship guidelines.”

Census Bureau Response

The Census Bureau agrees that any communication efforts must take great care to reinforce the public trust, rather than arousing suspicions about privacy and confidentiality. The Census Bureau has supported some privacy research in the past and the Data Stewardship Program will continue to seek support for general privacy studies in the future, but resources are limited for this kind of effort. In the meantime, small cognitive studies are being undertaken to pre-test changes to survey and census instruments. Some of these research efforts – and the testing for the 2010 Census – may provide insights for Data Stewardship messages, as well.

In terms of general communication strategies, a Data Stewardship Executive Policy Committee (DSEP) team is developing messages for use in our publications, on the Web site, and in other forums that relay information to the general public about the Census Bureau’s fundamental principles and commitments, as well as explaining the legal and policy limitations that protect confidentiality. Also, with regard to publication of our Privacy Impact Assessments, we tried to anticipate concerns and address them up front via responses to Frequently Asked Questions.

Our experience in Census 2000 has taught us to be ready. Although we have had some success in quickly pulling together a response to public criticism, we recognize that

establishing a *process* for responding to various issues is something we need to focus more attention on. The DSEP has discussed establishing a team to develop procedures for dealing with issues that should arise, so that the Census Bureau will be better equipped to respond rapidly to any real or perceived breaches that can affect the public's trust. We hope that these efforts and our ability to point to our Data Stewardship Program will help us weather these storms in the future.

The American Statistical Association Advisory Committee

“The American Statistical Association Advisory Committee (ASA/AC) commends the Census Bureau for establishing this new Data Stewardship program to respond to and anticipate concerns about privacy. We believe that education about general privacy and confidentiality issues is an important part of outreach.

The ASA/AC recommends that the strategic goal of supporting innovation and ensuring confidentiality be expanded to include informing the public of the Census Bureau's protections. This can be done in part by placing a privacy statement or restrictions on all information provided on the web site, as well as with data products and publications.

Census Bureau protections could be effectively disseminated by having the Census Bureau show leadership in the area of privacy and protections – making available to researchers the protocols and guidelines used to establish protections; conducting seminars or short courses at conferences and other venues on privacy/protections. Such indirect efforts could constitute an effective outreach effort to the public and is consistent with the Bureau's mission.”

Census Bureau Response

Outreach through the Census Bureau's Web site is one avenue that the Data Stewardship Executive Policy Committee (DSEP) has already begun to utilize. Information on disclosure protections can be accessed on the Web site by clicking on “Confidentiality.” Comparable information also appears on each of the tables generated from the *American FactFinder*. The disclosure rules we follow are consistent with guidelines issued by the Office of Management and Budget (OMB) in its *Statistical Policy Working Paper No. 22* and utilize a checklist approach.

In addition, a DSEP page is being developed that can be easily accessed via the Internet. A DSEP team is working on appropriate messaging to reinforce the public's trust, rather than raising suspicions about privacy and confidentiality issues. These general purpose statements will focus on the Census Bureau's fundamental principles and commitments, as well as explaining the legal and policy limitations that protect confidentiality.

The ASA also suggests that the Census Bureau show leadership in data stewardship by sharing its experiences and solutions with other agencies and organizations. We have recently promoted our Data Stewardship Program and our approach to Privacy Impact

Assessments to various stakeholders, including the Congress, General Accounting Office, OMB, major federal statistical agencies, administrative agency data suppliers, privacy groups, data users, each of our advisory committees, and the Census Information Centers. In addition, we have given presentations for numerous professional associations, including at the Joint Statistical Meetings, on the data stewardship framework and some of the policies we have developed. It is our intent to continue to do so, and we welcome suggestions for new venues that would reach out to new groups of potential users and respondents whom we have not spoken with in the past. The idea of developing a short course or seminars is a good one, as well, and we will explore ways we can do so, either on our own or in conjunction with other statistical agencies.

The Population Association of America

“The Population Association of America Advisory Committee (**PAA/AC**) applauds the Census Bureau for developing its Data Stewardship program in response to growing concerns about privacy, confidentiality, and access to data. We recommend that some consideration be given to adding one or more external (non-Census Bureau) members to the Data Stewardship Executive Policy Committee. External members would serve a monitoring function and, if chosen wisely, could make substantive contributions to the work of the committee. We also recommend that information about data privacy and confidentiality be included in the “Kids Corner” and that the “Kids Corner” link be moved to the home page.”

Census Bureau Response

The suggestion to add one or more external members to the Data Stewardship Executive Policy Committee (DSEP) is an interesting one and one that we will give due consideration. As mentioned at the Census Advisory Committee on Professional Associations (CACPA) meeting, this was tried by the Disclosure Review Board in the past and was not fully successful. Even if we determine that it is not feasible to invite external members to serve on the DSEP, though, the DSEP will no doubt continue to seek input from external advisors on an as-needed basis, as it has in the past. This will be done through forums such as the CACPA meetings and through directly approaching experts in their fields for advice on issues relating to DSEP matters.

With regard to communication, the Data Stewardship Program is developing general purpose messages for use in our publications, on the Web site, and in other forums that relay information to the general public about the Census Bureau’s fundamental principles and commitments, as well as explaining the legal and policy limitations that protect confidentiality. The PAA also suggests adding information on privacy and confidentiality to a segment of the Web site targeted at children. We will look into this, as well. The Census Bureau Web site is currently being updated and this is an opportune time to consider the changes the PAA recommends. As today’s most avid Internet users and tomorrow’s respondents-in-waiting, children are an important sector of the population to inform about the Census Bureau’s policies on data stewardship.

Recommendation 10

Firm Performance, Workforce Quality and Workforce Churning

Census Bureau Questions:

- 1. What insights does the Advisory Committee have about the conceptual and measurement problems in measuring output and productivity in difficult-to-measure sectors such as financial services?*
- 2. What are the suggestions of the Advisory Committee on the types of alternative measures of firm performance, workforce quality and workforce churning that should be considered in light of the data limitations and measurement difficulties?*
- 3. What recommendations does the Advisory Committee have about how the Sloan/Census detailed industry project can be used to improve Census data products?*

“The American Economic Association Advisory Committee (AEA/AC) thinks this Sloan Industry Center Project is an important exercise. The project can provide important insights into workforce quality and workforce dynamics at the establishment level, and how these variables are related to productivity.

1. The primary measurement problem the Committee sees in this research program pertains to productivity. Using deflated revenue/worker facilitates inter-industry comparisons, but even the definition of revenue is problematic in some industries (e.g. financial services) as the authors acknowledge. Further, in industries where establishments are vertically integrated to different degrees, using revenue/worker to measure productivity may introduce spurious differences. Some alternative determinants of establishment performance might exploit the geographic detail afforded by the Economic Census. Performance measures are likely to vary across markets, particularly when markets are isolated geographically, and the census data provides the ability to measure establishment performance relative to other producers in the same geographic market. A performance measure based on growth might be a useful addition.
2. The Committee thinks that the workforce quality and workforce turnover measures produced by the LEHD hold substantial promise for economic research in their own right. Their value extends beyond the examination of productivity patterns. Making these workforce characteristics measures available to the research community could be a valuable service. The Committee also believes that the data linkage associated with this project could be useful to researchers investigating the heterogeneity of firms within industries, where competing enterprises may choose to operate with workforces having different characteristics.

3. The Committee thinks this project demonstrates the value of linking economic and household data and commends the authors' creative utilization of the industry-specific expertise in the Sloan Industry Centers."

Census Bureau Response

1. We recognize the limitations of the revenue per worker measures and appreciate the committee's suggestions about alternative measures to consider. We plan on exploring those alternatives. Nonetheless, part of the point of this exercise is to consider the limitations of revenue per worker measures since revenue measures are one of the primary measures collected in the economic census.
2. The LEHD project is working towards making the worker and job turnover statistics available to the user community. The Quarterly Workforce Indicators (QWI) are already available on a limited basis via the Census website (www.census.gov). The micro measures are being made available to researchers via the Census Research Data Center network.
3. We plan to continue working with the Sloan Industry Centers in the future to take advantage of their industry-specific expertise.

Recommendation 11

Integrated Self-Help System

“The American Marketing Association Advisory Committee (AMA/AC) submits the following:

1. The AMA/AC recommends that marketing research be conducted to better understand user profiles and needs in order to help shape the further development of the integrated self-help system.
2. In order to minimize confusion with three different search modes (topics, search, and FAQ’s), AMA recommends that users have a single access point on the page, which then highlights and defines the three modes.”

Census Bureau Response

1. The Marketing Services Office will conduct a survey, using the RightNow survey instrument, once the MSO receives clearance from the Office of Management and Budget to conduct such as survey. We believe that the time frame for such a survey should be in the early fall, once we have a more complete knowledge base of questions and answers.
2. The Marketing Services Office will work with the Internet staff to redesign user access to these tools.

Recommendation 12

Longitudinal Employer-Household Dynamic (LEHD) Program Update

“The American Statistical Association Advisory Committee (ASA/AC) congratulates the Census Bureau on the success to date of what is clearly a very wide-ranging and ambitious program. Linked longitudinal data on employers and employees are of increasing importance to researchers and policy-makers, and the provision of this new data source is to be highly commended.

The committee has the following recommendations:

1. Analyses should be conducted of the quality of the matching between the Integrated Records database and the demographic surveys, in particular to identify whether there are any subgroups where the quality of the matching could bias the analysis.
2. Care needs to be taken that estimates of labor market dynamics, particularly at local levels, reflect real changes in the labor market, and are not artifacts of changes in administrative procedures or data processing problems with the source administrative files.
3. Large-scale record linkage involves a trade-off between privacy rights versus the public good. While the measures taken to ensure the confidentiality of the data are certainly noteworthy, the Census Bureau should also ensure that all applications of the LEHD program have an overwhelming and easily explainable public good. The Census Bureau should actively consider this as a factor in deciding where to focus attention (see question 2 from the Census Bureau). For example, health is an area with a high public good factor.
4. The Census Bureau should consider how this database might be used to improve its existing demographic and economic surveys programs. For example, could the LEHD data be used in combination with survey data to produce better small area estimates of the survey variables?
5. Measures of accuracy of the data (e.g., matching error) should accompany the presentation of results.
6. Finally, the ASA/AC recommends that the Census Bureau consider focusing on studies with a clear benefit and that “tell a good story.” That way public support for the infrastructure can be built.”

Census Bureau Response

1. We agree that such analyses are valuable, and we have already initiated research on the characteristics of matched and unmatched CPS and SIPP respondents. A preliminary report is expected to be made available in 2005.
2. We agree that our estimates must be relevant and reflective of the real changes in the labor market. The LEHD program has taken extensive steps in this direction. Two notable papers are listed below – the first is an invited paper given at several American Statistical Association meetings that will appear in a forthcoming issue of the Journal of Business and Economic Statistics. The second has also been submitted for publication.

The LEHD web site, located at <http://lehd.dsd.census.gov/> provides documentation of these two papers, as well as the approach taken to address the issue.

Technical Paper No. TP-2002-17

The Sensitivity of Economic Statistics to Coding Errors in Personal Identifiers

Date: January 2003. **Author(s):** John M. Abowd and Lars Vilhuber

Technical Paper No. TP-2003-09

Using Worker Flows in the Analysis of the Firm

Date: May 2004, 2003. **Author(s):** Gary Benedetto, John Haltiwanger, Julia Lane, and Kevin McKinney

3. The LEHD program is sensitive to this concern and exercises extreme care to balance privacy rights and the public good. Each LEHD project must meet not only the Census Bureau's Title 13 mandate, but also improve economic or demographic censuses, surveys, or intercensal population estimates. The QWI online in the LEHD web site documents the reason that the Census Bureau produces the indicators about the dynamic labor market. Transportation and health insurance are two examples of public goods that the LEHD Program is also studying.
4. We recognize the enormous potentials of the LEHD Program to improve the existing demographic and economic programs, and we have in fact made specific efforts to realize the potentials. For example, the LEHD program has been working with the American Community Survey to improve place of work and industry coding. As another example, it has an ongoing analysis of immigration patterns that is developed in conjunction with the Immigration Studies Branch of the Population Division. Both examples demonstrate how the LEHD program has made and will continue to strive for improvements in the existing programs.

5. We agree that this should become a standard feature, and it is an active part of the research program.
6. Each of the LEHD projects is undertaken to be consistent with the Census Bureau's mandate and mission. Some of the descriptions of the overarching benefits of the program and the associated studies are provided on the LEHD website, including:

Technical Paper No. TP-2002-21

Unlocking the Information in Integrated Social Data

Date: May, 2002. Author(s): John M. Abowd

Technical Paper No. TP-2004-02

Integrated Longitudinal Employee-Employer Data for the United States

Date: May, 2004. Author(s): John M. Abowd, John C. Haltiwanger, and Julia I. Lane

Recommendation 13

Corporate Identity

“The American Marketing Association Advisory Committee (AMA/AC) commends the use of the new corporate identity throughout most of the CACPA presentations. Additionally, the AMA congratulates and strongly supports the Bureau's decision to discard materials not in conformance with these standards by the end of this year.”

Census Bureau Response

The Census Bureau will remind staff that old materials must be used up or discarded by the end of 2004.

Recommendation 14

Receipt of Meeting Materials

“The American Marketing Association Advisory Committee (AMA/AC) would prefer to receive papers at least three weeks prior to the meeting. AMA also recommends that these papers be available via email or a Web link and that additional background information also be available electronically. If the Census Bureau is concerned about the misuse of this information on a web site, many options are available such as creating PDF’s, using log-in personal identification numbers for committee members, and creating a separate website for committee member use only.”

Census Bureau Response

The goal of the Census Advisory Committee Office is to provide meeting materials to the advisory committee members in a timely manner, via traditional mailings and/or e-mail, as we are able. As staff resources become available in the future, we plan to also make the materials available on the Census Bureau Web site.

Recommendation 15

American Community Survey/Demographic Analysis Working Group

“The American Statistical Association Advisory Committee (ASA/AC) appreciates getting responses to its recommendations well in advance of the meetings.

The ASA Advisory Committee is interested in work with Census Bureau staff in a working group to explore the American Community Survey/Demographic Analysis estimation issue.”

Census Bureau Response

The Census Advisory Committee Office is committed to providing responses to the recommendations to advisory committee members in a timely manner and will continue to do so.

The staff at the Census Bureau is setting up a working group meeting with the ASA Advisory Committee members to explore the American Community Survey/Demographic Analysis estimation issue.

C:\Documents and Settings\pewet001\Local Settings\Temp\notesE1EF34\Census Bureau Responses to the CACPA Recommendations.wpd