Mrs. Diana Hynek

Departmental Paperwork Clearance Officer
Department of Commerce
Room 6616,
14th and Constitution Avenue NW
Washington, DC 20230

## SUBJECT: ACS 2013 Content Changes

Dear Mrs. Hynek:
We write in response to the comment request regarding the content changes to the American Community Survey (ACS) of the U.S. Census Bureau (OMB Control Number 0607-0810).

The ACS is considering including two new questions topics about computer and Internet usage, and parental place of birth for the 2013 questionnaire. The computer and Internet usage topic will comprise three questions with a mix of fixed choice and open-ended responses, and the parental place of birth topic will include two open-ended questions.

The Puerto Rico Institute of Statistics (PRIS) support these changes, as the proposed collection of information will allow us to share some of this data with the International Telecommunications Union (ITU) in their "Information and Communications Technology (ICT) Access and Use by Households and Individuals". The ICT is a practical tool that supports countries in their effort of measuring and monitoring the production of high quality and internationally comparable data and our institution is looking to enhance Puerto Rico telecommunications data.

Definitely, the proposed ACS content changes will be an asset to Puerto Rico's efforts in improving data quality. For further information, call us at (787) 993-3339 or email us at mario.marazzi@estadisticas.gobierno.pr.


1629 K Street, NW

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Religious Action Center for Reform Judaism
Shanna L. Smith National Fair Housing Alliance Joe Solmonese Human Rights Campaign Randi Weingarten American Federation of Teachers Elisabeth MacNamara League of Women Voters
Warren David
American-Arab AntiDiscrimination Committee

## Compliance/Enforcement

 Committee ChairpersonKaren K. Narasaki
Asian American Justice Center President \& CEO
Nade J. Henderson
Executive Vice President \& COO Karen McGill Lawson

February 27, 2012
Via email: jjessup@doc.gov
U.S. Census Bureau

Diana Hynek
Departmental Paperwork Clearance Officer
Department of Commerce
Room 6616
$14^{\text {th }}$ and Constitution Avenue, NW
Washington, DC 20230
Dear Ms. Hynek:
On behalf of The Leadership Conference on Civil and Human Rights, a coalition charged by its diverse membership of more than 200 national organizations to promote and protect the civil and human rights of all persons in the United States, we write to share our comments in response to the Census Bureau's December 28, 2011 Notice of Proposed Information Collection and Comment Request on the American Community Survey (ACS) 2013 Content Changes and Internet Response Mode.

The Leadership Conference is ideally positioned to address many of the most pressing issues affecting the successful implementation of Census Bureau programs, surveys, and initiatives. The Leadership Conference's coordinating role among so many diverse organizations allows for the sharing of different perspectives, as well as the development of broader strategies that occur within the purview of any individual organization. All of our work draws on the expertise of the cross-section of national organizations, and examines the impact of civil rights policy on a broad range of constituencies.

The Leadership Conference considers a fair and accurate census and comprehensive ACS among the most significant civil rights issues facing the country today. Our wide-ranging efforts to promote equality of representation and economic opportunity are guided significantly by objective, inclusive data on America's diverse communities and populations. We and our member organizations appreciate the importance of fact-based analyses for identifying disparate access and outcomes and devising effective solutions. On behalf of our member organizations, The Leadership Conference strongly supports the Census Bureau's proposal to add two topics to the ACS starting in 2013: (1) computer and Internet usage; and (2) parental place of birth. We also ask for caution when designing an Internet response option for future surveys and censuses because accurate and thorough data are critical to understanding the so-called "digital divide." We offer more detailed reasons below.

## Computer and Internet Usage

The Leadership Conference supports the Census Bureau's decision to include questions about computer ownership and Internet subscription in the ACS, as directed by Congress in the Broadband Data Improvement Act of 2008. Collecting data about computer usage and broadband adoption through the ACS will provide the most complete look to date regarding

Page 2 of 4
where we stand as a nation, compared to the rest of the world, what challenges we face, and how we should move forward. It will also enable us to capture the evolution of how people are getting online in a world of smartphones, tablets, netbooks, laptops, and the like. Equipped with richer data, The Leadership Conference and the federal government can develop policy goals to achieve universal broadband access and adoption.

The data collected through the proposed additional questions will allow The Leadership Conference and its member organizations to develop a more complete understanding of the so-called "digital divide," a divide on which the communities we represent - including rural communities, the poor, and communities of color - all too often find themselves on the wrong side due to a lack of meaningful broadband access.

Census data collected through the Current Population Survey (CPS) provide the most comprehensive data available today on computer usage and broadband adoption, informing a number of important studies on the digital divide produced by the National Telecommunications and Information Administration (NTIA). ${ }^{1}$ Through these studies, we know that African Americans, Latinos, and American
Indians/Alaskan Natives trail non-Hispanic Whites by a wide margin when it comes to using broadband at home. ${ }^{2}$ For Asian Americans, the significant ethnic and socioeconomic diversity in that community makes it likely that many Asian subgroups also lag behind in broadband adoption. We also know that low-income and rural communities access broadband at home at a much lower rate than communities in affluent or urban areas. ${ }^{3}$

The data gathered through the ACS will expand the CPS findings in a number of important and necessary ways. First, the ACS reaches a much larger population than the CPS - 3,540,000 addresses each year compared to just $54,000 .{ }^{4}$ This larger sample size will provide more accurate insight into the state of computer usage and broadband adoption across our nation, especially with regard to race and ethnic subgroups, level of educational attainment, English language proficiency, and other important variables that inform people's ability to respond to censuses and surveys. Second, according to the final report for the 2010 Content Test for the computer and Internet questions, the design of the proposed ACS questions may better capture the entirety of a household's Internet usage. For example, during the 2010 Content Test, which occurred during the same time period as the 2010 CPS, researchers found that the proposed ACS questions yielded a much higher percentage of respondents claiming that they owned a handheld device or subscribed to a mobile data plan than the CPS questions. ${ }^{5}$ Researchers speculated that this higher reporting was due, in part, to the ACS utilizing a "forced choice" option instead of the CPS's "mark-all-that-apply" approach. ${ }^{6}$ Essentially, by asking about computer or device ownership through a

[^0]Page 3 of 4
series of "yes" or "no" questions, rather than asking a respondent to select all devices they own, the proposed ACS questions captured a higher percentage of respondents that used handheld devices and/or mobile data plans.

The data will also be useful to the Census Bureau, given the agency's intent to offer an Internet response option for future surveys and censuses. ${ }^{7}$ Data collected through the proposed questions will allow the Census Bureau to gain a better understanding of how to design the online response portal to maximize participation. For instance, the Bureau may consider designing a response portal that can be used easily through handheld devices or tablet computers to capture a portion of respondents that only access the Internet through these devices. Further, through the use of these data, the Bureau will more accurately calculate any potential cost savings by having a better idea of how many people will be able to take advantage of this new option.

Finally, we remain cautious regarding the Bureau's research and testing on the inclusion of an Internet response option for the ACS and, potentially, the decennial census. It will be critical to ensure that efforts to take advantage of new technology for a more efficient and cost-effective ACS do not leave traditionally hard-to-count communities behind. As the research cited above demonstrates, the Census Bureau must take into account persistent disparities in Internet access, usage, and platforms in order to maximize response rates in all communities. ${ }^{8}$ We look forward to continuing a conversation with the Bureau about how the Internet response option should best be structured.

## Parental Place of Birth

Collecting data on parental place of birth will be important to the advocacy work of The Leadership Conference and its members, as it will provide us with an intergenerational understanding of different communities. The speed of growth of second generation Americans is astounding; according to the CPS it has grown from 24.6 million people with at least one foreign-born parent in 1996 to 33 million in 2009.

Data on parental place of birth are critical to understanding foreign born, children of immigrants, and natives with no foreign-born parents populations. Focusing on these three categories separately will give The Leadership Conference and its members, policymakers, and researchers information about adaptation and integration of immigrants, children of immigrants, and their descendants over time. Without information about parental place of birth, the second generation remains indistinguishable from the third-or-higher generations. We agree with the Census Bureau that there is added value in gathering parental place of birth data, which, combined with other socioeconomic data gathered in the ACS, will provide a richer set of data to understand the needs and concerns faced by first generation immigrants, second generation, and beyond. This is particularly important when trying to determine the impact that the foreign born and their children have on communities, what services to provide them, and what planning considerations to heed. For example, understanding the level of English language proficiency among different generations will help public and private service providers better understand the types of language assistance to offer in different communities. The data will provide more refined guidance on how best to use limited resources to maximize effectiveness.

[^1]We hope that these recommendations and analyses prove useful to the Bureau, and we look forward to collaborating with you to further the goal of ensuring a fair and accurate census and comprehensive American Community Survey. Please contact Leadership Conference Census Task Force Co-Chairs Terry Ao Minnis, Asian American Justice Center, at 202-296-2300 x127, or Max Sevillia, NALEO Educational Fund at 202-546-2536 x15, or Corrine Yu, Leadership Conference Managing Policy Director at 202-4665670 , if you would like to discuss the above issues or any other issues of importance to The Leadership Conference.

Sincerely,


Wade Henderson
President \& CEO


Executive Director of the
NALEO Educational Fund


Director of Census and Voting Program
Asian American Justice Center

February 27, 2012

Ms. Diana Hynek
Departmental Paperwork Clearance Officer
Department of Commerce, Room 6616
$14^{\text {th }}$ and Constitution Avenue, NW
Washington DC 20230

ATTN: Federal Register "Proposed Information Request; Comment Request; The American Community Survey 2013 Content Changes and Internet Response Mode." Federal Register Vol 76, No. 249, December 28, 2011, pp. 81474 - 81475.

Dear Ms. Hynek:

On behalf of the American Association for Public Opinion Research (AAPOR), the world's preeminent professional organization devoted to survey research and public opinion measurement, we strongly urge the U.S. Census Bureau to add two questions on parental nativity to the 2013 American Community Survey (ACS). One question should ask for the birth country of the father and one question for the birth country of the mother.

As experts on public opinion and survey professionals, we understand the need to collect empirical information on politically sensitive topics. Immigration and immigration policy is one of the most politically charged issues facing our country today. To provide a clear empirical foundation for tracking the size and scope of immigration in this country, it is critical to collect generation-specific information at a sub-national level. The CPS provides information on parental origin at a national level.

Consequently, while the CPS can provide a broad brush on the prevalence of children of immigrants for the entire country, the ACS is the only data collection vehicle that has the precision and coverage that can measure the wide diversity of immigrant populations for states and localities. Currently, it is impossible to distinguish between second and later generation immigrants on the ACS. This makes it very difficult to understand how immigrants are assimilating and integrating into the U.S. culture at a local or state level.

Without adding these two questions, our ability as a country to develop empirically driven sound public policies, regardless of one's political preferences, will be greatly hampered. About one quarter of children in this country have foreign born parents, and the number has been growing steadily. According to the Current Population Survey (CPS), the number of people with at least one foreign born parent was 24.6 million in 1996. This had grown to 33 million by 2009. Almost half of these individuals were under 18 years old. ${ }^{1}$ As this population has grown,

[^2]February 27, 2012
American Association for Public Opinion Research
Comment: U.S. Census Bureau, American Community Survey
Page 2 of 2
immigrants have settled beyond the larger states that have traditionally been their destinations (e.g., Texas, California, Florida, Illinois, New York). This puts a premium on collecting these data for all areas throughout the U.S.

In addition to documenting the size and scope of the population, local-area data are very important for the design of programs for those who have limited English proficiency. For example, specific programs under the 2001 No Child Left Behind Act allocates funds to the education of the children of new immigrants. Specialized education programs have to be created to integrate these children into society. To allocate resources, service providers need to know the number of second generation children and their heritage that could be eligible for services.

In conclusion, AAPOR strongly recommends the Census Bureau include a question on the place of birth of each parent on the ACS. Please let us know if there are additional efforts we can make to ensure these questions are added to the ACS.

Sincerely,


Scott Keeter, President
American Association for Public Opinion Research

# Chamber of Commerce 

OF THE
United States of America

February 24, 2012

Ms. Jennifer Jessup
Departmental Paperwork Clearance Officer
Department of Commerce
14th and Constitution Avenue, NW
Room 6616
Washington, DC 20230
Re: The American Community Survey 2013 Content Changes and Internet Response Mode
Dear Ms. Jessup,
The U.S. Chamber of Commerce, the world's largest business federation representing the interests of more than three million businesses and organizations of every size, sector and region, is pleased to submit these comments regarding the proposed American Community Survey (ACS) 2013 content changes and possible Internet response options.

As you know, a wide spectrum of economic sectors in the United States -- including many U.S. Chamber members in the retail and service industry (e.g., coffee shops; dry cleaners; banks; restaurants); broadcast, print and electronic communications; housing; transportation; housing and mortgage banking; and marketing -- use data from the decennial census and the related American Community Survey.

The ACS data points are vital for monitoring trends in the economic, social, and demographic landscape at a local level. Understanding these trends allows users of the ACS data to make informed decisions regarding strategic development opportunities that strengthen our communities, provide for the efficient and effective delivery of goods and services, create jobs, and ultimately drive economic growth.

The U.S. Chamber has reviewed the questions sponsored by the Federal Communications Commission on computer and Internet usage, and strongly supports their inclusion on the 2013 ACS questionnaires. Chamber members have witnessed the growth in Internet shopping in the retail sector among individuals and businesses, and feel that analyzing these trends down to the local level can help small businesses tailor their marketing to a focused group of consumers.

Additionally, we believe that small and medium-sized business will welcome the possibility to respond to the survey online, as many have suggested that this could streamline the process of responding - and may also increase the response rate for the sample size thus eliminating costly follow-up.

The Chamber appreciates the opportunity to comment on the proposed American Community Survey 2013 content changes and possible Internet response options, and looks forward to implementing these improvements to ensure that the American Community Survey continues to bring us the type of demographic data that businesses of all sizes have come to rely on for planning and expanding.

R. Bruce Josten

```
From: "Patrick Burns" <patrickburns@economicrt.org>
To: <dHynek@doc.gov>
Cc: <ACSO.communications@census.gov>
```

Date: Monday, January 09, 2012 01:50PM
Subject: In favor of 2 proposed new ACS questions

Ms. Hynek,

I am writing in support of adding the two questions described in the Federal Register notice on December 28, 2011. I think both questions would be extremely useful for researchers, as long as they don't add too much burden to your budget.
"Computer and internet usage" would speak to long-standing questions about a 'digital divide,' although the greatest value for that data would be in a 5-year ACS (2013-2017?!?) that was available at the Census Tract level. The only reason not to add that question would be if a better data source was available, such as administrative records of Internet Service Providers, which are already collected, capture the entire population, but not publicly available as of yet. It would be interesting of a federal agency such as the FCC could require all ISPs to submit quarterly or monthly lists of their subscribers, and then release this data at the Census Block Group, Census Tract or ZIP Code level. Or maybe Homeland Security already has these data? That said, being able to cross-tab "computer and internet usage" with personal demographic characteristics in the ACS would be very useful, and not possible using administrative data.
"Parental place of birth" would be an interesting question also, adding further richness to the ACS data on migration and nativity.

I hope that the Census does add both of these questions. Sincerely,

## PATRICK

Patrick Burns, Senior Researcher

Economic Roundtable
315 W. 9th Street, Suite 1209
Los Angeles, CA, 90015
W: (213) 892-8104 x203 F: (213) 291-9245
http://www.economicrt.org

From: Pettit, Kathryn [mailto:KPettit@urban.org]
Sent: Friday, January 06, 2012 9:01 AM
To: NNIPNEWS
Subject: [NNIPNews] FW: Federal Register notice: Proposed new ACS questions

From a Census listserv, I found out that the Census Bureau published a Federal Register notice on December 28, 2011, seeking comment on two proposed new questions for the American Community Survey (ACS) starting in 2013. Deadline for public comments is February 27, 2012.

Here is the link to the FR notice: [http://www.gpo.gov/fdsys/pkg/FR-2011-12-28/pdf/201133269.pdf](http://www.gpo.gov/fdsys/pkg/FR-2011-12-28/pdf/201133269.pdf)

The Census Bureau tested these new questions in its 2010 ACS Content Test. The topics are:

1. Computer and internet usage
2. Parental place of birth

The justification for both proposed topics is included in the FR notice. The notice also summarizes several other proposed small modifications to ACS questions starting in 2013.

It would be good for the Dept. of Commerce to hear from people working locally if these questions would inform your work and understanding of your neighborhoods.
-Kathy

```
From: Thomas J Smith/AMSD/HQ/BOC
To: Susan Lynn Hostetter/ACSO/HQ/BOC@BOC
```

Date: Tuesday, February 14, 2012 12:59PM
Subject: FW: Opportunity To Comment: Proposed ACS 2013 Content Changes and Internet Response Mode

Another comment to add to the pile.....

Thomas Smith
U.S. Census Bureau

301-763-1181
------Forwarded by Thomas J Smith/AMSD/HQ/BOC on 02/14/2012 12:58PM -----
To: "Smith, Thomas J" [Thomas.J.Smith@census.gov](mailto:Thomas.J.Smith@census.gov)
From: "Banks, Gwellnar" [gBanks@doc.gov](mailto:gBanks@doc.gov)
Date: 02/14/2012 12:44PM
Cc: "Mickelson, Glenna" [gMickelson@doc.gov](mailto:gMickelson@doc.gov)
Subject: FW: Opportunity To Comment: Proposed ACS 2013 Content Changes and Internet Response Mode

FYI -

From: Jessup, J ennifer
Sent: Tuesday, February 14, 2012 11:34 AM
To: Banks, Gwellnar
Subject: Fw: Opportunity To Comment: Proposed ACS 2013 Content Changes and Internet Response Mode

From: Cach, Lynn@EDD [Lynn.Cach@edd.ca.gov](mailto:Lynn.Cach@edd.ca.gov)
To: Jessup, Jennifer
Cc: Wong, Spencer@EDD [Spencer.Wong@edd.ca.gov](mailto:Spencer.Wong@edd.ca.gov); Saxton, Steve@EDD [Steve.Saxton@edd.ca.gov](mailto:Steve.Saxton@edd.ca.gov);
Heilman, Mark@EDD [Mark.Heilman@EDD.ca.gov](mailto:Mark.Heilman@EDD.ca.gov); Barrios, Juan@EDD [Juan.Barrios@edd.ca.gov](mailto:Juan.Barrios@edd.ca.gov)
Sent: Tue Feb 14 11:16:49 2012
Subject: Opportunity To Comment: Proposed ACS 2013 Content Changes and Internet Response Mode
Good morning,

EDD/LMID suggests that the survey age be changed from $18+$ to $16+$ to be comparable to CPS. Please let me know if you have any questions. Thank you.

## Lynn Cach

Legislative e Contract Analyst

EDD|Labor Market Information Division
Office: (916)262-2315 | Fax: (916) 262-2342

Lynn.cach@edd.ca.gov

宩 Please consider the environment before printing this e-mail.


Opportunity to Comment: Proposed American Community

## Survey 2013 Content Changes and Internet Response

On December 28, 2011, the Department of Commerce published a notice in the Federal Register seeking comment on possible changes to the U.S. Census Bureau's American Community Survey (ACS) content and data collection, beginning in 2013.

The proposed changes described in this notice include the following:

- New question topics-computer and Internet usage and parental place of birth
- New versions of existing question topics—veteran status, period of military service, food stamps, property income and wages
- A possible Internet response option

The link to the full text of the Federal Register notice can be found on the Operations and Administration of the ACS page.

The deadline for public comment is February 27, 2012.

Additionally, there is a small correction to the email address listed in the notice. Please direct all email comments to jiessup@doc.gov. (Emails sent to dHynek@doc.gov will receive an out of office message, but will be automatically forwarded.)

If you need information or have questions about the survey, please call our Customer Services Center on 1 (800) 923-8282.

Thank you,

American Community Survey Office
U.S. Census Bureau

Page 4 of 4

## United States" <br> Censuss puen

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From: Thomas J Smith/AMSD/HQ/BOC
To: Susan Lynn Hostetter/ACSO/HQ/BOC@BOC
Date: Thursday, January 19, 2012 01:30PM
Subject: FW: Comments on ACS 2013 Changes

Here is a comment received in response to the 12/28/2011 Federal Register notice soliciting comments on our plans to submit the ACS for OMB review.

All comments sent to us before the 60 day deadline must be summarized and addressed in Question 8 of the Supporting Statement which will be part of the clearance package. No direct response to any commentor is required, although not prohibited

Thomas Smith
U.S. Census Bureau

301-763-1181
------Forwarded by Thomas J Smith/AMSD/HQ/BOC on 01/19/2012 01:29PM -----
To: "Smith, Thomas J" [Thomas.J.Smith@census.gov](mailto:Thomas.J.Smith@census.gov)
From: "Banks, Gwellnar" [gBanks@doc.gov](mailto:gBanks@doc.gov)
Date: 01/19/2012 01:11PM
Cc: "Mickelson, Glenna" [gMickelson@doc.gov](mailto:gMickelson@doc.gov)
Subject: FW: Comments on ACS 2013 Changes
-----Original Message----
From: Stan Drezek [mailto:Stan.Drezek@nisd.net]
Sent: Tuesday, January 17, 2012 6:26 PM
To: Jessup, Jennifer
Cc: Debbie McNierney
Subject: Comments on ACS 2013 Changes
The Department of Commerce in the Federal Register (12-28-11) sought comments on possible 2013 changes to the ACS.

As a user of ACS information for planning purposes in a large diverse school district with a resident population in excess of half a million
my comments are:
a) The ACS information is used extensively for planning purposes and public reporting. ACS data is essential in tracking population growth and demographic, social, and economic factors in our district.
b) My impression is that the time burden estimates on people attempting
to complete the ACS are severe underestimates of the necessary time to

```
complete responding in a meaningful and accurate manner.
c) While not addressed in this notice per se, the greatest help that
could be given in improving the ACS is increasing the sample size. We
find that even the 5-yr estimates have too large of an error to use the
data other than for giving us trends and checking out reasonability.
For example, for births we have to use actual county supplied data and
just cross check the ACS. The MOEs are just too large even for a school
district our size. On the other hand the ACS does give us insight into
fertility and other demographics albeit not precise point estimates.
d) I strongly support the use of the internet to collect ACS data.
Frankly I was amazed at Robert Groves's talk to us at the recent Applied
Demography Conference in San Antonio on all the processes the Census
Bureau was investigating to cut costs and leverage sources of
information. Toward that effort it is essential we proceed with an
internet data collection option.
Thank you for the chance to comment.
Stan Drezek
Stan Drezek
Phone=3978587 FAX=7068845
Office of Resource Planning
Northside ISD
5900 Evers
San Antonio, TX 78238-1606
```

From: usacitizen1 usacitizen1 [usacitizen1@live.com](mailto:usacitizen1@live.com)
To: [dhynek@doc.gov](mailto:dhynek@doc.gov), [deficitreduction@senate.gov](mailto:deficitreduction@senate.gov), [acso.communications@census.gov](mailto:acso.communications@census.gov), [speakerboehner@mail.house.gov](mailto:speakerboehner@mail.house.gov), [sf.nancy@mail.house.gov](mailto:sf.nancy@mail.house.gov), [americanvoices@mail.house.gov](mailto:americanvoices@mail.house.gov), [comments@whitehouse.gov](mailto:comments@whitehouse.gov), [letters@newsweek.com](mailto:letters@newsweek.com), [today@nbc.com](mailto:today@nbc.com), [info@taxpayer.net](mailto:info@taxpayer.net), [media@cagw.org](mailto:media@cagw.org), [info@theteaparty.org](mailto:info@theteaparty.org)
Cc: [glenna.mickelson@doc.gov](mailto:glenna.mickelson@doc.gov)
Date: Wednesday, December 28, 2011 03:59PM
Subject: public comment on federal register FW: the crap the feds produce with the tax dollars they bludgeon from us all

THIS IS ANOTHER MAKE WORK UNNECESSARY SURVEY. THERE IS ABSOLUTELY NO PAPERWORK REDUCTAION OF ANY KIND BY THIS NOTICE. TAXPAYERS ARE ALRADY PAYING TAXES TO FUND THE US HUD AGENCY WHICH DOES HOUSING SURVEYS, SO YOU DONT NEED TO DO ONE TOO. COSTS FOR TAXPAYERS GO UP SUBSTANTIALLY WHEN EVERY SINGLE DAMN AGENCY IN WASHINGTON DC HAS TO DO THEIR OWN SURVEYS. NONE OF THEM EVER CALL THEIR SISTER AGENCIES FOR ANY INFORMATION. WHY IS THAT?

THIS AGENCY WANTS TO ADD 2 MORE ITEMS OF INFORAMTION COLELCTION AND FEELS IT HAS TO DO SO USING THIS AS AN EXCUSE FOR ANOTHER INFO COLLECTION???????? WHY WAS THIS AGENCY SO STUPID THAT THESE TWO ITEMS OF INFORMATION WERE NOT ADDED IN THE 2010 CENSUS JUST CONCLUDED AT A COST OF BILLIONS OF DOLLARS. WAIT UNTIL 2020 TO GET THE INFORMATION. IT IS NOT NEEDED. IT IS NOT VITAL. THIS GOVT AGENCY SEEMS TO PLAY AROUND AND IS NOT INTERESTED IN HELPING AMERICAN TAXPAYERS, BUT INSTEAD BLUDGEONS TAXPAYERS FOR UNNECESSARY MAKE WORK PROJECTS.
the veteran information can be gleaned from the veterans bureau and from military agencies. there is absolutely no need at all for further surveys to be dONE BY THIS AGENCY. LETTING YOU IN WOULD MAKE 3 AGENCIES ALL COLLECTING THE SAME INFORMATION OVER AND OVER AND OVER AND OVER, AL THE WHILE COLLECTING FOR 3 agencies to run doing the same runaround as each other.

PROPERTY INCOME INFO CAN BE COLLECTED FROM STATE TAX RECORDS. THIS CENSUS BUREAU WANTS TO STICK ITS NOSE INTO EVERYBODY'S BUSINESS. INFORMATION ON WAGES IS AVAILABLE FROM THE US DEPT OF LABOR. USE YOUR SISTER AGENCIES. STOP REINVENTING THE WHEEL. ALL CITIZENS NEED LESS CENSUS INTRUSION, ESPECIALLY WHEN YOU HIRE RAPISTS TO VISIT HOMES AND DO SURVEYS. AND HIRE POLITICIANS RELATIVES FOR NO SHOW JOBS. CONTACTING 4 MILLION PEOPLE A YEAR IS REAL INTRUSION INTO BUSY LIVES. THIS IS MORE INFORMATION THAN ANYBODY IN AMERICA NEEDS OR WANTS. SHUT DOWN THIS STUPIDITY AND WASTE OF TAX DOLLARS. THE SIZE AND SCOPE OF THIS IS BEYOND THE PALE.
JEANPUBLIC

Date: Wed, 28 Dec 2011 11:00:23-0500
Subject: the crap the feds produce with the tax dollars they bludgeon from us all From: jeanpublic1@gmail.com
To: usacitizen1@live.com
[Federal Register Volume 76, Number 249 (Wednesday, December 28, 2011)] [Notices]

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[Pages 81474-81475]
From the Federal Register Online via the Government Printing Office [www.gpo.gov]
[FR Doc No: 2011-33269]
DEPARTMENT OF COMMERCE
U.S. Census Bureau
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Proposed Information Collection; Comment Request; The American Community Survey 2013 Content Changes and Internet Response Mode

AGENCY: U.S. Census Bureau.

ACTION: Notice.

SUMMARY: The Department of Commerce, as part of its continuing effort to reduce paperwork and respondent burden, invites the general public and other Federal agencies to take this opportunity to comment on proposed and/or continuing information collections, as required by the Paperwork Reduction Act of 1995, Public Law 104-13 (44 U.S.C. 3506(c)(2)(A)).

DATES: To ensure consideration, written comments must be submitted on or before February 27, 2012.

ADDRESSES: Direct all written comments to Diana Hynek, Departmental Paperwork Clearance Officer, Department of Commerce, Room 6616, 14th and Constitution Avenue NW., Washington, DC 20230 (or via the Internet at dHynek@doc.gov).

FOR FURTHER INFORMATION CONTACT: Requests for additional information or copies of the information collection instrument(s) and instructions should be directed to Cheryl Chambers, U.S. Census Bureau, American Community Survey Office, Washington, DC 20233 by FAX to (301) 763-8070 or via the internet at ACSO.communications@census.gov.

SUPPLEMENTARY INFORMATION

## I. Abstract

The American Community Survey (ACS) collects detailed population and housing data every month and provides tabulations of these data on a yearly basis. In the past, the long-form data were collected only at the time of each decennial census. After years of development and testing, the ACS began full implementation in households in January 2005 and in group quarters (GQs) in January 2006.

The ACS provides more timely information for critical economic planning by governments and the private sector. In the current information-based economy, federal, state, tribal, and local decision makers, as well as private business and non-governmental organizations, need current, reliable, and comparable socioeconomic data to chart the
future. In 2006, the ACS began publishing up-to-date profiles of American communities every year, providing policymakers, planners, and service providers in the public and private sectors this information every year--not just every ten years.

The ACS released estimates of population and housing characteristics for geographic areas of all sizes in December 2010. These data products, used by federal agencies and others, are similar in scope to the Summary File 3 tables from Census 2000.

In the 2010 ACS Content Test, the Census Bureau conducted testing of two new question topics--computer and Internet usage and parental place of birth--which we are considering adding to the questionnaire starting in 2013. As authorized by the Broadband Data Improvement Act of 2008, the Federal Communications Commission sponsored the computer and Internet usage topic; it is comprised of three questions with a mix of fixed choice and open-ended responses. The Census Bureau sponsored the parental place of birth topic; it includes two open-ended questions. The 2010 Content Test results for the two new topics were presented to the Office of Management and Budget (OMB) in September 2011. Reports describing these results will be made available publicly in early 2012.

The Census Bureau believes there is added value in collecting information about parental place of birth, though some may feel that this topic is somewhat duplicative when collected in connection with existing survey questions on race, Hispanic origin, and ancestry. Adding the parental place of birth questions to the questionnaire in 2013 would be done as part of a multi-year process to further examine the relationship of the data for these topics. The ACS data would also be evaluated in connection with results from the 2010 Census Alternative Questionnaire Experiment, and this combined research would be used in determining recommendations for which questions would remain on the ACS at the conclusion of this process. The Census Bureau plans to provide various opportunities for public comment as well as dialogue with groups that are especially interested in these data as we refine the plans and share results on this cross-topical research.

In the 2010 ACS Content Test, the Census Bureau also conducted testing on five existing question topics, veteran's status and period of service, food stamps, property income and wages which we are planning to incorporate into the survey starting in 2013. The Census Bureau revised the food stamp question, at the request of the Food and Nutrition Service, to incorporate the program name change to the Supplemental Nutrition Assistance Program (SNAP). The new version will be used in all collection modes. The Census Bureau revised the wage question to improve response on property income and reporting of wages by breaking up these questions into shorter pieces to improve comprehension when the questions are asked by an interviewer. This change will be incorporated into the Computer-
[[Page 81475]]
assisted Telephone Interview (CATI) and Computer-assisted Personal Interview (CAPI) modes only. At the request of the Department of Veteran Affairs, the Census Bureau revised the veteran status and period of service questions to simplify the reporting categories. The new version will be used by all collection modes. The 2010 Content Test results for the five existing topics were presented to OMB in September 2011. Reports describing these results will be made available publicly in early 2012.

## II. Method of Collection

The Census Bureau will mail survey materials to households selected for the ACS. For households that do not return a questionnaire, Census Bureau staff will attempt to conduct interviews via CATI. We will also conduct CAPI for a sub sample of nonrespondents. A content reinterview will be conducted from a small sample of respondents.

In 2011 the Census Bureau conducted two tests to assess the feasibility of providing an Internet response option to households that receive survey materials by mail. These tests evaluated various methods for providing an Internet response option. One option tested offering respondents the choice to respond by Internet or mail. Another method tested provided only instructions to respond online initially, and sent a follow-up paper questionnaire to households that did not respond online or did not have Internet access. Implementing an Internet response option may lead to cost savings for administering the ACS as well as improvements in the quality of the data provided. Depending on the results of the 2011 tests, the Census Bureau is considering implementing an Internet response option for the ACS in 2013. Reports describing the results of the April 2011 test will be made available publicly in early 2012.

For most types of GQs, Census Bureau field representatives (FRs) will conduct personal interviews with respondents to complete questionnaires or, if necessary, leave questionnaires and ask respondents to complete. Information from $G Q$ contacts will be collected via CAPI. A GQ contact reinterview will be conducted from a sample of GQs primarily through CATI. A very small percentage of the GQ reinterviews will be conducted via CAPI.

The Census Bureau staff will provide Telephone Questionnaire Assistance (TQA) and if the respondent indicates a desire to complete the survey by telephone, the TQA interviewer conducts the interview.

## III. Data

OMB Control Number: 0607-0810.
Form Number: ACS-1, ACS-1(SP), ACS-1(PR), ACS-1(PR)SP, ACS-1(GQ), ACS-1(PR)(GQ), GQFQ, ACS CATI (HU), ACS CAPI (HU), ACS RI (HU), and AGQ QI, AGQ RI.

Type of Review: Regular submission.
Affected Public: Individuals, households, and businesses.
Estimated Number of Respondents: We plan to contact the following number of respondents each year: 3,540,000 households; 200,000 persons in group quarters; 20,000 contacts in group quarters; 43,000 households for reinterview; and 1,500 group quarters contacts for reinterview.

Estimated Time Per Response: Estimates are 38 minutes per household, 15 minutes per group quarters contact, 25 minutes per resident in group quarters, and 10 minutes per household or GQ contact in the reinterview samples.

Estimated Total Annual Burden Hours: The estimate is an annual average of 2,337,900 burden hours.

Estimated Total Annual Cost: Except for their time, there is no cost to respondents.

Respondent's Obligation: Mandatory.
Legal Authority: Title 13, United States Code, Section 141, 193, 221.
IV. Request for Comments

Comments are invited on: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; (b) the accuracy of the agency's estimate of the burden (including hours and cost) of the proposed collection of information; (c) ways to enhance the quality, utility, and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on respondents, including through the use of automated collection techniques or other forms of information technology.

Comments submitted in response to this notice will be summarized and/or included in the request for OMB approval of this information collection; they also will become a matter of public record.

Dated: December 22, 2011
Glenna Mickelson, Management Analyst, Office of the Chief Information Officer. [FR Doc. 2011-33269 Filed 12-27-11; 8:45 am] BILLING CODE 3510-07-P

From: Thomas J Smith/AMSD/HQ/BOC
To: Susan Lynn Hostetter/ACSO/HQ/BOC@BOC
Date: Thursday, January 19, 2012 10:53AM
Subject: FW: Comments on adding questions to the ACS

Here is a comment received in response to the 12/28/2011 Federal Register notice soliciting comments on our plans to submit the ACS for OMB review.

All comments sent to us before the 60 day deadline must be summarized and addressed in Question 8 of the Supporting Statement which will be part of the clearance package. No direct response to any commentor is required, although not prohibited

Thomas Smith
U.S. Census Bureau

301-763-1181
------Forwarded by Thomas J Smith/AMSD/HQ/BOC on 01/19/2012 10:53AM -----
To: "Smith, Thomas J" [Thomas.J.Smith@census.gov](mailto:Thomas.J.Smith@census.gov)
From: "Banks, Gwellnar" [gBanks@doc.gov](mailto:gBanks@doc.gov)
Date: 01/18/2012 08:34AM
Cc: "Mickelson, Glenna" [gMickelson@doc.gov](mailto:gMickelson@doc.gov)
Subject: FW: Comments on adding questions to the ACS
Good morning, Tom. I am forwarding this and others to come in response to Census FRN. I am doing this for Jennifer while she is in job adjustment mode.

From: vicki.mack@census.gov [mailto:vicki.mack@census.gov]
Sent: Friday, January 13, 2012 10:45 AM
To: Jessup, J ennifer
Subject: Comments on adding questions to the ACS

I just want to express my opinion that adding these questions to the ACS would be adding more respondent burden. I was an ACS supervisor in the Charlotte region for over a year. I answered calls from angry respondents, tried to convert refusals, conducted observations and conducted some interviews in the field. I am concerned about the Field staff who have to contact the respondents who did not return the forms.

First, adding a question on parent place of birth is redundant because an origin question for the householder is already asked.

As far as the computer and internet use question, there is no clear reason why the computer and internet question would be added. The Field Representatives (FR's) who attempt to complete these interviews are often asked why are we asking certain questions. I don't see how FR's would explain this question to a respondent in a way that the respondent would feel that is beneficial them or their community. In addition, there is already a computer and internet use supplement for the CPS survey. If that question is eventually added to the ACS, then it should be removed from the CPS supplement, which would at least reduce respondent burden on that survey.

I don't think that any additional useful information would be garnered from these questions.

It seems that people who are interested in adding these questions do not realize that many people who respond to the question do so reluctantly, often complain about the intrusiveness, and complain about the length. It seems that they think, "Oh well its just a few more questions. What would it hurt?" The questionnaire is already long enough in my opinion. I think that anyone suggesting change to the survey, should first be interviewed by a FR using the current survey, before thinking about adding or changing questions.

Vicki Mack, Ph.D.
Data Dissemination Specialist
Atlanta Regional Office
US Census Bureau
(704) 351-9102
vicki.mack@census.gov

# Princeton University <br> Office of Population Research <br> Wallace Hall <br> Princeton, New Jersey 08544 

January 11, 2012
Diana Hynek
Departmental Paperwork Clearance Officer
Department of Commerce
Room 6616
14th and Constitution Avenue NW.
Washington, DC 20230
Re: Proposed Information Collection; Comment Request; The American Community Survey 2013 Content Changes and Internet Response Mode

Dear Ms. Hynek:
I write as concerned citizen as well as Chair of Social and Behavioral Sciences of the National Academy of Sciences, a member of the NAS Council, and President of the American Academy of Political and Social Science. My purpose is to support questions the addition on the place of birth of father and mother on the ACS.

The 2010 ACS Content Test included two questions on parental place of birth and statistical analyses of the result data were very positive, indicating that the questions functioned well on the questionnaire, provided reasonable and reliable results, and had minimal effects on the quality, reliability, distributions, and response rates of the surrounding questions. In addition, there were minimal differences caused by the different placements of the questions on the questionnaire.

These questions are essential for identifying second generation immigrants in the United States, a large and rapidly growing segment of the U.S. population whose integration, assimilation, and general welfare is crucial to the future of the United States, and in my view it is a real scandal that we have not reliable data on this population since the questions were dropped from the census after 1970. As a result, during one of the most tumultuous periods of immigration in American history, we do not have good data on the progress of the second generation. Although questions on parental birthplace were added to the CPS in 1996 to provide reliable estimates on the second generation for the nation as a whole, the sample size is insufficient to provide information on the progress of non-Mexican national origin subgroups or information even on Mexicans for many regions, much less small area data for them and other national origins.

The addition of questions on parental birthplace certainly has strong justification from a demographic point of view, but I believe it also has a legislative mandate under the Civil Rights Act, along with U.S. Code Title 8 (Aliens and Nationality), Title 20 (Education) and Title 42 (Public Health and Welfare). Whatever happens to second generation immigrants, particularly Hispanic immigrants, will inevitably have strong repercussions for the future health, socioeconomic welfare, and civil rights that prevail in American society.

The bottom line is that we really need questions on parental birthplace placed on the ACS as soon as is reasonably possible, not just for narrow academic reasons but for the good of the country.

Sincerely yours,


Henry G. Bryant Professor of Sociology and Public Affairs

From: Thomas J Smith/AMSD/HQ/BOC
To: Susan Lynn Hostetter/ACSO/HQ/BOC@BOC
Date: Thursday, January 19, 2012 01:30PM
Subject: Fw: Comment on Proposed Changes to the 2013 American Community Survey

Here is a comment received in response to the 12/28/2011 Federal Register notice soliciting comments on our plans to submit the ACS for OMB review.

All comments sent to us before the 60 day deadline must be summarized and addressed in Question 8 of the Supporting Statement which will be part of the clearance package. No direct response to any commentor is required, although not prohibited

Thomas Smith
U.S. Census Bureau

301-763-1181
------Forwarded by Thomas J Smith/AMSD/HQ/BOC on 01/19/2012 01:30PM -----
To: "Smith, Thomas J" [Thomas.J.Smith@census.gov](mailto:Thomas.J.Smith@census.gov)
From: "Banks, Gwellnar" [gBanks@doc.gov](mailto:gBanks@doc.gov)
Date: 01/19/2012 01:11PM
Cc: "Mickelson, Glenna" [gMickelson@doc.gov](mailto:gMickelson@doc.gov)
Subject: Comment on Proposed Changes to the 2013 American Community Survey
Hello, Tom. FYI and action.

From: Sakamoto, Arthur [mailto:asakamoto@austin.utexas.edu]
Sent: Wednesday, J anuary 18, 2012 12:57 AM
To: Jessup, J ennifer
Subject: Comment on Proposed Changes to the 2013 American Community Survey

Departmental Paperwork Clearance Officer,
Department of Commerce, Room 6616,
14th and Constitution Avenue NW.,

Washington, DC 20230

I would like to commend and heartily endorse the proposed changes to the 2013 American Community Survey. Particularly the added question on parental place of birth would be a great piece of information to have in order to assess trends in the assimilation of racial and ethnic minorities (including Asian Americans).

Thank you.

Sincerely,

Arthur Sakamoto

Arthur Sakamoto

Professor
Department of Sociology

1 University Station A1700
University of Texas
Austin, Texas 78712
http://www.utexas.edu/cola/depts/sociology/faculty/asj5312

From: Thomas J Smith/AMSD/HQ/BOC
To: Susan Lynn Hostetter/ACSO/HQ/BOC@BOC
Date: Thursday, January 26, 2012 10:18AM
Subject: FW: Comment on the ACS
History: $\downarrow$ This message has been replied to.

Here is a comment received in response to the 12/28/2011 Federal Register notice soliciting comments on our plans to submit the ACS for OMB review.

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Thomas Smith
U.S. Census Bureau

301-763-1181
------Forwarded by Thomas J Smith/AMSD/HQ/BOC on 01/26/2012 10:17AM -----
To: "Smith, Thomas J" [Thomas.J.Smith@census.gov](mailto:Thomas.J.Smith@census.gov)
From: "Banks, Gwellnar" [gBanks@doc.gov](mailto:gBanks@doc.gov)
Date: 01/25/2012 04:15PM
Cc: "Mickelson, Glenna" [gMickelson@doc.gov](mailto:gMickelson@doc.gov)
Subject: FW: Comment on the ACS
Good afternoon, Tom. Quite a popular FRN, some of the comments very harsh. Does Census usually respond to these comments? I never really gave it any thought before but now I am curious. Thanks.

From: Jessup, J ennifer
Sent: Wednesday, J anuary 25, 2012 2:40 PM
To: David Arthur Swanson; Banks, Gwellnar
Cc: George Hough
Subject: RE: Comment on the ACS

Dr. Swanson,

Your comments are acknowledged and will be handled in accordance with the proper procedure.

```
Best Regards,
Jennifer L. Jessup
Office of the Chief Information Officer
United States Department of Commerce
202-482-0336
From: David Arthur Swanson [mailto:david.swanson@ucr.edu]
Sent: Wednesday, J anuary 25, 2012 12:26 PM
To: Jessup, J ennifer
Cc: George Hough
Subject: Comment on the ACS
```

Per the announcement below, my comment is in the form of a forthcoming article that I co-authored with George Hough on the "usability" of the persons per household information in the ACS. The online form of the article is attached. The comment is aimed at data collection procedures (e.g., sample size, measurement error, non-response error, sample frame error, controlling to the PEP estimates, etc.) that are inadequate to support a sufficiently precise estimate of persons per household at the sub-state level that is usable.

David A. Swanson, Ph.D.

Professor of Sociology

University of California Riverside

Riverside, CA 92521 USA
email:david.swanson@ucr.edu
-------- Original Message --------

## Subject:

[AD] FW: Opportunity To Comment: Proposed ACS 2013 Content

Changes and Internet Response Mode
Date: Wed, 25 Jan 2012 09:50:32-0500
From: Kelvin Pollard [kelvinp@prb.org](mailto:kelvinp@prb.org)
To: AppliedDemography@yahoogroups.com
[AppliedDemography@yahoogroups.com](mailto:AppliedDemography@yahoogroups.com)

Please see the notice below; the deadline for public comment is February 27.

Feel free to forward this on to others who may be interested.
--Kelvin Pollard
Editor, Applied Demography newsletter

From: U.S. Census Bureau [mailto:census@subscriptions.census.gov]
Sent: Friday, J anuary 13, 2012 8:59 AM
To: Kelvin Pollard
Subject: Opportunity To Comment: Proposed ACS 2013 Content Changes and Internet Response Mode

## Error! Filename not specified.

Opportunity to Comment: Proposed American Community Survey 2013 Content Changes and Internet Response

On December 28, 2011, the Department of Commerce published a notice in the Federal Register seeking comment on possible changes to the U.S. Census Bureau's American Community Survey (ACS) content and data collection, beginning in 2013.

The proposed changes described in this notice include the following:

- New question topics-computer and Internet usage and parental place of birth
- New versions of existing question topics—veteran status, period of military service, food stamps, property


## income and wages

- A possible Internet response option

The link to the full text of the Federal Register notice can be found on the Operations and Administration of the ACS page.

The deadline for public comment is February 27, 2012.

Additionally, there is a small correction to the email address listed in the notice. Please direct all email comments to jjessup@doc.gov. (Emails sent to dHynek@doc.gov will receive an out of office message, but will be automatically forwarded.)

If you need information or have questions about the survey, please call our Customer Services Center on 1 (800) 923-8282.

Thank you,

American Community Survey Office

From: Thomas J Smith/AMSD/HQ/BOC
To: Susan Lynn Hostetter/ACSO/HQ/BOC@BOC
Date: Thursday, January 19, 2012 10:52AM
Subject: FW: response to Federal Register Notice published on Dec. 28, 2011

Here is a comment received in response to the 12/28/2011 Federal Register notice soliciting comments on our plans to submit the ACS for OMB review.

All comments sent to us before the 60 day deadline must be summarized and addressed in Question 8 of the Supporting Statement which will be part of the clearance package. No direct response to any commentor is required, although not prohibited

Thomas Smith
U.S. Census Bureau

301-763-1181
------Forwarded by Thomas J Smith/AMSD/HQ/BOC on 01/19/2012 10:51AM -----
To: "Smith, Thomas J" [Thomas.J.Smith@census.gov](mailto:Thomas.J.Smith@census.gov)
From: "Banks, Gwellnar" [gBanks@doc.gov](mailto:gBanks@doc.gov)
Date: 01/18/2012 08:35AM
Cc: "Mickelson, Glenna" [gMickelson@doc.gov](mailto:gMickelson@doc.gov)
Subject: FW: response to Federal Register Notice published on Dec. 28, 2011
(See attached file: Letter of support for ACS questions on Parents POB.docx)

From: JENNIFER LYNNE VAN HOOK [mailto:jxv21@psu.edu]
Sent: Thursday, January 12, 2012 9:57 AM
To: Jessup, J ennifer
Subject: response to Federal Register Notice published on Dec. 28, 2011

Dear Ms. Jessup,
I am sending a letter (attached) in response to the Federal Register Notice published on Dec. 28, 2011. I had
sent it to an incorrect email address about a week ago.
Sincerely,
Jennifer Van Hook
Director, Population Research Institute Professor of Sociology \& Demography
601 Oswald Tower
University Park, PA 16802
814-867-2276
jvanhook@psu.edu

Attachments:
Letter of support for ACS questions on Parents POB.docx

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U.S. Census Bureau

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Sincerely,
Jennifer Van Hook
Director, Population Research Institute Professor of Sociology \& Demography
601 Oswald Tower
University Park, PA 16802
814-867-2276
jvanhook@psu.edu

Attachments:
Letter of support for ACS questions on Parents POB.docx

From: Thomas J Smith/AMSD/HQ/BOC
To: Susan Lynn Hostetter/ACSO/HQ/BOC@BOC
Date: Thursday, January 19, 2012 10:53AM
Subject: FW: Opportunity To Comment: Proposed ACS 2013 Content Changes and Internet Response Mode

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Thomas Smith
U.S. Census Bureau

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To: "Smith, Thomas J" [Thomas.J.Smith@census.gov](mailto:Thomas.J.Smith@census.gov)
From: "Banks, Gwellnar" [gBanks@doc.gov](mailto:gBanks@doc.gov)
Date: 01/18/2012 08:34AM
Cc: "Mickelson, Glenna" [gMickelson@doc.gov](mailto:gMickelson@doc.gov)
Subject: FW: Opportunity To Comment: Proposed ACS 2013 Content Changes and Internet
Response Mode
As previously mentioned...

From: Weidlich, Stephen [mailto:Stephen.Weidlich@aecom.com]
Sent: Friday, J anuary 13, 2012 1:07 PM
To: Jessup, J ennifer
Subject: Opportunity To Comment: Proposed ACS 2013 Content Changes and Internet Response Mode

Thank you for this opportunity to comment on these proposed changes to the ACS.

I am particularly interested in the internet usage topic proposed. If implemented, I ask that the U.S. Census Bureau provide sub-tallies of internet usage by race, ethnicity, and poverty status.

I believe that this additional information would help in the implementation of Executive Order 12898, particularly as it applies to the National Environmental Policy Act. As you know, effective communication about proposed actions and potential impacts to minority/low-income populations is an important part of environmental justice. Regularly, project proponents provide information online for environmental justice populations to access. Issues of a "digital divide" are currently difficult to assess, particularly for small geographies (i.e., block groups).

## Stephen "Stev" Weidlich

Ethnographer/Social Scientist; Environmental Analyst
Design + Planning
D + 1 619.764.6894 C + 1 619.201.7275
stev.weidlich@aecom.com

AECOM<br>1420 Kettner Boulevard, Suite 500, San Diego CA 92101 USA<br>T + 1 619.233.1454 F + 1 619.233.0952

www.aecom.com

January 6, 2011
Jennifer Jessup
Departmental Paperwork Clearance Officer
Department of Commerce, Room 6616
14th and Constitution Avenue NW
Washington, DC 20230

Dear Ms. Jessup,
I am writing to give strong support to the proposed content changes to the ACS 2013 questionnaire, as noted in the Federal Register's Notice, dated December 28, 2011. These changes will add two questions on parental place of birth (mother's and father's) to the American Community Survey. Data on parental place of birth is becoming increasingly critical for state- and local-level policy analysis and planning, yet it is not currently included in the ACS questionnaire. The addition of these questions will greatly enhance the value of the ACS.

Information on parents' place of birth is of general importance for the evaluation of U.S. immigration and integration policy. As the children of today's new immigrants grow up, leave their parental homes and form their own households, researchers would be unable to identify them or assess their level of adjustment without data on parents' place of birth. If the ACS adds questions on mothers' and father's place of birth as proposed, this will enable researchers to analyze generational patterns for numerically-small but important immigrant groups (e.g., Chinese or Filipinos), and it would permit the analysis of generational patterns for states or smaller geographic areas.

Data on parental place of birth is also necessary for the development, implementation, and evaluation of specific programs servicing children today. Parental place of birth is necessary to correctly identify the U.S.-born children of immigrants (the "second generation"), and information about the children of immigrants is crucial for the successful implementation of many ongoing social service and educational programs, such as the Emergency Immigrant Education Program (EIEP) and No Child Left Behind. Information about the number, location and characteristics of the U.S.-born children of immigrants can also be used to inform efforts to improve service provision or to develop new programs,
such as the efficient provision of services in multiple languages for US-born children living in immigrant households.

It may be argued that a question on parental place of birth is unnecessary because this information can be obtained by matching the children in the ACS to their parent's records. But this assumes that children are living with both parents. In fact, large percentages of Hispanic children of immigrants live with only one parent (with the share in most groups exceeding 20\%) and non-trivial percentages live in households without any parent at all (i.e., they are placed in the care of friends or relatives).

In conclusion, I strongly encourage the collection of parents' place of birth on the ACS questionnaire.

Sincerely,


Jennifer Van Hook
Professor of Sociology and Demography
The Pennsylvania State University
jvanhook@pop.psu.edu

## An Evaluation of Persons per Household (PPH) Estimates Generated by the American Community Survey: A Demographic Perspective

David A. Swanson \& George C. Hough

Population Research and Policy Review
in cooperation with the Southern Demographic Association (SDA)

ISSN 0167-5923

Popul Res Policy Rev
DOI 10.1007/s11113-012-9227-8


RESEARCH AND POLICY REVIEW

Q SPRINGER
IN COOPERATION WITH THE SOUTHERN DEMOGRAPHIC ASSOCIATION

Springer

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# An Evaluation of Persons per Household (PPH) Estimates Generated by the American Community Survey: A Demographic Perspective 

David A. Swanson - George C. Hough Jr.

Received: 3 February 2010/Accepted: 4 January 2012
© Springer Science+Business Media B.V. 2012


#### Abstract

The American Community Survey (ACS) is a U.S. Census Bureau product designed to provide accurate and timely demographic and economic indicators on an annual basis for both large and small geographic areas within the United States. Operational plans call for ACS to serve not only as a substitute for the decennial census long-form, but as a means of providing annual data at the national, state, county, and subcounty levels. In addition to being highly ambitious, this approach represents a major change in how data are collected and interpreted. Two of the major questions facing the ACS are its functionality and usability. This paper explores the latter of these two questions by examining "persons per household (PPH)," a variable of high interest to demographers and others preparing regular post-censal population estimates. The data used in this exploration are taken from 18 of the counties that formed the set of 1999 ACS test sites. The examination proceeds by first comparing 1-year ACS PPH estimates to Census 2010 PPH values along with extrapolated estimates generated using a geometric model based on PPH change between the 1990 and 2000 census counts. Both sets of estimates are then compared to annual 2001-2009 PPH interpolated estimates generated by a geometric model based on PPH from the 2000 census to the 2010 census. The ACS PPH estimates represent what could be called the "statistical perspective" because variations in the estimates of specific variables over time and space are viewed largely by statisticians with an eye toward sample error. The model-based PPH estimates represent a "demographic perspective" because PPH estimates are largely viewed by demographers as varying systematically and changing relatively slowly over time, an orientation stemming from theory and empirical evidence that PPH


[^3]estimates respond to demographic and related determinants. The comparisons suggest that the ACS PPH estimates exhibit too much "noisy" variation for a given area over time to be usable by demographers and others preparing post-censal population estimates. These findings should be confirmed through further analysis and suggestions are provided for the directions this research could take. We conclude by noting that the statistical and demographic perspectives are not incompatible and that one of the aims of our paper is to encourage the U.S. Census Bureau to consider ways to improve the usability of the 1-year ACS PPH estimates.

Keywords Housing unit method • Population estimation • Sub-national

## Introduction

The American Community Survey (ACS) is a U.S. Census Bureau product designed to provide accurate and timely demographic and economic indicators on an annual basis for both large and small geographic areas within the United States (Citro and Kalton 2007; U.S. Census Bureau 2004a, b). Operational plans call for ACS to serve not only as a substitute for the decennial census long-form, but as a means of providing annual data at the national, state, county, and subcounty levels (Cork et al. 2004; U.S. Census Bureau 2001a, b, 2003, 2004a, 2009a, b). In addition to being highly ambitious, this approach represents a major change in how data are collected and interpreted (Citro and Kalton 2007; Hough and Swanson 1998, 2006; Swanson 2010; U.S. Census Bureau 2009a).

Two of the major questions facing the ACS are its functionality and usability (Citro and Kalton 2007). This paper explores the latter of these two questions by examining "persons per household" (PPH), a variable of high interest to demographers and others preparing regular post-censal population estimates (Bryan 2004; Devine and Coleman 2003; Kimpel and Lowe 2007; Lowe et al. 1977; Roe et al. 1992; Smith 1986; Smith and Cody 1994; Smith and Lewis 1980; Smith and Mandell 1984; Smith et al. 2002; Swanson 2004; Swanson et al. 1983; Velkoff and Devine 2009).

The reason why PPH is a variable of high interest to analysts preparing postcensal population estimates is that it is a key component in the housing unit method (HUM), which for at least 30 years has been the most widely-used technique for producing sub-national population estimates in the United States (Byerly 1990; California Department of Finance 2010; Devine and Coleman. 2003; Hoque 2010; Kimpel and Lowe. 2007; Smith and Cody 2010, 2011; U.S. Census Bureau 1978; Velkoff 2007; Washington State Office of Financial Management 2000).

The ACS data used in this exploration are taken from 18 counties that were in the 1999 ACS test sites (See Table 1). These 18 counties represent the smallest pieces of geography for which ACS PPH data are available for the entire inter-censal period, 2000-2010. The examination proceeds in four phases. In the first phase, we examine the accuracy of PPH estimates extrapolated from a geometric model. Here, we construct models from 1980 and 1990 census data for each of the 39 counties of Washington state and then compare the 2000 PPH estimates extrapolated from these

Table 1 The 18 counties used in the analysis

| Pima County, AZ | Madison County, MS |
| :--- | :--- |
| Jefferson County, AR | Douglas County, NE |
| San Francisco County, CA | Bronx County, NY |
| Tulare County, CA | Rockland County, NY |
| Broward County, FL | Franklin County, OH |
| Lake County, IL | Multnomah County, OR |
| Black Hawk County, IA | Schuylkill County, PA |
| Calvert County, MD | Sevier County, TN |
| Hampden County, MA | Yakima County, WA |

county-specific models to the 2000 census PPH values. Second, we compare singleyear (1-year) 2010 ACS PPH estimates for these 18 counties to the 2010 census PPH values. Third, we compare PPH estimates extrapolated from a geometric model based on PPH change from Census 1990 to Census 2000 to Census 2010 PPH values. In the fourth and final phase we compare the accuracy of the 1-year ACS PPH for 2001-2009 to PPH estimates extrapolated from the 1990-2000 based geometric model for the same years as well as PPH estimates interpolated from a 2000-2010 based geometric model.

The ACS PPH estimates represent what could be called the "statistical perspective" because variations in the estimates of specific variables over time and space are viewed by statisticians with an eye toward sample error (Citro and Kalton 2007; Fay 2005, 2007; Federal Register 2010; Kish 1998; Purcell and Kish 1979; Starsinic 2005; U.S. Census Bureau 2001a, b, 2003, 2004a, b, 2009a, b). Applied to an on-going survey such as the ACS, this implies that fluctuations over time are not necessarily viewed with alarm because they are due to statistical uncertainty.

The model-based PPH estimates represent a "demographic perspective" because PPH estimates are viewed by demographers as not likely to change abruptly over time. Instead, they are viewed as changing slowly over time, an orientation stemming from theory and empirical evidence that PPH estimates respond to a constellation of demographic and related determinants that taken as a whole changes slowly over time (Burch 1967, 1970; Burch et al. 1987; Coale 1965; De Vos and Palloni 1989; Goldsmith et al. 1982; Kimpel and Lowe 2007; Korbin 1976; Myers and Doyle 1990; Smith et al. 2002; Swanson 1982; Washington State Office of Financial Management 2000). As a consequence, even in the face of statistical uncertainty, demographers view abrupt changes in PPH over short periods of time as a problem. We return to this problem in the section "PPH and Demographic Theory."

Another difference between the statistical and demographic perspectives has to do with tradition and usage. In terms of summarizing a variable derived from sample data, the statistical perspective is oriented toward a range of values for an estimate (i.e., its upper and lower confidence bounds) based on sample error. That is, it is oriented toward "interval" estimates. The demographic perspective is oriented toward a single "value" for an estimate of a given variable in terms of summarization. That is, it is oriented toward "point" estimates. While the statistical perspective is technically correct in regard to the ACS, it can be problematic in
terms of the demographic perspective in that PPH usability is linked to point estimates. In this regard, it is useful here to note that the ACS has been promoted by the Census Bureau as "...a nationwide survey designed to provide communities with reliable and timely demographic, social, economic, and housing data every year" (U.S. Census Bureau 2008, IV) while acknowledging that its estimates are subject to sample errors, which may be substantial at the substate level (see, e.g., Fay 2007; Reamer 2010a; Swanson 2010; Van Auken et al. 2006; Williams 2010).

In undertaking our assessment, we note that our examination of ACS PPH data is consistent with the Census Bureau's (2008, p. 25) guideline that: "...the ACS was designed to provide estimates of the characteristics of the population, not to provide counts of the population in different geographic areas or population subgroups." That is, PPH is a "characteristic," not a "count." In addition, we note that PPH has not been identified as one of the ACS variables that should not be compared either to census data or to itself over time, given that 1-year ACS estimates are not compared to multi-year ACS estimates (see, e.g., 'Guidance for Data Users,' http://www. census.gov/acs/www/guidance_for_data_users/handbooks/). We also note that unlike sub-county areas ACS variance levels for counties (e.g., census tracts and block groups), the ACS variance levels for counties have not been viewed as requiring special variance reduction measures by the Census Bureau (Fay 2005, 2007; Starsinic 2005). For example, as shown in Table 2, among the 18 counties we examine, the percent of interviewed housing units in the 2010 1-year sample is lowest in Sevier County, Tennessee ( $0.096 \%$ ) and highest in Schuykill County, Pennsylvania ( $2.32 \%$ ). Moreover, with 450 as the approximate "floor" for these samples and the fact that the official population estimates are used as "controls" at the county level (U.S. Census Bureau 2003; Fay 2005, 2007; Starsinic 2005), we believe that our examination of the ACS PPH estimates at the county level is consistent with the view of how the ACS should be used as promulgated by the U.S. Census Bureau U.S. Census Bureau (2008, IV). At the same time, we believe the demographic perspective presented in this paper is consistent with how population analysts interested in PPH estimates as input to the HUM will view and use ACS data.

In our assessment, we are only using the ACS 1-year estimates and excluding the 3 -year and 5 -year ACS estimates. A major reason is that only the 1 -year PPH estimates are really useful to use with the HUM "as is," which will be made clear in the following section. The multi-year PPH estimates are not usable for the HUM because they are "temporally aggregated estimates" that are not usable "as is" for the HUM. Why the multi-year PPH estimates are not usable for the HUM is explained by the U.S. Census Bureau (2008, p. 9), which states that the multi-year estimates should not be referenced to any specific point in time as follows:
...ACS estimates based on data collected from 2005-2007 should not be called "2006" or "2007" estimates. Nor should 2005-2009 period estimates be labeled " 2007 " estimates, even though that is the midpoint of the 5 -year period. Multiyear estimates should be labeled to indicate clearly the full period of time (e.g., "The child poverty rate in 2005-2007 was X percent.")

Because HUM estimates are done annually, the preceding directive from the Census Bureau renders the multi-year data unusable in the absence of
Table 2 Population, housing and ACS sample size information for the 18 counties

| ACS test site (county \& state) | Census population |  | Percent change in population2000-2010 | Census housing units |  | Percent change in housing units2000-2010 | $N$ of housing units interviewed in 1-year ACS 2010 | Ratio of interviewed housing units to census housing units 2010 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2000 | 2010 |  | 2000 | 2010 |  |  |  |
| Pima, AZ | 843,746 | 980,263 | 16.18 | 366,737 | 440,909 | 20.22 | 5,388 | 0.0122 |
| Jefferson, AR | 84,278 | 77,435 | -8.12 | 34,350 | 33,006 | -3.91 | 450 | 0.0136 |
| San Francisco, CA | 776,733 | 805,235 | 3.67 | 346,527 | 376,942 | 8.78 | 4,393 | 0.0117 |
| Tulare, CA | 368,021 | 442,179 | 20.15 | 119,639 | 141,696 | 18.44 | 2,136 | 0.0151 |
| Broward, FL | 1,623,018 | 1,748,066 | 7.70 | 741,043 | 810,388 | 9.36 | 8,726 | 0.0108 |
| Lake, IL | 644,356 | 703,462 | 9.17 | 225,919 | 260,310 | 15.22 | 3,853 | 0.0148 |
| Black Hawk, IA | 128,012 | 131,090 | 2.40 | 51,759 | 55,887 | 7.98 | 916 | 0.0164 |
| Calvert, MD | 74,563 | 88,737 | 19.01 | 27,576 | 33,780 | 22.50 | 440 | 0.0130 |
| Hampden, MA | 456,228 | 463,490 | 1.59 | 185,876 | 192,175 | 3.39 | 2,605 | 0.0136 |
| Madison, MS | 74,674 | 95,203 | 27.49 | 28,781 | 38,558 | 33.97 | 494 | 0.0128 |
| Douglas, NE | 463,585 | 517,110 | 11.55 | 192,672 | 219,580 | 13.97 | 3,261 | 0.0149 |
| Bronx, NY | 1,332,650 | 1,385,106 | 3.94 | 490,659 | 511,896 | 4.33 | 5,753 | 0.0112 |
| Rockland, NY | 286,753 | 311,687 | 8.70 | 94,973 | 104,057 | 9.56 | 1,465 | 0.0141 |
| Franklin, OH | 1,068,978 | 1,163,414 | 8.83 | 471,016 | 527,186 | 11.93 | 6,878 | 0.0130 |
| Multnomah, OR | 660,486 | 735,334 | 11.33 | 288,561 | 324,832 | 12.57 | 4,443 | 0.0137 |
| Schuykill, PA | 150,336 | 148,289 | -1.36 | 67,806 | 69,323 | 2.24 | 1,608 | 0.0232 |
| Sevier, TN | 71,170 | 89,889 | 26.30 | 37,252 | 55,918 | 50.11 | 537 | 0.0096 |
| Yakima, WA | 222,581 | 243,231 | 9.28 | 79,174 | 85,474 | 7.96 | 1,039 | 0.0122 |

modifications-a topic we discuss in the final section. In addition to the Census Bureau's description of is temporally aggregated ACS estimates, we note that several authors have found that temporally aggregated data are subject to bias and "hidden heterogeneity" (Bass and Leone 1983; Blundell and Stoker 2005; Rossana and Seater 1995). We also find that interval PPH estimates for a given year (i.e., estimates defined by lower and upper bounds of a confidence interval) are not useable "as is" with the HUM for reasons similar to those describing why the multiyear PPH estimates are not useable. Thus, we: (1) focus on the "point" PPH estimates provided by the 1-year ACS rather than "interval" PPH estimates for a given year; and (2) use the 1-year ACS PPH estimates as if they were "point-intime" estimates that can be used "as-is" with the HUM, at least in principle.

Having stated these reservations, we recognize that the multi-year ACS surveys represent the only viable source of data for sub-county PPH estimates and that, as such, they will have to be examined. However, this examination is beyond the scope of this paper, as are detailed discussions of how the multi-year PPH estimates might be used to make adjustments to 1-year ACS PPH estimates.

Finally, it is important to note that the ACS data are subject to population and housing unit "controls" that are developed under the auspices of the Census Bureau's annual population estimates program (PEP) (U.S. Census Bureau 2003, 2009a). These controls extend directly to the county level and indirectly to subcounty levels in that subcounty estimates must be consistent with the county estimates. As such, the "controlled" ACS PPH estimates we examine here are not simply subject to sample, coverage, non-response, and measurement errors but also to potential biases that are related to the controls (Breidt 2006).

## The Housing Unit Method

As noted earlier, a major reason why PPH is a variable of high interest to demographers and others preparing post-censal population estimates is that it is a key component in a widely-used method of population estimation known as the HUM. For at least 30 years, the HUM formula has been the method most widely used to develop sub-national population estimates (Byerly 1990; California Department of Finance 2010; Devine and Coleman 2003; Hoque 2010; Kimpel and Lowe 2007; Smith and Cody 2010, 2011; U.S. Census Bureau 1978; Velkoff 2007; Washington State Office of Financial Management 2000) The HUM formula used to generate the population of an area at a given point in time is:

$$
\mathrm{P}=\mathrm{GQ}+(\mathrm{PPH})(\mathrm{H})(\mathrm{OR})
$$

where P is the total population; GQ is the population in groups quarters; PPH the persons per household; H the total number of housing units; and OR is the occupancy rate. Note that $(\mathrm{H})(\mathrm{OR})$ is the total number of households and that PPH is the ratio of persons living in households to the number of occupied housing units (i.e., the number of households).

The HUM is based on the assumption that virtually everyone lives in some type of housing structure (Devine and Coleman 2003; Smith and Cody 2011). A major
reason why the HUM is the most commonly used method for making sub-national population estimates in the United States and has been for at least 30 years is it works well. That is, it provides reasonably accurate annual post-censal (and intercensal) estimates (Devine and Coleman 2003; Hoque 2010; Smith 1986; Smith and Cody 2011; Velkoff and Devine 2009). Another reason is that current (or near current) counts for two of its elements are generally available for the year in which a given set of estimates is needed: (1) the number of households; and (2) the group quarters population (Devine and Coleman 2003; Kimpel and Lowe 2007; Smith et al. 2002; Swanson et al. 1983). With these two elements in hand, PPH is the only remaining element needed to implement the HUM-hence the interest in the 1-year ACS.

An important criterion in the development and evaluation of population estimates (and projections) is accuracy (National Research Council 1980; Smith et al. 2001; Swanson 1980, 1981; Swanson et al. 2000). However, it is not just for reasons of professional pride that accuracy is important; the estimates are used to distribute resources, and in many of these distributions each person estimated generates thousands of dollars over the course of a decade (Murray 1992; U.S. GAO 2006; Walashek and Swanson 2006). As an example, the "official" estimates produced by the U.S. Census Bureau are used to allocate billions of dollars annually (Wetrogan 2005). ${ }^{1}$ This means that estimates are routinely scrutinized and even challenged (U.S. Census Bureau, no date 1). This drive toward accuracy affects all elements of the HUM, including PPH. Making PPH even more an object of attention is the fact that relatively small changes in it can generate relatively large changes in the estimates produced by the HUM. For example, an area with 100,000 households will have a household population estimate of 260,000 with a PPH of 2.6 ; with a PPH of 2.5 , it becomes 10,000 people fewer. With thousands of dollars riding on each estimated person, it should not come as a surprise that PPH is typically the element of the HUM that is most often in dispute (Swanson et al. 1983).

In addition to the fact that relatively small changes in PPH can trigger relatively large changes in HUM-based population estimates, there are three more reasons why a PPH estimate is usually the HUM element in dispute. The first, alluded to earlier, is that the Group Quarters population can generally be estimated to the satisfaction of all parties because most of this population resides in large complexes that have been identified and are monitored annually (Devine and Coleman 2003; Kimpel and Lowe 2007; Smith et al. 2002; Swanson et al. 1983). The second is that housing unit data are typically benchmarked to the last census and updates are provided by the local governmental entities for which the estimates are produced by the U.S. Census Bureau or a State Demographic Center (Devine and Coleman 2003; Kimpel and Lowe 2007; Smith et al. 2002; Swanson et al. 1983). The third reason is that turning housing unit counts into households is done via occupancy rates. Like the housing unit counts, occupancy rates are usually informed by the last census result and, if needed, they updated either by external data such as the U.S. Postal

[^4]Service (Lowe 1988; Lowe and Mohrman 2003; Lowe et al. 2003) or surveys, which are often done by the local governmental entities themselves (Swanson et al. 1983). In contrast to the Group Quarters, Housing Unit, and Occupancy Rate elements of the HUM, the PPH element is typically not as well grounded in current data.

Typically, current annual PPH estimates are obtained by using a model based on PPH values from the two most recent censuses to extrapolate the most recent PPH census value into the post-censal period (Bryan 2004; Smith et al. 2004; Swanson et al. 1983). While, as previously implied, the model-based method has generally been found to work well, demographers producing annual HUM estimates are always interested in data that could prove useful. This is particularly the case as the post-censal estimate date becomes more removed from the last census. That is, there is much more uncertainty about the accuracy of a HUM-based estimate for a given area in a year ending in nine than there is for a year ending in one. For all of these reasons, the availability of annual PPH estimates from the ACS has piqued interest as an input source for the HUM.

Thus, with the expansion of the ACS to its full design in 2005 (Griffin and Waite 2006) and a decade of 1-year data available, it is not surprising that among the large number of demographers using the HUM to generate post-censal population estimates, more than a few are interested in seeing if the ACS can provide more accurate annual PPH estimates than the model based extrapolations. Consequently, this paper largely represents an attempt to answer this question, which as just pointed out, is an important one in terms of the resources allocated using HUM generated estimates.

## PPH and Demographic Theory

Before moving on, it is important to note that the PPH estimates generated by geometric trend extrapolation are used not only because they generally are the only way that PPH values can be obtained, but as alluded to earlier, the HUM has generally been found sufficiently accurate to warrant its wide use for the more than 30 years it has been the most widely used method to generate sub-national population estimates (Byerly 1990; California Department of Finance 2010; Devine and Coleman. 2003; Hoque 2010; Kimpel and Lowe. 2007; Smith and Cody 2010, 2011; U.S. Census Bureau 1978; Velkoff 2007; Washington State Office of Financial Management 2000). In addition, the model-based PPH estimates represent the type of temporal change demographers (and the stakeholders involved with HUM estimates) expect to see in PPH estimates over time (Akkerman 1980; Bongaarts 1983; Burch 1967, 1970; Burch et al. 1987; Coale 1965; De Vos and Palloni 1989; Goldsmith et al. 1982; Kimpel and Lowe 2007; Korbin 1976; Myers and Doyle 1990; Smith et al. 2002; Swanson 1982; Swanson and Lowe 1980). This expectation is due to the factors that determine PPH .

De Vos and Palloni (1989) developed a conceptual framework of the demographic theory that underlies household composition, which we have reproduced as Fig. 1. This framework reveals the factors that determine PPH.


Fig. 1 Schematic overview of the demographic theory underlying household composition

The conceptual framework shows that household composition and structure $(\mathrm{F})$ is determined directly by three factors: (1) the rules of household formation and dissolution (A); (2) Socio-economic Conditions (B); and (3) the availability of kin (C). Demographic factors (E) operate indirectly on household composition and size via a unidirectional effect on the availability of kin (C) and three interactive effects: (1) via socio-economic conditions (B); via the rules of household formation and dissolution (A); and kinship rules (D), which in turn affects observed household composition and structure via a unidirectional effect on the availability of kin (C) and an interactive effect via the rules of household formation and dissolution (A). While specifications may vary, Fig. 1 provides the conceptual framework that underlies the demographic perspective on PPH.

Of particular interest in Fig. 1 is the set of rules of household formation and dissolution, which refer to culturally determined preferences or social norms that regulate the co-residence, entrance into and exit out of households by household members, and the potential fission and fusion of entire households (De Vos and Palloni 1989, p. 177). These preferences and norms include (1) marriage (or cohabitation), divorce, and remarriage; (2) leaving home; (3) entering a primary household; (4) adoption; and (5) entrances and exits of individuals who are not related to the household head. Rules governing marriage (or cohabitation), separation, divorce, and remarriage are fundamental for the constitution of conjugal couples and in determining the timing of changes within the nuclear family while the rules for leaving home, entering a primary household, adoption, and governing the entrances and exits of individuals not related to the household head affect the contraction and expansion of households (De Vos and Palloni 1989, p. 177).

Clearly, the conceptual framework provided in Fig. 1 as well as specifications and variations of it are not consistent with PPH estimates that "jump around" from year to year, whether actually observed or in principle. Rather, the conceptual framework suggests that PPH experiences gradual changes observed over time, a process that is largely due to the complex interactions that cultural, social, demographic, economic, and technological factors have with one another (Glick et al. 1997; Moore 1963; Ogburn 1922). This suggests that while "inflection points" clearly exist for PPH, they are not likely to manifest themselves as going up 1 year, down the next, and then back up again (Korbin 1976; Myers and Doyle 1990; Washington State Office of Financial Management 2000).

## Data and Methods

Table 2 provides background information on population, housing and ACS sample size (the number of housing units in which interviews were conducted). Population counts from the 2000 and 2010 censuses are provided for each of the 18 counties in the analysis, along with the percent change in population between 2000 and 2010. Similarly, housing counts from the 2000 and 2010 census are provided along with the percent change. Of the 18 counties, only two lost population,

To get an idea of the ACS sample size, Table 2 provides the number of housing units for which interviews were conducted in regard to the 2010 1-year ACS, along with The ratios of these numbers to the 2010 counts of housing units. As can be seen in Table 2, these ratios are consistently around $1.00 \%$.

The U.S. Census Bureau established the operational structure for the ACS in 1994 when it put in place the "Continuous Measurement Office," which implemented the first operational test of the ACS in four test sites in 1995 (Griffin and Waite 2006). These test sites were subsequently expanded, and by 1999, operational tests took place in 36 counties spread across 26 states (Griffin and Waite 2006). Three-year ACS averages centered on 2000 were set up for these counties to support comparisons with Census 2000. Relevant among the many findings of these tests was that the arithmetic mean (2.63) of the PPH estimates found in the ACS for these 36 counties was the same as that found in Census 2000 and that there were no statistically significant differences for PPH (U.S. Census Bureau 2004b, p. 17). It was also noted that this result was not unexpected because the total household population and the total number of housing units found in Census 2000 are used as control variables in ACS weighting (U.S. Census Bureau 2004b, p. 17).

As mentioned earlier, the analytical method for generating the model-based PPH estimates is one commonly used by applied demographers for this purpose, namely, the geometric rate of change (Lowe et al. 1977; Smith et al. 2001, 2002; Swanson et al. 1983). In this approach, the rate of change is benchmarked to two most recent successive census counts and then applied to the PPH value found in the most recent census count, which is then extrapolated beyond the most recent census by applying the rate of change to it.

The process takes place in two steps. The first is the calculation of the ratio of change in PPH:

$$
\mathrm{r}=\left(\mathrm{PPH}_{\mathrm{l}} / \mathrm{PPH}_{\mathrm{b}}\right)^{(1 / \mathrm{y})}
$$

where $r$ is the ratio of change; PPH the persons per household; 1 the launch year (most recent census); b the base year (census preceding launch year; and $y$ is the number of years between 1 and $b$ ( 10 years).

The second step is applying the ratio of change to the launch year to find PPH estimates:

$$
\mathrm{PPH}_{\mathrm{t}}=\left(\mathrm{PPH}_{1}\right)\left[(1+\mathrm{r})^{(\mathrm{y})}\right]
$$

where $r$ is the ratio of change (from step 1); PPH the persons per household; $t$ the target year; 1 the launch year (most recent census); and $y$ is the number of years between t and 1 .

The preceding process is used with 1990 and 2000 census PPH estimates to generate 2010 PPH estimates for each of the 18 ACS test counties to compare with the 2010 census PPH values. It is important to again note that although simple, this method has a history of producing good PPH estimates as discussed earlier, In addition, as noted by Smith et al. (2001), there is nothing inherently wrong with a simple method that performs well.

In addition to the annual PPH estimates extrapolated for 2001-2010 from the 1990-2000 based geometric model, we also have generated annual PPH estimates for 2001-2009 that are interpolated from a 2000-2010 based geometric model. These interpolated PPH estimates are viewed as a benchmark against which to compare the 1-year ACS PPH estimates and the PPH estimates extrapolated from the 1990-2000 based geometric model.

## Results

Before looking at the 1-year ACS results, we begin the first phase of our research, by examining the accuracy of county level PPH estimates generated by the geometric trend extrapolation method. We do not discuss their consistency with demographic theory because we already know that they are consistent. Table 3 shows the result of a test using the 39 counties in the state of Washington.

In this test, Census 1980 and 1990 PPH estimates are used as input to the geometric model. The annual ratios of change from 1990 to 2000 from each county's model are then applied to the 1990 census PPH and extrapolated to generate PPH estimates for 2000. These estimated PPH estimates are then compared to Census 2000 PPH estimates. To set the stage for this comparison, we first identify the level of accuracy that can be expected from a set of population estimates. We base these expectations on evaluations of 1980 and 1990 estimates of all counties and states conducted by the Census Bureau (Davis 1994; Long 1993); evaluations of 2,000 estimates for all counties, states, census tracts, and block groups conducted by a private data vendor (Hodges et al. 2002) and on accuracy criteria provided by the Committee on National Statistics (1980, pp. 10-12) that ideally should be met by postcensal estimates: (1) low average error; (2) low average relative error

Table 3 Accuracy test of the geometric method of estimating PPH estimates for counties: Washington State (2000)

|  | Washington State PPH values by county, 1980, 1990, and 2000 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 1980 \\ & \text { PPH } \end{aligned}$ | $\begin{aligned} & 1990 \\ & \text { PPH } \end{aligned}$ | $\begin{aligned} & 2000 \\ & \text { PPH } \end{aligned}$ | 1980-1990 <br> Geometric rate of change | Estimated 2000 |  |  |  |
|  |  |  |  |  | PPH | Absolute error | Percent error | $\begin{aligned} & \text { MAPE } \\ & (\%) \end{aligned}$ |
| State | 2.6086 | 2.5348 | 2.5349 | -0.0029 | 2.4631 | -0.0718 | -2.83 | 2.83 |
| Adams | 2.9113 | 2.9405 | 3.0949 | 0.0010 | 2.9700 | -0.1249 | -4.03 | 4.03 |
| Asotin | 2.5662 | 2.4727 | 2.4162 | $-0.0037$ | 2.3826 | -0.0336 | -1.39 | 1.39 |
| Benton | 2.7971 | 2.6516 | 2.6795 | $-0.0053$ | 2.5137 | -0.1658 - | 6.19 | 6.19 |
| Chelan | 2.4827 | 2.4863 | 2.6192 | 0.0001 | 2.4899 | -0.1293 | -4.93 | 4.93 |
| Clallam | 2.5374 | 2.4007 | 2.3066 | -0.0055 | 2.2714 | -0.0353 | $-1.53$ | 1.53 |
| Clark | 2.7625 | 2.6625 | 2.6900 | $-0.0037$ | 2.5661 | -0.1239 | -4.61 | 4.61 |
| Columbia | 2.5254 | 2.4368 | 2.3628 | $-0.0036$ | 2.3513 | $-0.0115$ | -0.49 | 0.49 |
| Cowlitz | 2.6619 | 2.5588 | 2.5531 | -0.0039 | 2.4597 | -0.0934 | -3.66 | 3.66 |
| Douglas | 2.7591 | 2.6769 | 2.7554 | $-0.0030$ | 2.5971 | -0.1583 | -5.74 | 5.74 |
| Ferry | 2.8567 | 2.6978 | 2.4938 | $-0.0057$ | 2.5477 | 0.0539 | 2.16 | 2.16 |
| Franklin | 2.8817 | 3.034 | 3.2637 | 0.0052 | 3.1943 | -0.0693 | -2.12 | 2.12 |
| Garfield | 2.5955 | 2.3948 | 2.3911 | $-0.0080$ | 2.2096 | $-0.1815$ | -7.59 | 7.59 |
| Grant | 2.7986 | 2.7407 | 2.9204 | -0.0021 | 2.6840 | $-0.2364$ | -8.09 | 8.09 |
| Grays Harbor | 2.5966 | 2.4813 | 2.4826 | -0.0045 | 2.3711 | -0.1115 | -4.49 | 4.49 |
| Island | 2.6706 | 2.6149 | 2.5223 | $-0.0021$ | 2.5604 | 0.0381 | 1.51 | 1.51 |
| Jefferson | 2.4537 | 2.3089 | 2.2122 | $-0.0061$ | 2.1726 | -0.0395 | -1.79 | 1.79 |
| King | 2.4868 | 2.3982 | 2.3905 | -0.0036 | 2.3128 | -0.0777 | -3.25 | 3.25 |
| Kitsap | 2.682 | 2.6469 | 2.6007 | $-0.0013$ | 2.6123 | 0.0115 | 0.44 | 0.44 |
| Kittitas | 2.3976 | 2.3251 | 2.3314 | $-0.0031$ | 2.2548 | -0.0766 | -3.29 | 3.29 |
| Klickitat | 2.7211 | 2.6409 | 2.5361 | -0.0030 | 2.5631 | 0.0270 | 1.06 | 1.06 |
| Lewis | 2.6732 | 2.5997 | 2.5690 | -0.0028 | 2.5282 | -0.0408 | $-1.59$ | 1.59 |
| Lincoln | 2.5726 | 2.4308 | 2.4233 | -0.0057 | 2.2968 | -0.1265 | -5.22 | 5.22 |
| Mason | 2.5458 | 2.5162 | 2.4891 | $-0.0012$ | 2.4869 | -0.0022 | -0.09 | 0.09 |
| Okanogan | 2.6674 | 2.5877 | 2.5762 | $-0.0030$ | 2.5104 | $-0.0658$ | -2.56 | 2.56 |
| Pacific | 2.4465 | 2.3499 | 2.2711 | $-0.0040$ | 2.2571 | -0.0140 | -0.62 | 0.62 |
| Pend Oreille | 2.8088 | 2.6029 | 2.5074 | $-0.0076$ | 2.4121 | -0.0953 | -3.80 | 3.80 |
| Pierce | 2.6586 | 2.6231 | 2.6047 | $-0.0013$ | 2.5881 | -0.0166 | -0.64 | 0.64 |
| San Juan | 2.2946 | 2.2489 | 2.1587 | $-0.0020$ | 2.2041 | 0.0454 | 2.10 | 2.10 |
| Skagit | 2.5656 | 2.5495 | 2.6032 | $-0.0006$ | 2.5335 | -0.0697 | -2.68 | 2.68 |
| Skamania | 2.7896 | 2.6921 | 2.6120 | -0.0036 | 2.5980 | -0.0140 | $-0.54$ | 0.54 |
| Snohomish | 2.7606 | 2.67935 | 2.6547 | $-0.0030$ | 2.6005 | -0.0542 | -2.04 | 2.04 |
| Spokane | 2.5789 | 2.4747 | 2.4646 | $-0.0041$ | 2.3747 | -0.0899 | -3.65 | 3.65 |
| Stevens | 2.907 | 2.7318 | 2.6439 | $-0.0062$ | 2.5672 | $-0.0768$ | -2.90 | 2.90 |
| Thurston | 2.6441 | 2.553 | 2.4987 | -0.0035 | 2.4650 | $-0.0337$ | -1.35 | 1.35 |
| Wahkiakum | 2.7724 | 2.4762 | 2.4243 | -0.0112 | 2.2116 | -0.2127 | -8.77 | 8.77 |

Table 3 continued

|  | Washington State PPH values by county, 1980, 1990, and 2000 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 1980 \\ & \text { PPH } \end{aligned}$ | $\begin{aligned} & 1990 \\ & \text { PPH } \end{aligned}$ | $\begin{gathered} 2000 \\ \text { PPH } \end{gathered}$ | 1980-1990 <br> Geometric rate of change | Estimated 2000 |  |  |  |
|  |  |  |  |  | PPH | Absolute error | Percent error | MAPE <br> (\%) |
| Walla Walla | 2.5411 | 2.4955 | 2.5388 | $-0.0018$ | 2.4507 | $-0.0880$ | -3.47 | 3.47 |
| Whatcom | 2.5902 | 2.5324 | 2.5113 | -0.0023 | 2.4759 | $-0.0354$ | -1.41 | 1.41 |
| Whitman | 2.4668 | 2.3868 | 2.3115 | $-0.0033$ | 2.3094 | -0.0021 | -0.09 | 0.09 |
| Yakima | 2.7711 | 2.8039 | 2.9576 | 0.0012 | 2.8371 | $-0.1205$ | -4.08 | 4.08 |
| County level summary statistics |  |  |  |  |  |  |  |  |
| Mean error |  |  |  |  |  |  | -0.0680 |  |
| MAPE |  |  |  |  |  |  | 2.97\% |  |
| MALPE |  |  |  |  |  |  | -2.60\% |  |
| $N$ ABS \% |  |  |  |  |  |  |  |  |
| Error $>10$ |  |  |  |  |  |  | 0 |  |

(disregarding direction of the error; (3) few extreme relative errors; and (4) absence of bias for subgroups. As acknowledge by the Committee, it is generally not possible to produce a set of estimates that will minimize the four criteria simultaneously. Given this, the Committee chose to focus on low average relative error and few extreme relative errors, with some attention to low average error or bias. Following these guidelines, we find that population estimates are considered to be accurate if a MAPE of $5.00 \%$ or less is achieved and if fewer than $3 \%$ of the absolute percent errors exceed $10 \%$. Applying these standards to the $2,000 \mathrm{PPH}$ estimates generated by the geometric method, we find that it is capable of providing estimates sufficiently accurate for use: (1) The mean error is 0.068 ; (2) the mean absolute percent error (MAPE) is 2.97 ; (3) the mean algebraic percent error is -2.60 ; and (4) the number of absolute percent errors that are 10.0 or greater is zero. In regard to the latter, the largest absolute percent error is $8.77 \%$ (Wahkiakum County, which has a small population. Here the estimated 2000 PPH is 2.21 and the 2000 census PPH is 2.42 ).

These results show that the geometric method does not provide perfect estimates, but at these error levels, they are sufficient for use, as is demonstrated by their ubiquity (Byerly 1990; Devine and Coleman 2003; Smith and Cody 1994; Smith et al. 2002; Velkoff and Devine. 2009; Washington State Office of Financial Management 2010; Wetrogan 2007). The results also provide a benchmark accuracy level for the 1-year ACS PPH estimates in that we would like to see that they provide at least this level of accuracy, if not higher.

Table 4 shows the results of the second phase of our examination, which is a comparison of the ACS 1-year 2010 PPH estimates to the 2010 census PPH values. The MAPE for the 18 counties is $3.51 \%$. Moreover, we find that the census PPH

Table 4 Comparison of ACS single year 2010 PPH estimates to 2010 census PPH values
${ }^{\text {a }}$ Census PPH value is outside of the $90 \%$ margin of error of the ACS PPH Estimate

| Area | Estimate | Margin <br> of error | Census | Percent <br> difference |
| :--- | :--- | :--- | :--- | ---: |
| Pima, AZ | 2.71 | 0.03 | $2.46^{\mathrm{a}}$ | 10.16 |
| Jefferson, AR | 2.48 | 0.1 | 2.49 | -0.40 |
| San Francisco, CA | 2.46 | 0.03 | $2.26^{\mathrm{a}}$ | 8.85 |
| Tulare, CA | 3.37 | 0.05 | 3.36 | 0.30 |
| Broward, FL | 2.67 | 0.03 | $2.52^{\mathrm{a}}$ | 5.95 |
| Lake, IL | 2.99 | 0.04 | $2.82^{\mathrm{a}}$ | 6.03 |
| Black Hawk, IA | 2.36 | 0.07 | 2.38 | -0.84 |
| Calvert, MD | 2.94 | 0.11 | 2.85 | 3.16 |
| Hampden, MA | 2.56 | 0.03 | $2.49^{\mathrm{a}}$ | 2.81 |
| Madison, MS | 2.64 | 0.05 | 2.61 | 1.15 |
| Douglas, NE | 2.53 | 0.03 | $2.49^{\mathrm{a}}$ | 1.61 |
| Bronx, NY | 2.82 | 0.02 | $2.77^{\mathrm{a}}$ | 1.81 |
| Rockland, NY | 3.02 | 0.05 | 3.07 | -1.63 |
| Franklin, OH | 2.47 | 0.03 | $2.38^{\mathrm{a}}$ | 3.78 |
| Multnomah, OR | 2.38 | 0.03 | 2.35 | 1.28 |
| Schuylkill, PA | 2.27 | 0.06 | $2.35^{\mathrm{a}}$ | -3.40 |
| Sevier, TN | 2.74 | 0.15 | $2.52^{\mathrm{a}}$ | 8.73 |
| Yakima, WA | 2.93 | 0.06 | 2.97 | -1.35 |
|  |  |  | MAPE | 3.51 |

values are within the $90 \%$ margin of Error in only $44 \%$ (8) of the 18 counties, as can be seen in Table 4.

Table 5 provides the results of the third phase of our work, which is a comparison between the 2010 PPH estimates that are extrapolated from the 1990-2000 based geometric model (county specific) and the Census 2010 PPH values. The MAPE for the 18 counties is $2.25 \%$.

As can be seen in comparing the summary results in Table 5 with those in Table 4, the 2010 PPH estimates extrapolated from the 1990-2000 based geometric model are closer on average to the 2010 census PPH values than are the 1-year 2010 ACS PPH estimates. It is worthwhile to note that this finding holds not only for 18 test counties, but for all of the 807 counties for which 2010 1-year ACS data are available. ${ }^{2}$

[^5]Turning to the fourth and final phase of our examination, we are primarily interested in the temporal stability of the 1-year ACS PPH estimates. Here, we do not want to see PPH estimates that "jump around" from year to year for the reasons already discussed. On the one hand, it has to do with the theory underlying PPH changes and, on the other, the resource allocations made using HUM-generated estimates. In regard to the latter, if a PPH estimate goes up and down from 1 year to the next in a manner not consistent with historical trends, the local government entity is likely to challenge the estimate when the PPH estimates goes down. Moreover, dramatic annual fluctuations in population estimates are likely to damage the credibility of the entity producing them. This could lead to a positive feedback cycle of the kind described by Walashek and Swanson (2006) that could prove damaging to all parties.

Exhibits $1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17$, and 18 provide a graphic picture of the temporal stability of the 1 -year ACS PPH estimates annually from 2000 to 2010 alongside the 2001-2010 PPH estimates extrapolated from the 1990-2000 based geometric model and the 2001-2009 PPH estimates interpolated from the 2000-2010 geometric model. As stated earlier, we view the interpolated PPH estimates as a benchmark against which both the 1-year ACS and extrapolated PPH estimates are compared.

[^6]Table 5 Comparison of extrapolated geometric modelbased 2010 PPH estimates to 2010 census PPH estimates

Models are county specific and based on 1990-2000 trends in PPH values

| Area | Estimate | Census | Percent <br> difference |
| :--- | :--- | :--- | :---: |
| Pima, AZ | 2.45 | 2.46 | -0.40 |
| Jefferson, AR | 2.48 | 2.49 | -0.22 |
| San Francisco, CA | 2.31 | 2.26 | -2.21 |
| Tulare, CA | 3.45 | 3.36 | 2.63 |
| Broward, FL | 2.55 | 2.52 | 1.36 |
| Lake, IL | 2.91 | 2.82 | 3.20 |
| Black Hawk, IA | 2.39 | 2.38 | 0.48 |
| Calvert, MD | 2.81 | 2.85 | -1.29 |
| Hampden, MA | 2.44 | 2.49 | -1.91 |
| Madison, MS | 2.60 | 2.61 | -0.31 |
| Douglas, NE | 2.43 | 2.49 | -2.37 |
| Bronx, NY | 2.82 | 2.77 | 1.83 |
| Rockland, NY | 2.99 | 3.07 | -2.60 |
| Franklin, OH | 2.31 | 2.38 | -2.83 |
| Multnomah, OR | 2.38 | 2.35 | 1.28 |
| Schuylkill, PA | 2.25 | 2.35 | -4.05 |
| Sevier, TN | 2.38 | 2.52 | -5.40 |
| Yakima, WA | 3.13 | 2.97 | 5.36 |
|  |  | MAPE | 2.25 |



Exhibit 1 Pima County, AZ: 2000-2010 PPH estimates and census PPH values for 2000 and 2010

## Discussion

In beginning this discussion, keep in mind that for the inter-censal years, 2001-2009, the documentation for the ACS (U.S. Census Bureau 2009a) states that the ACS estimates are controlled to population and related estimates at the


Exhibit 2 Jefferson County, AR: 2000-2010 PPH estimates and census PPH values for 2000 and 2010


Exhibit 3 San Francisco County, CA: 2000-2010 PPH estimates and census PPH values for 2000 and 2010


Exhibit 4 Tulare County, CA: 2000-2010 PPH estimates and census PPH values for 2000 and 2010


Exhibit 5 Broward County, FL: 2000-2010 PPH estimates and census PPH values for 2000 and 2010


Exhibit 6 Lake County, IL: 2000-2010 PPH estimates and census PPH values for 2000 and 2010
county level that are done annually by the Census Bureau's PEP. Some of the temporal instability and other issues are likely to be the result of these procedures (Breidt 2006). Another source of temporal instability related to these controls is also likely to be coming from the "challenges" that local governments can make to the Bureau's population estimates. These challenges can result in dramatic adjustments. An example of the effect of a challenge can be seen in Exhibit 1 for Pima County, Arizona, which successfully challenged its 2007 PEP estimate that changed the population from 967,089 to 996,593 . As a result of this substantial adjustment ( 29,504 people, a $3.1 \%$ increase), the ACS PPH estimate increases dramatically between 2007 and 2008 and again from 2008 to 2009. Although not as dramatic as Pima County, three other counties were directly affected by successful challenges: (1) Bronx County, New York (2005, 2006, and 2007); Rockland County, New York (2005, 2006, 2007, and 2008); and San Francisco County, California (2007).


Exhibit 7 Black Hawk County, IA: 2000-2010 PPH estimates and census PPH values for 2000 and 2010


Exhibit 8 Calvert County, MD: 2000-2010 PPH estimates and census PPH values for 2000 and 2010
Although much less dramatic changes occurred, two other counties were affected by challenges made by cities within them: (1) Broward County, Florida (Coconut Creek in 2005 and Lauderdale Lakes in 2008); and (2) Hampden County, Massachusetts (Ludlow 2007; Springfield 2007, 2008; Westfield 2008).

The interpolated PPH estimates for 2001-2009 (based on the 2000 and 2010 census PPH values) are viewed as the benchmark estimates during the decade for the reasons discussed earlier in regard to the demographic theory underlying changes in PPH. Using this benchmark, we find that the ACS PPH estimates remain above the interpolated PPH estimates for the entire period, 2001-2009 in seven counties for the entire period, that they are never below the interpolated estimates for the entire period and cross-over the interpolated estimates in 11 counties over the period 2001-2009. In terms of directional changes, the single-year ACS PPH estimates change direction two or more times in all 18 counties.

The 1-year ACS PPH estimates are not encouraging in terms of usability with the HUM. Over the period 2001-2009, the extrapolated PPH estimates perform better in


Exhibit 9 Hampden County, MA: 2000-2010 PPH estimates and census PPH values for 2000 and 2010


Exhibit 10 Madison County, MS: 2000-2010 PPH estimates and census PPH values for 2000 and 2010
comparison with the interpolated PPH estimates than do the annual ACS PPH estimates. Moreover the extrapolated PPH estimates for 2010 perform better in comparison with the census PPH values than do the 2010 ACS PPH estimates. Moreover, as expected, the extrapolated PPH estimates generate annual changes that are far more consistent with both theory and use than do the ACS estimates in that the latter "jump around" too much.

For reasons already discussed, annual "jumping around" is an undesirable PPH characteristic for both demographers who employ the HUM and the stakeholders for whom HUM estimates are done. ${ }^{3}$ Here, we also observe that if one followed the

[^7]

Exhibit 11 Douglas County, NE: 2000-2010 PPH estimates and census PPH values for 2000 and 2010


Exhibit 12 Bronx County, NY: 2000-2010 PPH estimates and census PPH values for 2000 and 2010

Census Bureau's advice about using statistical procedures to determine if ACS estimates change over time for a given county (see, e.g., U.S. Census Bureau 2009b, p. 6), one could end up looking at its annual PPH estimates for the county in question as not changing over time because of small PPH differences (e.g., a PPH estimate of 2.503 in 2001 may not be statistically different from one of 2.509 in 2002 and even one of 2.717 in 2006). This is problematic because it would be inconsistent with the theoretical and empirical determinants of PPH change. That is, if theory and empirical evidence suggest that PPH values are decreasing in Jefferson

[^8]

Exhibit 13 Rockland County, NY: 2000-2010 PPH estimates and census PPH values for 2000 and 2010


Exhibit 14 Franklin County, OH: 2000-2010 PPH estimates and census PPH values for 2000 and 2010

County, Arkansas over the period 2001-2009 (see Exhibit 2 and Appendix Table 6) while little if any statistical difference is found for its ACS PPH estimates over the same period, then the usability of the PPH estimates generated by the ACS come into question for use with annual population estimation employing the HUM. Specifically, the $90 \%$ margins of error provided by the U.S. Census Bureau for Jefferson County's 1-year ACS PPH estimates are $0.05,0.08,0.09,0.09,0.07,0.10$, $0.10,0.11$ and 0.10 for each year from 2001 to 2009, respectively. Given the 2000 census PPH of 2.56 and the "interval" PPH estimates stemming from the $90 \%$ MOEs annually from 2001 to 2009, the annual PPH estimates from 2001 to 2009 for Jefferson County would be, respectively: 2.56, 2.63, 2.63, 2.53, 2.41, 2.53, 2.53, 2.53 , and 2.53 (see Appendix Table 6). Thus, we have no change from 2000 to 2001, a dramatic change from 2001 to 2002 (from 2.56 to 2.63) and then no change (2.63) until 2004, when PPH declines (to 2.53), followed by another decrease in 2005 (to 2.41), then an increase in 2006 (back to 2.53 ), followed by no change


Exhibit 15 Multnomah County, OR: 2000-2010 PPH estimates and census PPH values for 2000 and 2010


Exhibit 16 Schuylkill County, PA: 2000-2010 PPH estimates and census PPH values for 2000 and 2010
(2.53) in PPH from 2006 to 2009. This pattern of annual change in PPH is neither consistent with demographic theory nor useful to an analyst seeking PPH estimates to use in the HUM for purposes of making annual population estimates. ${ }^{4}$ As you can

[^9]surmise from the discussion of the theory underlying the demographic perspective on PPH, this sequence of change makes no sense to a demographer. ${ }^{5}$ The sequences of change for virtually all of the other 17 counties pose similar problems from the demographic perspective.

## Footnote 4 continued

1 year at a time and making a comparison of the most current ACS PPH estimate against the ACS PPH estimate in use, which through the decade would yield a series of pair-wise comparisons rather than three or more simultaneous comparisons. Of course, the one in use might be from 2 years ago if the previous two comparisons indicated "no change," but the point holds: it is a series of pair-wise comparisons that would be made, not three or more comparisons simultaneously.

In making a series of pair-wise comparisons, one adjustment that could be made is the Bonferroni correction (Hough and Swanson 2006; Kirk 1968; Perenger 1998), which is designed to reduce the probability of making a Type I error. An analyst seeking to use the ACS PPH estimates over the course of a decade can quickly estimate the probability of making a Type I error. Since the Census Bureau is using a $90 \%$ confidence interval, the corresponding alpha level in a series of pair-wise $T$-tests would be .10 $(\alpha=.10)$. Given this, the probability of making at least one Type I error in making nine pair-wise comparisons (2001 compared to 2000, 2002 compared to 2001, .., 2008-2007, and 2009-2008) over the course of a decade is $1-(.9)^{9} \approx .67$. That, is we have a $67 \%$ chance of stating that a change in PPH has occurred when in fact it is not, if all nine pair-wise comparisons are made. Assuming in advance that nine comparisons would be made, the analyst could employ the Bonferroni correction, which is $\dot{\alpha}=\alpha / n$, where $\alpha=$ the alpha level (.10), $n=$ the number of pair-wise comparisons to be made (for which we can use nine, which is the maximum), and $\dot{\alpha}=$ the corrected alpha level (Hough and Swanson 2006). In this situation with $\alpha=.10$ and $n=9$, the analyst would find $\dot{\alpha} \approx 0.01 \approx .10 / 9$. This would correspond to adjusting the margins of error from 90 to $99 \%$. This can be done as follows: $\mathrm{MOE}^{\prime}=2.576 / 1.645^{*} \mathrm{MOE}$ (U.S. Census Bureau 2009b, A12). Appendix Table 7 shows the results of using the Bonferroni correction to make this adjustment in the MOEs for all of the 18 counties over the period from 2001 to 2009.

As can be seen in Appendix Tables 6 and 7, whether or not an attempt is made to correct for multiple comparisons, the results in either case generally do not make demographic sense for any of the 18 counties. That is, the annual "change" in the ACS PPH estimates is either abrupt and discontinuous or non-existent. In either case, the change is neither consistent with the demographic theory underlying PPH change over time nor the needs of an analyst in terms of PPH estimates being used as input to the HUM for purposes of making annual population estimates. Continuing with our example of Jefferson County, if we use the Bonferroni correction to adjust the $90 \%$ margins of error provided by the U.S. Census Bureau for 1-year ACS PPH estimates, from 2001 to 2009 (with the adjusted 2001 MOE being compared to the 2000 census PPH of 2.66 ), we get, respectively: $2.66,2.66,2.66,2.53,2.53,2.53,2.53,2.53$, and 2.53 . Thus, we would have no change in the 2000 census PPH of 2.66 from 2001 to 2003, then an abrupt decrease to 2.53 in 2004, followed by a constant PPH of 2.53 through 2009.

As a final note, we have looked into procedures designed to deal with detecting temporal change from other perspectives, including change-point analysis (Bai 1997; Bai and Perron 2003) and interrupted time series (Lewis-Beck 1986). These techniques appear to be ill-suited for use here since the 1-year ACS PPH estimates do not appear to be able to provide the requisite quality for an historical time series that could be used as a basis for developing models.

[^10]

Exhibit 17 Sevier County, TN: 2000-2010 PPH estimates and census PPH values for 2000 and 2010


Exhibit 18 Yakima County, AR: 2000-2010 PPH estimates and census PPH values for 2000 and 2010

In addition to the temporal instability issue illustrated by the sequence of PPH change for Jefferson County, Arkansas, one must ask what causes some of the substantial differences observed elsewhere between the model-based PPH estimates and the 1-year ACS PPH estimates. As discussed earlier, by 2009, Pima County, Arizona (Exhibit 1) the 1 year ACS PPH estimates are not only substantially different from the 1990-2000 geometric model's extrapolated 2009 estimate, but clearly way off track to hit the 2010 census PPH value. As discussed, the PEP challenge clearly has an effect, but in addition, one could ask the question how much, if any, of the differences are due to the ACS residency rule? After all, the ACS residency rule is not the same as the Decennial Census residency rule, the one that is inherent in the model-based ACS PPH estimates (Cork and Voss 2006, pp. 53-570).

## Conclusions and Suggestions for Future Research

As described at the start of this paper, the ACS provides annual PPH estimates that are subject to sample (and non-sample) error. This means that they can fluctuate from year to year in a given population, which reflects a "statistical perspective." Demographers, however, view PPH as a population characteristic that has determinants. Such that PPH is viewed as changing systematically and slowly over time-the "Demographic Perspective." The comparisons suggest that the ACS PPH estimates exhibit too little slow systematic change and too much "noisy" variation for a given area over time to be usable by demographers and others preparing annual post-censal population estimates with the HUM.

In regard to the importance of the PPH estimates changing in a systematic manner over time, our experience in producing and defending estimates makes us appreciate model-based PPH estimates because the changes are easily understood by stakeholders. This is an important point, whether defending projections or estimates (Smith et al. 2001, p. 296). Based on what we see in the temporal instability of ACS PPH values, we would have difficulty defending their use to stakeholders. This is especially the case when, as noted earlier is often the case, when these estimates are used to allocate resources.

Our finding that the 1-year ACS PPH estimates are not particularly usable for purposes of making HUM-based population estimates at the county level is preliminary in nature. More work not only needs to be done not only to confirm this finding, but also to examine ways the ACS PPH estimates might be modified so that they could become more useful. With this in mind, our suggestions for further analysis include: (1) conducting a broader scale comparison, taking into account the full range of counties; (2) examining 1-year ACS PPH estimates that are not controlled; and (3) making adjustments (e.g., smoothing a series and then extrapolating it) to 1 -year ACS PPH estimates, perhaps in conjunction with the multi-year estimates, such that more systematic temporal change can be obtained. Once this was done, then, depending on the results, the assessment could proceed to other geographies, such as places, census tracts, and block groups. In addition, it may be worthwhile to look at the difference between the 2010 ACS and the 2010 census PPH numbers in terms of total error, which suggests that the differences could be decomposed into variance and bias as was attempted by Multry and Spencer (1993) in regard to estimating 1990 census error.

We note that the demographic perspective described in this paper is not incompatible with a statistical perspective. At one level, it can be viewed as a model-based approach, a perspective that is shared with statistics (Hill 1990; Jiang and Lahiri 2006). Further, as noted in many places throughout this paper, demographers view PPH as a variable that responds to demographic and related determinants. Thus, at another level, the demographic perspective we have described represents 'causality.' This also is a perspective that is shared with statistics (Cox and Wermuth 2006). Finally, at a third level, the demographic perspective is empirical, which also is a perspective that is shared with statisticsStigler (1986: 1) observes, for example, that "...Modern statistics provides a quantitative technology for empirical science..." In short, we argue that the view
that PPH is a variable that responds to demographic and related determinants is not only worthy of consideration, but one that is compatible with statistics. Toward this end, we have identified three shared commonalities that support this argument: (1) a model-based perspective; (2) a causal perspective; and (3) an empirical perspective.

In conclusion, we point out that this paper is intended to broaden this view among those who have developed and implemented the ACS and to trigger ideas that could yield higher levels of usability of the 1 -year ACS PPH estimates. As such we hope that we are following in the footsteps of other demographers who were among the first (if not the first) to point out that ACS variance levels at the sub-county level were disturbingly high (Van Auken et al. 2006), which prompted work to mediate this problem on the part of those who have developed and implemented the ACS (Fay 2005, 2007; Starsinic 2005).

## Appendix

See Tables 6 and 7.

Table 6 Annual PPH estimates using statistical inference ( $90 \%$ MOEs) to determine change

| County | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Pima, AZ | 2.49 | 2.47 | 2.47 | 2.47 | 2.47 | 2.51 | 2.51 | 2.62 | 2.71 |
| Jefferson, AR | 2.56 | 2.63 | 2.63 | 2.53 | 2.41 | 2.53 | 2.53 | 2.53 | 2.53 |
| San Francisco, CA | 2.32 | 2.32 | 2.27 | 2.27 | 2.23 | 2.23 | 2.33 | 2.45 | 2.45 |
| Tulare, CA | 3.30 | 3.26 | 3.29 | 3.40 | 3.40 | 3.40 | 3.40 | 3.40 | 3.40 |
| Broward, FL | 2.48 | 2.51 | 2.51 | 2.51 | 2.56 | 2.59 | 2.64 | 2.58 | 2.67 |
| Lake, IL | 2.96 | 2.96 | 2.96 | 2.99 | 2.95 | 2.98 | 2.98 | 2.94 | 2.99 |
| Black Hawk, IA | 2.40 | 2.40 | 2.40 | 2.40 | 2.35 | 2.35 | 2.40 | 2.40 | 2.40 |
| Calvert, MD | 2.94 | 2.94 | 3.02 | 3.02 | 3.02 | 2.90 | 3.01 | 3.01 | 3.01 |
| Hampden, MA | 2.54 | 2.51 | 2.51 | 2.56 | 2.52 | 2.56 | 2.56 | 2.53 | 2.53 |
| Madison, MS | 2.70 | 2.70 | 2.70 | 2.62 | 2.62 | 2.62 | 2.62 | 2.62 | 2.62 |
| Douglas, NE | 2.47 | 2.49 | 2.49 | 2.49 | 2.49 | 2.49 | 2.55 | 2.47 | 2.53 |
| Bronx, NY | 2.82 | 2.82 | 2.78 | 2.81 | 2.81 | 2.79 | 2.84 | 2.84 | 2.84 |
| Rockland, NY | 3.02 | 3.06 | 3.06 | 3.06 | 3.06 | 3.10 | 3.01 | 3.01 | 3.01 |
| Franklin, OH | 2.42 | 2.42 | 2.47 | 2.47 | 2.39 | 2.39 | 2.43 | 2.43 | 2.47 |
| Multnomah, OR | 2.37 | 2.41 | 2.41 | 2.37 | 2.32 | 2.32 | 2.34 | 2.39 | 2.39 |
| Schuykill, PA | 2.37 | 2.37 | 2.37 | 2.27 | 2.27 | 2.27 | 2.36 | 2.28 | 2.28 |
| Sevier, TN | 2.40 | 2.40 | 2.40 | 2.40 | 2.49 | 2.60 | 2.60 | 2.60 | 2.60 |
| Yakima, WA | 2.97 | 2.97 | 2.97 | 2.97 | 2.97 | 2.97 | 2.94 | 2.94 | 2.94 |

Table 7 Annual PPH estimates using statistical inference (99\% MOEs) to determine change per the Bonferroni correction

| County | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Pima, AZ | 2.49 | 2.49 | 2.49 | 2.49 | 2.49 | 2.49 | 2.53 | 2.62 | 2.71 |
| Jefferson, AR | 2.66 | 2.66 | 2.66 | 2.53 | 2.53 | 2.53 | 2.53 | 2.53 | 2.53 |
| San Francisco, CA | 2.32 | 2.32 | 2.27 | 2.27 | 2.27 | 2.27 | 2.33 | 2.45 | 2.45 |
| Tulare, CA | 3.30 | 3.30 | 3.30 | 3.40 | 3.40 | 3.40 | 3.40 | 3.40 | 3.40 |
| Broward, FL | 2.48 | 2.48 | 2.48 | 2.52 | 2.56 | 2.59 | 2.64 | 2.58 | 2.67 |
| Lake, IL | 2.96 | 2.96 | 2.96 | 2.96 | 2.96 | 2.96 | 2.96 | 2.96 | 2.96 |
| Black Hawk, IA | 2.40 | 2.40 | 2.40 | 2.40 | 2.35 | 2.35 | 2.35 | 2.35 | 2.35 |
| Calvert, MD | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 | 2.94 |
| Hampden, MA | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 | 2.54 |
| Madison, MS | 2.70 | 2.70 | 2.70 | 2.70 | 2.57 | 2.57 | 2.57 | 2.57 | 2.57 |
| Douglas, NE | 2.49 | 2.49 | 2.49 | 2.49 | 2.49 | 2.49 | 2.55 | 2.47 | 2.53 |
| Bronx, NY | 2.82 | 2.82 | 2.78 | 2.78 | 2.78 | 2.78 | 2.84 | 2.84 | 2.84 |
| Rockland, NY | 3.02 | 3.02 | 3.02 | 3.02 | 3.02 | 3.10 | 3.01 | 3.01 | 3.01 |
| Franklin, OH | 2.42 | 2.42 | 2.47 | 2.47 | 2.39 | 2.39 | 2.43 | 2.43 | 2.47 |
| Multnomah, OR | 2.37 | 2.41 | 2.41 | 2.41 | 2.32 | 2.32 | 2.32 | 2.39 | 2.39 |
| Schuykill, PA | 2.37 | 2.37 | 2.37 | 2.27 | 2.27 | 2.27 | 2.36 | 2.36 | 2.36 |
| Sevier, TN | 2.40 | 2.40 | 2.40 | 2.40 | 2.40 | 2.60 | 2.60 | 2.60 | 2.60 |
| Yakima, WA | 2.97 | 2.97 | 2.97 | 2.97 | 2.97 | 2.97 | 2.97 | 2.97 | 2.97 |

## References

Akkerman, A. (1980). On the relationship between household composition and population age distribution. Population Studies, 34(3), 525-534.
Bai, J. (1997). Estimation of a change point in multiple regression models. Review of Economics and Statistics, 79, 551-563.
Bai, J., \& Perron, P. (2003). Computation and analysis of multiple structural change models. Journal of Applied Economics, 18, 1-22.
Bass, F., \& Leone, R. (1983). Temporal aggregation, the data interval bias, and empirical estimation of bimonthly relations from annual data. Management Science, 29, 1-11.
Blumerman, L., \& Vidal, P. (2009). Uses of population and income statistics in federal funds distribution-with a focus on Census Bureau Data. Governments Division Report Series (Research Report \#2009-1). Suitland, MD: US Census Bureau.
Blundell, R., \& Stoker, T. (2005). Heterogeneity and aggregation. Journal of Economic Literature, 43, 347-391.
Bongaarts, J. (1983). The formal demography of families and households: An overview. IUSSP Newsletter, No. 17. Liege: International Union for the Scientific Study of Population.
Breidt, F. J. (2006). Controlling the American Community Survey to intercensal population estimates. Journal of Economic and Social Measurement, 31, 253-270.
Bryan, T. (2004). Population estimates. In J. Siegel \& D. Swanson (Eds.), The methods and materials of demography (2nd ed., pp. 523-560). New York: Elsevier Academic Press.
Burch, T. (1967). The size and structure of families: A comparative analysis of census data. American Sociological Review, 32(3), 347-363.
Burch, T. (1970). Some demographic determinants of average household size: An analytic approach. Demography, 7(1), 61-69.

Burch, T., Halli, S., Madan, A., Thomas, K., \& Wai, L. (1987). Measures of household composition and headship based on aggregate routine census data. In J. Bongaarts, T. Burch, \& K. Wachter (Eds.), Family demography: Methods and their application (pp. 19-33). Oxford: Clarendon Press.
Byerly, E. (1990). State and local agencies preparing population and housing estimates. Current Population Reports, Series P-25, No. 1063. U.S. Bureau of the Census. Washington, DC: U.S. Government Printing Office.
California Department of Finance. (2010, May). E-1 population estimates for cities, counties and the state with annual percent change-January 1, 2009 and 2010. Sacramento, CA. Accessed August 2011, from http://www.dof.ca.gov/research/demographic/reports/estimates/e-1/2009-10/view.php.
Citro, C., \& Kalton, G. (Eds.). (2007). Using the American Community Survey: Benefits and challenges. Washington, DC: The National Academies Press, National Research Council.
Coale, A. (1965). Estimates of average size of household. In A. Coale, L. Fallers, M. Levy, D. Schneider, \& S. Tompkins (Eds.), Aspects of the analysis of family structure (pp. 64-69). Princeton, NJ: Princeton University Press.
Committee on National Statistics. (1980). Estimating population and income for small areas. Washington, DC: National Academy Press.
Cork, D., Cohen, M., \& King, B. (Eds.). (2004). Reengineering the 2010 census: Risks and challenges. Washington, DC: National Academies Press, National Research Council.
Cork, D., \& Voss, P. (Eds.). (2006). Once, only once, and in the right place: Residence rules in the decennial census. Washington, DC: National Academies Press, National Research Council.
Cox, D., \& Wermuth, N. (2006). Causality: A statistical view. International Statistical Review, 72(3), 285-305.
Davis, S. T. (1994). Evaluation of postcensal county estimates for the 1980s. Working Paper No. 5. Washington, DC: Population Division, U.S. Bureau of the Census.
De Vos, S., \& Palloni, A. (1989). Formal models and methods for the analysis of kinship and household organization. Population Index, 55(2), 174-198.
Devine, J., \& Coleman, C. (2003). People might move but housing units don't: An evaluation of the state and county housing unit estimates. Population Division Working Paper Series No. 71. Washington, DC: U.S. Census Bureau. Accessed January 2010, from http://www.census.gov/population/www/ documentation/twps0071/twps0071.html.
Fay, R. (2005). Model-assisted estimation for the American Community Survey. In Proceedings of the joint statistical meetings, ASA section on survey research methods (pp. 3016-2023). Alexandria, VA: American Statistical Association.
Fay, R. (2007). Variance reduction for sub-county estimates in the American Community Survey. Paper presented at the spring meeting of the Census Advisory Committee for Professional Associations, Suitland, MD.
Federal Register. (2010). American Community Survey 5-year data product plans. Federal Register 75(181): September 20 (Docket Number 100726309-0311-02). Washington, DC: Government Printing Office.
Glick, J., Bean, F., \& Van Hook, J. (1997). Immigration and changing patterns of extended family household structure in the United States: 1970-1990. Journal of Marriage and Family, 59(1), 177-191.
Goldsmith, H., Jackson, D., \& Shambaugh, J. (1982). A social analysis approach. In E. Lee \& H. Goldsmith (Eds.), Population estimates: Methods for small area estimates (pp. 169-190). Beverly Hills, CA: Sage.
Griffin, D., \& Waite, P. J. (2006). American community survey overview and the role of external evaluations. Population Research and Policy Review, 25, 201-223.
Hill, J. (1990). A general framework for model-based statistics. Biometrika, 77(1), 115-126.
Hodges, K., Wilcox, F., \& Poveromo, A. (2002). An evaluation of small area estimates produced by the private sector. Paper presented at the annual meeting of the Population Association of America, Atlanta, Georgia.
Hoque, M. N. (2010). Estimates of the total populations of counties and places in Texas for July 1, 2009 and January 1, 2010. Office of the State Demographer, Institute for Demographic and Socioeconomic Research, College of Public Policy. San Antonio, TX: The University of Texas at San Antonio. Accessed August 2011, from http://txsdc.utsa.edu/Resources/TPEPP/Estimates/2009/ 2009_txpopest_method.pdf.

Hough, G., \& Swanson, D. A. (1998). Towards an assessment of continuous measurement: A comparison of returns with 1990 census returns for the Portland test site. Journal of Economic and Social Measurement, 24, 295-308.
Hough, G., \& Swanson, D. (2006). An evaluation of the American Community Survey: Results from the Oregon test site. Population Research and Policy Review, 25(3), 257-273.
Hubbard, R., \& Bayarri, M. J. (2003). P values are not error probabilities. Technical Report 14-03. Department of Statistics and Operations Research. University of Valencia, Valencia, Spain. Accessed March 2010, from http://www.uv.es/sestio/TechRep/tr14-03.pdf.
Iversen, G., \& Norpoth, H. (1973). Analysis of variance. Beverly Hills, CA: Sage.
Jiang, J., \& Lahiri, P. (2006). Mixed model prediction and small area estimation. Test, 15(1), 1-96.
Kimpel, T., \& Lowe, T. (2007). Estimating household size for use in population estimates. Population Estimates and Projections, Research Brief no. 47. Olympia, WA: Washington State Office of Financial Management.
Kirk, R. (1968). Experimental design: Procedures for the behavioral sciences. Belmont CA: Brooks.
Kish, L. (1998). Space/time variations and rolling samples. Journal of Official Statistics, 14(1), 31-46.
Korbin, F. (1976). The fall in household size and the rise of the primary individual in the United States. Demography, 13(1), 127-138.
Lewis-Beck, M. S. (1986). Interrupted time series. Chapter 9 in W. D. Berry \& M. S. Lewis-Beck (Eds.), New tools for social scientists: Advances and applications in research methods. Beverly Hills, CA: Sage.
Long, J. F. (1993). Postcensal population estimates: States, counties, and places. Working Paper No. 3. Washington, DC: Population Division, U.S. Bureau of the Census.
Lowe, T. (1988). A resurrection: The potential of postal survey data in improving housing unit population estimates for local areas. Paper presented at the annual meeting of the Population Association of America., New Orleans, LA.
Lowe, T., \& Mohrman, M. (2003). Use of postal delivery data in the population estimate process. Population Estimates and Projections Research Brief No. 18. Olympia, WA: Washington State Office of Financial Management.
Lowe, T., Mohrman, M., \& Brunink, D. (2003). Developing postal delivery data for use in population estimates. Population Estimates and Projections Research Brief No. 17. Olympia, WA: Washington State Office of Financial Management.
Lowe, T., Pittenger, D., \& Walker, J. (1977). Making the housing unit method work: A progress report. Paper presented at the annual meeting of the Population Association of America, St. Louis, MO.
Moore, W. (1963). Social change. Englewood Cliffs, NJ: Prentice-Hall.
Multry, M., \& Spencer, B. (1993). Accuracy of the 1990 census and undercount adjustments. Journal of the American Statistical Association, 88, 1080-1091.
Murray, M. (1992). Census adjustment and the distribution of federal spending. Demography, 29(3), 319-332.
Myers, D., \& Doyle, A. (1990). Age-specific population-per-household ratios: Linking population age structure with housing characteristics. In D. Myers (Ed.), Housing demography: Linking demographic structure and housing markets (pp. 109-130). Madison, WI: University of Wisconsin Press.
National Research Council. (1980). Estimating population and income of small areas. Washington, DC: National Research Council. National Academies Press.
National Research Council. (1995). Modernizing the U.S. Census. Washington, DC: National Research Council. National Academies Press.
National Research Council. (2003). Statistical issues in allocating funds by formula. Washington, DC: National Research Council. National Academies Press.
Ogburn, W. F. (1922). Social change with respect to culture and original nature. New York: B.W. Huebsch.
Perenger, T. (1998). What is wrong with Bonferroni adjustments? British Medical Journal, 136, 1236-1238.
Purcell, N. J., \& Kish, L. (1979). Estimation for small domains. Biometrics, 35, 365-384.
Reamer, A. (2010a, April 19). Budget 2011: More data for metros. The New Republic. Accessed June 2011, from http://www.tnr.com/blog/the-avenue/budget-2011-more-data-metros.
Reamer, A. (2010b). Surveying for dollars: The role of the American Community Survey in the geographic distribution of federal funds. Washington, DC: Brookings Institution Press.

Roe, L., Carlson, J., \& Swanson, D. (1992). A variation of the housing unit method for estimating the population of small, rural areas: A case study of the local expert procedure. Survey Methodology, 18, 155-163.
Rossana, R., \& Seater, J. (1995). Temporal aggregation and economic time series. Journal of Business and Economic Statistics, 13, 441-451.
Scire, M. (2007). 2010 Census: Population measures are important for federal funding allocations. Testimony before the Subcommittee on Information Policy, Census, and National Archives, Committee on Oversight and Government Reform, House of Representatives. Publication GAO-08230T. Washington, DC: General Accountability Office.
Smith, S. (1986). A review and evaluation of the housing unit method of population estimation. Journal of the American Statistical Association, 81, 287-296.
Smith, A. S. (1998). The American Community Survey and intercensal population estimates: Where are the crossroads? Population Division Technical Working Paper No. 31. Washington, DC: U.S. Census Bureau.
Smith, S., \& Cody, S. (1994). Evaluating the housing unit method: A case study of 1990 population estimates in Florida. Journal of the American Planning Association, 60, 209-221.
Smith, S., \& Cody, S. (2010). Methodology for producing estimates of total population for cities and counties in Florida: April 1, 2009. Bureau of Economic and Business Research. Gainesville, FL: University of Florida. Accessed August 2011, from http://edr.state.fl.us/Content/populationdemo graphics/data/Methodology_Estimates.pdf.
Smith, S., \& Cody, S. (2011). An evaluation of population estimates in Florida: April 1, 2010. Special Population Reports \# 8. Bureau of Business and Economic Research. Gainesville, FL; University of Florida.
Smith, S., \& Lewis, B. (1980). Some new techniques for applying the housing unit method of local population estimation. Demography, 17, 323-339.
Smith, S., \& Mandell, M. (1984). A comparison of population estimation methods: Housing unit versus component II, ratio correlation, and administrative records. Journal of the American Statistical Association, 79, 282-289.
Smith, S. K., Nogle, J., \& Cody, S. (2002). A regression approach to estimating the average number of persons per household. Demography, 39(4), 697-712.
Smith, S. K., Tayman, J., \& Swanson, D. A. (2001). Population projections for states and local areas: Methodology and analysis. New York: Kluwer/Plenum Press.
Starsinic, M. (2005). American Community Survey: Improving reliability for small area estimates. In Proceedings of the 2005 joint statistical meetings, ASA section on survey research methods ( pp . 2392-3599). Alexandria, VA: American Statistical Association.
Stigler, S. (1986). The history of statistics: The measurement of uncertainty before 1900. Cambridge, MA: Belknap Press of Harvard University Press.
Swanson, D. A. (1980). Improving accuracy in multiple regression estimates of county populations using principles from causal modeling. Demography, 17(November), 413-427.
Swanson, D. A. (1981). Allocation accuracy in population estimates: An overlooked criterion with fiscal implications. In Small area population estimates, methods and their accuracy and new metropolitan areas definitions and their impact on the private and public sector (pp. 13-21). Series GE-41 No. 7. U.S. Bureau of the Census.

Swanson, D. A. (1982). Change in average household size: 1970-80. In Alaska population overview: 1981. Research and Statistics Division. Juneau, AK: Alaska Department of Labor.

Swanson, D. A. (2004). Advancing methodological knowledge within state and local demography: A case study. Population Research and Policy Review, 23(4), 379-398.
Swanson, D. A. (2010, November 15-19). Perspectives on the American Community Survey. Presented at the 2010 conference of the Latin American Association for Population Studies, Havana, Cuba.
Swanson, D. A., Baker, B., \& Van Patten, J. (1983). Municipal population estimation: Practical and conceptual features of the housing unit method. Paper presented at the annual meeting of the Population Association of America, Pittsburgh, PA.
Swanson, D. A., \& Lowe, T. (1980). Changes in household size, 1970-79. In State of Washington population trends, 1979. Population, Enrollment and Economic Studies Division. Olympia, WA: Washington State Office of Financial Management.
Swanson, D. A., Tayman, J., \& Barr, C. (2000). A note on the measurement of accuracy for subnational demographic estimates. Demography, 37(May), 193-201.
Toothaker, L. E. (1993). Multiple comparison procedures. Beverly Hills, CA: Sage.
U.S. Census Bureau. (No date 1). Estimates challenge program and results. Accessed August 2011, from http://www.census.gov/popest/archives/challenges.html.
U.S. Census Bureau. (No date 2). Release notes for preliminary vintage 2010 estimates. Accessed November 2011, from http://www.census.gov/popest/topics/methodology/2010-relnotes.pdf.
U.S. Census Bureau. (1978). State and local agencies preparing population estimates and projections: Survey of 1975-76. Current Population Reports, Series P-25, No. 723. U.S. Bureau of the Census. Washington, DC: U.S. Government Printing Office.
U.S. Census Bureau. (2001a). Meeting 21st century demographic data needs-implementing the American Community Survey: July 2001. Report 1: Demonstrating operational feasibility. Washington, DC: U.S. Census Bureau.
U.S. Census Bureau. (2001b). The American Community Survey, updated information for America's Communities, November, 2001 (ACS/01-BLKT).
U.S. Census Bureau. (2003). American Community Survey Operations Plan. Release 1: March 2003. Washington, DC: U.S. Census Bureau.
U.S. Census Bureau. (2004a). About the American Community Survey. Accessed January 2010, from http://www.census.gov/CMS/www/acs.htm.
U.S. Census Bureau. (2004b). Meeting 21st century demographic data needs-implementing the American Community Survey. Report 8: Comparisons of the American Community Survey threeyear averages with the census sample for a sample of counties and tracts. Washington, DC: U.S. Census Bureau.
U.S. Census Bureau. (2008). A compass for understanding and using American Community Survey data: What general data users need to know. Washington, DC: U.S. Census Bureau.
U.S. Census Bureau. (2009a). Design and methodology: American Community Survey (April, 2009, ACSDM1). Washington, DC: U.S. Census Bureau.
U.S. Census Bureau. (2009b). A compass for understanding and using American Community Survey data: What researchers need to know. Washington, DC: U.S. Census Bureau.
U.S. GAO (General Accountability Office). (2006). Federal assistance: Illustrative simulations of using statistical population estimates for reallocating certain federal funding. GAO-06-567. Washington, DC. U.S. Government Accountability Office.

Van Auken, P. M., Hammer, R. B., Voss, P. R., \& Veroff, D. L. (2006). The American Community Survey in counties with 'seasonal' populations. Population Research and Policy Review, 25, 275-292.
Velkoff, V. (2007). The U.S. Census population estimates program. Paper presented at the annual conference of the Association of Public Data Users, Alexandria, VA.
Velkoff, V., \& Devine, J. (2009, June 5). Estimates evaluation: E2. Presentation given at the quarterly meeting of the Council of Professional Associations on Federal Statistics, Alexandria, VA. Accessed January 2010, from http://www.copafs.org/VelkoffDevine.pdf.
Walashek, P., \& Swanson, D. (2006). The roots of conflicts over US Census counts in the late 20th century and prospects for the 21st century. Journal of Economic and Social Measurement, 31(34), 185-206.
Washington State Office of Financial Management. (2000). Developing trends in household size for use in population estimates. Population Estimates and Projections Research Brief No. 10. Olympia, WA: Washington State Office of Financial Management.
Wetrogan, S. (2005, June 7). The intercensal population estimates and projections program. Presentation to the Metropolitan Washington Council of Governments, Washington, DC. Accessed August 2011, from www.mwcog.org/uploads/committee.../vltfVls20050607121524.ppt.
Wetrogan, S. (2007). Evaluating county population estimates using a housing unit based approach. Paper presented at the annual meeting of the Southern Demographic Association, Birmingham, AL.
Williams, J. (2010, December 21). The American Community Survey: Development, implementation, and issues for congress. Government Policy. Accessed June, 2011 from http://government-policy. blogspot.com/2010/12/american-community-survey-development.html.
Ziliak, S., \& McCloskey, D. (2008). The cult of statistical significance: How the standard error costs us jobs, justice and lives. Ann Arbor, MI: The University of Michigan Press.

From: Thomas J Smith/AMSD/HQ/BOC
To: Susan Lynn Hostetter/ACSO/HQ/BOC@BOC
Date: Monday, February 27, 2012 01:47PM
Subject: FW: AAJC Comments to Census Bureau Request re ACS 2013 Content Changes and Internet Response Mode

ACS comments.....

Thomas Smith
U.S. Census Bureau

301-763-1181
------Forwarded by Thomas J Smith/AMSD/HQ/BOC on 02/27/2012 01:47PM -----
To: "Smith, Thomas J" [thomas.j.smith@census.gov](mailto:thomas.j.smith@census.gov)
From: "Banks, Gwellnar" [gBanks@doc.gov](mailto:gBanks@doc.gov)
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Cc: "Mickelson, Glenna" [gMickelson@doc.gov](mailto:gMickelson@doc.gov)
Subject: FW: AAJ C Comments to Census Bureau Request re ACS 2013 Content Changes and Internet Response Mode
(See attached file: AAJC Comments to Census Bureau Request re ACS 2013 Content Changes and Internet Response Mode.pdf)

FYI

From: Jessup, J ennifer
Sent: Monday, February 27, 2012 12:45 PM
To: Banks, Gwellnar
Subject: Fw: AAJ C Comments to Census Bureau Request re ACS 2013 Content Changes and Internet Response Mode

FYI

From: Terry Ao Minnis [tao@advancingequality.org](mailto:tao@advancingequality.org)
To: Jessup, Jennifer

Cc: Jason Lagria <J Lagria@advancingequality.org>
Sent: Mon Feb 27 12:42:52 2012
Subject: AAJ C Comments to Census Bureau Request re ACS 2013 Content Changes and Internet Response Mode

February 27, 2012

Via email: jjessup@doc.gov

Diana Hynek
Departmental Paperwork Clearance Officer
Department of Commerce
Room 6616

14th and Constitution Avenue, NW
Washington, DC 20230

Dear Ms. Hynek:

In response to the Census Bureau's December 28, 2011 Notice of Proposed Information Collection and Comment Request on the American Community Survey 2013 Content Changes and Internet Response Mode, the Asian American Justice Center (AAJC), a member of the Asian American Center for Advancing Justice (Advancing Justice), submits the following comments. A national non-profit, non-partisan organization, AAJC works with the other members of Advancing Justice, the Asian American Institute (AAI) in Chicago, the Asian Law Caucus (ALC) in San Francisco, and the Asian Pacific American Legal Center (APALC) in Los Angeles, to ensure an accurate count of our community during the decennial census and the American Community Survey (ACS). Advancing Justice recognizes that accurate data directly affect our nation's ability to ensure equal representation and equal access to important public and private resources for all Americans, including Asian Americans.

AAJC has been extensively involved in working to eliminate the problems that have historically resulted in undercounting and underreporting of Asian Americans in federal data collection and analysis efforts, and in particular the decennial census and ACS counts. AAJC conducted a successful national Census 2000 outreach and educational project focused on the Asian American community. After the 2000 Census, AAJC continued its efforts to ensure accurate and appropriate federal data collection and reporting on Asian Americans through its membership on the Decennial Census Advisory Committee since 2000 and subsequently its membership on the
reconstituted and downsized 2010 Census Advisory Committee as well as its role as co-chair of the Leadership Conference on Civil and Human Rights' (Leadership Conference) Census Task Force. Most recently, AAJC conducted an extensive education and outreach efforts around Census 2010 both through being a part of the Leadership Conference's Census Collaborative and leading a nationwide Asian American Pacific Islander-focused outreach campaign that included a clearinghouse resource center Web site, material development - particularly in-language materials, and mobilizing local grassroots organizations.

AAJ C's mission to advance the human and civil rights of Asian Americans and build a fair and equitable society for all is guided significantly by objective, inclusive data on our diverse communities and populations. Data allow us to identify disparate access and outcomes as well as needs of the community and provide us a way to develop effective solutions. To that end, AAJ C strongly supports the Census Bureau's proposal to add two topics to the ACS starting in 2013: (1) computer and Internet usage; and (2) parental place of birth.

## Computer and I nternet Usage

As access to broadband Internet services becomes increasingly essential, AAJC is committed to achieving universal broadband access for underserved and unserved communities. AAJC is a member of the Leadership Conference Media and Telecom Task Force and the Broadband Opportunity Coalition (BBOC), a historic alliance of national civil rights organizations formed to increase broadband adoption in unserved and underserved communities nationwide. Our BBOC partners include the National Urban League, the League of United Latin American Citizens (LULAC), National Council of La Raza (NCLR), and the NAACP. BBOC recently launched a National Awareness Campaign to educate the communities they serve about the benefits of broadband Internet. Through its broadband outreach work in connection with the BBOC, AAJC is a national leader and expert in increasing broadband adoption in the Asian American community.

## 1) ACS Data on Computer and Internet Usage Can Provide Critical Data That is Currently Missing for the Asian American Community

AAJC supports the Census Bureau's efforts to gather information about computer and Internet usage in the ACS. As access to broadband Internet services is increasingly essential for accessing government information and benefits, obtaining healthcare, applying for jobs, receiving an education and participating in civic and social engagement, it is critical that we understand who does and does not have broadband access. Broadband Internet also has the ability to empower and provide critical in-language information and services to limited English proficient (LEP) Asian Americans. More than one in three Asian Americans are considered LEP and one in four is isolated in a household where no one over 14 speaks English without some difficulty.

ACS data on computer and Internet usage will be instrumental in painting for policy makers a more complete picture of who is adopting broadband Internet in the United States, especially in the Asian American community. Unfortunately, many minority and underserved groups lag behind in adopting broadband Internet, creating a "digital divide." Low income individuals and the uneducated are not adopting broadband. Furthermore, Black and Hispanic adoption rates are currently at less than 50 percent.

For Asian Americans, there is a dearth of reliable data regarding their broadband adoption profiles. Recent federal government studies show Asian Americans, as a whole, are adopting broadband Internet at relatively higher rates than all other racial groups.[1] These studies are likely inaccurate and a significant number of Asian Americans continue to face barriers that prevent them from connecting to the Internet. First, the studies excluded a large portion of the Asian American population because they were conducted only in English, despite more than 30\% of Asian Americans being LEP. [2] Second, the data from the studies were not disaggregated into Asian subgroups and do not accurately describe the complete adoption profile of the Asian American community. The socio-economic distribution of the Asian American community is bimodal. While some members of the Asian American community are faring well, others-particularly in the Southeast Asian community-face more challenges.[3] Without this reliable data, Asian Americans are at risk of being overlooked by policy makers and left behind on the side of the digital highway. Accordingly, ACS data on broadband adoption and computer usage will be very useful in providing more accurate data that has been missing about the Asian American community.

AAJC strongly urges the Census Bureau to disaggregate the computer and Internet usage data for Asian American subgroups. The ACS reaches a much larger population than previous federal surveys, which can allow for more granularity in its results, especially for the Asian American population. Often viewed as racially homogeneous, Asian American communities are actually incredibly diverse. More than 45 distinct ethnic groups and a multitude of cultures speaking more than 28 languages comprise Asian America. Accordingly, the Census Bureau should ensure its outreach is conducted in Asian languages and its study has sample sizes sufficient to break down the Asian American community into statistically meaningful categories to better understand how to increase broadband access and adoption for all members of our community. At a minimum, the Census Bureau should collect data on the largest Asian subgroups, which have historically constituted a substantial majority of the Asian American population - Chinese, Filipino, Asian Indian, Korean, Vietnamese, Japanese, Pakistani, Hmong, Cambodian, Laotian, and Thai.

## 2) Internet Response Option

AAJC is supportive in the Census Bureau's efforts to increase the number of ways to respond to the ACS by providing an Internet response option to the ACS. However, there are over 100 million people who are not connected to the Internet, and racial minorities make up a disproportionate percent of those not connected. The Census Bureau should ensure that any plans to modernize the ACS do not leave out minority populations who are already on the wrong side of the digital divide, and to that end, should not rely only on an Internet Response Only module. An Internet response option can potentially increase survey participation by minority communities, who tend to adopt mobile Internet technologies at higher rates than the
general population. Accordingly, the Bureau should ensure that any Internet response will be compatible with mobile platforms. . Moreover we encourage the Census Bureau to study the feasibility of including in-language options for the Internet response option to the ACS. We look forward to working with the Bureau on how the Internet response option should be structured to maximize participation by all communities.

## Parental Place of Birth

Collecting data on parental place of birth will be important to AAJ C's advocacy and policy work, as it will provide an intergenerational understanding of our many different communities. The population of second generation Americans has grown rapidly over the years - from 24.6 million people with at least one foreign-born parent in 1996 to 33 million in 2009 according to the CPS.

Data on parental place of birth are critical to understanding foreign born, children of immigrants, and natives with no foreign-born parents populations. Focusing on these three categories separately will give AAJC information about adaptation and integration of immigrants, children of immigrants, and their descendants over time. Without information about parental place of birth, the second generation remains indistinguishable from the third-orhigher generations. We agree with the Census Bureau that there is added value in gathering parental place of birth data which, combined with other socioeconomic data gathered in the ACS, will provide a richer set of data to understand the needs and concerns faced by first generation immigrants, second generation, and beyond. This is particularly important when trying to determine the impact that the foreign born and their children have on communities, what services to provide them, and what planning considerations to heed. For example, understanding the level of English language proficiency among different generations will help public and private service providers better understand the types of language assistance to offer in different communities. The data will provide more refined guidance on how best to use limited resources to maximize effectiveness.

## Robust Language Program Needed

AAJC would like to reiterate the need for a more robust language program to support the ACS, which would lead to better data. A third of the entire Asian American population is LEP and more than $40 \%$ of eight AAPI groups are LEP (Vietnamese, Hmong, Cambodian, Laotian, Chinese, Korean Bangladeshi, and Taiwanese). Combine the language barriers with the highest foreign-born rates in the nation, with more than a majority of Asian Americans being foreignborn and the resulting lack of familiarity with the census and ACS process, and Asian Americans are among the most vulnerable to not participating in the ACS. This could result in data that would be less useful for the community as it would skew the needs of our community. Simply put, providing a strong language program that supports many Asian American languages will help to strengthen the data collected via the ACS.

## Conclusion

AAJ C is committed to working with the Census Bureau to see that the ACS results in accurate, timely, and useful data on all Americans, including Asian Americans that help ensure we are properly addressing the needs of the Asian American community. We believe that the Bureau's proposal to add two topics to the ACS starting in 2013 on computer and Internet usage and on parental place of birth will help in that respect. We also urge the Bureau to invest more into its language program for our communities to help ensure we are collecting accurate and comprehensive data.

Sincerely,
//s//

Terry Ao Minnis, Director of Census \& Voting Programs,
tminnis@advancingequality.org, 202 296-2300 x127
Jason T. Lagria, Telecommunications and Broadband Policy Staff Attorney
jlagria@advancingequality.org, 202 296-2300 x122

Asian American Justice Center, a member of the Asian American Center for Advancing Justice

## Terry Ao Minnis

Director of Census \& Voting Programs

Asian American Justice Center
Member of Asian American Center for Advancing Justice

1140 Connecticut Avenue NW, Suite 1200

Washington, DC 20036

T (202) 296-2300 x127

MEMBER OF
ASIAN AMERICAN CENTER
FOR ADVANCING JUSTICE

## ficio

[1] See Econ. \& Statistics Admin. and Nat'l Telecomm. \& Info. Admin., U.S. Dep't of Commerce, Exploring the Digital Nation: Home Broadband Internet Adoption in the United States (2010) (77 percent AAPI household adoption); Nat'l Telecomm. \& Info. Admin., U.S. Dep't of Commerce, Digital Nation: Expanding Internet Usage 11 (2011) ( 68.8 percent home broadband adoption rate for AAPIs); see also Lee Rainie, Pew Research Center, Asian-Americans and Technology (2011), available at http://www.pewinternet.org/Presentations/2011/J an/~/media/Files/Presentations/2011/J an/201 1\% 20-\% 20pdf\% 20-\% 20Asian\%20Americans\% 20-\% 20DC.pdf (English only polls result in "substantially upscale APA population [with higher] educational attainment and household income").
[2] There is a large disparity in Internet and home broadband usage between English-speaking and Spanish-speakers Hispanics. AAJC suspects the same might be occurring in the AAPI community. See Joint Center for Political and Economic Studies, National Minority Broadband Adoption: Comparative Trends in Adoption, Acceptance and Use 9 (2010) (reporting 40 point differences in Internet Use and home broadband use between English-speaking and Spanishspeaking Hispanics).
[3] See generally Asian Pacific American Legal Center \& Asian American Justice Center, A Community of Contrasts Asian Americans in the United States: 2011 (2011) (providing a detailed portrait of the Asian American community, including disaggregated data by ethnicity).

## Attachments:

From: Thomas J Smith/AMSD/HQ/BOC
To: Susan Lynn Hostetter/ACSO/HQ/BOC@BOC
Date: Monday, February 27, 2012 01:48PM
Subject: FW: AAPOR comment re American Community Survey 2013: FR Vol. 76, No. 249, Dec 28, 2011, pp. 81474-81475

ACS comments.....

Thomas Smith
U.S. Census Bureau

301-763-1181
------Forwarded by Thomas J Smith/AMSD/HQ/BOC on 02/27/2012 01:47PM -----
To: "Smith, Thomas J" [thomas.j.smith@census.gov](mailto:thomas.j.smith@census.gov)
From: "Banks, Gwellnar" [gBanks@doc.gov](mailto:gBanks@doc.gov)
Date: 02/27/2012 01:03PM
Cc: "Mickelson, Glenna" [gMickelson@doc.gov](mailto:gMickelson@doc.gov)
Subject: FW: AAPOR comment re American Community Survey 2013: FR Vol. 76, No. 249, Dec 28, 2011, pp. 81474-81475
(See attached file: AAPOR Comment_American Community Survey_Parental Nativity_02 27
2012 final.docx)

FYI

From: Jessup, J ennifer
Sent: Monday, February 27, 2012 12:22 PM
To: Banks, Gwellnar
Subject: FW: AAPOR comment re American Community Survey 2013: FR Vol. 76, No. 249, Dec 28, 2011, pp. 81474-81475

From: Tibbitts, Susan - AAPOR [stibbitts@aapor.org]
Sent: Monday, February 27, 2012 12:20 PM

# To: dHynek@doc.gov; Jessup, Jennifer (CANTORD1@WESTAT.com); J ohnson, Timothy 81474-81475 <br> To: Diana Hynek and/or Jennifer Jessup <br> Departmental Paperwork Clearance Officer <br> Department of Commerce 

Cc: Scott Keeter (skeeter@pewresearch.org); Paul J. Lavrakas (pjlavrakas@hughes.net); 'David Cantor'
Subject: AAPOR comment re American Community Survey 2013: FR Vol. 76, No. 249, Dec 28, 2011, pp.

On behalf of the members of the American Association for Public Opinion Research (AAPOR), I am pleased to submit the attached comments regarding the Federal Register "Proposed Information Request; Comment Request; The American Community Survey 2013 Content Changes and Internet Response Mode." Federal Register Vol. 76, No. 249, December 28, 2011, pp. 81474-81475.

Please let us know if you have questions.

Thank you,

Susan

Susan L. Tibbitts

Executive Director
American Association for Public Opinion Research

111 Deer Lake Road, Suite 100 Deerfield, IL 60015 USA
Tel +1-847-205-2651 ext. 252 | Fax +1-847-480-9282
stibbitts@aapor.org
www.aapor.org

Save the Date: AAPOR 67 ${ }^{\text {th }}$ Annual Conference, J W Marriott Orlando Grande Lakes, May 17-20,

2012

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## Attachments:

AAPOR Comment_American Community Survey_Parental Nativity_02 272012 final.docx

From: Thomas J Smith/AMSD/HQ/BOC
To: Susan Lynn Hostetter/ACSO/HQ/BOC@BOC
Date: Monday, February 27, 2012 01:47PM
Subject: FW: USCC Comment Letter Re: The American Community Survey 2013 Content Changes and Internet Response Mode

ACS comments....

Thomas Smith
U.S. Census Bureau

301-763-1181
------Forwarded by Thomas J Smith/AMSD/HQ/BOC on 02/27/2012 01:47PM -----
To: "Smith, Thomas J" [thomas.j.smith@census.gov](mailto:thomas.j.smith@census.gov)
From: "Banks, Gwellnar" [gBanks@doc.gov](mailto:gBanks@doc.gov)
Date: 02/27/2012 01:04PM
Cc: "Mickelson, Glenna" [gMickelson@doc.gov](mailto:gMickelson@doc.gov)
Subject: FW: USCC Comment Letter Re: The American Community Survey 2013 Content Changes and Internet Response Mode
(See attached file: 120221_CommentLetter_AmericanCommunitySurvey_ACS_Jessup.pdf)

Hello, Tom. FYI

From: Jessup, J ennifer
Sent: Monday, February 27, 2012 12:22 PM
To: Banks, Gwellnar
Subject: FW: USCC Comment Letter Re: The American Community Survey 2013 Content Changes and Internet Response Mode
Importance: High

FYI

From: Casasco, Paul [PCasasco@USChamber.com]
Sent: Friday, February 24, 2012 11:39 AM

To: Jessup, J ennifer
Cc: Chambers, Cheryl V; Maney, Tim; Mosby, Robert
Subject: USCC Comment Letter Re: The American Community Survey 2013 Content Changes and Internet Response Mode

Attached are comments from the U.S. Chamber of Commerce on The American Community Survey 2013 Content Changes and Internet Response Mode.

Please contact me with any questions.

Thank you,

Gordy Casasco

## P. Gordon Casasco

Congressional and Public Affairs

United States Chamber of Commerce

1615 H Street, NW

Washington, DC 20062-2000

Office: (202) 463-5808

Cell: (202) 294-2813
pcasasco@uschamber.com

## Attachments:

120221_CommentLetter_AmericanCommunitySurvey_ACS_J essup.pdf

Date: Tuesday, February 28, 2012 08:34AM
Subject: FW: ACS Census Comments from the National Congress of American Indians

More comments...

Thomas Smith
U.S. Census Bureau

301-763-1181
------Forwarded by Thomas J Smith/AMSD/HQ/BOC on 02/28/2012 08:33AM -----
To: "Smith, Thomas J" [thomas.j.smith@census.gov](mailto:thomas.j.smith@census.gov)
From: "Banks, Gwellnar" [gBanks@doc.gov](mailto:gBanks@doc.gov)
Date: 02/27/2012 06:15PM
Cc: "Mickelson, Glenna" [gMickelson@doc.gov](mailto:gMickelson@doc.gov)
Subject: FW: ACS Census Comments from the National Congress of American Indians (See attached file: NCAI_ACS Comments.pdf)

This is a very popular IC. FYI

From: Amber Ebarb [amber_ebarb@NCAI.org](mailto:amber_ebarb@NCAI.org)
To: Jessup, Jennifer
Cc: Brian Howard [bhoward@NCAI.org](mailto:bhoward@NCAI.org); Amber Ebarb [amber_ebarb@NCAI.org](mailto:amber_ebarb@NCAI.org)
Sent: Mon Feb 27 17:42:50 2012
Subject: ACS Census Comments from the National Congress of American Indians

Dear Ms. Hynek:

The National Congress of American Indians submits the following comments in response to the Census Bureau's request for comments in the December 27, 2011, Federal Register Notice concerning the American Community Survey (ACS) 2013 content changes and Internet response mode.

If you have any questions, please contact me at 202-466-7767 ext. 590 or email
aebarb@ncai.org or Brian Howard at bhoward@ncai.org.

Thank you,

Amber Ebarb
Program Manager
National Congress of American Indians
Policy Research Center

## Embassy of Tribal Nations

1516 P St NW

Washington, DC 20005
202-466-7767

Fax: 202-466-7797
aebarb@ncai.org
www.ncai.org

Attachments:
NCAI_ACS Comments.pdf

Date: Tuesday, February 28, 2012 08:33AM
Subject: FW: ACS content change comments 22712

More comments...

Thomas Smith
U.S. Census Bureau

301-763-1181
------Forwarded by Thomas J Smith/AMSD/HQ/BOC on 02/28/2012 08:33AM -----
To: "Smith, Thomas J" [thomas.j.smith@census.gov](mailto:thomas.j.smith@census.gov)
From: "Banks, Gwellnar" [gBanks@doc.gov](mailto:gBanks@doc.gov)
Date: 02/27/2012 06:14PM
Cc: "Mickelson, Glenna" [gMickelson@doc.gov](mailto:gMickelson@doc.gov)
Subject: FW: ACS content change comments 22712
(See attached file: ACS content change comments final 227 12.pdf)

FYI

From: Nancy Zirkin [Zirkin@civilrights.org](mailto:Zirkin@civilrights.org)
To: Jessup, J ennifer
Sent: Mon Feb 27 17:31:35 2012
Subject: ACS content change comments 22712
Attached are the comments of The Leadership Conference on Civil and Human Rights, in response to the Census Bureau's December 28, 2011 Notice of Proposed Information Collection and Comment Request on the American Community Survey (ACS) 2013 Content Changes and Internet Response Mode. As you will see, The Leadership Conference strongly supports the Census Bureau's proposal to add two topics to the ACS starting in 2013: (1) computer and Internet usage; and (2) parental place of birth. We also ask for caution when designing an Internet response option for future surveys and censuses because accurate and thorough data are critical to understanding the so-called "digital divide." We hope that these recommendations and analyses prove useful to the Bureau, and we look forward to collaborating with
you to further the goal of ensuring a fair and accurate census and comprehensive ACS.
---

```
Nancy M. Zirkin
Executive Vice President
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The Leadership Conference Education Fund
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202.263.2880 - Phone
202.329.4442 - Cell
Zirkin@civilrights.org - Email
www.civilrights.org
```

Attachments:
ACS content change comments final 227 12.pdf

President
Jefferson Keel
Chickasaw Nation
FIRST VICE-PRESIDENT
Juana Majel Dixon
Pauma Band of Mission Indians
Recording Secretary
Edward Thomas
Central Council of Tlingit \& Haida Indian Tribes of Alaska

TREASURER
W. Ron Allen

Jamestown S'Klallam Tribe
Regional Vice-Presidents
Alaska
Bill Martin
Central Council of Tlingit \& Haida Indian Tribes of Alaska

Eastern Oklahoma
S. Joe Crittenden

Cherokee Nation
Great Plains
Robert Shepherd
Sisseton Wahpeton
Midwest
Matthew Wesaw Pokagon Band of Potawatomi

NORTHEAST
Lance Gumbs
Shinnecock Indian Nation
NORTHWEST
Fawn Sharp
Quinault Indian Nation
PACIFIC
Don Arnold
Scotts Valley Band of Pomo Indians
Rocky Mountain
Scott Russell
Crow Tribe
Southeast
Larry Townsend
Lumbee Tribe
Southern Plains Robert Tippeconnie
Comanche Nation
SOUTHWEST
Joe Garcia
Ohkay Owingeh
Western
Ned Norris, Jr
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1516 P Street, N.W.
Washington, DC 20005
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202.466.7797 fax

February 27, 2012

Diana Hynek<br>Departmental Paperwork Clearance Officer<br>Department of Commerce, Room 6616<br>14th and Constitution Avenue NW<br>Washington, DC 20230<br>(via the Internet at dHynek@doc.gov)

## Re: Comments on the American Community Survey 2013 Content Changes

The National Congress of American Indians submits the following comments in response to the Census Bureau's request for comments in the December 27, 2011, Federal Register Notice concerning the American Community Survey (ACS) 2013 content changes and Internet response mode.
A) Is the proposed collection of information necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility?

## 1. The proposed collection of information on Computer and Internet usage in the household is necessary for the agency to provide adequate information on American Indian and Alaska Native communities.

The proposed collection of information would be beneficial for American Indian and Alaska Native communities by providing more accurate and dependable economic and social data than is currently available. American Indian and Alaska Native lands are some of the most unserved and underserved areas of the United States. When referring to Internet, broadband and wireless capability, the difference between Indian Country and the rest of the United States has commonly been referred to as the 'Digital Divide'. ACS data showing computer and Internet usage within American Indian and Alaska Native households could further illustrate and highlight the availability of technology and adoption rates in Indian Country, and it could highlight disparities that are currently subject to conjecture and potentially provide the foundation for solutions to alleviate this digital disconnect.

The Federal Communications Commission's National Broadband Plan states that Internet penetration on tribal lands is estimated at less than ten percent, while basic analog telephone service reaches about 68 percent of Indian Country. ${ }^{1}$ The additional information that is proposed for collection by the Department of Commerce, U.S.

[^11]Census Bureau ${ }^{2}$ could establish the groundwork that results in additional inquiries by outside agencies and entities on needed research such as: identifying the barriers to computer and Internet usage in Indian Country, investigating the issues surrounding non-adoption of digital technologies, and determining the applicability of a 'needs-based' assessment for federal agencies providing funding for broadband infrastructure deployment on tribal lands.

## 2. Data are needed to understand and address barriers to computer and Internet usage in Indian Country.

It has long been acknowledged that there are numerous barriers to infrastructure deployment on tribal lands. One of the major issues has been the relative high-costs associated with building the necessary infrastructure to rural and remote tribal lands, areas where service may only reach two or three households. In the years following the 1996 Telecommunications Act the federal government sought to leave telephone build out and connection up to the telecommunications industry, and the Universal Service Fund was established to assist the industry with providing this service and connecting the country - it failed. Instead of connecting all of America to basic telephone services, the industry 'cherry-picked' areas that would provide their companies with the most profit or revenues, and as such, rural and tribal communities were left largely disconnected since costs associated with connecting these communities outweighed the potential revenues for the industry. Therefore, it is critical that data collection commence on Internet usage in American Indian and Alaska Native households to determine 'areas of need' and provide a basis for targeted funding efforts to deploy broadband capable infrastructure to these communities.

## 3. The proposed data collection would assist the FCC, the industry, and tribes to properly evaluate telecommunications overhaul and identify implications to technology adoption in Indian Country.

On November 18, 2011, the Federal Communications Commission (FCC) released a Report and Order and Further Notice of Proposed Rulemaking overhauling the Universal Service Fund (USF) and substantially revised its intercarrier compensation (ICC) mechanisms. ${ }^{3}$ This Order adopted a new Connect America Fund, and a new Mobility Fund including a set-aside 'Tribal Mobility Fund.' This recent Order that is 759 pages in length was released by the FCC represents the most significant overhaul of telecommunications regulation in nearly a century. Additionally, the FCC is considering phasing out analog technologies and replacing them with digital, broadband capable, technologies. For instance, on December 14, 2011, the FCC held a series of workshops on the transition of the public switch telephone network (PSTN) system to new technologies. Although the PSTN has proven to be an extremely reliable network, the transition of this circuit switch network has already begun and there are questions pertaining to whether or not portions of the PSTN will be kept in service or completely replaced. ${ }^{4}$ Since American Indian and Alaska Native communities were largely excluded from acquiring basic analog services from service providers unwilling to build out

[^12]into these high-cost areas, the proposed data collection on Internet usage in Indian Country could be used to identify those tribal lands lacking connectivity or access to broadband technologies.

## 4. Collection of information regarding computer and Internet usage in American Indian and Alaska Native households can further assist in providing targeted funding to lands experiencing high rates of non-connectivity.

It is clear that the FCC, other agencies, and tribes rely on Census data when making decisions that affect millions of people. The FCC has already used preliminary data from the 2010 Census and the October 2011 American Roamer Data highlighting census blocks that may be eligible to apply for monies awarded through the Mobility Fund. These census blocks have been identified as lacking 3G or better broadband services.

The collection of a) computer usage and b) Internet access and subscription types within the household as two separate items would be useful. Due to high-unemployment, high poverty rates, and low incomes prevalent in many tribal communities, it is probable that even those households with a computer may not necessarily have Internet access. It is also important to note that some tribal telecommunications providers may lack current infrastructure and may only support basic dialup or low-speed Digital Subscriber Line (DSL) services. For instance, the Tohono O'odham Nation Utility Authority (TONUA) provides Internet services for the Tohono O'odham Nation in southern Arizona. According to their website they offer DSL services at speeds of two megabits per second $(\mathrm{Mb} / \mathrm{s})$ for $\$ 42.95$ per month with a one year contract. ${ }^{5}$

In contrast Cox Communications, Inc. servicing Tucson, Arizona - about 68 miles east of Sells, capital of the Tohono O'odham Nation - currently offers a special on their DSL services providing three $\mathrm{Mb} / \mathrm{s}$ download speeds at $\$ 19.95$ for the first six months of service. ${ }^{6}$ Upon conclusion of the six month special offer the three $\mathrm{Mb} / \mathrm{s}$ DSL service resumes its regular price at a rate of $\$ 39.95$ per month. ${ }^{7}$ Although the costs of DSL service between Cox Communications, Inc. and the TONUA are relatively close, the plan provided by Cox Communications, Inc. would produce about $\$ 156.00$ in savings per year compared to the TONUA plan. Additionally Cox Communications, Inc. provides free Internet activation service with an online web purchase, ${ }^{8}$ provided of course that the residence has access to a terrestrial broadband network. It should be noted that information on TONUA's web site did not mention whether or not they provided free Internet activation services but, typically, tribes need to build-out infrastructure to connect additional households due to the rural and remote nature of many tribal lands. Although services may be technically available they may still exist beyond the economic reach of many in Indian Country due to socio-economic conditions many reservations and villages experience.

As noted above, while tribal residents may have computer access within their household that does not necessarily mean that Internet connectivity is readily available or viable given certain economic situations within these communities. Therefore, it is essential that improved data collection regarding computer and internet usage and availability is necessary to ascertain adoption of these

[^13]technologies in American Indian and Alaska Native households. Although data collection by the Census on 'availability' of digital technologies like computer and Internet in Indian Country is either not collected, or incomplete, this initial step could set the foundation for such future initiatives.

## B) The accuracy of the agency's estimate of the burden (including hours and cost) of the proposed collection of information

## Any increase in the burden of collection over the current burden should be minimal and is required to uphold the federal trust responsibility.

In considering the burdens and costs of data collection regarding computer and Internet usage in American Indian and Alaska Native households, the federal government must recognize and uphold its federal fiduciary trust responsibilities to American Indians and Alaska Natives. To improve the socio-economic levels of American Indian and Alaska Native communities it is essential that sound, accurate, and timely data is available to illustrate the 'Digital Divide' in Indian Country.
C) What would enhance the quality, utility, and clarity of the information to be collected?

## 1. Computer and Internet usage data collection could set the foundation for further inquiries regarding digital technology adoption in Indian Country.

Taking the aforementioned disparities regarding computer and Internet usage in Indian Country into consideration, it is essential that the Census clarify proposed questions and questionnaires that would be collecting this type of information. It would be beneficial for research and data collection purposes to provide for additional follow-up questions to the baseline computer and Internet usage questionnaire. A base questionnaire could first pose an examination of computer usage in the household and further inquire as to whether or not said household a) can get access to or b) subscribes to Internet services. Further inquiries could collect information regarding: whether or not the household has access to terrestrial Internet services by way of telephone wireline or fiber optic cable; access to satellite based services; upload and download speeds and associated costs (i.e. faster Internet services cost more to the subscriber). These further inquiries could establish the framework for future initiatives to bridge the Digital Divide in Indian Country by providing the basis for sound policy and regulation formulation and targeted funding efforts to 'areas of need.'

## 2. Clarify 'Internet usage' and 'computer usage' to encompass all forms of technology and service.

There needs to be clarification of 'internet usage' and 'computer usage' within the household. Questions and questionnaires adopted by the Census must take into consideration Internet used through mobile, radio, and satellite devices. Questions should be developed to reflect the technologies available and take into consideration that many people use smart phones and other mobile devices to browse the Internet, conduct business, research facts, and $\log$ in to social media services. 'Computer usage' will also have to be defined, or a different term may have to be developed specific to Census needs. Technology is no longer limited to the basic desktop computer and the Census will have to take into consideration that many people utilize laptops, tablets such as the iPad, smart phones, and other mobile technologies.

In the 2012 American Community Survey Research and Evaluation Report released January 31, 2012, the U.S. Census published the results of its test questions regarding internet and computer usage in the household. ${ }^{9}$ The test questions coincide with the aforementioned recommendations supported by NCAI by taking into consideration the multiple technology platforms available to consumers. However, it would be beneficial to include in the proposed questions if an individual in a household subscribes to the Internet to record the download speeds they subscribe to.

Typically, DSL service providers will offer lower $\mathrm{Mb} / \mathrm{s}$ speeds to accommodate lower income individuals, or those that do not necessarily need fast Internet speeds if they are using the Internet as a utility - such as using the Internet for simple email and other applications. Faster Internet speeds are mostly desired by those that use the Internet for entertainment purposes, such as video conferencing or participating in online video gaming, and therefore require high $\mathrm{Mb} / \mathrm{s}$ speeds to accommodate the amount of data streaming over the network. Collecting data on $\mathrm{Mb} / \mathrm{s}$ speed subscribership will assist in determining not only availability but also further determinations of Internet usage.

## 3. American Community Survey data quality in general for Indian Country.

The Census Bureau has long acknowledged that the reliability of ACS data is affected by the size of the sample of households from which it is collected. It has pushed the Administration and the Congress to increase funding for the ACS so that it can expand the sample size and increase the reliability of the data. In 2011, this effort paid off. In June 2011, the Census Bureau increased the sample size for the ACS by 18 percent. It is now mailing questionnaires to 295,000 households a month, up from the previous 250,000 .

Other changes are also designed to improve the accuracy of the ACS in smaller geographic areas, particularly AI/AN areas. In "bush" or remote Alaska, the Bureau now conducts in-person, followup interviews of every household that does not return its mail questionnaire. The non-response follow-up by personal visit will increase to 100 percent in most reservation areas. The sampling rates for smaller communities have also been increased.

As long as Congressional appropriations for the ACS continue to provide adequate resources, all of these changes should begin to improve the quality of the ACS data for reservation and other small AI/AN areas when the 5-year estimates for 2007-2011 are released late in 2012. The full effect of such changes will be evident in the data set for 2012-2016.

These improvements that address sampling error are tremendously important for capturing the characteristics of tribal communities in reservation and Alaska Native areas, and NCAI urges the Census Bureau to ensure these methods remain in use.
D) What are your comments on ways to minimize the burden of the collection of information on respondents, including through the use of automated collections techniques or other forms of information technology?
${ }^{9}$ See 2012 American Community Survey Research and Evaluation Report Memorandum Series \#ACS12-RER-08. Available at https://www.census.gov/acs/www/Downloads/library/2012/2012_Shin_01.pdf.

## 1. Automated collection techniques are likely to skew the results of Census collection from American Indian and Alaska Native populations.

It is likely that information technology collection would have limited responses from the American Indian and Alaska Native populations. As aforementioned, American Indian and Alaska Native lands are largely unserved and underserved areas with respect to Internet connectivity. The results of an automated collection would tend to indicate more computer usage and Internet service adoption than actually exists because the only households Census would reach already have those capabilities. That part of Indian Country that needs to be assessed would continue again to be uncounted because it is on the other side of the Digital Divide.

## 2. There are concerns over previous attempts to collect data in Indian Country.

Information collection techniques should also take into consideration tribal sovereignty. For instance, members of the Native Nations Broadband Task Force in an Ex-Parte filing to the Federal Communications Commission noted that their respective tribes were not receptive to allowing contracted entities admittance to tribal lands for surveying purposes. ${ }^{10}$ The issue highlighted here is that during the creation of the National Broadband Map website the National Telecommunication and Information Administration (NTIA) in coordination with the Federal Communications Commission (FCC) created a separate Native Nations National Broadband Map website. ${ }^{11}$ This Native Nations map was meant to illustrate tribal lands connected, or not, to telephone and Internet services.

However, as was expressed by members of the Native Nations Broadband Task Force there were tribes that did not participate in the data collection due to NTIA providing grants only to the 50 states, five territories, the District of Columbia, or their designees. The grant making process was administered through NTIA under its State Broadband Initiative (SBI) program and did not allow tribes to apply for these grants. The SBI program was created through the Recovery Act and the Broadband Data Improvement Act with the purpose of assisting states in gathering data twice a year regarding telecommunications availability, speeds, and services offered to community institutions such as schools, libraries, and hospitals. ${ }^{12}$ Since tribes were excluded from applying for these grants, states collected data on broadband availability from providers providing services to federally recognized American Indian tribes and Alaska Native villages. However, as explained in the following paragraph, many tribal lands and villages were largely misrepresented as having full broadband connectivity as reported by the Native Nations National Broadband Map.

## 3. Proper collection of this data would assist in obtaining accurate data highlighting areas where Internet access is incorrectly stated by the Native Nations National Broadband Map

In testimony provided before the U.S. Senate Committee of Indian Affairs, Geoffrey Blackwell, Chief of the Office of Native Affairs at the FCC, stated that:

[^14]In the case of the Goshute Confederated Tribes, during the late September Native American Summit in Salt Lake City, we witnessed their explanation to the Utah state broadband mapping manager that the gross overestimation of the wireless broadband coverage on their reservation actually precluded them from applying for federal grants and loans for a Tribal project that would address the lack of services. The Utah state broadband mapping coordinator explained that the federal grant did not have funding to verify the data. Increased coordination among the relevant federal agencies and a meaningful involvement of the Native Nations, embracing them as partners, would begin to address these unintended barriers-to-entry. ${ }^{13}$

The exclusion of tribes to apply for grants to map their own communities has clearly resulted in inaccurate and skewed data collection of Internet availability on American Indian and Alaska Native lands. It is critical that the Census collect this information for use by and for tribal communities in addressing the Digital Divide. This initial step will provide the framework for updated, current, and accurate data collection efforts, and advance solutions by tribes to empower themselves to develop plans to connect their communities. The Broadband Data Improvement Act under Title I Section 103 requires the Secretary of Commerce in consultation with the FCC to expand, "the American Community Survey conducted by the Bureau of the Census to elicit information for residential households, including those located on native lands, to determine whether persons at such households own or use a computer at that address, whether persons at that address subscribe to Internet service and, if so, whether such persons subscribe to dial-up or broadband Internet services at that address." ${ }^{14}$ Therefore, the U.S. Census must uphold its fiduciary responsibility to American Indians and Alaska Natives by working in conjunction with tribes, tribal leaders and officials, Alaska Native villages, and others in governing roles to ensure accurate data collection.

[^15]Penn
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The Population Studies Center of the University of Pennsylvania strongly supports the Census Bureau's recommendation that questions about parental place of birth be added to the American Community Survey. Such information does not overlap with the existing race and ethnicity questions and is critical for providing a more comprehensive account of the U.S. population, understanding the process of immigrant adaptation across generations, and assessing the demographic dynamics of racial and ethnic groups.

Questions on parental nativity appeared in U.S. censuses from 1870 to 1970 . Unfortunately, they were dropped from the 1980 Census onward, and replaced with questions on: "ancestry:" Thus since 1980 only the Current Population Survey collects data on parental place of birth. Several complications resulted from this change:

- Without parental nativity it is impossible to identify the children of immigrants, who comprise more than a quarter of the U.S. population under the age of 18. It is therefore also impossible to analyze social change across immigrant generations. The relatively smaller sample size of the CPS limits researchers' ability to investigate these issues, particularly among smaller immigrant groups.
- Questions on race/ethnicity and ancestry are not purely demographic since they rely on self-identification. There is evidence that identities change across generations and that they are seriously affected by survey wording and design. Including questions on parental place of birth will have the added benefit of helping to assess the validity of the race/ethnicity and ancestry categories used to classify the U.S. population.
- Children of immigrants, like the U.S. population as a whole, have increasingly mixed origins that are not easily subsumed under rigid race/ethnicity or ancestry classifications. Such diversity in origins is lost by the lack of information on parental place of birth.

A main aim of demographic data such as the ACS is to provide researchers with the tools necessary to conduct original analyses, investigate new demographic trends, and provide a nuanced description of the U.S. population. Given the large size of the immigrant and second generation populations today, and the intense research, policy, and public interest that they draw, there is much to be gained by adding a precise measure of parental origin to the $A C S$.

Thank you for the opportunity to comment formally on this matter of sciehtific interest.



[^0]:    ${ }^{1}$ NTIA has wholly or partially funded the surveys, with the help of the Economics and Statistics Administration, for the CPS Computer and Internet Use Supplements in 1994, 1997, 1998, 2000, 2001, and 2003, and Internet Use Supplements in 2007, 2009, and 2010. The data became the basis for the Commerce Department reports, Falling Through the Net $(1995,1998,1999,2000)$ and A Nation Online $(2002,2004)$, and informed the NTIA report Networked Nation: Broadband in America (2007). The first two reports in the Digital Nation report series, issued in February and November 2010, relied on October 2009 CPS data. NTIA U.S. Dept. of Commerce, Digital Nation: Expanding Internet Usage, (NTIA Research Preview 2011) Fn. 7 (Feb. 2011), http://www.ntia.doc.gov/reports/2011/NTIA_Internet_Use_Report_February_2011.pdf ("Digital Nation 2011").
    ${ }^{2}$ Digital Nation 2011, at 21, 23.
    ${ }^{3}$ Id. at $8,16$.
    ${ }_{5}^{4}$ Fed. Reg., http://www.gpo.gov/fdsys/pkg/FR-2011-12-28/pdf/2011-33269.pdf; Digital Nation 2011 at 6.
    ${ }^{5}$ Final report for the 2010 Content Test,
    https://www.census.gov/acs/www/Downloads/library/2012/2012_Shin_01.pdf
    ${ }^{6} I d$.

[^1]:    ${ }^{7}$ Fed. Reg., http://www.gpo.gov/fdsys/pkg/FR-2011-12-28/pdf/2011-33269.pdf.
    ${ }^{8}$ Given the widespread use of smartphones by communities of color, any Internet response option that does not incorporate the use of smart phones (or even further forward-looking technology options) runs the risk of leaving communities of color of behind.

[^2]:    ${ }^{1}$ Larsen, L.J., Grieco, E.M. and P. de la Cruz (2012) "2010 ACS Content Test Evaluation report covering parental place of birth."
    2012 American Community Survey Research and Evaluation Report Memorandum Series \#ACS12-RER-04. U.S. Census Bureau, Washington D.C.

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[^4]:    ${ }^{1}$ The population data available from the ACS are not the "official" estimates of the U.S. Census Bureau. However, along with the official estimates, the ACS data are being used to drive a portion of the geographic allocation of billions of federal funds (Blumerman and Vidal 2009; Reamer 2010b; Wetrogan 2005).

[^5]:    ${ }^{2}$ This is a finding of no small interest if in fact the 2010 ACS PPH estimates are informed in some manner by the 2010 Census. We point out that the documentation of the PEP preliminary estimates for 2010 suggest that these estimates are not informed by 2010 Census results (U.S. Census Bureau, no date 2) and the documentation for the ACS suggests only that the 2010 ACS data would be informed by 2000 Census data and subsequent PEP estimates and not at this point in time, by 2010 Census data (U.S. Census Bureau 2009a). Thus, it appears that the 2010 1-year ACS estimates are not informed by the 2010 Census results. However, we note that in 10 of the 18 counties there are pronounced reversals in the direction of change observed between 2009 and 2010 compared to the period 2008-2009 trend for the 1 year-ACS PPH estimates and that these pronounced reversals bring the 2010 ACS PPH estimates much closer to the 2010 census PPH values than the 2008-2009 trends and 2009 PPH estimates suggest they would have been. These pronounced reversals are seen for the following 10 counties: Pima County, AZ

[^6]:    Footnote 2 continued
    (Exhibit 1), San Francisco County, CA (Exhibit 3), Broward County, FL (Exhibit 5), Lake County, IL (Exhibit 6), Hampden County, MA (Exhibit 9), Douglas County, NE (Exhibit 11), Rockland County, NY (Exhibit 13), Multnomah County, OR (Exhibit 15), Schuylkill County, PA (Exhibit 16), and Sevier County, TN (Exhibit 17). These pronounced changes suggest some sort of "external" influence on the ACS data and while we can only speculate, given the information we have seen on the development of the 2010 ACS data, the 2010 census seems to be a logical suspect.

    Continuing to the remaining eight counties, there would appear to be little if any reason, however, to suspect an external influence. We find that in two cases, the reversals are pronounced, but they serve to "over-correct" in that the 2010 PPH estimates are farther away from the corresponding 2010 census PPH values than were the 2009 PPH estimates. These are Black Hawk County, IA (Exhibit 7) and Yakima County, WA (Exhibit 18). In one case, Jefferson County, AR (Exhibit 2), there is a reversal but it is not pronounced, while in two others, Calvert County, MD (Exhibit 8) and Madison County, MS (Exhibit 10), 2010 ACS PPH estimates are closer to the census 2010 PPH values than the 2009 ACS PPH estimates but the moves do not involve a reversal of direction from the trend observed between 2008 and 2009. In Franklin County, OH (Exhibit 14), there is basically no change from the 2009 ACS PPH estimate to the 2010 ACS PPH estimate while in two counties, Tulare, CA (Exhibit 4) and Bronx, NY (Exhibit 12), the changes observed between 2009 and 2010 move their 2009 PPH estimates away from the corresponding 2010 census PPH values.

    As noted in the text, we also used the census 2010 PPH values as a basis for comparing the accuracy of the 1-year 2010 ACS PPH estimates to the accuracy of PPH estimates generated by the geometric method for all of the 807 counties for which ACS data are available. The latter were developed in the same manner as the estimates discussed in Table 3: the 1990-2000 trends in PPH values were extrapolated to 2010 using the geometric model. At $6.85 \%$, the MAPE of the ACS PPH estimates is higher than the MAPE for the geometric model, $5.83 \%$, indicating that the ACS is less accurate than the geometric model not only for the 18 test counties, but for all counties. We also found that the $90 \%$ margins of error provided by the Census Bureau for the 2010 1-year ACS PPH estimates contained the 2010 census PPH values in only $64 \%$ (515) of the 807 counties. This is a better showing than the $39 \%$ observed for the 18 test counties, but one would intuitively expect it to be higher than $64 \%$ for the entire universe of ACS counties in that $90 \%$ margins of error are used. These data and results are in an excel file that is available from the authors.

[^7]:    ${ }^{3}$ This is because there is an expectation on the part of both these demographers and the stakeholders that PPH estimates should exhibit systematic changes unless there is compelling substantive evidence (e.g., the PPH estimates jumped because of a surge of in-migrants with high fertility and large family sizes) to the contrary. If such PPH estimates are used in the absence of compelling substantive evidence justifying

[^8]:    Footnote 3 continued
    their temporal instability then it appears that the risk of challenges and related administrative and legal actions increases (see, e.g., Walashek and Swanson 2006), especially when these estimates are used to allocate resources, which is often the case (National Research Council 1980, 2003; Scire 2007).

[^9]:    ${ }^{4}$ We need to make two points here. First, we selected Jefferson County as an example simply because it illustrates that using inferential statistics to identify change in the ACS PPH neither yields trends that are consistent with demographic theory nor annual PPH estimates that would be useful as input into the HUM for purposes of making annual population estimates. In point of fact, for all of the 18 counties statistical inference yields annual changes in the ACS PPH estimates that neither conform to demographic theory nor provide annual PPH estimates that would be useful as input into the HUM, as can be seen in Appendix Table 6.

    The second point is that some may argue that in using statistical inference to identify PPH changes, we are actually making "multiple comparisons," which require adjustments. In response, we argue that most multiple comparison adjustments (e.g., analysis of variance) are not appropriate because these adjustments are generally designed to be used when three or more simultaneous comparisons are being made (Iversen and Norpoth 1973; Toothaker 1993), which is not the case for an analyst attempting to use the ACS PPH estimates over the course of a decade. Instead, such an analyst would be only going out

[^10]:    ${ }^{5}$ By a "substantive difference" we mean an "important difference." This is not the same as "statistical significance." The developer of the $T$-test, W.S. Gossett (aka "Student"), was acutely aware of the difference between statistical significance and an important difference since he was trying to brew high quality beer for the Guinness Brewery at reasonable prices (Ziliak and McCloskey 2008). However, this important distinction was late to come both to R.A. Fisher, and to J. Neyman and E. Pearson, whose ideas became widespread and literally "ritualized" into the practice of statistical testing without conveying the idea of taking into account whether or not there was an "important difference" (Hubbard and Bayarri 2003; Ziliak and McCloskey 2008); unfortunately, the ritualized nature of statistical testing exacerbated this by placing "statistical significance" as the only result worth reporting in scientific research (Ziliak and McCloskey 2008).

[^11]:    ${ }^{1}$ See Connecting America: The National Broadband Plan, p. 23 and p. 152. Published 2009. Federal Communications Commission. Available at http://download.broadband.gov/plan/national-broadbandplan.pdf

[^12]:    ${ }^{2}$ See Federal Register. Vol. 76, No. 29. Wednesday, December 28, 2011. Notice: Department of Commerce, U.S. Census Bureau. Proposed Information Collection; Comment Request; The American Community Survey 2013 Content Changes and Internet Response Mode. Available at http://www.gpo.gov/fdsys/pkg/FR-2011-12-28/pdf/2011-33269.pdf. [I think all you need here is the standard Fed Reg citation - I would check with Katy J.]
    ${ }^{3}$ See the Connect America Fund Order. Federal Communications Commission. November 18, 2011. Available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0206/FCC-11-161A1.pdf.
    ${ }^{4}$ See Federal Communications Commission, Workshops on The Public Switch Telephone Network in Transition. Available at http://www.fcc.gov/events/public-switched-telephone-network-transition-0.

[^13]:    ${ }^{5}$ Tohono O'odham Nation Utility Authority. (2011, February 22). Tohono O'odham Nation Utility Authority - Internet Pricing. Retrieved from TOUA Net: http://www.toua.net/pricing.html.
    ${ }^{6}$ Note special $\$ 19.95$ offer on three Mb/s DSL service set to expire on March 31, 2012.
    ${ }^{7}$ See Cox Communications, Inc. Internet Pricing \& plans serving Arizona. Accessed February 23, 2012. Available at http://ww2.cox.com/residential/arizona/internet/pricing.cox.
    ${ }^{8}$ Ibid.

[^14]:    ${ }^{10}$ See Notice of Ex Parte Presentation - Connect America Fund, WC Docket No. 10-90; Improving Communications Services for Native Nations, CG Docket No. 11-41. Federal Communications Commission Electronic Comment Filing System. Available at http://apps.fcc.gov/ecfs/document/view? id=7021703527
    ${ }^{11}$ See Native Nations National Broadband Map. Available at http://www.broadbandmap.gov/native-nations.
    ${ }^{12}$ See State Broadband Initiative |Broadband USA - NTIA. Available at http://www2.ntia.doc.gov/sbdd

[^15]:    ${ }^{13}$ U.S. Senate Committee on Indian Affairs. "Internet Infrastructure in Native Communities: Equal Access to ECommerce, Jobs and the Global Market Place." Testimony of Chief Geoffrey Blackwell. October 6, 2011. Accessed February 22, 2012. Available at http://www.indian.senate.gov/hearings/hearing.cfm?hearingID=0bd5589287f5bbb3d229c1850f6ff999.
    ${ }^{14}$ See the Broadband Data Services Improvement Act of 2008, 47 U.S.C. 1303. Available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=110_cong_public_laws\&docid=f:publ385.110.pdf

