

## **IPUMS-International Activity Report: 2012**

**Prepared by the co-investigators and staff  
of the IPUMS-International project**

**July 2012**



**Minnesota Population Center**

# IPUMS-International Activity Report:

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The IPUMS-International project proposal identified four core activities for the 2009-2014 grant period:

(1) *Data acquisition and long-run preservation.* We continue to acquire data from around the world, both by expanding the list of participating countries and by obtaining more data from our existing partners. These additional data include both the 2010 round of censuses and older microdata files still to be recovered from obsolete data storage media. See Appendix A for a detailed listing of data acquired through the reporting period.

(2) *Data cleaning and processing.* Before new microdata files can be added to the IPUMS-International database, they must be cleaned and processed. This task includes standardizing data formats and correcting format errors; assessing data quality and coverage problems; drawing high-density samples; correcting internal inconsistencies by using logical and probabilistic procedures; analyzing confidentiality risks and applying statistical confidentiality protections; and harmonizing variable codes.

(3) *Documentation and added value.* Comprehensive documentation is an essential facet of our work. The goal is to provide guidance to users on the meaning of census responses and their comparability across time and space. As we add new censuses to the database, comparability issues multiply. We develop documentation from original enumeration materials in consultation with experts from each country. In addition, the project provides a variety of new variables and tools to aid in analysis.

(4) *Dissemination.* In calendar year 2011, our user base increased 22 percent and usage by 38 percent thanks to sustained, global efforts to publicize the availability of census microdata from the IPUMS-International website. Our proposal promised to enhance our web-based dissemination system by improving tools for navigating documentation, defining datasets, and constructing customized variables. We also proposed new on-line data analysis and collaboration software. To ensure the broadest possible constituency for the data, we also plan an expanded program of education and dissemination activities.

This report covers the third year of the current NSF grant. This phase of the IPUMS-International project began in August 2009 with the appointment of a new Advisory Committee. We met with this new board twice in 2010, first for a brief meeting during the Population Association Meetings in the spring and later, with a full meeting in October, here at the Minnesota Population Center. The new Advisory Committee challenged us to anticipate the future on two fronts by developing plans (1) to build the user base (or to create an outreach and dissemination plan) and (2) to position ourselves, organizationally, to successfully sustain IPUMS International in light of the Minnesota Population Center's new Terra Populus project. We reported major progress on these goals at our meeting in October 2011. User statistics were up significantly and the organizational structure had been built in anticipation of the launch of the Terra Populus project. Structural changes within the MPC involved merging the data

integration procedures and teams for the North Atlantic Population Project (NAPP) and IPUMS-International, to ensure a smooth harmonization for both the nineteenth-century census data from NAPP with the contemporary census data from IPUMS. At our October 2011 meeting, the Advisory Committee agreed to serve as advisors to the Terra Populus project and challenged us to expand our user outreach efforts even further. This document summarizes our core activities during the past year, including our plans and activities to raise our visibility among the research, policy and governmental communities.

## **Acquiring and preserving data**

Statistical agencies of 97 countries have endorsed the project Memorandum of Understanding, and 93 countries have entrusted microdata (Appendix A), including the National Bureau of Statistics of the world's newest country, South Sudan. Several other countries seem close to signing, including Belgium, Kazakhstan, Republic of Korea and Nigeria.

Microdata for 10 censuses (8 countries) have been acquired—the most important in the last year being Poland (1988, 1995, 2002), For the 2010 census round (2005-2014), seven microdatasets were entrusted in recent months: Brazil (2010), Indonesia (2010), Kenya (2009), Israel (2008), Kyrgyzstan (2009), Uruguay (2006) and Cameroun (2005). Next year, we expect to receive even more 2010 round datasets: Ethiopia, Ghana, Malaysia, Mongolia, Mozambique, Ecuador, Costa Rica, and perhaps Nigeria. The focus of data acquisitions for the coming year will shift to the 2010 census round, without neglecting opportunities to recover microdata for earlier censuses or to energize partnerships, particularly with respect to the “reluctant seven.” Australia, China, India, Japan, Republic of Korea, Nigeria, and Russia.

In December 2011, we hosted several representatives of KoSTAT, the Korean national statistical office, who visited the Minnesota Population Center for a week. The delegation was eager to learn about the technical facets of integrating international microdata and metadata and the meetings were deemed a success. We hoped these meetings would culminate in the delivery of Korean data to the IPUMS project during the UN Statistical Commission meetings in New York in February, 2012. Although the agreement remains unsigned, we have been informed that KOSTAT is preparing samples for the 1960-2010 censuses to be entrusted to the project as early as next year.

Acquiring comprehensive metadata requires effort and persistence, particularly in Africa. A retired US Census Bureau employee, Mr. Michael Levin, made one trip to Africa on behalf of the project to obtain census microdata for Cameroun. One of the conditions for entrusting the microdata was that a professional microdata editor complete the editing of their 2005 census data. We learned two important lessons from this experience: First, the mission was a success, greatly appreciated by the statistical office and we successfully acquired a valuable series of microdata. The second lesson is that this work is very expensive, much too expensive for our budget. We sought funding from The African Development Bank and obtained a grant for up to \$100,000 for data missions to as many as a dozen countries. The grant is administered directly by the AfDB, but we exercise total control over the missions. As a condition of the assistance, the participating countries are required to entrust a copy of the microdata to the IPUMS-International project for archiving and integration.

We acquired a 5% *household* sample of the 1981 census of Spain, and are close to an agreement to recover the 1976 microdata of Jordan. A long stalled project to complete the recovery of the 1981 census of Bangladesh is close to fruition. Meanwhile the census agencies of Canada, India, Italy, Malaysia, and the United Kingdom have entertained proposals to enhance the series of high precision household samples stretching back to the 1970s. The UK Data Archive was awarded a £700k grant by the ESRC to recover the microdata for the 1961-1981 census microdata. IPUMS-International lobbied the Office of National Statistics over the past decade, assisted in drafting the proposal, will consult on the initiative and will receive copies of household samples for integration and dissemination. ONS-UK is considering substituting a new household sample for the 2001 census currently disseminated by IPUMS.

### ***New initiative: African Development Bank (AfDB) partnership***

We have entered into a partnership with the Statistics Department of the African Development Bank and the African Center for Statistics to accelerate the integration of African Census Microdata from the 1970s through the 2010 round of censuses. The AfDB is providing modest, but critical funding to facilitate the recovery, archiving, integration, and dissemination of African census microdata by the IPUMS. Currently, 212 samples, representing 69 countries, are being disseminated by IPUMS-International, but scarcely 1 in 7 samples is from Africa. African statistical agencies *have* preserved their census legacies with microdata archived for perhaps as many as 150 censuses for the continent as a whole. Only 30 are currently integrated and being disseminated by IPUMS. The AfDB partnership is important for several reasons: First, it may encourage many of the 22 African statistical institutes not yet participating in the initiative to do so. Second, 10 statistical agencies that have endorsed the project memorandum of understanding--but have not entrusted complete microdata and documentation--are now more likely to cooperate. Third, in the case of Ethiopia, Nigeria, and a few other countries needed technical assistance will be offered to complete the cleaning and editing of microdata. Finally, once the microdata and documentation are entrusted, it may be possible to attract funding for a continent-wide integration of African census microdata.

## **Data cleaning and processing**

Significant effort on the project this past year involved processing new samples. We added 26 new samples from 7 countries to the data series in June 2012. New samples were added from El Salvador, Indonesia, Morocco, Nicaragua, Turkey, and Uruguay. We also added the 2010 round census sample to our existing collection from Mexico. Appendix A lists all samples now being disseminated. Note that the 2008 census of Sudan could be split to form a separate sample for South Sudan, raising the total number of countries with integrated data to 69. The 2012 data release included about 40 new integrated variables, as well as 2,400 unharmonized variables (i.e., "source variables") unique to the individual samples. Most of the new integrated variables are country-specific data relating to geography, ethnicity, or language. Apart from adding country-specific variables of this type, we tend to limit the pool of integrated variables to a few hundred that are available across multiple countries.

When deciding which countries to include in a data release, we typically must weigh the competing values of efficiency and geographic range. As 2010 round census data increasingly becomes available from partner countries, we also feel a new responsibility to enhance

chronological depth. Processing data from a few countries, each of which has a string of datasets, is efficient. Processing data from more countries, each of which has only one or two datasets, expands the geographic scope of the database. Processing newly available samples from countries already in the collection is desirable for different reasons; researchers are eager to extend previous analysis across the latest samples, and releasing 2010 round data in a timely fashion helps us secure such data from other existing partners. For the June 2012 release, we tried to balance all three concerns by including series data from six new countries as well as the 2010 round data from Mexico, expanding their time series to seven censuses. This October we will participate in the biennial meetings of the Association for Latin American Population (ALAP) and Brazilian Association of Population Studies (ABEP), as well as a special conference on preserving and disseminating microdata hosted by the Brazilian Statistical Agency (IBGE) and organized by our regional partner, the Inter-American Statistical Institute (IASI). Although we normally do not release new data in the fall, we will make every effort to launch the long-form sample for the 2010 census of Brazil for dissemination just prior to these meetings, where we know they will be eagerly received.

We confront data challenges yearly, and this year was no exception. Routine problems stem from missing or erroneous documentation of sample design, data structure, variable labels, etc. For example, during the past year we encountered a variety of problems with the extensive series of data from Indonesia, which spanned 4 decades and included censuses and surveys; there was also one inter-censal survey in the time series for Uruguay. Fortunately, we were able to solve or work around most of these problems and release the intended samples on time.

Specific data challenges, such as those described above, are part of the typical processing cycle in the yearly life of IPUMS International. Other challenges arise from the increasing size and scope of the project in general. Fortunately, technology has evolved so that computing capacity is no longer an enormous concern for a project such as IPUMS International, though financial investment in computing remains essential. However, as we add samples, add better geographic information, and make plans for a full count and high density sample data enclave, we run into the legacy of processing decisions made earlier in the life of the project. A handful of integrated variables would benefit from reorganization as they become unwieldy under the weight of slight conceptual differences across samples. In the coming year, we need to further adjust our data reformatting process to facilitate more efficient geographic and full-count data processing. Any change in a variable coding scheme or reformatting procedure must be run across all 200+ samples. In some future year, a lighter integration production load may be necessary in order to carry out a backlog of data reformatting and variable adjustments.

### ***New initiative: Geography***

We are in the process of overhauling how we handle geography in IPUMS-International. The requirements of TerraPop have brought matters to a head, but we discussed these needs in our grant proposals and were committed to tackling these issues. The data production process has always been our focus, and we have in the past largely treated geography like any other variable, though one that has particularly strict confidentiality considerations surrounding it. We made minimal efforts to harmonize geographic units. Now we are making spatially consistent units over time for the first administrative level. Harmonization amounts to aggregating units together if there were any boundary changes over time among them. The final units are sometimes large,



but we can be confident that the same space is represented by the codes in all time periods. We are making boundary files for these units. We will also provide sample-specific geographic variables (unharmonized), so researchers who do not need to deal with change over time can get the unaltered units. One of the great benefits of truly harmonized geography is the opportunity to make a single variable that includes the first level geography for all countries in all time periods that can be mapped. Harmonizing second level geography requires information that is harder to acquire, and that will require ongoing effort.

## **Documentation and added value**

Throughout the life of the project, IPUMS International has added features to aid researchers in their work and to extend the reach of the data for new analytic uses. A considerable amount of work each year is invested in providing extensive documentation, not only about variables themselves, but also about enumeration methods, sample design, comparability across data sets, and international standards on which our variables are based. Over the years, we have added supplemental migration and fertility files, where available, as stand-alone downloadable data files with matching keys to corresponding census files. We expand the collection of supplemental files with each data release. In 2008, we added family location variables to enable researchers to capitalize on information about family context. Each year since then our process includes work to construct these "pointers" for the new data sets.

In 2009, we began adding boundary files corresponding to the country and first administrative level geographic units available in the microdata. These boundaries aid researchers in mapping data based on place of residence, place of birth, or migration variables in the sample. Each year's processing work now includes the research and preparation of boundary files for new countries in the collection as well as work to extend boundary information for existing countries. We have piloted a project to create integrated low-level geographic units over time. We are also creating a temporally-integrated first administrative level variable spanning all countries in the collection with a corresponding shapefile. We are also preparing the shape files that correspond to geographic units for the most recent census year. Resulting boundary files will enhance IPUMS International and extend the reach of the project by enabling the fusion of census microdata with other geographic information, such as environmental and land use data.

Over the past year, our research assistants, in consultation with PIs, other faculty, and project researchers, have been developing a Living Standards Index constructed from household asset information available in IPUMS International samples. Presentations have been well received and have garnered significant attention at several academic conferences. We are developing the specifications to create a generalized version of the variable across samples in the IPUMS-International collection.

### ***New initiative: Data quality indicators.***

We occasionally receive requests from researchers about the quality of the data we receive from the different countries. Although we document basic information about sample characteristics, we receive uneven information about the quality of data collection and processing. We, therefore, provide little information about data errors or error correction measures. In recent years, we have added documentation to the IPUMS-International website about variance

estimation and have provided a summary table about basic sample characteristics with recommendations for handling clustering and employing weights (Appendix B). More recently, we have examined a number of potential data quality indicators, including age heaping measures, age-sex ratio accuracy measures, missing data rates, internal IPUMS-International processing assessments, and internal reformatting adjustments. Age heaping, age-sex ratio accuracy measures and missing data rates are included in the appendix. Additional internal measures pertaining to structural data and reformatting issues will be covered at the meeting. We are currently evaluating the collection of output from these analyses and considering options for presenting relevant information to users while remaining sensitive to potential concerns of our data contributing partners.

## Dissemination and Outreach

Our primary strategy in attracting users is, and has always been, creating a high quality data collection and user friendly dissemination system. We continue to believe that this is the most reliable means of attracting researchers to IPUMS and generating the kind of word of mouth that snowballs over time. We continuously work on updating the web interface to take advantage of the latest and best trends in web design in order to make the user experience as friendly as possible. We of course engage in a variety of other activities to supplement that core approach and we're continually searching for angles that will allow us to gain traction in new user groups. We are developing new technology to broaden the audience for the data and encourage classroom use. Last year, we developed tools for disseminating binary files (native-format SAS, SPSS and Stata files), so that users do not have to convert the data from ASCII into a proprietary format. This year, we have developed software for online data analysis, which allows students and others to conduct many analyses without downloading the data. The system is operational, and will be deployed shortly. We are also developing classroom user registration technology to simplify use of the data by large groups of students. The combination of these technologies will significantly enhance our ability to attract a broader research audience, including those in training who have the potential to become our biggest advocates and most productive researchers in the future. Details of outreach activities are presented in Appendix C; a list of publications using IPUMS-International data is presented in Appendix D.

### ***New initiative: IPUMS mirror site***

Another avenue we are pursuing is the development of overseas partners that can make inroads in particular regions. For years we have had a mirror site at Barcelona that serves up our data through a portal ([www.iecm-project.org](http://www.iecm-project.org)) containing additional European content. Two years ago we set up a similar site at the African Centre for Statistics in Addis Ababa, an organization sponsored by the UN and the African Development Bank. The site is still young, but we hope it can serve as a basis for capacity building and goodwill in the area. Now we are initiating a partnership with a prestigious African academic institution, the Population Studies Unit of the University of the Witwatersrand. The head of the Unit is Dr. Clifford Odimegwu, one of the continent's leading demographers. We are hopeful that the partnership will not only accelerate the development of a young cadre of demographic talent but also promote the increased use of the IPUMS census microdata. Eurostat has now decided to cooperate rather than compete in the census microdata arena. In September, Eurostat is hosting a European Union census microdata

conference featuring IPUMS, to encourage the timely entrusting of 2010 round census microdata and to encourage participation of more European statistical offices in the IPUMS.

### **New initiative: Classroom registration**

Numerous researchers use IPUMS in the classroom, but it has been awkward for them to register their classes in a timely way and problematic for them to distribute the data efficiently and within the constraints of the license agreement. We have recently developed a new facet of the registration process designed to address these issues. The system lets users set up a class which students can join through a streamlined registration process. The instructor can review the roster of people who have registered, thus ensuring who has access to the extract system and who can legitimately receive the IPUMS data. The instructor is able to “share” a data extract with the class; with the extract appearing in every student’s download area. Aspects of the classroom registration system could potentially be extended in the future to facilitate data sharing among researchers.

### **New initiative: Online tabulation**

We have set up the Berkeley Survey Documentation and Analysis (SDA) online tabulation system to work with IPUMS-International. The tabulator has been very popular with the IPUMS-USA database since we introduced it a few years ago. But the size and large number of samples in IPUMS-International made the logistics more challenging. Moreover, for some time we did not consider it a priority for IPUMS-International because the data are restricted and the user base presumably on average more sophisticated. But experience with the system has convinced us that it may well gain some popularity with International users because of its great convenience factor. For one thing, it is very fast. Also, for areas with shaky Internet connections, it allows analysis of large quantities of data without downloading. And there may well be a substantial audience for these data for whom a statistical package is daunting. The SDA system does not only tabulate, it can perform regression, logit, etc. It is quite full featured for those willing to learn its syntax and conventions. But even stats package experts may take advantage of the ease of tabulating a quick number.

### **New initiative: IPUMS-International News**

With this June's data release, we also launched the *IPUMS-International News* as a vehicle for the regular sharing of information of interest to data users and data producers. In place of the traditional email announcement of the new data release, this year we sent registered users of the IPUMS-International an abbreviated electronic version of the *News*. The shortened newsletter included details of the data release, announcement of the 2011 IPUMS research award winners, a "research spotlight" graph from the IPUMS Living Standards index paper and a list of conferences where data users and data producers can connect with IPUMS-International. Recipients of this annual *News* who wish to receive other issues throughout the year, can opt in to the newsletter subscription list with a simple click of a button in their email. Each issue of the *News* will feature research being done using IPUMS-International data, as well as classroom tips, updates on user statistics, the acquisition of new data and new partners, and other items of interest. Although the primary distribution will be electronic, print versions will be produced and distributed at conferences or sent as pdf attachments to email messages.



**Summary Data**

We think there may be considerable demand for different kinds of summary and derived data. Of the latter sort, we have invested considerable effort in developing a Living Standards index from proxy variables. We hope to develop socioeconomic measures from personal data like occupation and industry. We also think there may be interest in variables that conform to the UN Millennium Development Goals, as closely as those can be approximated with census data, and which we could calculate at all levels of geography, not just at the national level. The foregoing measures are derived internally from the census data itself, and there are undoubtedly other possibilities. For the TerraPop project we will be calculating summary data for geographic areas, like population density or the labor force participation rate. These can be made available through IPUMS-International, though in theory users could calculate them themselves. Another species of variable we have not yet tackled includes summary measures that come from other sources. These most obviously might include measures of GDP per capita or other economic indicators.

**Data Enclave**

IPUMSI has much more data than it can release through the data access system. Roughly a third of the samples were drawn by us from high density or full count data. In other cases where we have only sample data, we are obliged to suppress small categories -- most conspicuously geography. We have made initial steps toward providing confidential data in a secure enclave environment. This year we developed new processing steps to fully develop the underlying full count data for some test samples. New procedures were required because in the past when we drew our sample we archived the full data without further metadata or data processing. Now we are ready to selectively develop the full count data for those countries that agree to allow analysis under controlled conditions. Some of our partners, Uruguay for example, have already agreed to allow full or high-density data to be made available in a restricted research setting. We have space in which to set up an enclave at Minnesota soon, but we are more intrigued by the potential for a remote data enclave, akin to those developed by other institutions, such as ICPSR. Several members of our staff have been trained in restricted data security protocol and we have on-site expertise in running a U.S. Restricted Data Enclave. Our arrangements with statistical offices prevent us from sending data to individual's desktops, but we have identified statistical agency partners and partner prospects in other cities and continents who could potentially administer enclave environments locally to our specifications. We envision something akin to a remote desktop situation, where the data stay in Minnesota and are run through our servers. The researcher can see the results but cannot copy them to a device or print them; they have to be submitted for review by IPUMS, which forwards the vetted results to the researcher. We hope that ICPSR's recent work in this area could be applied to the approach we describe, but we have only begun to explore the possibilities.

**Workshops, conference participation, presentations**

We took advantage of every feasible opportunity for disseminating information about IPUMS-International to the wider research community of existing and potential users. These activities included staffing dissemination booths in exhibition halls at academic conferences and meetings (listed below). We also held workshops for data producers and data users, demonstrated the use of IPUMS-International for social science research, and presented papers at academic conferences. These activities are listed in Appendix C.

**IPUMS conference exhibits**

- 2012 American Society of Health Economists (ASHE), Minneapolis, MN, June 10-13
- 2012 Society for Mexican Demographers (SOMEDE), Aguascalientes, Mexico, May 30-June 1
- 2012. Population Association of America (PAA), San Francisco, CA, May 3-5
- 2012 European Data Access Forum, Luxembourg, March 27-28
- 2012 Association of American Geographers (AAG), New York, NY, February 24-28
- 2012 7th African Symposium on Statistical Development (ASSD), Cape Town, SA, Jan. 17-23
- 2012 American Historical Association (AHA), Chicago, IL, January 5-8
- 2011 6th African Population Conference (APC), Ouagadougou, Burkina Faso, December 5-9
- 2011 Social Science History Association (SSHA), Boston, MA, November 17-20
- 2011 American Public Health Association (APHA), Washington, DC, October 29-November 2
- 2011 American Sociological Association (ASA), Las Vegas, NV, August 20-23
- 2011 International Statistical Institute (ISI), Dublin, Ireland, August 21-26
- 2011 25<sup>th</sup> Population Census Conference, Association of National Census and Statistics Directors of America, Asia and the Pacific (ANCSDAP), Seoul, Korea, May 25-27
- 2011 International Union for the Scientific Study of Population (IUSSP) Conference on Microdata, Lome, Togo, April 17-20
- 2011 American Association of Geographers (AAG), Seattle, WA, April 10-16
- 2011 Population Association of America (PAA), Washington, DC, March 30-April 2
- 2011 International Association of Social Sciences and Health (IASSH), Tirupathi, India, February 11
- 2011 Allied Social Sciences Association (ASSA), Denver, CO, January 7-9

**2011 IPUMS research award**

In addition to these dissemination and outreach activities, we also issued a call for submissions for an IPUMS research award as an incentive and reward to researchers who completed substantive papers using the IPUMS-International data. The award was publicized at the Population Association of America meetings and among registered users of the IPUMS database. The 2010 competition resulted in dozens of submissions for IPUMS-International. Those published as journal articles or working papers are included in the publications list (Appendix C). Several graduate student papers were reviewed that had not yet been submitted for publication. Additional author-reported publications for 2011 are included in the bibliography.

The 2011 award for best published research paper went to Jeroen Spijker and Albert Esteve. "Changing Household Patterns of Young Couples in Low-and-Middle-Income Countries," *History of the Family* 16: 437-455. The student award went to Andrew Halpern-Manners, a student in the Department of Sociology, University of Minnesota, for "The Effect of Family Member Migration on Education and Work Among Nonmigrant Youth in Mexico," *Demography* 48: 73-99.

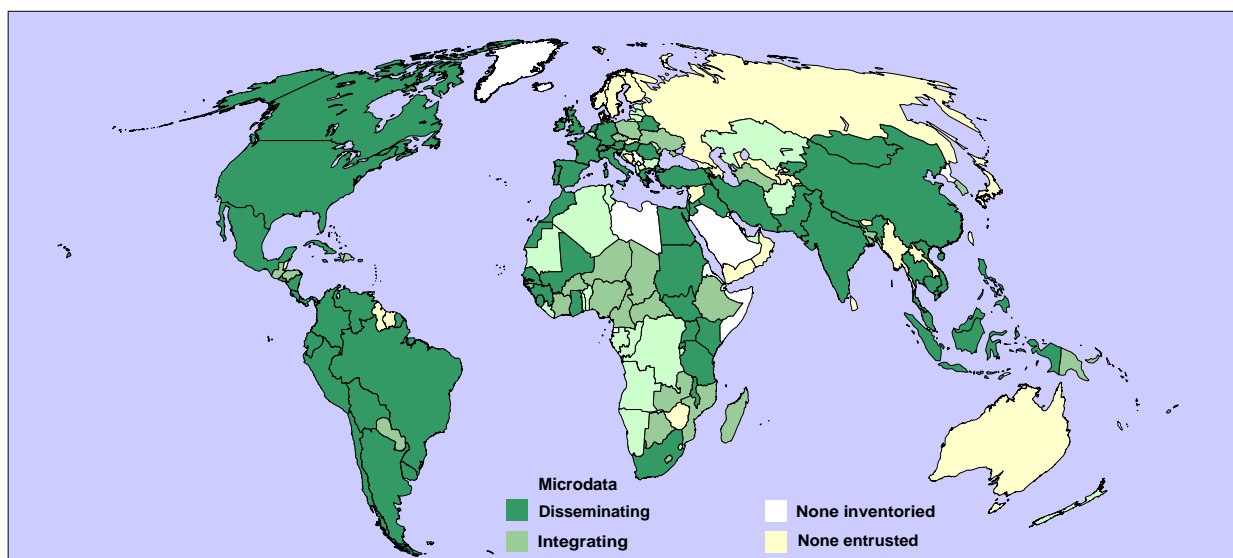
A list of all identified publications using IPUMS-International data is presented in Appendix D.

## Appendix A. IPUMS-International Microdata Inventory July 2012

### 1. Summary Table and Map

Status	Countries	Microdata sets
Agreements	97	294
Total	118	335
A. Disseminating	* 69	* 212
B. June 2012 release	7	26
C. 2013 proposed release	10	31
D. Other microdata entrusted	32	66

\*includes Sudan and South Sudan



### *Lists of samples (§ = acquired in past year)*

#### A. Fully processed (June 2011): 185 samples (62 countries)

Dissemination site: <https://international.ipums.org/international>

	1960s	1970	1980s	1990s	2000s	2010s
Argentina		1970	1980	1991	2001	
Armenia					2001	
Austria		1971	1981	1991	2001	
Belarus				1999		
Bolivia		1976		1992	2001	
Brazil	1960	1970	1980	1991	2000	
Cambodia				1998	2008	
Canada		1971	1981	1991	2001	
Chile	1960	1970	1982	1992	2002	

	1960s	1970	1980s	1990s	2000s	2010s
China			1982	1990		
Colombia	1964	1973	1985	1993	2005	
Costa Rica	1963	1973	1984		2000	
Cuba					2002	
Ecuador	1962	1974	1982	1990	2001	
Egypt				1996	2006	
France	1962,68	1975	1982	1990,99	2006	
Germany, FR		1970	1987			
Germany, DR		1971	1981			
Ghana					2000	
Greece		1971	1981	1991	2001	
Guinea			1983	1996		
Hungary		1970	1980	1990	2000	
India (NSS)		1983	1987	1993,99	2004	
Iran					2006	
Iraq				1997		
		1971	1981	1991	2002,06	
Ireland		1971,79	1981,86	1991,96	2006	
Israel		1972	1983	1995		
Italy					2001	
Jamaica			1982	1991	2001	
Jordan					2004	
Kenya			1989	1999		
Kyrgyz Republic				1999		
Malawi			1987	1998	2008	
Malaysia		1970	1980	1991	2000	
Mali			1987	1998		
Mexico	1960	1970		1990,95	2000,05	
Mongolia			1989		2002	
Nepal					2001	
Netherlands	1960	1970			2001	
Pakistan		1973	1981	1998		
Palestine				1997	2007	
Panama	1960	1970	1980	1990	2000	
Peru				1993	2007	
Philippines				1990,95	2000	
Portugal			1981	1991	2001	
Puerto Rico		1970	1980	1990	2000,05	
Romania		1977		1992	2002	
Rwanda				1991	2002	
Saint Lucia			1980	1991		

	1960s	1970	1980s	1990s	2000s	2010s
Senegal			1988		2002	
Sierra Leone					2004	
Slovenia					2002	
South Africa				1996	2001,07	
South Sudan (in Sudan)					2008	
Spain			1981	1991	2001	
Switzerland		1970	1980	1990	2000	
Sudan					2008	
Tanzania			1988		2002	
Thailand		1970	1980	1990	2000	
Uganda				1991	2002	
United Kingdom				1991	2001	
United States	1960	1970	1980	1990	2000,05	
Venezuela		1971	1981	1990	2001	
Vietnam			1989	1999	2009	

**B. June 2012 release: 26 samples (7 countries)**

	1960s	1970	1980s	1990s	2000s	2010s
El Salvador				1992	2007	
Indonesia		1971,76	1980,85	1990,95	2000,05	2010
Mexico						2010
Morocco			1982	1994	2004	
Nicaragua		1971		1995	2005	
Turkey			1985	1990	2000	
Uruguay	1963	1975	1985	1996	2006	

**C. Candidates for launch in 2013: 28 samples (10 countries)**

(§ = microdata for most recent census entrusted within last six months)

	1960s	1970	1980s	1990s	2000s	2010s
Brazil (Oct. 2012)						2010§
Burkina Faso			1985	1996	2006	
Cameroun		1975	1987		2005§	
Fiji	1966	1976	1986	1996	2007	
Ghana			1984			2010§
Israel	1961				2008§	
Kenya	1969	1979			2009§	
Kyrgyzstan					2009§	
Panama						2010§
Paraguay	1962	1972	1982	1992	2002	
USA - ACS					2005-9	



***D. Additional data archived by MPC: 66 datasets (32 countries, plus 59 Pacific and 6 Caribbean Island samples)***

§ = microdata entrusted within last six months

\* = no signed agreement

	1960s	1970	1980s	1990s	2000s	2010s
Bangladesh			1981	1991	2001	
Botswana			1981	1991	2001	
Chad				1993		
Czech Republic				1991	2001	
Dominican Rep.	1960	1970	1981		2002	
Egypt			1986			
Ethiopia				1984	1994	
Gambia *			1983	1993		
Guatemala	1964	1973	1981	1994	2002	
Haiti		1971	1982		2003	(defective)
Honduras	1961	1974	1988			
HongKong *		1971				
Italy			1981	1991		
Lesotho				1996	2006	
Korea, RO *					2005	
Liberia *		1974				
Madagascar				1993		
Mauritius				1990	2000	
Mexico			1980			
Mongolia	1956§					
Mozambique				1997		
Niger			1988		2001	
Nigeria (GHS)					2006,7,8	
P. New Guinea			1981	1991	2001	
Philippines	1960	1970	1980			
Poland			1988§	1995§	2002	
Sudan		1973	1983	1993		
Swaziland *					2007	
Togo	1958	1971	1981§			
Timor l'Este *					2004	
Turkmenistan				1995		
Zambia				1990	2000	
Pacific Islands	10	12	12	16	9	
Caribbean Is.	0	0	1	2	3	

### E. Additional Countries with signed agreements (no data entrusted):

Bulgaria  
Cape Verde  
Central African Republic  
Cote d' Ivoire  
Guinea Bissau  
Ukraine

### F. Data recovery projects (\* under consideration; § = recently underway):

\* = no signed agreement for these data

	1960s	1970	1980s	1990s	2000s	2010s
Afghanistan						
*				NRVS:	2005,7,8	
Bangladesh			1981§			
Canada (5% hh)		1971§	1981§	1991§	2001§	
Cape Verde				1990		
Guinea						
Bissau				1991		
Italy *			1981	1991		
Jordan *		1977§		1994		
Mongolia *	1934	Costly!				
Peru			1981			
Poland		1978§				
Rwanda *		1972	Costly!			
Togo	1958	1971	1981			
UK	1961§,8	1971§	1981§			

East-West Center \* Repository for microdata and documents

### G. Countries Negotiating:

#### Top priority:

China (2000, 2010)  
India (censuses--hopeful)  
Nigeria (censuses--hopeful)  
Republic of Korea (hopeful)  
Russia

**Latin America:** all countries fully participating

**English-speaking Caribbean** (CARICOM): hopeful: Belize, Trinidad and Tobago

**Europe:** hopeful: Belgium, Croatia, Estonia, Lithuania

**Africa:** hopeful: Algeria, Benin, Liberia, Tunisia

**Asia and Pacific:** hopeful: New Zealand, Republic of Korea, Tajikistan, Kazakhstan

**Hopeless for now:** Australia, Denmark, Finland, Japan, Norway, Saudi Arabia, Sweden

## Appendix B. IPUMSI Data Quality Indicators

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Sample	Quality of age reporting				Missing data				
	Grouped	Whipple	Myer's	UN Age-Sex	Relate:	Age:	Marst:	Edattan:	Empstat:
	ages	Index	blended	Accuracy	%	%	%	%	%
	(1)	(2)	(3)	(4)	missing	missing	missing	missing	missing
Argentina 1970		104	1	12	0	0	0	0	0
Argentina 1980		107	2	15	0	0	0	0	0
Argentina 1991		103	1	16	0	0	0	0	0
Argentina 2001		103	1	15	0	0	0	1	4
Austria 1971		97	2	34	0	0	0	5	0
Austria 1981		99	2	32	0	0	0	9	N/A
Austria 1991		98	2	32	3	0	0	0	0
Austria 2001		98	1	27	0	0	0	0	0
Armenia 2001		103	2	40	0	0	1	1	1
Bolivia 1976		145	10	21	0	0	1	1	3
Bolivia 1992		124	7	22	0	0	0	0	0
Bolivia 2001		113	3	15	0	0	0	0	0
Brazil 1960		143	9	20	0	0	0	0	2
Brazil 1970		126	5	15	0	0	0	0	1
Brazil 1980		111	2	14	0	0	0	1	2
Brazil 1991		102	1	10	0	0	0	2	0
Brazil 2000		104	1	13	0	0	0	0	N/A
Belarus 1999		99	1	29	N/A	0	0	0	2
Cambodia 1998		117	5	35	4	0	1	0	2
Canada 1971		99	0	17	0	0	0	0	0
Canada 1981		100	1	19	0	0	0	5	0
Canada 1991		99	1	19	0	0	N/A	2	N/A
Canada 2001		99	1	21	0	0	0	0	N/A
Chile 1960		131	7	21	0	0	0	0	0
Chile 1970		123	6	16	0	0	0	N/A	N/A
Chile 1982		104	2	16	0	0	0	N/A	N/A
Chile 1992		99	1	17	0	0	0	N/A	0
Chile 2002		100	1	13	0	0	0	0	1
China 1982		101	3	29	1	0	0	0	1
China 1990		101	2	23	0	0	0	1	0
Colombia 1964		144	9	35	0	0	0	2	0
Colombia 1973		140	8	30	0	0	0	1	0
Colombia 1985		139	8	17	0	0	0	1	1
Colombia 1993		118	5	22	0	0	0	1	0
Colombia 2005		106	1	13	0	0	0	1	N/A
Costa Rica 1963		125	6	39	0	0	1	6	N/A
Costa Rica 1973		121	5	20	0	0	0	0	0
Costa Rica 1984		108	3	17	0	0	0	0	0
Costa Rica 2000		110	3	14	0	0	0	0	0

Sample	Quality of age reporting				Missing data				
	Grouped	Whipple	Myer's	UN Age-Sex	Relate:	Age:	Marst:	Edattan:	Empstat:
	ages	Index	blended	Accuracy	%	%	%	%	%
	(1)	(2)	(3)	(4)	missing	missing	missing	missing	missing
Ecuador 1962		176	16	37	0	0	0	0	N/A
Ecuador 1974		137	8	34	0	0	0	1	0
Ecuador 1982		127	7	21	0	0	0	2	0
Ecuador 1990		133	7	15	0	0	1	N/A	1
Ecuador 2001		112	3	18	1	0	3	1	7
Egypt 1996		213	18	39	0	0	0	N/A	0
France 1962		100	1	29	0	0	0	1	0
France 1968		100	1	29	0	0	0	1	0
France 1975		101	1	33	0	2	0	1	0
France 1982		101	1	24	2	1	1	5	0
France 1990		100	1	23	0	0	0	0	0
France 1999		100	1	21	0	0	0	1	2
Ghana 2000		184	15	33	0	0	0	0	0
Greece 1971		108	2	38	0	0	0	0	0
Greece 1981		107	2	39	0	0	0	0	0
Greece 1991		107	2	24	0	0	0	1	1
Greece 2001		104	1	19	1	0	0	0	0
Guinea 1983		217	21	65	0	0	0	N/A	0
Guinea 1996		207	19	57	0	0	0	N/A	0
Hungary 1970		103	2	33	0	0	0	N/A	0
Hungary 1980		104	2	34	0	0	0	0	0
Hungary 1990		102	1	29	0	0	0	0	0
Hungary 2001		101	1	23	0	0	0	0	0
India 1983		244	26	28	0	0	0	0	0
India 1987		235	26	26	0	0	0	0	0
India 1993		222	25	26	0	0	0	0	0
India 1999		210	23	24	1	0	0	5	0
Iraq 1997		105	2	36	0	0	1	0	1
Israel 1972	Yes	N/A	N/A	30	0	0	1	8	1
Israel 1983	Yes	N/A	N/A	51	0	0	0	1	1
Israel 1995	Yes	N/A	N/A	20	3	0	0	0	0
Italy 2001	Yes	N/A	N/A	19	0	0	0	0	0
Jordan 2004		101	1	19	0	0	1	1	1
Kenya 1989		147	8	21	0	0	1	1	3
Kenya 1999		150	7	24	0	0	0	0	0
Kyrgyz Republic 1999		99	1	23	0	0	0	0	0
Malaysia 1970		102	4	30	0	0	0	0	2
Malaysia 1980		106	2	26	0	0	0	0	1
Malaysia 1991		114	3	21	0	0	0	1	2
Malaysia 2000		115	3	22	0	0	0	2	0

Sample	Quality of age reporting				Missing data				
	Grouped	Whipple	Myer's	UN Age-Sex	Relate:	Age:	Marst:	Edattan:	Empstat:
	ages	Index	blended	Accuracy	%	%	%	%	%
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Mexico 1960		175	13	28	0	0	0	0	N/A
Mexico 1970		148	9	20	N/A	0	0	0	2
Mexico 1990		125	5	13	4	0	1	0	2
Mexico 1995		123	5	17	0	0	0	0	0
Mexico 2000		118	4	18	0	0	0	5	0
Mexico 2005		119	5	13	0	0	N/A	2	N/A
Mongolia 1989		100	3	35	0	0	0	0	N/A
Mongolia 2000		99	1	24	0	0	0	0	0
Netherlands 1960	Yes	N/A	N/A	14	0	0	0	N/A	N/A
Netherlands 1971	Yes	N/A	N/A	16	0	0	0	N/A	N/A
Netherlands 2001	Yes	N/A	N/A	34	0	0	0	N/A	0
Panama 1960		126	5	31	0	0	0	0	1
Panama 1970		121	3	15	1	0	0	0	1
Panama 1980		112	3	19	0	0	0	1	0
Panama 1990		109	2	9	0	0	0	2	0
Panama 2000		103	1	11	0	0	0	1	0
Palestine 1997	Yes	N/A	N/A	33	0	0	0	1	1
Philippines 1990		112	2	12	0	0	0	1	0
Philippines 1995		115	3	14	0	0	0	1	N/A
Philippines 2000		110	2	13	0	0	1	6	N/A
Portugal 1981		102	1	17	0	0	0	0	0
Portugal 1991		101	1	16	0	0	0	0	0
Portugal 2001		100	1	17	0	0	0	0	0
Romania 1977		100	1	39	0	0	0	0	N/A
Romania 1992		96	2	31	0	0	0	1	0
Romania 2002		96	2	32	0	0	0	2	0
Rwanda 1991		101	2	29	0	0	1	N/A	1
Rwanda 2002		107	2	28	1	0	3	1	7
Slovenia 2002	Yes	N/A	N/A	23	0	2	0	1	0
South Africa 1996		100	2	20	2	1	1	5	0
South Africa 2001		96	2	21	0	0	0	0	0
South Africa 2007		97	1	20	0	0	0	1	2
Spain 1981		103	1	25	0	0	0	0	0
Spain 1991		102	1	20	0	0	0	0	0
Spain 2001		98	1	21	0	0	0	0	0
Uganda 1991		165	13	36	0	0	0	1	1
Uganda 2002		133	8	43	1	0	0	0	0
United Kingdom 1991		98	1	21	0	0	0	N/A	0
United Kingdom 2001	Yes	N/A	N/A	65	0	0	0	N/A	0



Sample	Quality of age reporting				Missing data				
	Grouped	Whipple	Myer's	UN Age-Sex	Relate:	Age:	Marst:	Edattan:	Empstat:
	ages	Index	blended	Accuracy	%	%	%	%	%
	(1)	(2)	(3)	(4)	missing	missing	missing	missing	missing
United States 1960		100	1	16	0	0	0	0	0
United States 1970		100	1	18	0	0	0	0	0
United States 1980		100	1	17	0	0	0	0	0
United States 1990		103	1	18	0	0	0	0	0
United States 2000		102	1	19	0	0	0	0	0
United States 2005		102	1	18	0	0	0	0	0
Venezuela 1971		115	3	20	1	0	0	5	0
Venezuela 1981		102	1	13	0	0	1	0	1
Venezuela 1990		110	2	19	0	0	1	8	1
Venezuela 2001		103	1	15	0	0	0	1	1
Vietnam 1989		99	2	28	0	0	0	1	0
Vietnam 1999		100	2	25	0	0	0	1	0

(1) Grouped ages: Identifies samples that report age intervals rather than single years of age. Age-quality measures are

(2) Whipple index: Identifies heaping on 0's and 5's. Values range from 100 (no concentration) to 500 (only 0s and 5s)

(3) Myer blended method: identifies concentration on any digits. Values range from 0 (no heaping) to 90 (all ages)

(4) UN age-sex accuracy index: Summary measure of the quality of age and sex reporting, based on changes in sex ratios

(5) Percent of persons with unknown relationship to head. Not applicable (N/A) identified samples that collected

(6) Percent of persons with an unknown age.

(7) Percent of persons with unknown marital status. N/A indicates that census did not collect marital status data.

(8) Percent of persons with unknown educational attainment--restricted to persons in EDATTAN universe. N/A indicates

(9) Percent of persons with unknown employment status--restricted to persons in EMPSTAT universe. N/A indicates that

## Appendix C.

### IPUMS-International Dissemination and Outreach

#### July 2012

#### **1. *Meetings with Officials of National Statistical Offices & International Organizations***

July 2-4, 2012. McCaa, Robert. Statistical Conference of the Americas, UN Economic Commission for Latin America and the Caribbean (ECLAC), Quito, Ecuador. Invited presentation before national statistical office representatives to discuss 2010 round of censuses and GIS boundary files, as well as new partnerships among Latin American and Caribbean countries.

May 22-25, 2012. McCaa, Robert. UNECE Population Census expert meeting in Geneva to discuss 2010 round census microdata and encourage countries to consider participating in IPUMS-International.

May 16, 2012. McCaa, Robert. Meeting with Office of National Statistics-UK in London to discuss the recovery of samples for the 1961-1981 censuses and to do-over the 2001 sample.

April 19-20, 2012. McCaa, Robert. Eurostat Statistical Confidentiality meeting in Luxembourg with 30 ECE+ official statistical offices regarding disclosure practices for the 2010 round of censuses. Also discussed cooperation with Eurostat and encouraged countries to consider participating in IPUMS-International.

February 24-March 2, 2012. McCaa, Robert and Patricia Kelly Hall. United Nations Statistical Commission, New York.

January 17-23, 2012. Hall, Patricia Kelly. Meet with heads of African national statistical offices at joint meetings of the 7th African Symposium on Statistical Development (ASSD) and the United Nations Statistical Commission for Africa, Cape Town, SA.

December 18-19, 2011. Statistics Korea visit to Minnesota Population Center.

December 5-9, 2011. McCaa, Robert. Participate in Sixth African Population Conference in Ouagadougou, Burkina Faso and meet with INS officials.

December 2, 2011. McCaa, Robert. Meet with ONS regarding recovery of 1961-1981 census microdata of the UK, London.

November 29, 2011. McCaa, Robert. Meet with Statistics Belgium officials regarding participation in IPUMS-International, Brussels.

November 23-25, 2011. McCaa, Robert. UNFPA Needs Assessment Conference on Census Analysis in Asia (NACCA), Bali, Indonesia. Meet with BPS statisticians to complete acquisition of 2010 census microdata.

October 20-21, 2011. McCaa, Robert. Meeting with Statistics Korea and IUSSP Scientific Panel on Global Perspectives on Marriage and International Migration, Seoul.

## **1. Meetings with Officials of National Statistical Offices & International Organizations (continued)**

September 23, 2011. McCaa, Robert. Meeting with officials at Statistics Canada in Ottawa to negotiate terms for a new household sample of the Canadian censuses in the IPUMS.

August 20-21, 2011. McCaa, Robert, Lara Cleveland, Patricia Kelly Hall and Matthew Sobek. IPUMS Workshop on "Integrating Global Census Microdata," Dublin, Ireland, part of the International Statistical Institute's World Statistical Congress, August 21-26, 2012. Presentations on IPUMS data processing and integration as well as plans for future developments made to audience of national statistical office representatives.

August 5-8, 2011. McCaa, Robert. Meeting with Peter Elias, Keith Dugmore and officials at Office of National Statistics on recovery of the 1961-1981 censuses of the United Kingdom and plan for the 2011 census.

July 28, 2011. McCaa, Robert. Meeting with INE of Spain in Madrid to discuss 1981 and 2011 censuses of Spain.

July 2-6, 2011. McCaa, Robert. McCaa, Robert. Participation in the OECD microdata group meeting in Paris.

July 7, 2011. McCaa, Robert. Participation in the CASS microdata meetings in Manchester, U.K.

April 28, 2011. McCaa, Robert. Meeting with the National Population Commission of Nigeria in Abuja.

April 22, 2011. McCaa, Robert. Meeting with the officials at the Direction Generale de la Statistique et de la Comptabilite Nationale, Lome, Togo.

April 14, 2011. McCaa, Robert. Meeting with officials at the Bureau Central des Recensements et des Etudes de Population (BUCREP) of the Republic of Cameroun, in Yaounde.

April 13, 2011. McCaa, Robert. Meeting with officials of the Institut National de la Statistique (INS) of the Republic of Cameroun.

November 12, 2010. McCaa, Robert. Meeting with officials of Instituto Nacional de Estadística y Geografía (INEGI) in Aguascalientes, Mexico.

September 9, 2010. McCaa, Robert. "IPUMS-Europe Seminar," presented at the Federal Statistical Office in Neuchatel, Switzerland.

September 3, 2010. McCaa, Robert, Patricia Kelly Hall and Matt Sobek. Meetings with Rshood M. Khraif, Director and three other of his colleagues from the Center for Population Studies, King Saud University.

July 21-23, 2010. McCaa, Robert. Meeting with regional census directors at the Caribbean Community (CARICOM) in Bridgeton, Barbados.

## **1. Meetings with Officials of National Statistical Offices & International Organizations (continued)**

July 8, 2010. McCaa, Robert. UN Economic Commission for Europe/EUROSTAT Joint Meeting on Population and Housing Censuses, Geneva, Switzerland.

May 10-11, 2010. McCaa, Robert. UNECE/Eurostat expert meeting on register-based censuses, The Hague, The Netherlands.

May 6-7, 2010. McCaa, Robert, Matt Sobek and Patricia Kelly Hall. Meeting with director and technical expert of the African Center for Statistics, Minneapolis.

April 6, 2010. McCaa, Robert. Meeting with the director of the World Bank's Integrated Health Survey Network, Paris.

March 22-23, 2010. McCaa, Robert. Experts Conference on Maternal Mortality, United Nations, New York.

February 22-24, 2010. McCaa, Robert. Meeting with heads of African Statistical Organizations, New York, in conjunction with UN Statistical Commission meetings.

January 17-22, 2010. Hall, Patricia Kelly. Second Meeting of the Statistical Commission for Africa (STATCOM-Africa), "Harnessing Technical and Financial Resources in Support of the Monitoring of Millennium Development Goals in African Countries," UN Economic Commission for Africa, Addis Ababa.

November 19-21, 2009. Hall, Patricia Kelly. 5<sup>th</sup> Africa Symposium on Statistical Development, Co-sponsored by Statistics South Africa and the UN Economic Commission for Africa, Dakar.

November 16-18, 2009. Hall, Patricia Kelly. "Renewing the Partnership," conference sponsored by Paris 21—A Consortium for Statistics for Development, Dakar.

October 29, 2009. Hall, Patricia Kelly. UN Economic Commission for Europe/EUROSTAT Group of Experts on Population and Housing Censuses, Geneva.

October 29, 2009. McCaa, Robert. 17<sup>th</sup> Meeting of the Regional Census Coordinating Committee (CARICOM), Castries, Saint Lucia.

## **2. Workshops, Seminars and Lectures**

September 27, 2011. Hall, Patricia Kelly. Workshop on how to use IPUMS data in research for the Department of Economics, St. Cloud State University, St. Cloud, Minnesota.

August 23, 2011. Genadek, Katie. "Using the Integrated Public Use Microdata Series in Research." Policy and Research Workshop focusing on the IPUMS-International presented at the American Sociological Association annual Meetings, August 19-23, Las Vegas, Nevada.

August 22, 2011. Kennedy, Sheela. "Social Science Data Infrastructure." Policy and Research Workshop interactive roundtable focusing on IPUMS-International presented at the American Sociological Association annual meetings, August 19-23, Las Vegas, Nevada.

**2. Workshops, Seminars and Lectures (continued)**

August 20-21, 2011. McCaa, Robert, Lara Cleveland, Patricia Kelly Hall and Matthew Sobek. IPUMS Workshop on "Integrating Global Census Microdata," Dublin, Ireland, part of the International Statistical Institute's World Statistical Congress, August 21-26, 2012.

May 24, 2011. McCaa, Robert. IPUMS-International presentation at the Centre for Applied and Policy Economics (SCAPE), Department of Economics, National University of Singapore.

April 14, 2011. McCaa, Robert. IPUMS-International Workshop for the National Statistics Institute in Yaounde, Cameroun.

March 30, 2011. McCaa, Robert. World Bank DECDG Seminar on IPUMS-International in Washington, DC.

February 25, 2011. Cleveland, Lara. "IPUMS International Data Resources," University of Minnesota MPC Data Workshop.

January 28, 2011. McCaa, Robert. Presentation on IPUMS-International at the Indira Gandhi Institute of Development Research in Mumbai, India.

January 25, 2011. McCaa, Robert. Presentation on IPUMS-International at the International Institute of Population Sciences in Mumbai, India.

November 14-15, 2010. IPUMS America Latina III workshop, Havana, Cuba, in coordination with the Latin American Population Association (ALAP) meetings, November 16-18. [REF: U.S. Treasury Department, Office of Foreign Asset Control (OFAC) Special License CT-16232 dated September 10, 2010.]

November 15, 2010. Cleveland, Lara. "Variance estimates for IPUMS samples," presented in IPUMS America Latina III workshop, Havana, Cuba.

November 15, 2010. Cleveland, Lara. "GIS: Integrated Geo-statistical Units," presented in IPUMS America Latina III workshop, Havana, Cuba.

November 15, 2010. Hall, Patricia Kelly. "Secure Data Enclave," presented in IPUMS America Latina III workshop, Havana, Cuba.

November 15, 2010. Sobek, Matthew. "Check out the new face of IPUMS-International," presented in IPUMS America Latina III workshop, Havana, Cuba.

November 9, 2010. McCaa, Robert. "IPUMS-International Workshop," presented at the Colegio de Mexico in Mexico City.

November 3-6, 2010. McCaa, Robert. Presentation at the Mexican Society for Demographic Study meetings in Mexico City.

November 1, 2010. Hall, Patricia Kelly. "Launching the African Integrated Census Microdata (AICMD) Portal housed at the African Center for Statistics," presented at 6<sup>th</sup> Africa Symposium on Statistical Development: "Data Analysis and Use in the 2010 Round of Population and Housing Censuses," in Cairo, Egypt, October 31-November 2.



## 2. Workshops, Seminars and Lectures (continued)

September 7-9, 2010. McCaa, Robert. "Inequality in Health Workers Measured with IPUMS-International Census Microdata," presented in World Health Organization (WHO) workshop in Geneva, Switzerland.

September 2, 2010. McCaa, Robert. "IPUMS-International Workshop," presented at the European Association of Population Studies" in Vienna, Austria.

August 23, 2010. McCaa, Robert. Training session on capturing 1930 Mexican census data from enumeration forms held at the Archivo General de la Nacion in Mexico City, Mexico.

May 26, 2010. McCaa, Robert. "IPUMS-International Data Users Workshops," Colegio de Mexico.

April 16, 2010. Cleveland, Lara. "Users Workshop on Data Products Available from the Minnesota Population Center," including the IPUMS-International project, Population Association of America side meeting, Dallas.

January 22, 2010. Patricia Kelly Hall. "IPUMS-International Data Users Workshop," Second Meeting of the Statistical Commission for Africa (STATCOM-Africa), "Harnessing Technical and Financial Resources in Support of the Monitoring of Millennium Development Goals in African Countries," UN Economic Commission for Africa, Addis Ababa.

December 7-11, 2009. Hall, Patricia Kelly. "Research Opportunities with the Newly-Expanded Integrated Public Use Microdata Series (IPUMS) International Census Data, *United Nations Workshop on Strengthening the Analytical Capacity in Census Analysis in Developing Countries*, Population Division, Department of Economic and Social Affairs, United Nations Secretariat, Beirut, Lebanon.

December 7-11, 2009. Hall, Patricia Kelly. "Hands-on Training in using the IPUMS database for demographic analysis," *United Nations Workshop on Strengthening the Analytical Capacity in Census Analysis in Developing Countries*, Population Division, Department of Economic and Social Affairs, United Nations Secretariat, Beirut, Lebanon.

November 19, 2009. Hall, Patricia Kelly. "IPUMS-International Data Users Workshop," 5<sup>th</sup> Africa Symposium on Statistical Development, Co-sponsored by Statistics South Africa and the UN Economic Commission for Africa, Dakar. October 23, 2009. Cleveland, Lara. "Using the IPUMS-International Database," University of Minnesota Data Training Workshop, Wilson Library, Minneapolis.

## 3. Conference Presentations

May 24-25, 2012. McCaa, Robert and Albert Esteve. "IPUMS-International and Integrated European Census Microdata Projects Reduce Risks of Managing Trans-Border Access and Add Significant Value," Russian UNECE / EuroSTAT 14th Expert Meeting on Population and Housing Censuses, Geneva, Switzerland.

April 19-20, 2012. McCaa, Robert and Albert Esteve. "Disclosure Controls for One-Stop, Trans-Border Access to Census Microdata for 98 Countries via a Single License and

### 3. Conference Presentations (continued)

Dissemination Point: the IPUMS-IECM Partnership," ESSnet Workshop on Statistical Disclosure Control (SDC) of Census Data, Luxembourg.

January 17-23, 2012. McCaa, Robert and Patricia Kelly Hall. "IPUMS and AICMD Add Significant Value to African Census Microdata," 7th African Symposium on Statistical Development (ASSD), Cape Town, South Africa.

December 5-9, 2011. McCaa, Robert, Sheela Kennedy, Matthew Sobek and Lara Cleveland. "The Quality of Constructed Family and Household Relationships in African Census Samples," Sixth African Population Conference, Ouagadougou, Burkina Faso.

November 23-25, 2011. McCaa, Robert. "IPUMS-International Adds Value to Census Microdata in Countless Ways," Needs Assessment Conference on Census Analysis in Asia (NACCA), Bali, Indonesia.

December 5-9, 2011. McCarthy, Aine. "The Census Data Wealth Index: An Application to Predict Education Outcomes in Developing Countries." 6th African Population Conference, Union for African Population Studies (UAPS), Ouagadougou, Burkina Faso.

October 26-28, 2011. McCaa, Robert. "Trans-Border Access to Census Microdata: The IPUMS-IECM Partnership, Where a Single License Agreement Opens Access to Microdata for More than 60 Countries to Researchers World-Wide Free of Cost," Joint UNECE / Eurostat Work Session on Statistical Data Confidentiality, Tarragona, Spain.

October 20-21, 2011. McCaa, Robert. "Comparative Perspectives on Marriage and International Migration, 1970-2000: Findings from IPUMS-International Census Microdata Samples," IUSSP Scientific Panel on Global Perspectives on Marriage and International Migration, Seoul, Korea.

August 26, 2011. McCaa, Robert. "IPUMS-International: Free, Worldwide Microdata Access Now for Censuses of 60 Countries, 80 by 2015." Paper presented at the 58<sup>th</sup> ISI (International Statistical Institute) meetings, Dublin, Ireland.

August 24, 2011. Kirdruang, Phatta. "The Census Data Wealth Index: An Application to Predict Education Outcomes in Developing Countries." Paper on a new socio-economic variable constructed for the IPUMS-International, presented at the 58<sup>th</sup> ISI (International Statistical Institute) meetings, Dublin, Ireland.

August 19, 2011. Kirdruang, Phatta. "The Census Data Wealth Index: An Application to Predict Education Outcomes in Developing Countries." Young Statisticians Meeting (YSI), Dublin, Ireland; a satellite meeting of the International Statistical Institute (ISI) World Statistical Congress.

June 9, 2011. Cleveland, Lara. "Recent Innovations in IPUMS." Seminar on uses of census data in Europe in a comparative perspective in Barcelona, Spain.

### 3. Conference Presentations (continued)

April 1, 2011. Lovaton Davila, Rodrigo; Phatta Kirdruang, Dorothy Gondwe, Aine Seitz McCarthy; and Uttam Sharma, "Developing a Wealth Index for the World's Largest Population Census Database," poster presented at the Population Association of America Annual Meeting in Washington, D.C., March 31-April 2.

April 2, 2011. McCaa, Robert. "1930 Population Census of Mexico: a 1% Pilot Microdata Sample," with Aurora Gomez Galvarriato, paper presented at the Population Association of America Annual Meeting in Washington, D.C., March 31-April 2.

April 2, 2011. McCaa, Robert. "Family and Demographic Change in Post-Revolutionary Mexico: Insights from a New, National Household Sample of the 1930 Population Census," poster presented at the Population Association of America Annual Meeting in Washington, D.C., March 31-April 2.

March 2011. McCarthy, Aine. "The Census Data Wealth Index: An Application to Predict Education Outcomes in Developing Countries," Midwest Economics Association Annual Meeting, St. Louis, MO.

November 18, 2010. McCaa, Robert, "La complementariedad de censos y encuestas en la estimación de indicadores de soltería," with Albert Esteve and Joan Garcia, paper presented at the Latin American Population Association in Havana, Cuba, November 16-19.

August 26, 2010. McCaa, Robert. Roundtable on IPUMS census microdata, presented at the International Congress of Historical Demography in Amsterdam, Netherlands.

August 23, 2010. McCaa, Robert. Presentation on large databases at the International Congress of Historical Demography in Amsterdam, Netherlands.

August 4, 2010. Cleveland, Lara. "Drawing Statistical Inferences from International Census Data." Joint Statistical Meetings. Vancouver, BC, Canada.

July 8, 2010. McCaa, Robert. "Disseminating internationally integrated census microdata for the 2010 round and beyond: The IPUMS-International experience," UN Economic Commission for Europe/EUROSTAT Joint Meeting on Population and Housing Censuses, Geneva.

May 27, 2010. Hall, Patricia Kelly. "Confidentiality and Accessibility in Distributing Census Microdata in the IPUMS-International Project," Third Workshop on Data Access (a meeting of census personnel from national research data centers around the world). University of Michigan, Ann Arbor.

April 2010. Cleveland, Lara and Michael Davern. "Drawing Statistical Inferences from International Census Data," Poster Session 5, Population Association of America Annual Meeting, Dallas.

April 2010. Chager, Sonia, Joan García Román, Antonio López Gay and Albert Esteve. "Marriage prevalence among young-adults in India: social, time and regional trends." Paper presented at the Population Association of America Annual Meeting, Dallas.

**3. Conference Presentations (continued)**

April 2010. Esteve, Albert, Timothy Riffe, Jeroen Spijker. "Marriage prevalence and education in developing countries." Paper presented at the Population Association of America Annual Meeting, Dallas, TX.

April 2010. Kennedy, Sheela and Matthew Sobek. "The Development of Family Interrelationship Measures for International Census Data." Paper presented at the Population Association of America, Dallas.

January 21, 2010. McCaa, Robert and Patricia Kelly Hall. "Microdata Management: Preserve the microdata (and documentation) and make them useful," Second Meeting of the Statistical Commission for Africa (STATCOM-Africa), "Harnessing Technical and Financial Resources in Support of the Monitoring of Millennium Development Goals in African Countries," UN Economic Commission for Africa, Addis Ababa.

November 19, 2009. Hall, Patricia Kelly. "Timely dissemination of integrated census microdata and metadata: The IPUMS-International approach," 5<sup>th</sup> Africa Symposium on Statistical Development, Co-sponsored by Statistics South Africa and the UN Economic Commission for Africa, Dakar.

October 29, 2009. McCaa, Robert, Albert Esteve and Patricia Kelly Hall. "Entrusting census microdata and metadata for timely integration and dissemination via the IPUMS-EurAsia and IECM initiatives, 2010-2014," UN Economic Commission for Europe/EUROSTAT Group of Experts on Population and Housing Censuses, Geneva.

October 29, 2009. Levin, Michael J. and Robert McCaa. "Implementing IPUMS-International Confidentiality Protocols using CSPro/IMPS: 1991 Census Microdata of Saint Lucia," 17<sup>th</sup> Meeting of the Regional Census Coordinating Committee (CARICOM), Castries, Saint Lucia.

September 29, 2009. Garenne, Michel, Robert McCaa and Kouroum Nacro. "Maternal Mortality in South Africa: An Update from the 2007 Community Survey," International Union for the Scientific Study of Populations (IUSSP), Marrakesh, September 27-October 2.

## Appendix D. IPUMS-International Publications June 2012

### 1. Journal Publications

2010. Barham, Tania. "A Healthier Start: The Effect of Conditional Cash Transfers on Neonatal and Infant Mortality in Rural Mexico." *Journal of Development Economics* 94: 74-85.
2011. Baumle, Amanda. "Border Identities: Intersections of Ethnicity and Sexual Orientation in the US-Mexico Borderland." *Social Science Research* 39: 231-245
2010. Bleakley, Hoyt. "Malaria Eradication in the Americas: A Retrospective Analysis of Childhood Exposure." *American Economic Journal: Applied Economics* 2: 1-45.
2011. Chicoine, Luke. "AIDS mortality and its effect on the labor market: Evidence from South Africa." *Journal of Development Economics*: 1-14
2010. Daouli, Joan, Michael Demoussis, Nicholas Giannakopoulos. 2010. "Mothers, fathers and daughters: Intergenerational transmission of education in Greece." *Economics of Education Review* 29: 83-93
2010. Domingo, Andreu, Albert Esteve. 2010. "Gender, occupation and home structures of the Dominican and Ecuadorian migration in Spain and the United States." *Amca Latina Hoy* 55: 41-60
2010. Esteve, Albert, Luis Lopez-Ruiz. 2010. "Union formation implications of race and gender gaps in educational attainment: The case of Latin America." *Population Research and Policy Review* 29: 609-637.
2011. Fieder, M., S. Huber, F. Bookstein. 2011. "Socio-economic status, marital status and childlessness in men and women: An analysis of census data from six countries." *Journal of Biosocial Science* 43: 619-635.
2011. Gallego, Francisco. 2011. "Skill Premium in Chile: Studying Skill Upgrading in the South." *World Development* 40: 594-609
2010. Garenne, Michel, Robert McCaa and Kouroum Nacro. "Maternal mortality in South Africa: An update from the 2007 Community Survey," *Special Issue of the Journal of Population Research* (forthcoming).
2011. Halpern-Manners, Andrew. "The Effect of Family Member Migration on Education and Work Among Nonmigrant Youth in Mexico." *Demography* 48: 73-99.
2011. Hou, Feng, John Myles. "Interracial Marriage and Status-Caste Exchange in Canada and the United States." *Ethnic and Racial Studies* 1: 1-22



**1. Journal Publications (continued)**

2010. Huang, Cheng, Zhu Li, Meng Wang, Reynaldo Martorell. "Early Life Exposure to the 1959-1961 Chinese Famine has Long-Term Health Consequences." *The Journal of Nutrition* 140: 1874-1878.
2012. Jensen, Leif, David Ader. "The Demography of Rural Latin America: The Case of Chile." *International Handbook of Rural Demography* 3: 95-110.
2010. Lauster, Nathanael. "A Room to Grow: The Residential Density-Dependence of Childbearing in Europe and the United States." *Canadian Studies in Population* 37: 475-496.
2010. Lee, Chanyoung and Peter Orazem. "Lifetime Health Consequences of Child Labor in Brazil." *Research in Labor Economics* 31: 99-133.
2010. Levison, Deborah, Anna Langer. "Counting Child Domestic Servants in Latin America." *Population and Development Review* 36: 125-149.
2010. Malamud, Ofer and Christian Pop-Eleches. "General Education Versus Vocational Training: Evidence From an Economy in Transition." *The Review of Economics and Statistics* 1: 43-60.
2011. Manacorda, Marco and Furio Rosati. "Industrial Structure and Child Labor Evidence from the Brazilian Population Census." *Economic Development and Cultural Change* 59: 753-776.
2012. McCaa, Robert. "IPUMS-International: Integrating and Disseminating High Precision Population Census Samples of the USA, Greece, Europe, and the World." *Modern Greek Studies Yearbook*, Forthcoming.
2012. McCaa, Robert, Albert Esteve and Joan Garcia. "Comparative Perspectives on Marriage and International Migration, 1970-2000: Findings from IPUMS-International Census Microdata Samples in Cross Border Marriage," *Global Trends and Diversity*, Forthcoming.
2011. McCaa, Robert, Ann Meier and David Lam. "Creating Statistically Liberate Global Citizens: The Use of IPUMS-International Integrated Census Microdata in Teaching," *Statistical Journal of the IAOS (International Association of Official Statisticians)* 37: 145-156.
2011. McCaa, Robert, Michel Garenne and Kourtoum Nacro. "Maternal Mortality in South Africa: An Update from the 2007 Community Survey," *Journal of Population Research* 28: 89-101.
2011. McCaa, Robert, Albert Esteve and Joan Garcia. "La enumeración de la soltería femenina en los censos de población: sesgo y propuesta de corrección," *Papeles de Población* 66: 9-40.

### 1. Journal Publications (continued)

2010. Medina, Carlos and Christian Posso. "Technical Change and Polarization of the Labor Market: Evidence for Brazil, Colombia and Mexico." *Borradores de Economia*: 1-51.
2011. Mehta, Aashish, Jesus Felipe, Pilipinas Quising and Shelia Camingue. "Overeducation in Developing Economies: How can we Test for it, and What Does it Mean?" *Economics of Education Review* 30: 1334-1347.
2010. Miller, Grant. "Contraception as Development? New Evidence from Family Planning in Colombia." *The Economic Journal* 120: 709-736.
2011. Monkkonen, Paavo. "The Housing Transition in Mexico: Expanding Access to Housing Finance." *Urban Affairs Review* 47: 672-695.
2009. Ruggles, Steven. "Reconsidering the Northwest European Family System: Living Arrangements of the Aged in Comparative Historical Perspective." *Population and Development Review* 35: 249-273.
2010. Rughini, Cosima. "The forest behind the bar charts: bridging quantitative and qualitative research on Roma/igani in contemporary Romania." *Patterns of Prejudice* 44: 337-367.
2011. Salinas, Viviana. "Socioeconomic Differences According to Family Arrangements in Chile." *Population Research and Policy Review* 30: 677-699.
2012. Skirbekk, Vegard, Eric Malenfant, Stuart Basten and Marcin Stonawski. "The Religious Composition of the Chinese Diaspora, Focusing on Canada." *Journal for the Scientific Study of Religion* 51: 173-183.
2010. Torche, Florencia. 2010. "Educational Assortative Mating and Economic Inequality: A Comparative Analysis of Three Latin American Countries." *Demography* 47: 481-502.
2012. Verpoorten, Marijke. "Detecting hidden violence: The spatial distribution of excess mortality in Rwanda." *Political Geography* 30: 44-56.
2010. Vieira, Joice, Pau Miret Gamundi. 2010. "Transition to Adulthood in Spain: a Temporal and Territorial Comparison Using Entropy Analysis." *Revista Espanola de Investigaciones Sociologicas* 131: 75-107.
2010. Vitali, Agnese. "Regional differences in young Spaniards living arrangement decisions: A multilevel approach." *Advances in Life Course Research* 15: 97-108.

### 2. Books and Other One-Time Publications

2011. Aquino, Gabriel. "Puerto Rican Intermarriages: The Intersectionality of Race, Gender, Class and Space." Ph.D. diss. State University of New York at Albany.
2010. Basch, Julian. "El estancamiento del descenso de la fecundidad en pas de fecundidad intermedia: evidencias del caso argentino [The stagnation of the fertility decline in countries of intermediate fertility: evidence from the Argentine case]." Ph.D. diss., El Colegio de Mexico.

**2. Books and Other One-Time Publications (continued)**

2010. Demombynes, Gabriel, Dorte Verner, Ignacio Llovet, Isabel Tomadin, Elsa Anderman, Johannes Metzler. *The Invisible Poor: A Portrait of Rural Poverty in Argentina*. Washington, D.C.: World Bank Publications
2010. Heggeness, Misty. "Global trends in marital instability from 1970 to the present: Do economic opportunity and economic development matter?" Ph.D. diss.. University of Minnesota.
2010. Hunt, Jennifer. *Open for Business: Migrant Entrepreneurship in OECD Countries*. OECD Publication.
2011. Imbs, Jean, Claudio Montenegro, Romain Wacziarg. *The Geography of Structural Change*. Washington, DC: The World Bank.
2010. Julio, Martin. 2010. "Concentraciones de capital humano altamente calificado en Chile: Incentivos a la divergencia de la distribución espacial del capital humano." Masters thesis. Pontifica Universidad Catolica de Chile.
2011. Kirduang, Phatta. "Essays in Economics of Public Health Insurance in Developing Countries: Evidence from Thailand and Vietnam." Ph.D. diss., University of Minnesota.
2011. Umana-Aponte, Marcela. "Long-term Effects of a Nutritional Shock: The 1980 Famine of Karamoja, Uganda." PhD diss., University of Bristol.