New "High Tech" Research Tool Makes 1990 Census Instantly Available For Professional—and Personal—Purposes

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Will "Dear Abby" be replaced by the US decennial census? The possibility now exists for at least some "personal" questions—thanks to a powerful new way to gain immediate access to millions of census records.

This state-of-the-art research tool—conceived by Dr. Albert F. Anderson of the University of Michigan Population Studies Center—revolutionizes the speed and ease with which researchers can harness the Census's huge Public Use Microdata Samples (PUMS), interactively, from any PC connected to the Internet. (For example, in a matter of seconds—rather than hours or days— a researcher with a modem can receive a custom-tailored tabulation of the 2.6 million records that comprise the 1990 Census 1% Sample) Known as the CENSUS EXPLORE PROGRAM, this tool is now being made available to researchers for beta-testing by CIESIN (Consortium for International Earth Science Information Network) along with access to PUMS files from the 1990 and 1980 US Censuses (see below). It is also being used by scholars contributing to the Russell Sage Foundation's 1990 Census Monograph Project under the direction of Reynolds Farley.

This research tool is clearly a technological breakthrough which will transform the way social scientists and applied demographers utilize census data in their future work. Yet, my favorite illustration of its power draws from an application of a more personal nature. In response to the article,"American Maturity" that Diane Crispell and I wrote for *American Demographics* (March, 1993), we received a letter from a woman from Alaska that begins:

Gentlemen:

Please send me information regarding the highest concentration of retired single, gentlemen who are well educated and healthy. This data I would like to know more about can be anywhere in the United States, but please do not include Alaska, as I have been here for three and a half years and in Anchorage alone, there are only 3.4% over the age of 65 and they are neither well educated nor even solvent.....

Responding to this woman's inquiry would have been a very tall order prior to the availability of Al Anderson's EXPLORE research tool. Certainly, no census published table or computerized geographic summary (STF) data could have shown crosstabulations of ALL of the woman's preferred characteristics for geographic areas . Taken literally, she is requesting a list of areas with high concentrations of the following (combined) attributes: "retired", "single","male","well-educated" and "healthy".

The only possibility in the "pre-EXPLORE" era would have been to write a specialized computer program or complicated statistical package instructions for an expensive and time-consuming computer-tape run using the several reels available with one of the Census PUMS files. Depending on the programming help, mainframe computer set-up, and turnaround time, this job might have taken anywhere from 4 hours to several days.

Yet, using EXPLORE to tabulate the 2.6 million records of the 1990 Census 1% PUMS, Michigan graduate student Li-Shou Yang (who looked up 1990 PUMS coding categories while we worked at the PC) and I finished the entire job in 30 minutes. And most of that time was spent with spreadsheet work after we retrieved the basic tabulations with EXPLORE. Using US States as the relevant geographic units, our main tabulation consisted of a State by Gender cross tab— subject to the following controls: Age-65 and older; Employment Status-not in labor force; Marital Status- not currently married; Educational Attainment-college graduate; Work Limitation Status-not limited; Mobility limitation-not limited. These controls represented the best census category approximations to the lady's preferred criteria (though the lack of work or mobility limitations is not necessarily a proxy for being "healthy"). It should be noted that once we interactively keyed the coding categories into EXPLORE, the actual tabulation of 2.63 million records took 9 seconds!

What did we find? The five States (including DC) with the highest concentration of retired elderly men that are unmarried, educated and healthy (as a percent of all males) are: (1) District of Columbia; (2) Vermont; (3) Nevada; (4) Delaware; (5) New York Nevada has the additional advantage (found in a subsequent run) of registering a greater number of men than women with these characteristics. In general, States with the highest concentration of the woman's preferred male attributes are located in New England, the Eastern Seaboard and in the classic retirement areas. Midwest and Southeast States tended to show the lowest concentrations. Yet it is not surprising that she is dissatisfied in Alaska. This State ranked last on both the concentration of her preferred male characteristics, and on the male/female ratio for these attributes.

Obviously, we do not intend to start-up a census geographic "matchmaking" service at the Population Studies Center, but merely used this woman's polite request as an excuse to test the capability's of the EXPLORE program. This is, in fact, a trivial application of a very powerful research tool. When used with the 1990 PUMS files, a researcher has the capacity to generate tabulations or mean category values for most of the geographic, household or personal characteristics shown in the 1990 PUMS codebook. Our example could easily be extended to selecting individual metropolitan areas, or to controlling for additional personal characteristics such as race, income levels etc. Not only is the program extremely fast but it is also interactive—allowing the researcher to explore different tabulation alternatives within the same session by entering different line commands in response to prompts. Output can be readily transferred to hard-copy printouts or to other application programs (eg. spreadsheet or graphics software) that may be resident on the user's own personal computer. Use of the program does require familiarity with variables available on the Public Use Micro-files.

The CENSUS EXPORE PROGRAM is resident on computers located at CIESIN which is located at 2250 Pierce Road, University Center, Michigan. It can be accessed on any personal computer that is connected to the Internet. Researchers interested in gaining free access to the 1990 and 1980 1% PUMS files for the purpose of beta-testing the various features of the program should contact CIESIN Customer Service—(517)-797-2727 or use the Internet E-Mail Address: ciesin.info@ciesin.org. Researchers interested in learning more about EXPLORE's capabilities can contact Albert F. Anderson at the University of Michigan Population Studies Center—(313) 998-7140.

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Aging

MATURE, ACTIVE WOMAN SEEKS EDUCATED, HEALTHY MAN

How a demographer helped an older single woman find love—or a good place to look for it.

It's not easy for an educated, active, elderly woman to find a husband. Just ask Ann Helen Winsor of Sun City West, Arizona. "I'm definitely, aggressively looking," says the never-married Winsor. "I'm not content to sit on a shelf and be single for the rest of my life."

Winsor's quest prompted the retired school teacher to seek assistance from William Frey, a research scientist at the Population Studies Center at the University of Michigan in Ann Arbor. Winsor asked Frey to find states with "the highest concentration of retired, single gentlemen who are well-educated and healthy," with the caveat that Alaska be excluded. Winsor had lived in Alaska for four years, so she already knew from experience what Frey's analysis later revealed. The number of elderly, educated, single men in Alaska is so small that it's statistically insignificant.

Reno and Alaska did not satisfy her. Where else should she look?

In October 1993, Winsor moved to Arizona with Frey's data in hand. "As long as I'm going to do something, I might as well have the facts on my side," she says. "I thought I would be very scientific about relocating instead of being hit or miss."

The criteria for eligible men Winsor submitted to Frey are nothing short of sensible, she says. She is college-educated and seeks a man with whom she can converse. Wealth is unimportant, but she does not want to support a husband, either. "And he needs to be reasonably healthy to do things I want to do," says Winsor, who exercises daily.

To identify the states where Winsor would have the best chance of finding such dapper fellows, Frey fired up his center's Census Explore Program to cull data from the Census Bureau's Public Use Microdata Samples (PUMS). Frey looked for men older than age 65 who are not in the labor force, currently unmarried, and college-educated. Men made the final cut if they identified themselves as having no limitations on work or mobility.

The analysis revealed that such men can be few and far between. Even in states with relatively large shares, their proportion of the entire population is miniscule. The District of Columbia has the largest share of these men, yet only 0.4 percent of all males there fit the bill.

When it comes to finding a husband, the numbers are stacked against older women. Women live an average of seven years longer than men, and most women marry older men. As a result, nearly half of women aged 65 and older are widowed, compared with 14 percent of elderly men. With this in mind, Frey also ranked states by the ratio of men with the specified attributes to all women over age 65. He found that only one state truly favors elderly women who are eyeing Winsor's target group: Nevada, which has 156 educated, retired, and single men for every 100 elderly women.

This fact didn't escape Winsor, who visited Nevada before settling in Arizona. "I scoured Reno, but it didn't spell

Where the Old Boys Are

A good, healthy, unmarried, educated, retired man is hard to find.

(top-ten states and the District of Columbia with the largest ratio of college-educated men over age 65 who are not in the labor force and have neither work nor mobility limitations to all women over age 65, 1990)

		ratio of men to 100 women
1	Nevada	156
2	Hawaii	55
3	New Jersey	52
4	Delaware	50
5	South Dakota	47
6	Illinois	43
7	Maryland	42
8	Connecticut	42
9	District of Columbia	42
10	Montana	41

Note: In states where shares are the same, rankings are determined by total number of men with the specified attributes.

Source: Analysis of 1990 census data by William Frey, University of Michigan, Ann Arbor

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happiness," she says. In Arizona, where Winsor did settle, the ratio is not nearly as favorable—about 39 educated older men for each 100 women over age 65.

Winsor doesn't know if she will remain in Arizona. Lately she's been wondering if the east coast might yield more men to her liking. In New Jersey, the ratio of guys with the "right stuff" is more favorable than in Arizona—52 for every 100 elderly women. Not only that, New Jersey has about 6,200 of these men, more than Arizona's 3,400. North Carolina is also on Winsor's mind, but it may not be a good bet. There are only 17 single, educated, older men for every 100 mature women, and the state is home to only 2,100 of these men altogether. Winsor is not to be discouraged, though. "I may be unusual," she says. "But I'm not giving up."

The Consortium for International Earth Science Information Network (CIESIN) makes both the Census Explore Program and PUMS data from the 1990 and 1980 censuses available to researchers at no charge. For information, contact CIESIN customer service at (517) 797-2727, or by Internet E-mail at ciesin.info @ciesin.org. *—Shannon Dortch*

CHANGES IN MAGAZINE RESEARCH

The two major sources for magazine reader surveys now use similar methods. Can both survive?

In a controversial move, Simmons Market Research Bureau scrapped its well-known "through the book" magazine readership methodology last fall. The company now uses a version of the "recent reading" technique pioneered by its main rival, Mediamark Research (MRI). The move has been received ca by users of both studies.

Mark Goldschmidt, vice president a director of corporate marketing and pl ning at Hearst Publications, says Si mons' move makes its old studies usel

Simmons' move to a new technique makes its old studies useless for comparison purposes.

for comparison purposes. "The name the same, Simmons. Otherwise you dealing with a new company," he sa Simmons will have to accumulate data several years before it will have the ye to-year comparative information he fir useful. Simmons president and CI Rebecca McPheters confirms that re ership information will not l "trendable" until 1996.

Goldschmidt plans to evaluate Si mons' quality and make a purchase de sion in 1996. In the meantime, Hearst v continue to use MRI exclusively, as it h for the past two years.

This reaction may be typical. "M companies will just buy one," predi Tom Troland, group marketing direc for Meredith Corporation, when ask how marketers will approach the Si mons/MRI choice. The justification choosing is simple: "More of the same more of the same."

For some companies, such as Grune Jahr USA Publishing, data purchases v be driven in large part by advertisi agencies that prefer one company o another, says research director Pe Davis. For the larger of his seven titl it is likely his company will purchase b Simmons and MRI in the future. "I l forward to seeing what the numbe like," he says. "Maybe now we ca pare apples to apples." The smaller