

The Count of San Francisco

By Judy Miller, Special Projects Editor
San Francisco Chronicle

The San Francisco Chronicle's reporting on the 1990 census adhered to the finest traditions of computer-assisted journalism. Sometimes it seemed that everything that could go wrong did go wrong.

The Census Bureau surprised the California Media by releasing the data a month before it was expected. The magnetic tape containing the data arrived right on deadline while the presses were running. And then the tape drive broke down.

But despite problems, we published better and more detailed reports on census data than any other paper in California, mostly because we had programmed our software to do its work before the census data arrived.

With the support of top editors, the paper plans to use computers to improve both projects and daily reporting.

The census project got off the ground when

Editor Tim Schreiner and I teamed up to prepare for the release of the 1990 census data for California. Schreiner was a whiz at understanding the census and crunching numbers, and I was a graduate of MICAR's weeklong workshop and knew how to import 9-track magnetic tape information into a personal computer and manipulate with the database management program, XDB.

We also recruited Library Director Richard Geiger and Systems Specialists Gerald Lampol for assistance with research and technical matters.

The team's combined experience became key when the U.S. Census Bureau, which had promised to release its California data "no earlier than mid-March," instead released the information on February 25, with only two weeks notice.

The first wave of data consisted of total population figures, racial and ethnic population, and numbers of housing units broken down by county, census

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Hartford's Toxic Front Page

By Brant Houston and Kenton Robinson
Hartford Courant

You call this environmental protection?

- Connecticut manufacturers are failing to report millions of pounds of toxic emissions to the state as required by law.
- Connecticut manufacturers are actually emitting more ozone-eating Freon into the atmosphere than they were three years ago, when they pledged to reduce emissions.

Some manufacturers are seriously damaging mu-

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Plugging In....

The Dallas Morning News

By Allen Pusey, Assistant Projects Editor
Dallas Morning News

It would be an exaggeration to say I was pistol-whipped into attending a Missouri Institute for Computer-Assisted Reporting seminar in January.

But not much.

That may have been an advantage, however, in our efforts to start up a computer-assisted reporting program here at *The Dallas Morning News*. Although we have yet to produce a single

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track and block.

In California, where minorities are expected to outnumber whites within 10 to 15 years, the growth in population by racial and ethnic groups between 1980 and 1990 was the obvious lead to our first-day

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Startling Population Changes

Minorities make up 43% of California's citizenry

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ry tour in 38 U.S. Asian Ambassador
the in California, with the largest
numbers concentrated in Los An-
geles, Santa Clara, Orange and San
Francisco counties.

Very Important

The state's black population increased modestly during the past 10 years, but the share of blacks in the state population dropped slightly from the 1980 level — to 7.6 percent in 1991.

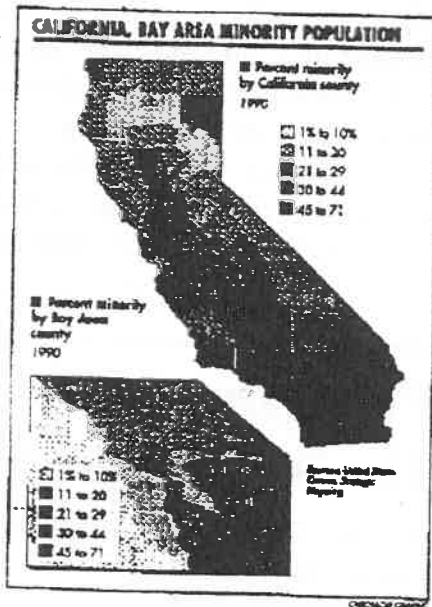
The Census showed that within a racial group such as up to 60 percent of Californians, a figure that includes many people of Hispanic origin, who classify themselves as white or more.

The non-Hispanic white population totals 52 percent of the state population, a decline from 1980, when the group accounted for two-thirds of the state population.

The state now has at least three counties with "majority majorities"—Imperial, Los Angeles and San Francisco. There are also 136 others where minorities hold the numerical edge, up substantially from 1990 when there were 74 such cities.

There were only six outposts at army posts in the Boy Army in 1900: Fort Fair, Alton, Oak City, Madison, Madison, Madison and Oak City. About 75 in the list in 1900 are San Jose, San Jose, Cal. San, Madison, South San Francisco, Toledo, Pittsburg, Quincy and Springfield.

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Although the present review is restricted to the use of IT in the workplace,

story.

In preparation for C-Day, the paper purchased a 9-track tape from the Census Bureau that gave sample census data for portions of Washington state. The purpose of this so-called "Dress Rehearsal" tape was to familiarize journalists with the contents of the 1990 census tape.

The record layout for this tape closely matched the layout of the 1990 California release. Thus, it was

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possible to import 1980 California census data in the precise format and layout of the 1990 data before it arrived so that the two files easily could be merged.

We then figured out what XDB commands we wanted to perform on the merged 1980 and 1990 data and saved them. For example, we stored queries in XDB that asked the computer to calculate the total percentage of minorities versus whites in the state, in each county and in each city.

We stored commands that asked the computer to calculate percentage growth for each minority group between 1980 and 1990. We even figured out the commands for our second- and third-day stories, which gave racial and ethnic snapshots of all nine Bay Area counties.

The preparation paid off.

On the day the census information was to arrive, the tape drive broke down. Fortunately, we had logged enough practice hours with it to get it going again.

The census data didn't reach the paper until 9 p.m., nine hours after originally promised. By 9:30 p.m., about 15 minutes before the second-edition deadline, we were punching out numbers for a demographics writer and the graphics artists.

They were able to produce stories and graphics showing the percentage of minorities in each of the state's 58 counties, the growth in minority population between 1980 and 1990 and population totals for every city in the state.

Success Story News

Last December, UPLINK featured a story produced by Chris Szechenyi, an investigative reporter at WRC-TV in Washington, D.C.

Szechenyi used a computer analysis of the Food and Drug Administration's Medical Device Report to create a multi-part series on faulty defibrillators, the device used to jump-start hearts that have stopped beating. NBC Nightly News featured his story.

This month, the story won the National Headliner's Award for investigative reporting by a television station. On the same day Szechenyi learned of the award, he was laid-off by his station due to budget cuts.

Hartford Cont....

nicipal sewer treatment plants by dumping toxic chemicals into the plants, thus causing sewage to pour into Connecticut water and costing taxpayers tens of thousands of dollars in repairs.

- Connecticut's Department of Environmental Protection has for three years left out tens of millions of pounds of toxic chemical emissions in its annual reports to the public; thus significantly downplaying the amount of poisons dumped and stored in local landfills.

These are some of the facts we've been able to reveal over the past six months with just a rudimentary use of the Toxic Release Inventory (TRI). The inventory is composed of annual reports from certain manufacturers on how much of 300 or so toxic chemicals they emit. While the reports have their shortcomings, they are good for giving an indication of how bad pollution is in your state and for cross-referencing with other files.

Over the past six months, *The Hartford Courant's* environmental reporter, Dan Jones, and I have produced several front page stories and a bunch of others by using TRI. At this point, I think we've just started to appreciate the possibilities.

We began our work by getting computer tapes of the inventory for 1988 and with the use of Nine-Track Express and XDB setting up eight different tables of information on what toxic chemicals manufacturers in Connecticut reported emitting.

We thought of doing a story from those tapes last summer, but realized that the paper reports for 1989 had just been filed - or should have been - with the state Department of Environmental Protection.

We knew that the state would take months to type those reports into a database, so we decided to enter the information onto our own database using laptops. This had been done by several reporters (including Dave Davis at the *Cleveland Plain Dealer*, who gave us the idea) and environmentalists with good results, so we plunged in and created our own 1989 database of 1,500 reports and verified it over a period of three weeks by ourselves and with the help of a researcher. Our database was an abbreviated version, quite similar to the summaries issued on diskette by the National Technical Information Service. (Data entry is really a bother, but we actually got

a lot of story ideas while looking at the reports and discovered many flaws in the reports.)

We totaled the emissions, made a top-ten list of manufacturers and chemicals, etc., so we could put out a report six months ahead of the state's annual report. But while comparing our database with the 1988 tapes, which were from the federal EPA, we found that some manufacturers had neglected to send their reports to the state over the past years, meaning

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the state had underestimated emissions in its annual reports. We also found many shortcomings in how the state cracked-down on some manufacturers.

Over the past few months, we've matched the database with another state database on pollution from sewer treatment plants, use our database for daily stories and for a longer story on ozone eating chemicals, given information from it to many bureau reporters, and used it to analyze transfers of chemicals to landfills and private disposal treatment companies. The state finally came out with its report this month and we immediately did a story on how it downplayed emissions by leaving out 14 million pounds of toxic chemicals shipped offsite by manufacturers. We intend to get the 1989 federal EPA tapes because it will have more detailed information that we didn't have time to type in.

For data entry, we used an inexpensive, off the shelf software called Powerbase. It has a great functionkey for repeating duplicate fields in records, and it was small enough to fit on a single diskette and still leave half the diskette open for data.

If you want to use TRI...

The 1988 federal 4-volume set is available through both the National Technical Information Service (703) 487-4848, and MICAR (314) 882-0684. 1989 data is expected soon. State-wide data is also available through NTIS at \$50 per state. State environmental protection agencies sometimes sell abbreviated data on diskette.

Plugging In Cont....

story - or download a single database - I think our program is going to be successful. Here's why:

A visit here last year by Elliot Jaspin laid the groundwork. It created such enthusiasm throughout the reporting staff that databases and computers became a routine topic of discussion. There was no need to sell the program to the grunts.

Elliot's enthusiasm caught the attention of several key editors. But, like other newspapers, the *Dallas Morning News* has always had trouble match-

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ing its computer capabilities with the needs of the staff. Management wanted an evaluation. I was the skeptic. And after a week at MICAR, my evaluation was simple: this stuff can work.

But there is more to it than that. I am convinced that computer-assisted reporting is not just a program, but rather a research and reporting technology that should be with us for a long time. And to that end, I have recommended a comprehensive infusion of computer-assisted reporting into the heart of the newsroom using a two-pronged approach based on a \$15,00 budget.

The first is a centralized, research and maintenance function. Our newsroom library will be responsible for the logging and storage of the tapes, the maintenance of any large-scale databases and the research and development of new and useful computer-based tools. They were already doing that. This will be just one more (very powerful) tool. The library already had several computers: two large capacity 386s and a 486 on order. We have added a 1600/6250 tape drive, NineTrack Express and two copies of XDB. We are awaiting a 670 mb, 8mb RAM computer from a local "brewery."

The second, and the hardest, is the creative reporting function. The enthusiasm is there, but the development of database skills throughout the newsroom is likely to be slow. We have decided to teach XDB through the development of small-scale computer-assisted reporting projects chosen very selectively. Reporters learn by doing - and such projects will give them both incentive and results.

There have been problems. For instance, our newsrooms have been converting to Macintosh based PCs. In light of what we have learned from MICAR, we have had to reevaluate that program. For many reasons, I favor an integration of Apple and IBM.

But solving those problems has made our program more inclusive, and probably stronger in the bargain. We have pulled expertise from virtually every department to make things right. And when things go wrong, as surely we can expect, I think we can now expect widespread assistance and support.

Starting, you know, can be such sweet sorrow. We'll keep you posted.

Every other month, UPLINK asks an individual or organization that is just beginning to use computer-assisted reporting to share their problems and victories for "Plugging In." If you have any advice or words of wisdom to share, please call us at MICAR.

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MICAR is interested in attaining any information, ideas or stories related to computer-assisted reporting for future issues of UPLINK

If you wish to contribute, please mail your story or idea to the above address. Or, call us for a fax number.

- Adam Berliant, Editor