

Poynteronline

Posted, Jun. 3, 2005

Updated, Jun. 7, 2005

A Guide to Computer Assisted Reporting

Tips and tales of investigative journalism.

By [Pat Stith](#) ([more by author](#))

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The "why" in any story is often the best part. So that's where I want to begin. Why go to the bother -- and expense -- of building or improving computer assisted reporting (CAR) programs at our newspapers?

There are a number of reasons, but I offer you just three, any one of which could justify the cost.

RELATED RESOURCES

This package contains a series of articles that resulted from a recent Poynter seminar called "Creating A Watchdog Culture: Claiming An Essential Newspaper Role." All are linked up at the bottom of this article.

One: CAR enables us to publish stories that our readers want and can't get anywhere else. In the midst of all the pushing and shoving for a place at the news table, here's a banquet of wonderful stories reserved for reporters who can use a computer to analyze data. Without those skills competitors can't even get in the game. In a time of flat or declining circulation, we want exclusives -- we want separation from the pack.

Two: CAR helps us recruit and retain good reporters. All over this country reporters who want to take their work to a higher level have been the driving force behind computer assisted reporting. They know that, other things being equal, reporters who can use a computer will defeat those who cannot. And not just defeat them -- they'll beat 'em like a tub. Publishers and editors who grab the CAR flag, and lead this battle, will send a message to their reporters: Come here, stay here, and we will help you be the best you can be.

Three: CAR will help us create, or improve, the watchdog culture at our newspapers. A database, a spreadsheet, helps us get some stories that just can't be acquired any other way. They also help us add depth and detail that fascinate readers.

I want to talk with you first about how CAR has enriched some of our stories, starting with a series we called "[Boss Hog, North Carolina Pork Revolution](#)" and then move forward to this past weekend.

For the "Boss Hog" story we acquired records of almost all calls made with state telephones or state telephone credit cards for a period of two years -- about 40 million records. And we made some interesting discoveries.

Murphy Family Farms, the biggest corporate hog farm in the United States at that time, was located in the little town of Rose Hill, in eastern North Carolina. It was headed by former state senator Wendell H. Murphy

-- "Boss Hog" himself. We found that, on average, someone in state government called Murphy Farms once every working hour of every working day during those two years. Murphy Farms was like a satellite of state government. Or maybe it was the other way around.

One of those calls was made from the legislative office of Vernon G. James, a Pasquotank farmer who was chairman of the House Agriculture Committee. Earlier that day James' committee had voted to kill a bill that would have imposed tough sewage disposal regulations on hog farms.

If I had approached James, hat in hand so to speak, and asked if he had talked with Murphy about that bill, what do you suppose he would have said? Would he have told me? But I didn't do that. When I spoke with James, I inquired about a specific call, made on a certain day at a certain time from his office to Murphy Family Farms. I asked James if he had called Murphy about the sewage regulation bill, and he replied: "I wouldn't be surprised if I did. Wendell came to me, and he did not like that bill at all."

After "Boss Hog" was published, we wrote about the veterinarian who first caught our attention and eventually drew us to the pork revolution story. He was in charge of the state's pseudorabies eradication program. Pseudorabies is a disease that kills pigs and stunts the growth of hogs. The eradication program is federally funded. That meant the people running it could not accept a gift, not even a hot dog, from the hog industry, according to a state attorney.

The vet had flown on business trips in planes owned by Murphy Family Farms or Prestage Farms in Clinton, another major hog producer. Sometimes he went dove hunting as a guest of a hog baron. A confidential source also told us that the vet had spent the night at a cabin on Lake Phelps, in eastern North Carolina, owned by Tyson Foods, then the fourth biggest hog producer in the country.

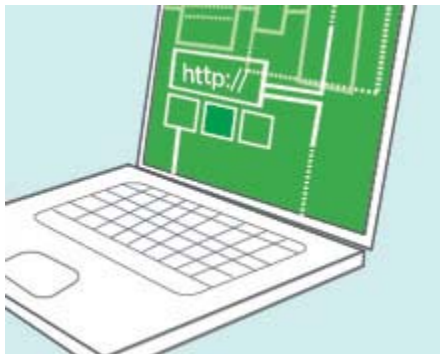
Except in the most extraordinary circumstance, *The News & Observer* doesn't use anonymous sources in stories. We stopped doing that in 1978. So if we were going to use the Tyson Foods tip, we had to prove it. The phone database and some good reporting by Joby Warrick, my partner then, enabled us to do that.

We used the phone records to track the vet's movements. When an employee of state government in North Carolina made a call with a state credit card, the number he called from was recorded as well as the number he called, the time, and the date of the call. The source supplied us with the date of the overnight stay and the phone database gave us numbers from which the vet made calls late that evening and early the next morning.

Now all Joby had to do was find the cabin and prove that a phone with that number was inside. At first, he couldn't find it. On his second trip to Lake Phelps, Joby crossed his fingers and called Tyson Foods. He said he was looking for a cabin near the Tyson Foods cabin, and could they give him directions to their cabin. They could and did.

When he finally found it, Joby got out of his car, walked up on the front porch, used his cell phone to dial the number, and heard the phone inside ring. He told me later that he was so nervous about the possibility of a coincidence that he hung up and dialed again. It rang again.

At *The N&O* we also have a campaign contribution database we call "The Money Machine." When we did the "Boss Hog" story it contained about 250,000 contributions to North Carolina politicians. We found, and reported, that hog executives had given about half a million dollars to candidates.



But one group of gifts stood out.

Three weeks before Gov. Jim Hunt was elected to his third term the Murphys sent him another \$20,000 -- \$2,000 from Wendell Murphy and \$2,000 each from his wife, mother, brother, sister-in-law, sister, daughter, son, daughter-in-law and stepson. Without the "Money Machine," we could not have reported any of that.

This past Sunday we began a [four-part series about overweight trucks](#) and the damage they are doing to roads in North Carolina. The legislature left the gate open and let the cows out. They have passed 10 laws in the last 12 years allowing heavier trucks on our highways. And the State Highway Patrol, which is supposed to enforce the laws that are left, hasn't been getting the job done. It has been unable to fill the vacancies among its weight enforcement officers.

We used the Money Machine to identify political contributions from the N.C. Home Builders Association, which has a bill weakening the weight law pending in the House now. And we used a little database we got from the Department of Transportation to find out how many roads in the state have been "posted" for light traffic and how many of those miles are in Wake County, our home county. We used data from the state's Fuel Tax database to show how much overweight citations and fines have dropped over the last several years. That citation and fine data -- along with the changes in the law -- were the foundation of the series.

After we had that information in hand, after we knew we were in business, we wanted to find out -- and tell our readers -- what percentage of trucks is overweight. But where could we get information like that? You can't get it from weigh station data. Only a fool, weight enforcement officers say, knowingly drives an overweight truck into a weigh station. You can't get it from portable scales data either, because weight officers patrolling back roads don't weigh everybody -- they weigh trucks with fat tires. So how could we get at that question?

It turns out that for years North Carolina and other states have been conducting pavement studies. The North Carolina Department of

Transportation installed weigh-in-motion sensors in the pavement at 16 locations in 12 counties and quietly weighed hundreds of thousands of trucks. We acquired that data -- which had not been given to law enforcement officials -- and examined records of almost half a million tractor trailers weighed in 2003, the most recent complete year available. We determined that about 8.5 percent were over 80,000 pounds, the legal maximum without a permit on an interstate.

The database contained the hour of day -- and night -- the trucks were weighed and, by sorting on hour, we found something else interesting. The percentage of trucks that were overweight in the wee hours of the morning, when weight enforcement officers are least likely to be on patrol, was triple the percentage of trucks that were overweight during the afternoon.

And when it came time to follow a weight enforcement officer, to interview him and photograph him at work, we didn't talk to just any officer. We used a database showing the work done by each officer to find Ricky Phillips, the patrol's Top Gun. Last year he cited more overweight pounds than anyone.

Almost all watchdog stories can be improved with computerized data. And some stories simply cannot be done without it. Let me give you some examples:

- We acquired the state car inspection database, which has fields for make, model, year, and, most important, mileage. We discovered that about 290,000 vehicle owners in our circulation area -- about one in three -- were eligible for a high mileage break on the city and county property taxes levied on their vehicles.
- We acquired a database of checks written by a tiny public agency charged with building an innovative air-cargo complex. Expenditures totaled \$15 million over a five-year period and a good many had to be seen to be believed. My favorite expenditure: a \$350 payment to a PR firm for writing a letter to the editor.
- We used the trooper citation to show that a 12-man drug interdiction unit was profiling black men. When troopers in the unit stopped a black man, but couldn't find drugs, they would charge him with a seat belt violation or some other minor offense. We compared the sex and race of the motorists they cited for traffic offenses with citations written by other troopers and found that the drug unit was almost twice as likely to charge a black man with a minor offense. One member of the unit charged 27 minorities in a row, one white man, and then eight more minority drivers.
- How many of you know what a "misadventure" is, in connection with death? I didn't know either when I first saw that word in the Medical Examiner's database. That's what they call it when a doctor or a nurse accidentally kills someone, it's a "misadventure." That's a national, maybe even an international, term. We compared misadventures in the Medical Examiner's database with misadventures in the state's death database and found a number of misadventure cases that had not been reported on the death certificate, or reported to the medical examiner, as state law

requires. None of this data was being turned over to the N.C. Medical Board, which is responsible for weeding out incompetent doctors.

- Our "High Raises in Hard Time" story came out of a University of North Carolina personnel database. The story said that highly paid employees were not only getting bigger raises, which is to be expected, they also were getting much higher percentage raises. We cited an English professor, who was making peanuts, who got 1 percent. And a doctor, who was making a bundle, who got 15 percent.
- We used a police incident database to do a story about children on Sawyer Road living with bloodshed. Raleigh police were called 1,996 times in a one-year period to a four square block area.
- N.C. State basketball players denied, at first, that they had sold any tickets to their games, which would be an NCAA violation. The team's guest records were not computerized so we created a database and cranked in those records. ACC tickets are like gold, only better, so we checked their guest list for regular season games against their tournament guest list. Several players invited "guests" to the tournament who had not attended any other game all year. We focused on an "Uncle Ralph" and we asked a player, Who is Uncle Ralph? And he told us, I don't have an Uncle Ralph. And we said, sure you do. He was your guest at the ACC Tournament. And the player said, I sold that ticket.

There are two widespread misconceptions about CAR: It takes forever. It's just for projects.

CAR is a lethal investigative weapon. But it also is a wonderful source of features. It's a valuable tool for health and environmental reporters. And business. And cops. And sports.

How can we cover politics without following the money? And how can we follow the money without a computer?

CAR also gives us stories that we do just because people will read the fool out of them. I give you three examples:

- We answered the question, How fast can you go without getting caught? The State Highway Patrol didn't tell us, of course. The patrol says, "We charge for clear and substantial violations." And when you ask them to define "clear and substantial," they say it depends on the weather. No matter how you phrase the question, your highway patrol is unlikely to say how many miles over the limit it allows. But their ticket database can tell you. Our trooper citation database has fields for speed limit and speed charged and when you have the computer subtract one from the other you get the answer almost every driver wants to know.

So, how fast can you go in North Carolina without getting caught?

Nine miles over the limit. More than 99 percent of all speeding charges made by the SHP are for 10 miles per hour or more above the limit.

- We used the State Medical Examiner's database to locate autopsy reports on dozens of unidentified bodies that had been found here, there and yonder. Instead of a name, there was a single word in the name field: "UNIDENTIFIED." Joby wrote the lead: "Whoever killed the woman in the dark Levi's must have wanted to rub out every trace of her. Even her name."
- We looked in the state Escheats Fund and got a list of people whose money or property had been turned over to the state after they had abandoned it. And then we went looking for them. We found some, and bought them good news: Call the state treasurer. He's holding some money for you. But the story we were after took an unexpected turn when we came across an old woman of principle. A poor old woman. Her land had been condemned, wrongfully she thought, and she wouldn't take payment. Ben Stocking's lead: "Marie Louise Lewis doesn't want the \$45,075 the state is holding for her, not one cent of it."

Oh, one more:

- We looked at the marriage database and discovered that many people will not risk being unlucky in love: Every month, on the 13th, the number of marriage ceremonies performed in North Carolina drops by 40 percent.

Building a CAR program takes a little money and a lot of determination. As a rule, there are only two advocates: Reporters, who want to write driving stories. They understand the power of this tool. And top managers, who want outstanding work in their newspapers and believe CAR will help them get it.

You have to find a way to work around your middle managers. They may say they are CAR advocates, because that's what they know you want to hear. But they're not, most of them, and I'll tell you why. They are under a lot of pressure to fill the paper with good stories. Not great stories. Good stories. And when all is said and done, they're not willing to give up a couple or three good stories on the possibility, maybe even probability, of getting a great one. A middle manager who pushes his or her reporters to learn CAR is a rare bird.

It is true that some CAR projects are risky because it may take a while to figure out that you're barking up the wrong tree. So what's new? That's always been true of project work, long before we began using databases.

But there are many stories where you can get a one-day turnaround.

The county pays us each year to print a list of tax delinquents -- several pages of agate. One day I talked with our county reporter about doing a story on the top 10 tax scofflaws and he said, in so many words, I would but, you see, I have a real job. I can't mess around with something like that for days on end.

That job didn't require days on end. The data was already in the house, in classified. I could give him a report in two hours, and did. And the next

day he wrote: "One of Wake County's largest tax debtors routinely collects thousands of dollars in housing subsidies from the county."

The state deaths database contains a field describing the type of burial. One choice is cremation, which the database said, is beginning to boom in North Carolina. The computer work was an hour or so of child's play. Good reporting and good writing turned that into a business-front story. And, you might want to know, people who are cremated have, on average, three more years of education than people who are buried.

In building or rebuilding a CAR program at your paper, here are some rules I think you can take to the bank.

Arm everybody who can shoot. By that I mean, whatever kind of training program you decide on, open it to everyone. And, don't worry, you'll have room. Reporters who don't routinely use public records in their work -- and there are a lot of them -- can't see the point in acquiring a million record database.

Institutionalize your gains. Still, at most newspapers, there's a reporter in the newsroom, often only one, who can make a computer sing. His or her desk is piled high with data and documentation. They're up to their elbows in work for other reporters. And when they leave you, when they resign, your CAR program goes with them. This could, and should, be avoided by institutionalizing your gains. At *The N&O*, responsibility for every aspect of the CAR program has been assigned to our News Research Department. News Research maintains our data and data documentation. It loads data, and does analysis for reporters who can't do their own work. It runs the CAR Fellowship Program, teaching reporters. And, increasingly, it has begun handling the fights over access to data. My newspaper could lose a bunch of us, and keep on rolling.

Make up your mind to win. In the movie, "Places in the Heart," Sally Field told her hired hand that, somehow, the cotton was going to get picked. "I don't care if it kills me," she said. "I don't care if it kills you." With that kind of resolve, she could have built computer assisted reporting programs at our newspapers. So can we.

Getting computerized data is not very different from getting paper records -- some agencies readily obey the law and some don't, or try not to. If your reporters aren't running into trouble getting public records it's because they're not asking for them. Or because they're giving up without a fight.

The most important thing you can do to build a Watchdog Culture in your newsrooms is to go to war on behalf of your reporters -- your readers -- on public record issues. That doesn't always mean a lawsuit. We're in the publishing business, not the litigating business. But you must be willing to take on the bad guys -- that's what they are, bad guys -- in court.

[When McClatchy bought *The News & Observer*, Gregory Favre and some other executives from California came to *The N&O* to soothe our nerves, I guess, and introduce themselves. When he met with reporters I told him

The N&O had a long history of fighting for access to public records and asked what McClatchy did when it is refused access. He told us that sometimes McClatchy sues 'em just for the fun of it. I didn't take that literally, but I thought, we can live with these guys.]

I hope you resolve to become personally involved in record fights including, on occasion, picking up your phone and explaining things to some bureaucrat.

I recommend to you a policy we have at *The News & Observer* that I think every paper in the country ought to adopt. Here it is: When a reporter is denied a record that he or she thinks is public they must notify their supervisor. If the supervisor can't resolve the conflict satisfactorily, they must notify their supervisor. And so on up the ladder, until the problem lands on management mall. Good reporters like this policy because it brings management, which has far more muscle than we do, into the fray. Management ought to like it too, because you don't want reporters making policy at your newspapers. And, in effect, that's what they're doing when they allow the government to kick them around on a public record issue.

There are other things that need to be done.

I would hire a reporting coach long before I'd hire a writing coach. I would invest in my News Research Department. Researchers don't help you get more stories, they help you get better stories.

But if you don't answer the bell when the government denies your reporters access to public records, you will not have a watchdog culture in your newsrooms. Your resolve to force the government to release public records is the foundation on which everything else rests.

More in this series:

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- 6/4/2005 10:17:55 AM: [A Conversation with Seymour Hersh](#)
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