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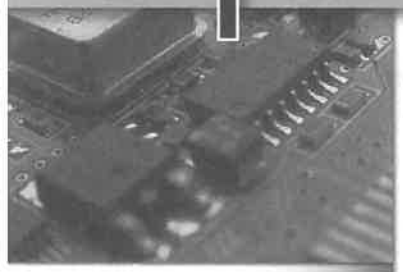


## FIRST VENTURE

# DATA REVEALS CITY WORKERS' BONUS PAY

By Matt Stiles
*Houston Chronicle*

I returned from last January's computer-assisted reporting Boot Camp in Columbia, Mo., with renewed vigor and eager to apply the new skills to my city hall beat.

I didn't have to wait long. The following month, a payroll-padding scandal broke, and the story dominated our local media for weeks.

The tale was perfect for a CAR rookie. Most of the details couldn't be told well without data on city salaries, budgets and bonuses, and typically talkative sources had clammed up because of an administrative investigation.

In short, I had little choice but to turn to data.

The payroll scandal involved four employees in the city council's administrative office who were accused of taking $143,000 in improper, incremental bonus payments over approximately one year. The employees were quickly suspended and later fired. Mayor Bill White and other city officials told reporters that bonus payments – especially in such large quantities – were highly unusual for city employees.

That wasn't exactly true, but it took CAR to show it. We compiled an exclusive story showing that one in six city employees was paid extra money – totaling about $4 million – since Mayor White took office in 2004. The

*continued on page 9*

## ENERGY AND UTILITIES

# PLUG INTO DATA TO INVESTIGATE UTILITIES

By Tom McGinty, *Newsday*

In July 2001, just a month after I was hired by *Newsday* and assigned to the utilities beat, the Long Island Power Authority, or LIPA, announced that it had to build new power plants across the island because increasing demand by residents and businesses would soon surpass the available supply.

Talking to experts about the issue, I learned that utilities in the Northeast typically have plenty of kilowatts to go around on all but the hottest days of the year when air conditioners cause huge spikes in demand. I was curious about changes in demand on LIPA's system over time, so I asked the utility for three years' worth of hourly readings in electronic format.

The chief spokesman looked at me like I was from Mars (the authority had never been asked for electronic data before), but he ultimately gave me a disk with 26,000 records in fixed-width ASCII format along with an utterly pointless 500-page printout of the same data.

My resulting story documented that demand on LIPA's system, which then had a maximum capacity of 4,600 megawatts, had exceeded 4,000 megawatts during just 16 hours in the previous year. The data allowed me to explain to readers that new power plants, always unpopular with residents, wouldn't be needed if the utility and its customers could find ways

*continued on page 8*

## In the spotlight:



**For more about energy and utilities see:**

- **Jan./Feb. issue of *The IRE Journal***

## TRACKING FEDERAL FUNDS

# INDIAN GRANTS, GAMING REVENUE BOTH ON THE RISE

By Ziva Branstetter, *Tulsa* (Okla.) *World*

Indian gaming has grown explosively during recent years. While giving few specific examples, tribes in Oklahoma claim they are putting that money to good use for programs to benefit their members. Before gaming, tribes relied almost solely on the federal government to pay for housing, medical care, education and other needs.

This led me to wonder about the relationship between tribes' gaming revenues and the funds they receive from the federal government. As tribes make more from gaming and become more self-sufficient, is there any reduction in federal funds for housing, medical care, government and the like? The answer is no, at least during the three years of data I examined.

While revenues from Indian gaming grew 30 percent nationally during fiscal years 2002 through 2004, federal grants to tribes grew 44 percent. By 2004, federal assistance to tribal organizations totaled about $7 billion; Indian gaming revenues topped $19 billion nationally. The pattern was the same in Oklahoma.

I found the answer using a database called the Federal Assistance Award Data System, or FAADS, maintained by the U.S. Census Bureau and available from the IRE and NICAR Database Library, *www.ire.org/datalibrary/databases/viewdatabase.php?dbaseindex=38*. Covering federal financial assistance for about 600 federal programs, FAADS includes

*continued on page 12*

## INSIDE NICAR

# UPLINK GOES ELECTRONIC

By David Herzog, *NICAR and Missouri School of Journalism*

This issue of *Uplink*, as you've no doubt noticed, ushers in a new look that we hope will be more appealing to our readers, who are a loyal, demanding and intelligent bunch.

While we're still mailing our print edition, subscribers now can download an electronic version of *Uplink* and take advantage of its interactive features. Just visit the NICAR Web site *(www.nicar.org)* and download the Adobe Acrobat PDF file for this issue. Inside, you'll find full-color graphics, hyperlinks that will take you to online resources and searchable pages.

We're also sprucing up the NICAR Web site to include even more sample data files and multimedia features relating to what's on the pages of *Uplink*. Features will change and develop as we make the transition to this new format.

We'd love to get your feedback on these changes. Please send me an e-mail and let me know what you think.

And, don't forget to send in your registration for the annual CAR Conference March 8-11 in Cleveland. It will be a great opportunity to learn the tricks of the trade or recharge your CAR battery.

Contact David Herzog by e-mail at *dherzog@nicar.org*.

# ABOUT OUR CONTRIBUTORS ...

**Ziva Branstetter,** projects editor of the *Tulsa World*, writes and edits investigative projects as part of a three-person investigative team. She has won state and national awards for coverage of nursing homes, the juvenile justice system, political corruption and work on open-records issues. Branstetter has previously worked for *The Tulsa Tribune* and the *Philadelphia Daily News*.

**Michelle Breidenbach** covers state government for the *Post-Standard* in Syracuse, N.Y. She wrote about her investigation of the New York Power Authority in the July/Aug. 2006 issue of *The IRE Journal*.

**Lee Davidson** is a special projects reporter for the *Deseret Morning News* of Salt Lake City. He has worked for that newspaper for 25 years, including 17 years as its correspondent in Washington, D.C. He attended Computer-Assisted Reporting Boot Camp in 2005.

**Alex Gary** has worked at the *Rockford* (Ill.) *Register Star* as regional reporter, online editor, assistant business editor and computer-assisted reporting director.

**Dan Keating** is database editor in *The Washington Post* library. He has written written about spending and corruption in local government of our nation's capital. He works mostly in SAS, along with ArcMap 9. He specialized in CAR after a decade of reporting at *The Berkshire* (Mass.) *Eagle* and *The Miami Herald*, where he reported from Key West for four years.

**Tom McGinty** is a staff writer on *Newsday's* investigative team. As *Newsday's* energy reporter, he was a leader on the team that covered the 2003 blackout that darkened large swaths of the United States and Canada. The coverage was a finalist for the 2004 Pulitzer Prize for breaking news. He previously served as the training director for IRE and NICAR.

**Matt Stiles** has been a City Hall reporter at the *Houston Chronicle* since May 2005. He previously covered federal law enforcement and courts at *The Dallas Morning News*. Stiles is an alumnus of the January 2006 Computer-Assisted Reporting Boot Camp.

# Bits and Bytes

## CAR conference deadlines

Make plans now for the 2007 CAR Conference to be held March 8-11 at the Renaissance Cleveland Hotel in downtown Cleveland.

Attendees must reserve a room by Friday, Feb. 9, to receive the discounted rate of $119 plus tax per night. The last day to register for the conference at the early-bird rate of $150 is Feb. 19. After that date, you must register on site for $175.

The conference will feature panels by the best in the business on every beat and topic including: Census, crime, education, local and state government, freedom of information, transportation and more. Hands-on classes will be offered featuring spreadsheets, database managers, mapping, statistics and other technology.

Registration, hotel information and preliminary program details can be found at *www.ire.org/training/cleveland07*.

### Truck data updated

Keep an eye on jack-knifing semis and other trucks on your local roads using three databases recently updated by NICAR.

The Truck Accidents database (*www.ire.org/datalibrary/databases/viewdatabase.php?dbaseindex=51*) shows commercial-carrier accidents as reported to local and state police, including details such as location, fatalities and vehicle identification numbers for trucks, buses or semis involved in wrecks.

The Truck Inspections database (*www.ire.org/datalibrary/databases/viewdatabase.php?dbaseindex=37*) contains information on the number of inspection violations for each truck; date, time and place of the inspection; whether the inspection occurred before or after a crash, as well as alcohol and drug detection information. Finally, the Truck Census database (*www.ire.org/datalibrary/databases/viewdatabase.php?dbaseindex=50*) contains the shipper's DOT census number, company address, number and type of vehicles in the company's fleet, cargo types and safety ratings.

### New archives for NICAR-L

A new archive interface makes it easier to search for tips and solutions posted on the NICAR-L Listserv, whether you're searching for a string function, a URL, author's name, or a phrase, such as "Excel date conversion."

The updated system organizes entries by thread, month, and author. The advanced search feature offers helpful filtering options, ranging from familiar boolean terms to wildcard searches and pattern-matching with regular expressions. IRE members can access the archives at *www.ire.org/membersonly/lists/NICAR-L*.

## ENERGY AND UTILITIES

# NY POWER AGENCY GIVES $1 MILLION TO LEADERS' PET PROJECTS, CHARITIES

By Michelle Breidenbach, *The* (Syracuse, N.Y.) *Post-Standard*

New Yorkers are familiar with the clean hydropower the state has been producing from the waterfalls on the St. Lawrence River for the past 50 years. But, is anyone paying attention to the agency that runs these dams?

The New York Power Authority is managed by political appointees who work in White Plains, a two-hour drive from Albany. The staff treats the NYPA like a private business, and employees call it "the company."

The NYPA is owned, however, by New York state taxpayers. Its meetings are public. Its records are subject to New York's Freedom of Information Law. Its board of directors is held to the same ethical standards as the governor or anyone who works for the highway or education departments.

Readers were surprised to learn from our two-part series that the NYPA's top executives make more money than the governor, fly even short distances on state-owned airplanes and donate about $1 million a year to their pet charities.

They used public money to buy chandeliers for a theater in the governor's hometown and to throw a ski weekend for an Albany congressman. NYPA executives refused to be interviewed in person about their day-to-day business. So, I relied on records.

To get started, I learned how New York's public power system fits into the national scene. The American Public Power Association (*www.appanet.org*) ranks public power utilities and put NYPA at No. 4 in generation. I researched a state-owned power company of similar size in South Carolina – Santee Cooper – for comparison.

I filed a public records request for Santee Cooper's salaries. They refused to send electronic records but provided a paper list with last names, positions and annual salaries for employees who make more than $50,000. The records showed that 4.4 percent of Santee Cooper's public power workers made more than $100,000 per year.

I also reviewed the salaries at the New York agencies whose budgets are controlled by the legislature and the governor. The electronic records are on file at the state comptroller's office. At these agencies, 3.8 percent of employees earn more than $100,000 per year. The governor makes $179,000 per year.

**Readers were surprised to learn from our two-part series that the NYPA's top executives make more money than the governor, fly even short distances on state-owned airplanes and donate about $1 million a year to their pet charities.**

Getting electronic records from the NYPA proved to be more difficult. The first response was: No, it is not state policy to distribute electronic records. So, I made an argument using opinions from the State Committee on Open Government, a branch of the Department of State. Some states, such as New York, have assigned someone within the government the task of interpreting open records and meetings laws. It is easy to search past opinions on the committee's Web site (*www.dos.state.ny.us/coog/coogwww.html*).

New York courts ruled more than 20 years ago that government agencies could not restrict access to data simply because it was held in computers and not on paper. Therefore, NYPA staff agreed to release electronic records. Payroll records came in a simple Microsoft Excel spreadsheet with names, titles and salaries for about 1,600 people. It showed 12.5 percent of employees make more than $100,000 per year. Fifteen NYPA employees make more than the governor.

Using the Find option in the Edit menu, easy word searches showed how many titles contained certain terms: there are 21 with "vice president," 53 with "director," 88 with "manager" and 15 with "public" or "government affairs." We used this information in a graphic.

A simple ranking of the list also teased out telling details: A janitor makes $85,488.

*continued on page 4*

## ENERGY AND UTILITIES

# NY POWER AGENCY

*continued from page 3*

That compares to less than $30,000 for janitors on the ordinary state payroll.

I asked the state comptroller's office and the Assembly Energy Committee what kind of documents they had received or requested in their audits and investigations of the NYPA. The comptroller's office provided procurement reports, which detailed the authority's contracts and their bidding processes. The Assembly Energy Committee had asked for airplane records, which it said it had not received.

NYPA filled my request for airplane records, which existed only on paper. I had received a tip that the governor had been overusing NYPA's airplanes, even though he had access to the state police fleet (the only other planes in state government). I split the records into piles to separate trips that included anyone who was not on my roster of NYPA employees. I made a spreadsheet of trips taken by Gov. George Pataki and his staff. In the end, this exercise proved only that the tip did not appear to be true.

The records did show, however, that NYPA executives were using the planes to travel from Albany to New York City and White Plains – trips other state employees make by train.

I wanted to know about the other ways the NYPA had strayed from its original mission. They provided an electronic copy of their vehicle report, which accounted for 798 electric-drive cars, vans and lawn mowers they had distributed in the name of green energy. The vehicles went to places such as Yankee Stadium.

**The authority's list of green energy projects showed new heating, air-conditioning and lights at Rochester City Hall, but not as many projects for Syracuse, a city that had not been represented on the NYPA's board of directors in a dozen years.**

The authority's list of green energy projects showed new heating, air conditioning and lights at Rochester City Hall but not as many projects for Syracuse, a city that had not been represented on the NYPA's board of directors in a dozen years.

I also asked for an accounting of what the NYPA called "community support projects." I called it philanthropy. It turned out that the agency set aside $1 million per year for executives and staff to hand out to the charities of their choice. This included buying tables at fundraising galas and donating to construction-fund drives for groups in which NYPA executives are active.

The agency's Excel spreadsheet showed the names of the recipients and the amount the NYPA donated. I looked up the grant recipients' IRS 990 forms at Guidestar (*www.guidestar.org*) and compared their board members to the names of the NYPA employees I had in my spreadsheet. There were a lot of hits. I also looked up the home addresses of NYPA board members and executives and looked for connections between their resumes and the groups on the philanthropy list.

I typed these connections into a new spreadsheet and started making phone calls. Several grant recipients said they got their money because someone from the NYPA served on their board.

Online county property records revealed that the NYPA's former president Eugene Zeltmann owned a home in Lake Placid in the Adirondack Mountains. The NYPA had contributed $55,000 to the Olympic Regional Development Authority, another state public authority. ORDA manages Whiteface Mountain in Lake Placid and the other venues used in the 1980 Winter Olympics. Like the NYPA, the authority is headquartered a few hours' drive from Albany and beyond the eyes of the legislature and the capitol press corps.

ORDA's spokesman said they used some of the power authority's money for an annual event called the Congressional Winter Challenge. It is a fantasy camp intended for Rep. John Sweeney to bring other members of Congress and their staff members to ski, play hockey and socialize. The hope is that they will return to Washington and send federal money to the mountains.

A records request at the development authority resulted in the kind of details that make a story about a winter fantasy camp come to life. They provided a copy of the invitation, the list of passengers who boarded a Washington airplane for Albany, an itinerary and team rosters. One participant was called simply "Mary S's best friend." Mary S. is the congressman's daughter.

The U.S. Olympic Committee, a nonprofit that rents space at ORDA's office, provided copies of opinions they had circulated from the House and Senate Ethics committees. Sweeney sought advice from the committees, which said that it is permissible for a member to take a privately sponsored trip in connection with his or her duties as an officeholder if the trip is for fact-finding and if the recreational activities were "merely incidental to the trip."

Only one other member of Congress attended the official fact-finding trip to Lake Placid. Other guests included at least a dozen Washington lobbyists, Sweeney family members, former Sweeney staffers and staff and relatives of NYPA executives. Sweeney lost re-election in November.

It turns out no one was paying attention ORDA either. After that story, tips poured in from the North Country, located way outside our circulation area. One tipster said the agency had steered contracts for the winter weekend to its own board members who own posh resorts in Lake Placid.

Another round of records requests proved that to be true. For the past two years, ORDA paid $96,378 to a resort owned by one board member and $112,040 to a resort owned by another board member.

***The series is available online at*** *www.syracuse.com/specialreports.* ***Click on "Power and Connections."***

Contact Michelle Breidenbach at *mbreidenbach@Syracuse.com*

## ENERGY AND UTILITIES

# DRILL FOR OIL DATA ON OPEC SITE

By Jeff Porter
IRE and NICAR

In "The Wizard of Oz," Scarecrow asked the critical question just after the Tin Woodsman was discovered by the Yellow Brick Road:

*Dorothy: "Did you say something?"*
*Tin Woodsman: "Oil can."*
*Dorothy: "He said, 'Oil can.'"*
*Scarecrow: "Oil can what?"*

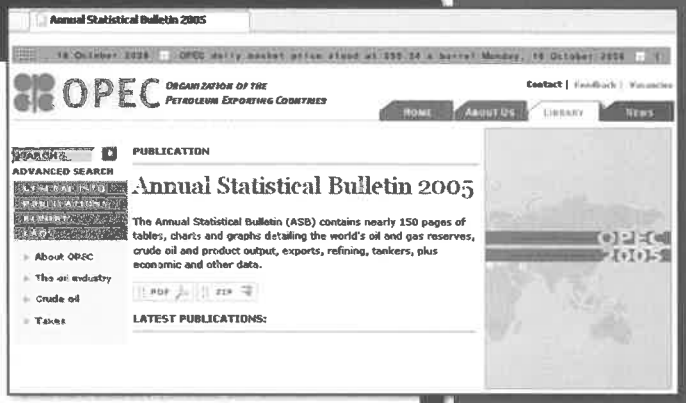
We know the answer to the Scarecrow's question: Oil can make or break politicians. Oil can drive the world's economy. Oil can make news time after time.

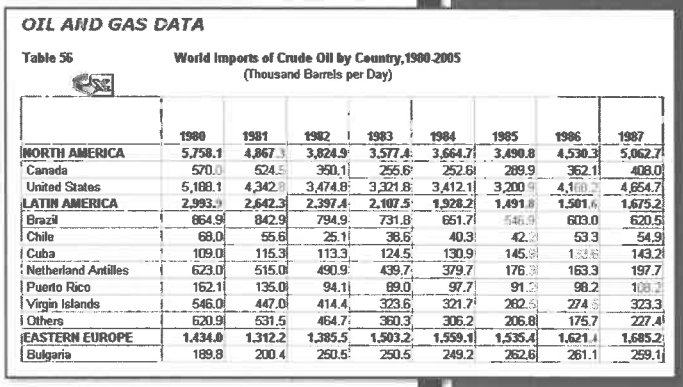
Oil can play into data, too – data that cover the entire world.

The influential organization of countries that produce oil, the Organization of the Petroleum Exporting Countries, or OPEC, has its own Web site and numerous tables, which are easily downloadable and already in Microsoft Excel format, that can provide numbers and perspective to stories about oil imports and exports, the transportation of petroleum products and, of course, pricing.

OPEC is made up of 11 oil producing and exporting countries: Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates and Venezuela. For those countries, oil is the main commodity and key to their economies.

The Web site, *www.opec.org*, offers charts, publications and background on OPEC itself and, under its Publications link, the Annual Statistical Bulletin. See *www.opec.org/library/Annual%20Statistical%20Bulletin/ASB2005.htm*.



OIL AND GAS DATA

Table 56 — World Imports of Crude Oil by Country, 1980-2005
(Thousand Barrels per Day)

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|---|---|---|---|---|---|---|---|
| NORTH AMERICA | 5,758.1 | 4,867.3 | 3,824.9 | 3,577.4 | 3,664.7 | 3,490.8 | 4,530.3 | 5,062.7 |
| Canada | 570.0 | 524.5 | 350.1 | 255.6 | 252.6 | 289.9 | 362.1 | 408.0 |
| United States | 5,188.1 | 4,342.8 | 3,474.8 | 3,321.8 | 3,412.1 | 3,200.9 | 4,168.3 | 4,654.7 |
| LATIN AMERICA | 2,993.9 | 2,642.3 | 2,397.4 | 2,107.5 | 1,928.2 | 1,491.8 | 1,501.6 | 1,675.2 |
| Brazil | 864.9 | 842.9 | 794.9 | 731.8 | 651.7 | 546.9 | 603.0 | 620.5 |
| Chile | 68.0 | 55.6 | 25.1 | 38.6 | 40.3 | 42.2 | 53.3 | 54.9 |
| Cuba | 109.0 | 115.3 | 113.3 | 124.5 | 130.9 | 145.8 | 153.8 | 143.2 |
| Netherland Antilles | 623.0 | 515.0 | 490.9 | 439.7 | 379.7 | 176.3 | 163.3 | 197.7 |
| Puerto Rico | 162.1 | 135.0 | 94.1 | 89.0 | 97.7 | 91.2 | 98.2 | 108.2 |
| Virgin Islands | 546.0 | 447.0 | 414.4 | 323.6 | 321.7 | 262.5 | 274.5 | 323.3 |
| Others | 620.9 | 531.5 | 464.7 | 360.3 | 306.2 | 206.8 | 175.7 | 227.4 |
| EASTERN EUROPE | 1,434.0 | 1,312.2 | 1,385.5 | 1,503.2 | 1,559.1 | 1,535.4 | 1,621.4 | 1,685.2 |
| Bulgaria | 189.8 | 200.4 | 250.5 | 250.5 | 249.2 | 262.6 | 261.1 | 259.1 |

From there, you can check the table of contents and download tables on a variety of topics: basic indicators, oil and gas production, export and import, transportation by tanker or pipeline, oil prices, major oil companies and global flows of crude and refined oil. For example, click on the link for Oil and Gas Data, then choose Table 56: World Imports of Crude Oil by Country, 1980-2005:

With a single click on the Excel icon, you can download the table and make additional comparisons or calculations.

This table is just one example of the rich amount of year-by-year data available from the OPEC site. A quick comparison by region with a calculation of percentage change can show big increases in oil consumption from 1960 to 2005 in Asia and the Mideast, which helps drive the price of oil. See the category called Summary Tables and Basic Indicators.

If you want to use this material in a serious way, you should read the General Notes section of the Annual Statistical Bulletin. There you can find definitions of terms such as "Consumption of refined products," a list of countries included in each region and explanations of abbreviations (for example, "b/d" means barrels per day). Also, you can compare some of these statistics with other data sources:

World Trade Organization – *www.wto.int*

International Trade Administration – *www.trade.gov*

Trade Stats Express – *http://tse.export.gov*

Contact NICAR Database Library Director Jeff Porter at *jeff@ire.org*.

**The influential organization of countries that produce oil, the Organization of the Petroleum Exporting Countries, or OPEC, has its own Web site and numerous tables, which are easily downloadable and already in Excel format, that can provide numbers and perspective to stories about oil imports and exports, the transportation of petroleum products and, of course, pricing.**

## Summary Table and Basic Indicators

T22 — WORLD CONSUMPTION OF REFINED PRODUCTS BY REGION, 1960-2005
(1000 b/d)

| | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| North America | 10,095.0 | 10,257.9 | 10,614.0 | 11,011.7 | 11,326.3 | 11,839.1 | 12,364.7 | 20,751.6 | 20,957.6 | 21,100.2 | 21,161.0 | 21,625.0 | 22,378.8 | 22,383.7 |
| Latin America | 1,424.7 | 1,510.5 | 1,602.8 | 1,569.8 | 1,697.2 | 1,781.0 | 1,914.9 | 6,410.0 | 6,508.6 | 6,527.5 | 6,385.9 | 6,292.4 | 6,493.6 | 6,668.1 |
| Eastern Europe | 2,617.4 | 2,855.0 | 3,207.9 | 3,515.6 | 3,791.5 | 4,076.4 | 4,366.3 | 4,936.9 | 4,644.7 | 4,843.7 | 4,635.4 | 4,688.5 | 4,772.0 | 4,818.2 |
| Western Europe | 3,690.9 | 4,149.3 | 4,827.0 | 5,590.0 | 6,409.6 | 7,175.7 | 8,018.5 | 14,664.0 | 14,483.7 | 14,656.6 | 14,504.9 | 14,612.8 | 14,724.2 | 14,669.5 |
| Middle East | 231.5 | 247.7 | 265.7 | 266.3 | 307.4 | 341.5 | 376.7 | 3,701.9 | 3,844.3 | 3,928.1 | 4,093.2 | 4,288.5 | 4,562.0 | 4,761.8 |
| Africa | 323.3 | 339.9 | 347.5 | 390.6 | 399.7 | 403.3 | 421.0 | 1,677.8 | 1,743.2 | 1,878.2 | 1,933.1 | 1,980.9 | 2,082.0 | 2,164.3 |
| Asia and Pacific | 1,453.1 | 1,714.5 | 1,910.5 | 2,224.7 | 2,568.7 | 2,950.6 | 3,359.5 | 18,547.7 | 19,205.9 | 19,260.8 | 19,937.6 | 20,493.5 | 21,796.9 | 22,070.7 |
| Total world | 19,775.9 | 21,074.7 | 22,775.4 | 24,568.7 | 26,502.4 | 28,567.6 | 30,821.6 | 70,690.0 | 71,387.9 | 72,195.2 | 72,651.1 | 73,981.6 | 76,809.6 | 77,526.3 |
| OPEC | 337.7 | 366.9 | 362.7 | 384.7 | 431.5 | 492.6 | 514.8 | 4,779.4 | 4,984.9 | 5,182.4 | 5,365.6 | 5,561.2 | 5,925.4 | 6,152.4 |
| OPEC percentage | 1.7 | 1.7 | 1.6 | 1.6 | 1.6 | 1.7 | 1.7 | 6.8 | 7.0 | 7.2 | 7.4 | 7.5 | 7.7 | 7.9 |

## ENERGY AND UTILITIES

# GAS PUMP INSPECTIONS MAKE SPEEDY CAR STORY

By Lee Davidson
*The* (Salt Lake City) *Deseret Morning News*

If you're looking for a quick, fairly easy investigation that will grab the interest of readers, then checking out the accuracy of gasoline pumps is the one for you.

The project, which took me only about a week to do (and I spent most of that negotiating and waiting for a copy of a state database) came about after a string of stories about how gasoline prices had dropped significantly nearly everywhere except Utah. While the governor launched another investigation of the high prices, we decided to look at whether customers really receive what they pay for at the pump.

We began our investigation with a quick search on the state's Web site, *www.utah.gov*, which showed us that the Division of Weights and Measures in the Department of Agriculture and Food had the data we needed. The Web site mentioned that the division tests "all gasoline pumps for accurate measurement." (I also could have found that by simply looking more closely on the inspection stickers that the division places on each gasoline pump in the state.)

The state provided me a full copy of its Microsoft Access database on a CD, and it already had some state-designed queries saved on it, such as "total pumps failed with location and count," which made my life far too easy.

A major drawback with the Utah database is that it did not include whether a "volume failure" occurred because a pump gave too much gasoline or too little. However, the inspection supervisor and other inspectors agreed that nearly half of the time the failed pumps gave too much, and half the time they gave too little.

I had most of the numbers and information that I needed from the database in about an hour. Some simple division of the number of pumps that failed (1,898) by the total pumps inspected (44,796) gave the overall failure rate (4.2 percent). Division of the number of stations with at least one failed pump (92) by the number of total stations (1,140) gave the failure rate for stations (8 percent).

I did some sorting by station and inspection date to discover that many stations had all their pumps fail repeatedly in up to five inspections over two years. Sorting by city, I also found that some of the state's biggest cities did not have any failing pumps, while some smaller cities had numerous failures.

Finally, sorting and counting by date showed that virtually all known stations had been inspected in 2005, but inspections appeared to be way down in 2006.

Some of our findings:

- Customers in Utah have a 1-in-25 chance of buying gasoline at a pump that fails to give amounts within legal ranges.
- About half of the pumps that fail give too little gasoline, and half give too much. So, motorists have about a 1-in-50 chance of getting more than they paid for, and 1-in-50 odds of getting less.
- About 8 percent of gas stations in Utah had at least one pump that failed from January 2005 through August 2006. They were scattered among 92 stations in 43 communities.
- Some stations had all of their pumps fail repeatedly in multiple inspections. However, the state issued no fines and closed no pumps or stations at that time.
- The state inspected all of the state's gasoline stations in 2005 but now has decided to inspect only about one-third of them each year. It has only eight inspectors, and they do a variety of other work, including checking scales and price scanners at stores statewide. The state said that other work had been suffering.

Once I had my information from the database, I interviewed state officials and industry representatives. A photographer and I went with a state inspector to a local gas station to see and describe how inspections occur.

We also found some interesting tidbits along the way. The inspector told us that pumps always give a little bit more gasoline when it is pumped quickly instead of slowly, so now I am sure that all of our readers pump gas as quickly as possible.

State officials also say pumps are designed so that as they wear out they should err in favor of consumers. I also suspect that readers started looking for older pumps.

We put a list online of all stations that had at least one pump fail. It showed the dates of inspections and how many pumps failed each time. We arranged that by city to make it easier for readers to identify nearby stations.

Contact Lee Davidson at
*lee@desnews.com*


Michael Brandy | Deseret Morning News

**This CAR story took just one week, including time shadowing state inspectors around to local service stations.**

# ENERGY AND UTILITIES

## RESOURCES FROM IRE AND NICAR FOR REPORTING ON ENERGY AND UTILITIES

You can find more tips for covering energy and utility in databases, stories, tips and publications available from IRE and NICAR

Don't forget that IRE maintains a Web page with resources for covering blackouts and updates the information when power outages make headlines. The listings include online resources from a variety of sources. See *www.ire.org/inthenews_archive/blackout.html*.

### Database Library

The National Inventory of Dams

(*www.ire.org/datalibrary/databases/viewdatabase.php?dbaseindex=44*)

includes dam maintenance records, structure, composition and owner, including power-generating dams. This update includes records for almost 80,000 dams. This update includes data through 2002. (In the past, the U.S. Army Corps of Engineers updated the database biannually, but the two-year reporting system is currently delayed.)

Federal Assistance Award Data System

Follow federal funding for state and local energy and water programs with FAADS (*www.ire.org/datalibrary/databases/viewdatabase.php?dbaseindex=38*), compiled by the General Service Administration. It shows major categories of federal spending, including grants, loans and direct payments. Entries include references to program codes used in the Catalog of Federal Domestic Assistance (*http://12.46.245.173/cfda/cfda.html*). The data is not a perfect picture of the government's payouts, but it does provide an overview of spending programs and money flowing to the state, county or city level.

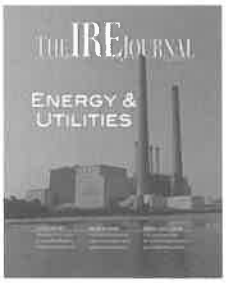
Check the Database Library's federal contracts collection (*http://www.ire.org/datalibrary/databases/viewdatabase.php?dbaseindex=17*) to find information on companies involved in energy-related projects or provision of services to the government. IRE and NICAR's data covers 1979-2006, plus portions of the current fiscal year 2007. It includes the company, contact information, the agency, type of work performed and where the work was performed.

### Resource Center

- "The Investigative Reporter's Handbook" covers "Investigating Energy and Communcations Utilities" in Chapter 17.
- *The IRE Journal* (July/Aug. 2004) covered energy issues, including how to respond to power blackouts.
- Nigel Jaquiss of Portland's *Willamette Week* provides a list of tips for journalists who are covering utility companies and explains how to find sources and appropriate documents. He also gives information on potential conflicts between consumers and shareholders. *Tipsheet No. 2706*
- Ken Ward, *The Charleston* (W. Va.) *Gazette*, lists and discusses 10 sources of data for journalists investigating water and air quality, pollution, energy usage and other environmental issues. *Tipsheet No. 1369*
- Ron Nixon, IRE and NICAR, and Tom McGinty, *Newsday*, compiled a list of Web sites helpful in covering the electric utility industry for the annual computer-assisted reporting conference in 2002. *Tipsheet No. 1505*
- Arthur O'Donnell, California Energy Markets, provides a list of Web sites about energy information and electric and gas business news. This is from the 2002 annual IRE conference. *Tipsheet 1620*
- Mike Taugher, *Contra Costa Times*, compiled a list of Web sites about energy, environment related issues and companies involved with energy for a presentation at the 2002 annual IRE conference. *Tipsheet No. 1631*

To order databases, contact the Database Library at 573-884-7332 or 573-884-7711. For a complete listing of the databases available from NICAR, visit *www.ire.org/datalibrary/databases/databases.php*.

For copies of stories or tipsheets, contact the Resource Center at 573-882-3364 or rescntr@ire.org. IRE members can download free PDF copies of most tipsheets at *www.ire.org/resourcecenter*.




**Read more about Energy and Utilities in *The IRE Journal* (Jan./Feb. 2006)**
IRE Members can view archived issues at *www.ire.org/membersonly/resourcecenter/irejournal*

# ENERGY AND UTILITIES

## UTILITIES

*continued from page 1*

to cut electric usage during those few peak hours.

Throughout the ensuing years on the beat, I would turn to databases and public documents from countless sources to fact-check industry officials and investigate a wide range of issues, from fuel costs and pollution to utility salaries and the impact of deregulation on the energy industry.

In fact, few beats have more data and public documents readily available to the reporter who knows where to find them and – this is the hard part – how to decipher the incredibly arcane terminology of the industry.

### Deregulation tangle

Untangling the inner workings of electric utilities got that much harder after the Federal Energy Regulatory Commission prodded many states to deregulate their utilities. Deregulation involved breaking up the electric monopolies that historically owned every piece of the systems – the power plants, the high-voltage transmission lines that move the juice over long distances and the low-voltage distribution circuits that feed kilowatts to users.

In states where deregulation was enacted, including New York, utilities were typically forced to sell their power plants to independent firms and open their wires to competitors who would purchase bulk power on newly established exchanges and try to sell it to utilities' customers. Proponents of deregulation said the newly competitive landscape would lead to efficiencies and lower rates that the stodgy monopolies of yesterday could never match. But as *New York Times* reporter David Cay Johnston noted in a recent series of articles, that promise has not been realized.

"A decade after competition was introduced in their industries, long-distance phone rates had fallen by half, air fares by more than a fourth and trucking rates by a fourth," Johnston wrote in October. "But, a decade after the federal government opened the business of generating electricity to competition, the market has produced no such decline."

This is fertile ground for utility beat writers, and all the information they need to piece together what has happened in their states is readily available.

### Energy Data

The first stop should be the U.S. Department of Energy's Energy Information Administration, which maintains dozens of databases with thousands of measurements of every facet of the electric industry. For example, the annual database created from form EIA-826 contains monthly sales figures for most utilities in the nation. As of this writing, it is available from 1990 through July 2006 in dBASE format, which is easily imported into Access or Excel.

Using that data, a reporter could quickly piece together the cost-per-kilowatt trend for the local utility over a decade and also compare it to other trends for other utilities.

Other EIA databases include one that tracks utilities' conservation efforts (known as "demand-side management" in industry parlance) and another that documents the cost and quality of fuel burned in certain power plants.

I used the latter database in March to examine whether LIPA's soaring rates really could be blamed on the cost of power plant fuel, as the utility claimed. My analysis found that, "In 1999, the main KeySpan Corp. power plants under contract to LIPA generated 11.6 million megawatt hours of electricity, about 56 percent of LIPA's total energy sales, and racked up a fuel bill of $327 million, according to FERC data. Last year, the total from those same plants dropped to 10.7 million megawatt hours, or 49 percent of LIPA's total, but their fuel bill was $847 million – more than two and a half times as high as in 1999."

Of course, databases alone won't be enough to fully investigate your local utility or the impact of deregulation, but there is also a wealth of documents available at the state and federal levels. LIPA, the main utility I covered, is an entity of the state and therefore not subject to oversight by federal or state regulators. That means the authority doesn't file many of the reports required of investor-owned utilities, but it also means that LIPA is subject to the state's Freedom of Information Law.

**Untangling the inner workings of electric utilities got that much harder after the Federal Energy Regulatory Commission prodded many states to deregulate their utilities.**

I made liberal use of FOI requests, and I obtained payroll data, contracts and other documents. In 2003, after learning that LIPA regularly conducts surveys of its customers, I filed a FOI request for copies of the results. I can still see the funny look LIPA's chief spokesman had on his face as he reluctantly slid four thick binders to me across a conference room table. Their remarkable contents led to a cover story headlined, "Power and Politics; LIPA's polls focused on its performance – and politicians."

The story noted that, "The Long Island Power Authority, a state-run utility whose board is controlled by appointees of Gov. George Pataki, commissioned opinion polls that included questions about the popularity of the governor, Sen. Hillary Rodham Clinton and more than a dozen other elected officials and politicians." In all, a third of the questions were political in nature, which critics said constituted a gross misuse of ratepayers' money.

### Track utility filings

Although FOI laws can help reporters gather information about government-run utilities, they're of no use to those who are writing about investor-owned utilities. Instead, they must turn to the numerous regulatory filings that utilities must submit even in the wake of deregulation.

For example, if a utility wants to raise its rates, it typically must file what is known as a "rate case" with the state commission that regulates utilities. The utility seeking the increase must file a host of supporting documents and submit to questions and document requests from interested parties.

When it comes to rate cases in New York, my first stop for insights and tips is Gerald Norlander, executive director of the Public Utility Law Project, or PULP, an organization whose sole purpose is protecting the rights of low-income

*continued on page 9*

# ENERGY AND UTILITIES

## UTILITIES

*continued from page 8*

and rural utility customers.

Norlander said a rate case is "like a little window into large corporations that we don't normally see. They have to leave tracks, and they have to come in and justify what they're doing. We get to ask questions."

Reporters looking for similar experts in their states can consult the Web site of the National Association of State Utility Advocates.

Another rich source of documents is FERC's docket-search Web site. If, for example, a reporter wanted to research the deregulation of a local utility, a process that must be approved by FERC, he or she could probably find a docket with dozens, or even hundreds, of documents submitted by all of the interested parties.

### Monitoring the system

Another source of information on utilities are the so-called "system operators" that operate the energy markets created by deregulation and oversee the reliable flow of electricity on their territories' high-voltage power lines. The New York Independent System Operator maintains scores of public databases and documents everything from utility-level power demand to bids and sales on the electric market.The system operator's Web site also allows access to meeting materials of the various committees that oversee the system. Earlier this year, I used several presentations from one of those committees to document a flaw in New York City's energy market that allowed three large generating firms to keep prices artificially high.

Pollution, obviously, is another important issue to examine on the utility beat, and there is no shortage of data to mine for stories on this topic. In 2002, I analyzed state and federal emissions databases, including the Environmental Protection Agency's National-Scale Air Toxics Assessment for a story about local power plants' impact on the air Long Islanders breathe. The data showed that the much-maligned power plants lagged far behind cars and other sources when it came to creating smog. They also contributed less than 1 percent of the deadly substances tracked by the EPA's toxics assessment.

As one official from the New York Department of Environmental Conservation said, "I would say [power plants are] part of the problem, but they're not as large a part of the problem as people perceive them to be, based on the numbers."

On Long Island, where power plants burn oil or natural gas, the story was that power plants aren't as bad as everyone thinks. However, in the parts of the country where coal is used to produce most of the electricity, the findings could be quite a bit different.

**Contact Tom McGinty at**
*mcgintyt@tribune.com*

### LINKS

- Energy Information Administration databases: *www.eia.doe.gov/cneaf/electricity/page/data.html*
- FERC Dockets: *http://elibrary.ferc.gov/idmws/search/fercadvsearch.asp*
- National Association of State Utility Advocates: *www.nasuca.org*
- EPA National-Scale Air Toxics Assessment: *www.epa.gov/ttn/atw/natamain*
- New York Independent System Operator: *www.nyiso.org/public/index.jsp*

# FIRST VENTURE

## BONUS PAY

*continued from page 1*

results came as a shock, but getting to them wasn't easy.

I already obtained an updated database with city employees' base salaries, but it didn't reflect bonuses. Thanks to new records, I learned that City Council members regularly doled out bonuses to their staffers. So, I wondered, how many of the 21,000 other city employees got bonuses?

By that time, I had plenty of paper documents. They generated front-page stories on what the mayor and other city officials wouldn't acknowledge for weeks: that the four implicated employees apparently forged authorization memos, gave themselves promotions and spent so much that the budget in their small office – known as the Office of Mayor Pro Tem – couldn't have lasted the full fiscal year.

Remembering Boot Camp, I set aside my fears and started asking for electronic payroll data – lots of it, in fact. I enlisted the help of colleague Alexis Grant. We believed working as partners would reduce the chance of mistakes, and the partnership would allow Grant to get CAR experience. Using what I learned at Boot Camp and my previously flirtations with CAR tools, I handled most of the data requests and analysis. Grant did many of the interviews and double-checked my work.

MODE: S SCREEN: QPSM USERID: E095 02/21/06 04:39:38 PM

EMPLOYEE PAY SUMMARY INQUIRY

EMPLOYEE ID: 104 22 3 NAME: HERNANDEZ, ROSITA

SELECTION YEARS: 05 TO 05 TYPE: P PAY PAY CATEGORY:

| YR | PAY CATEGORY | | ANNUAL AMT | QUARTER 1 | QUARTER 2 | QUARTER 3 | QUARTER 4 |
|---|---|---|---|---|---|---|---|
| | TOTAL | | 126,104.12 | 20,159.72 | 28,927.72 | 34,008.34 | 43,008.34 |
| 05 | BASE | BASE PAY | 72,741.10 | 16,455.00 | 17,492.80 | 18,284.50 | 20,508.80 |
| 05 | BILNG | BILING PAY | 900.12 | 207.72 | 207.72 | 242.34 | 242.34 |
| 05 | DFAMP | FUNERAL PAY | 867.10 | 377.00 | 0.00 | 490.10 | 0.00 |
| 05 | FHOLP | FLOATING HOL | 301.60 | 0.00 | 0.00 | 0.00 | 301.60 |
| 05 | LONG | LONGEVITY | 552.00 | 120.00 | 124.00 | 154.00 | 154.00 |
| 05 | PRIN | PERFORMANCE | 47,500.00 | 3,000.00 | 10,500.00 | 12,500.00 | 21,500.00 |
| 05 | VACAP | VACATION PAY | 3,016.00 | 0.00 | 603.20 | 2,262.00 | 150.80 |
| 05 | WELLP | WELL LVE PAY | 226.20 | 0.00 | 0.00 | 75.40 | 150.80 |

B--Y1103 END OF INQUIRY

A key document was the city's Employee Pay Summary Inquiry, a computer printout of what is essentially a big W2 form. [see above] It showed an employee's various types of pay – base salary, longevity and vacation – in both quarterly and annual totals. It also had

*continued on page 10*

## FIRST VENTURE

# BONUS PAY

*continued from page 9*

categories for performance and productivity incentives. The latter two categories were coded as "PRIN" and "PRIN2" in the city's payroll mainframe.

I first received Employee Pay Summary Inquiry forms for anyone who received PRIN or PRIN2 payments during the same period the four implicated employees took bonuses. The paper documents showed that numerous staffers – about 25 percent – got bonuses.

With a little negotiation, I got the city's finance officials to release a Microsoft Excel spreadsheet with aggregate citywide totals for the various pay categories. But, it didn't contain figures for PRIN and PRIN2, even though I knew from the paper records that employees received them.

After more background reporting, I learned that city payroll maintained that specific data separately – or so officials said – so I sent another request for an electronic list of every such payment during Mayor White's two-year tenure.

The raw data [see top] was in decent shape. I took simple steps to clean it up by removing color coding, capitalizing text and deleting formulas that summed annual payments for each employee in a separate field. I also had to request department codes to complete a spreadsheet with roughly 10,700 records.

The file had the following fields: employee ID number, first name, last name, department, approval date, payment date and amount. I then used Microsoft Access to perform simple, rookie-proof queries on the data. One of my first tasks was looking at specific employees [see right].

Remembering to insist on a unique identifier for each record was extremely helpful. I was able to join the table of bonuses with other directory databases I had obtained before the scandal. This matched the bonus recipients with their addresses, job titles and phone numbers.

At least 3,500 employees received bonuses, or "performance incentives" in city parlance. The money came in thousands of bi-weekly payments, ranging from 20 cents to $6,800. The average was $165.

The data showed that one police mechanic received more than $40,000 per year in bonuses during both 2004 and 2005, surpassing his $33,000 base salary. His colleagues and supervisors were paid similarly. Parking enforcement officers got extra money. So did operators at the city's telephone helpline. The same was true for workers at city airports, libraries and health offices, among others.

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 2 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 03-Jan-05 | 04-Feb-05 |
| 3 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 03-Jan-05 | 04-Feb-05 |
| 4 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 04-Jan-05 | 04-Feb-05 |
| 5 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 04-Jan-05 | 04-Feb-05 |
| 6 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 05-Jan-05 | 04-Feb-05 |
| 7 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 05-Jan-05 | 04-Feb-05 |
| 8 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 06-Jan-05 | 04-Feb-05 |
| 9 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 06-Jan-05 | 04-Feb-05 |
| 10 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 07-Jan-05 | 04-Feb-05 |
| 11 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 10-Jan-05 | 04-Feb-05 |
| 12 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 10-Jan-05 | 04-Feb-05 |
| 13 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 11-Jan-05 | 04-Feb-05 |
| 14 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 11-Jan-05 | 04-Feb-05 |
| 15 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 12-Jan-05 | 04-Feb-05 |
| 16 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 12-Jan-05 | 04-Feb-05 |
| 17 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 13-Jan-05 | 04-Feb-05 |
| 18 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 13-Jan-05 | 04-Feb-05 |
| 19 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 14-Jan-05 | 04-Feb-05 |
| 20 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 17-Jan-05 | 18-Feb-05 |
| 21 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 18-Jan-05 | 18-Feb-05 |
| 22 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 18-Jan-05 | 18-Feb-05 |
| 23 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 19-Jan-05 | 18-Feb-05 |
| 24 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 19-Jan-05 | 18-Feb-05 |
| 25 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 21-Jan-05 | 18-Feb-05 |
| 26 | 085769 | GARCIA | JOE | HPD | MECHANIC III | PRIN2 | 24-Jan-05 | 18-Feb-05 |

I grouped, sorted and calculated – and then double- and triple-checked my SQL language – until I trusted the trends that became apparent.

I sent a one-page memo with basic findings to the city's finance director to ensure our calculations weren't somehow skewed, and we started interviews.

City officials said the payments were authorized under reviewed plans and approved by supervisors of the various departments, which set them apart from the four Mayor Pro Tem employees.

Still, the sheer numbers were a surprise to many readers and some politicians. And, of course, top city officials didn't mention the scale of the citywide bonus payments until we asked.

Much of our March 24 story focused on the police mechanics and their support staff because they received the largest payments. We obtained a roster of all fleet operations personnel, including employee numbers, so we could separate the mechanics, support staff and supervisors from the citywide data. Their various titles made them tough to identify otherwise.

Department officials explained that the mechanics were paid based on standardized times for typical jobs. If they completed a brake job that is supposed to take an hour in half the time, they still receive 60 minutes' pay.

Some mechanics mastered this system. They quickly finished jobs and received high annual totals as a result, the officials explained. Their support staff – parts clerks, for example – also got a cut. A subsequent story later detailed the payments to supervisors who oversee the fleet bonus plan, which lead Houston's independently elected controller, Annise Parker, to express concern.

Local prosecutors have also launched a citywide inquiry to ensure there wasn't wrongdoing.

The CAR work for the bonus story wasn't difficult, even for a pair of rookies, but without the lessons of Boot Camp, I probably wouldn't have had the confidence to make it happen.

Instead, our readers would have had to rely on city officials and investigators to reveal the citywide bonuses on their own timetable and terms – which might never have happened.

**Contact Matt Stiles at**
*matt.stiles@chron.com*

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | City of Houston | | | | | | | | | | | |
| 2 | PRIN2 Payments | | | | | | | | | | | |
| 3 | 2003 Event Dates | | | | | | | | | | | |
| 4 | | | | | | | | | | | | |
| 5 | Dept | Employ Status | Emp ID | Employee Name | | | Title Description | Pay Type | Event Date | Check Date | Hrs/Min | Pay Amount |
| 6 | 010 | A | 050906 | STEPHENS | GAIL | V | SR INVENTORY MANAGEMENT CLERK | PRIN2 | 12/08/03 | 01/09/04 | 8.00 | 79.28 |
| 7 | 010 | A | 050906 | STEPHENS | GAIL | V | SR INVENTORY MANAGEMENT CLERK | PRIN2 | 12/09/03 | 01/09/04 | 8.00 | 79.28 |
| 8 | 010 | A | 050906 | STEPHENS | GAIL | V | SR INVENTORY MANAGEMENT CLERK | PRIN2 | 12/10/03 | 01/09/04 | 8.00 | 79.28 |
| 9 | 010 | A | 050906 | STEPHENS | GAIL | V | SR INVENTORY MANAGEMENT CLERK | PRIN2 | 12/11/03 | 01/09/04 | 0.12 | 1.98 |
| 10 | 010 | A | 050906 | STEPHENS | GAIL | V | SR INVENTORY MANAGEMENT CLERK | PRIN2 | 12/15/03 | 01/09/04 | 8.00 | 79.28 |
| 11 | 010 | A | 050906 | STEPHENS | GAIL | V | SR INVENTORY MANAGEMENT CLERK | PRIN2 | 12/16/03 | 01/09/04 | 8.00 | 79.28 |
| 12 | 010 | A | 050906 | STEPHENS | GAIL | V | SR INVENTORY MANAGEMENT CLERK | PRIN2 | 12/17/03 | 01/09/04 | 7.12 | 71.36 |
| 13 | 010 | A | 050906 | STEPHENS | GAIL | V | SR INVENTORY MANAGEMENT CLERK | PRIN2 | 12/22/03 | 01/23/04 | 8.00 | 79.28 |
| 14 | 010 | A | 050906 | STEPHENS | GAIL | V | SR INVENTORY MANAGEMENT CLERK | PRIN2 | 12/23/03 | 01/23/04 | 8.00 | 79.28 |
| 15 | 010 | A | 050906 | STEPHENS | GAIL | V | SR INVENTORY MANAGEMENT CLERK | PRIN2 | 12/24/03 | 01/23/04 | 0.12 | 1.98 |
| 16 | 010 | A | 050906 | STEPHENS | GAIL | V | SR INVENTORY MANAGEMENT CLERK | PRIN2 | 12/29/03 | 01/23/04 | 8.00 | 79.28 |
| 17 | 010 | A | 050906 | STEPHENS | GAIL | V | SR INVENTORY MANAGEMENT CLERK | PRIN2 | 12/30/03 | 01/23/04 | 8.00 | 79.28 |


## PRELIMINARY SPEAKERS LIST

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The Center for Public Integrity
**Robert Benincasa,** Gannett News Service
**Megan Clarke,**
*The Atlanta Journal-Constitution*
**Sarah Cohen,** *The Washington Post*
**Chase Davis,** *Houston Chronicle*
**Dave Davis,** *The* (Cleveland) *Plain Dealer*
**Steve Doig,** Arizona State University
**David Donald,** IRE and NICAR
**Jaimi Dowdell,** *St. Louis Post-Dispatch*
**Carolyn Edds,** *St. Petersburg* (Fla.) *Times*
**Alletta Emeno,** *The Philadelphia Inquirer*
**Matthew Ericson,** *The New York Times*
**Robert Gebeloff,**
*The* (Newark, N.J.) *Star-Ledger*
**Jason Grotto,** *The Miami Herald*
**Doug Haddix,** *The Columbus Dispatch*
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Missouri School of Journalism
**Brant Houston,** IRE and NICAR
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**Adam Clayton Powell III,**
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**Maurice Tamman,**
*Sarasota* (Fla.) *Herald-Tribune*
**Tom Torok,** *The New York Times*
**Jodi Upton,** *USA Today*
**Matthew Waite,** *St. Petersburg* (Fla.) *Times*
**MaryJo Webster,**
*Saint Paul* (Minn.) *Pioneer Press*
**James Wilkerson,** *The Des Moines Register*
**Derek Willis,** *The Washington Post*

## PRELIMINARY PANEL LIST

Watch Change link to *www.ire.org/training/cleveland07* for updates.
(Please note that titles and panel topics may be changed in the final program schedule.)

- Applying social network analysis to community investigations
- Applying social science methods to CAR
- Avoiding errors in CAR
- Building the newsroom intranet
- CAR and basic math
- CAR and natural disasters
- CAR and subsidies
- CAR and the American Community Survey
- CAR goes international
- City Hall and CAR
- Covering elderly issues with data
- Covering transportation safety with CAR
- Doing CAR in a small newsroom
- Editing in CAR
- Editing the CAR story: Making it sing and avoiding wrong notes
- Exposing ethnic injustices
- Finding data on the Net
- FOI and CAR: Successful strategies
- Getting touchdowns with CAR in sports
- Homeland security and CAR
- Housing scams and CAR
- Introduction to statistics
- Latest tools to collect information: RSS and more
- Making CAR work for broadcast
- Medicine and CAR
- Military data for investigations
- Narrative writing in CAR investigations
- No fear: An overview of CAR and how to get started
- Online maps for enterprise stories
- Real estate investigations in CAR
- Scraping data from government Web sites
- The latest in CAR and politics
- The latest in visualizing data: Maps, webcams, and social network analysis
- The latest investigations in CAR and the environment
- Thinking in CAR: Approaches, methodologies and blending it with traditional reporting
- Transportation stories with CAR
- Understanding crime statistics and CAR
- Using CAR to grade your school system
- Using federal contract data for investigations
- Using wikis and blogs in investigations
- Worker safety and CAR

# GAMING

continued from page 1

major payments to state and local governments, nonprofit agencies (including American Indian tribes), individuals and private organizations. It covers grants, loans, cooperative agreements, subsidies and other types of assistance. Although FAADS doesn't include every dime the government pays out, it comes very close to giving the big picture I was seeking.

The data, available as far back as 1983, cover the whole nation. Each year of FAADS data comes in a separate file. Also, before 2004, NICAR split the national data into two files because of the size of the database, so I had to combine those pieces first.

FAADS should be a fairly easy database for beginners. You do need to spend some time reading the documentation before you get started. The column names, such as TOAT and TOR are not intuitive.

One caution: It is a large database, and, if you work in Microsoft Access, it's best to quickly slice off your state for most of your analysis. Do that by selecting records with your state's name into a new table. To get national figures without hitting Access' size limits, I placed each fiscal year's data in a separate database when analyzing the whole country. It's a clunky workaround, but it gave me what I needed without waiting 15 minutes for a query.

For my statewide analysis, I decided to examine only federal grants and not include loans, insurance or direct payments for things such as veterans' benefits. My reasoning was that I wanted to isolate how much the federal government was giving to the tribe, not to individuals who had qualified for benefits essentially on their own.

The analysis was fairly simple, but the data did require some cleaning before I could start. A field called TOR, or type of recipient, contained a code that allowed me to isolate all of the payments to tribes. I selected those records into a separate table and performed a group by query on the name of the recipient. I quickly noticed that names had been entered many different ways: "Cherokee tribe of Oklahoma," "Cherokee Nation" and "Cherokee tribe." This prevented me from totaling up assistance to each tribe and was a flaw that had to be fixed.

To clean the data, I used another workaround – a trick I have used many times before. I exported all of the tribal records into a Microsoft Excel file. (In Access, just right click on the table, choose "export" and save as an Excel file.) Then I used Excel's autofilter function to filter on the name field, make a change to the first record and copy that change down the column in one sweep so that the names were standardized. For example, when I filtered on the name Cherokee tribe, I changed all instances to Cherokee Nation, and so on for each name variation. I'm sure there is a better way to do this by writing elegant SQL code, but it would probably take just as long for me to figure that out. This works well for a smaller file. Luckily, my file of tribal grants during the three years contained about 7,000 records, so it was small enough for this process. (The limit for each Excel worksheet is 65,536 rows.)

Standardizing the name fields took a few days, but when I was finished, I could quickly see how much each tribe received. Using the action date field in FAADS, I totaled the grant funding by each year to find out whether the total was going up or down. To find out where all that money was going, I used two fields: the name of the federal agency making the grant (fieldname: FAN) and the project description (fieldname: PROJDES).

Those fields didn't tell me enough about the programs, so I used the grant's program number listed in FAADS to look up more information in the federal Catalog of Federal Domestic Assistance. The catalog is available online at *www.cfda.gov*. I looked up the largest ones – where most of the money was going. The catalog told me who was eligible for the grant, what restrictions governed its use and some examples of funded projects. This information would be important if you had a concern that a grant was being used improperly.

On a side note, another database available from the Database Library will tell you whether auditors had concerns about the way recipients were spending these grants. I decided not to expand my story to include that database, called the Federal Audit Clearinghouse Single Audit Database (*www.ire.org/datalibrary/databases/viewdatabase.php?dbaseindex=42*), because I was interested in funding patterns over time. The single audit database is a great resource if you are interested in examining whether entities receiving federal funds in your state are spending the money wisely.

Once I had all the data I needed from FAADS, I turned to the National Indian Gaming Commission, which releases national revenue and figures by region, but not by state. For state totals, I used the Indian Gaming Industry Report, which is produced by Alan Meister, an economist with Analysis Group Inc. This report has been used by various government agencies and the media as an authoritative source on the industry. Unfortunately, the report does not include revenue figures for individual tribes. A few tribes release that information, but most in Oklahoma do not.

I plugged the national gaming figures and the overall grant numbers into a simple Excel spreadsheet to track the percentage increase. In a separate spreadsheet, I plugged in the name of each Oklahoma tribe, the number of in-state members and the grant funding the tribe received. This allowed me to see that, while the largest tribes received the most in grant funds, the smaller tribes actually were the big winners. The tiny Modoc tribe with 120 members in Oklahoma received more than $5 million in grant funds during the three years, or $43,000 in benefits per member.

One disappointment with the story was that very few people, especially federal lawmakers, were willing to comment about the issue. In past years, several federal lawmakers have proposed "means testing" to determine who qualifies for tribal funds, but as tribes have gained political clout, that idea has gone nowhere in Congress.

It's also important to note that federal funding for some needs, such as education, is required by treaties between tribes and the U.S. government. I devoted a sidebar to a Cherokee Nation school that appears to be doing a great job with the federal funds it receives. Other federal support, such as funding for language preservation, is discretionary.

I would encourage those who haven't used FAADS to give it a try. It's one of those big-picture databases that will allow you to see trends in government funding you won't find in any prepackaged report.

Contact Ziva Branstetter at
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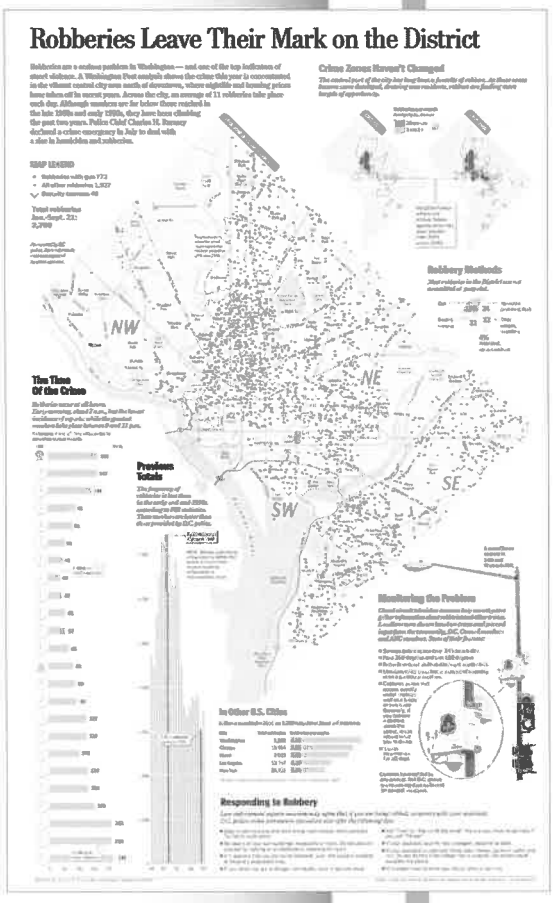
# New D.C. crime map built on recycled points

By Dan Keating
*The Washington Post*

MAPPING IT OUT

THE LATEST USES OF MAPPING IN NEWS REPORTING


Robberies Leave Their Mark on the District

Crime Zones Haven't Changed

Robbery Methods

The Time Of the Crime

Previous Totals

Monitoring the Problem

In Other U.S. Cities

Responding to Robbery

Is there a practical lesson to be learned from *The Washington Post's* recent full-page robbery map?

Yes, there is. The lesson is: color printouts. The bigger, the better.

Engaging editors and selling stories are survival skills for reporters. When facing those challenges, never forget the effectiveness of bright, shiny objects like colored maps and charts.

I took a page from the book of my renowned former colleague Ira Chinoy, now at the University of Maryland's Philip Merrill College of Journalism. Working on a series about unsolved murders in Washington, D.C., he not only put the location dots on a map, he printed the District in segments on about a dozen 11x17-inch sheets big enough to cover his editor's entire wall. The map is still taped to the wall. The series published in December 2000 was a huge hit.

For recent robbery story, I wasn't quite so ambitious. Washington announced a "crime emergency" in July based largely on a surge of robberies. We get a weekly crime data dump from the city police, which we push into MS SQL Server using a Perl application written by our "newsroom tool guy" Ed Holzinger. The data lists each serious incident as a separate record with case number, location, offense, time of day, method (which for robbery lists the weapon used), police district and short narrative.

I grabbed robberies from that data to spit out some basic analysis on busiest police districts, patterns over time and weapons used. And I did a rough first pass at geocoding them using ESRI ArcView 9.1 GIS. The most important thing I did was print out several copies of the resulting dot map in color on 11x17-inch pages. I was hoping to catch the city editor's eye, but the excitement level was much more than I anticipated.

City Editor Marcia Slacum Greene pored over the map, eyeing streets up and down across the District. I felt like a homeseller watching a prospective buyer fall in love with the kitchen. I only wished I could push the price of the story up $20,000.

Greene immediately said she wanted a story on the robberies. And she wanted to publish the map. Big.

From there out, there was lots of teamwork.

I worked with police reporter Allison Klein to pick out police reports we wanted to pull on paper. The biggest holes in the electronic records are in victim and offender information – largely omitted from the electronic extracts we receive. The paper reports have to be pulled separately from each police substation, so I generated lists in each district and made sure to get examples that typified patterns I'd seen in the analysis. Getting records in the District – especially during a "crime emergency" when every available body is on the streets – is slow. Klein used the reports to talk to some victims. She also prowled some of the most active robbery zones to talk to passersby about the risks they endure.

## Geocoding shortcut saves time

While she hit the streets, I went back over the data more thoroughly. I wanted to look over a longer time frame to see if patterns had changed. For a story three years ago, colleague Sarah Cohen had gotten a richer version of the city's crime database that included the police's geocoding of every incident for several years. So, rather than just geocoding what I had, I ran the latest records against the existing-geocoded set as a pure address match. If a robbery matched a previously geocoded address, I took the latitude-longitude point established by the police. Because the robbery locations are often accurate only to the city block on which they oc-

*continued on page 14*

# MAPPING

*continued from page 13*

curred, I also rounded off addresses to the city block and matched them again against the police-geocoded addresses. That matched most of the records.

We also have in hand a copy of the city's real estate assessment file, which includes latitude-longitude points for each home. Once again, I matched the robberies to the address file and picked up the map point location for any match. I did a second pass rounded to the block.

So, I did the vast majority of the geocoding in my data management application, SAS, rather than in ArcView. The nice thing about using SAS is that my work was saved in a written program, so I could tinker and rerun it without extra effort. And when I wanted to match against the real estate file the same way I had matched the older crime records, I could reuse the program. Also, the story took longer than expected, and I had to keep going back to re-run additional offenses as we got new data each week. Running the program was a lot easier than trying to recreate my work by hand.

If a burglary report didn't match the police or assessment records, I ran it through standard geocoding using ArcView. Unfortunately, the police don't give ZIP codes with crime incidents. ESRI's Streetmap geocoding service wants ZIP codes. I created a second geocoding source without them so that ESRI would match it without complaint.

I tested the geocoding of all dots by laying them against a polygon map of the police beats downloaded from the city GIS website. I did a select-by-attributes query of the dots using the police beat. I could quickly see if robberies that were supposed to be in District 3 were outside the proper polygon. The results matched up nicely for 14,031 robberies geocoded in the past four years. I played with some ways of displaying them. We ended up using two colors of dots: one for robberies with guns and one for all others. The published map included only the 2,700 robberies so far in 2006.

### Hot spots in context

To look for change over time, I made a series of hotspot maps using ESRI Spatial Analyst. I made four using two-year groupings of robberies from 1999 through 2006. To see change, I exported them as JPEG images and converted them into an animated GIF file using a wizard in Paintshop Pro. I put the animated GIFs, along with some charts and an export of the big map, on an Intranet web page I shared with Klein and Greene and others working on the story.

The result of all the chronological review was to discover – no big change. The pattern of robberies was largely unchanged over the past eight years. We ended up publishing the hotspots from 1999-2000 next to 2005-2006 to show that the pattern had held steady over time.

Graphics researcher April Umminger, with help from researcher Meg Smith, pulled robbery figures from the Uniform Crime Reports going back 20 years. The figures provided a wonderful broad context to show that the current robbery rate is nowhere near the highs of the crack epidemic in the 1980s and 1990s. They also pulled recent UCR figures for other major cities for another slice of context.

Our graphic also included a pie chart of the methods used for robbery and a bar chart showing the times of day. Collectively, the map shows where, when and how. The biggest missing component was the who. We were handcuffed by the lack of available data on offenders or victims. A longer project would be needed to assemble those records to the degree that they exist.

Another shortcoming was the lack of data from the many other police departments that operate within The District, such as the Capitol Police and National Park Police. We got data from the Park Police for robberies on areas they patrol – but, amazingly, every robbery was solved. We felt it was misleading to use only solved robberies from one department while showing all robberies from another department and ended up going with only the city police information for consistency.

The final steps were done by cartographers Laris Karklis and Nate Kelso. They added two layers to the map, one of the city's new surveillance cameras that they had on hand from a different map and another polygon outline they had from a previous map showing the areas in which property values had gone up the most in the current decade.

My favorite part of the map was that everyone eagerly looked for their own neighborhood, workplace, school or entertainment hangout. I love graphics in which people look for themselves – by listing records for every school or election results for every precinct or crime information by neighborhood. I agree that the "it's all about me" news mindset can go too far. On the other hand, I think giving readers a chance to directly connect their lives to our stories is worth it. The great response to this map was nice confirmation.

Contact Dan Keating at *keatingd@washpost.com*

**The result of all the chronological review was to discover – no big change. The pattern of robberies was largely unchanged over the past eight years. We ended up publishing the hotspots from 1999-2000 next to 2005-2006 to show that the pattern had held steady over time.**

**My favorite part of the map was that everyone eagerly looked for their own neighborhood, workplace, school or entertainment hangout. I love graphics in which people look for themselves – by listing records for every school or election results for every precinct or crime information by neighborhood.**

# TUNING UP YOUR ACCESS TABLES

By David Herzog,
NICAR and
Missouri School of Journalism

TECH TIP

Database indexing is like practicing good hygiene. There's nothing exciting about it, but your life will be a whole lot better if you make it a consistent habit.

Database indexes can speed up your queries when you're sifting through your data to find specific information. They also can help make joins run more efficiently. Anyone who has ever attempted to join two unindexed tables with hundreds of thousands of records in Microsoft Access knows it can take a while to get results.

First, a little background on how indexes work. Database indexes are very much like the index of a book, which allows the reader to quickly find information.

## The basics

Let's say you want to read about the Battle of Baltimore in that 900-page history of the United States that's on your book shelf. You have two options: Start at the Colonial Era and go page by page through the Revolutionary War, the Constitutional Convention, the Lewis and Clark Expedition and on to the War of 1812. Or, you can just go back to the index, look up the battle and turn to that page.

It's the same deal with database managers. If you're looking for information inside a field by using a WHERE statement, Access will look through all the records sequentially to find the ones you've specified. That's time-consuming when you have hundreds of thousands of records. If you've created an index for the field, Access looks for your criteria in the index to quickly find the appropriate records.

There are no hard rules regarding indexing, but you'll want to index the fields that you frequently search with WHERE statements or sort using ORDER BY. Also, index the fields used in your table joins. Don't index too many fields in a table – stick to three or four – because too many indexes will slow down performance. Also, don't index fields that you plan to update frequently because the indexes also will have to update themselves each time.

In addition, you will want to include a primary key – or master – index on your large tables. These primary key indexes enhance performance by speeding up basic operations.

## For matching

Here's how to create indexes on an Access database of property assessment records that contains two tables – properties (master list of the properties) and building_types, which contains building type information. (See figure 1.) You can download the data from the IRE Web site at *www.nicar.org/techtips.html*. We'll join these using the type_code field, which is common to both tables.

Let's take care of the building_types table first. In Design View, you can see the table structure, including the field name, data type and any descriptive information. Click on the type_code field to select it, and then change its index to "Yes (No Duplicates)" in the properties box at the bottom left. We picked this option be-

*continued on page 16*

**Figure 1**

Properties : Table

| Unit | Streetnmbr | Street | Zip |
|---|---|---|---|
| 0 | 15 | THURBERS AVE | 02905 |
| 0 | 79 | LONGWOOD AVE | 02908 |
| 0 | 46 | MAC GREGOR | 02904 |
| 0 | 88 | HUXLEY AVE | 02908 |
| 0 | 45 | BEL AIR DR | 02909 |
| 0 | 22 | STEERE AVE | 02909 |
| 0 | 20 | SPARROW | 02908 |
| | | EDY PLAZA | 02903 |
| | | | 02908 |
| | | S AVE | 02905 |
| | | | |
| | | | 02908 |
| | | AIR AVE | 02905 |
| | | HURST AVE | 02908 |
| | | DALE AVE | 02905 |
| | | CK AVE | 02909 |
| | | LN | 02909 |
| | | LAW AVE | 02908 |
| | | ERICK | 02908 |
| | | | 02909 |
| | | NE | 02909 |
| | | | 02908 |
| | | NDER | 02905 |
| | | H | 02901 |
| | | MINSTER | 02909 |
| | | KSTONE AV | 02909 |
| | | ERET | 02908 |
| | | N | 02909 |
| | | LIFFE AVE | 02908 |

Record: 1 of 15000

Building types : Table

| Type_Code | Type |
|---|---|
| 01 | single family |
| 02 | 2-5 family |
| 03 | apartments |
| 04 | combination |
| 05 | commercial 1 |
| 06 | commercial 2 |
| 07 | industrial |
| 08 | estate |
| 09 | farm |
| 10 | utility |
| 11 | seasonal-beach |
| 12 | misc |
| 13 | vacant res land |
| 14 | comm/ind vacant land |
| 15 | other vacant land |
| 21 | residential building leased land |
| 22 | industrial building leased land |
| 23 | residential condo |

Record: 1 of 38

TECH TIP

# TABLES

*continued from page 15*

cause the field has unique values, one for each building type. (See figure 2.)

Then save your changes by returning to the Datasheet View. You won't see any difference to your table because Access indexes are invisible and stored inside the guts of your .mdb file. (The primary key index, which we will create later, is an exception to this rule).

Now we want to build a corresponding index in the properties table and add others.

Open the properties table in Design View (same as you did with the Building_Types table) and find the Type_Code field. In this table, set its Indexed options to "Yes (Duplicates OK)" because the field will contain repeats of the codes. (See figure 3.)

While you're at it, go ahead and create similar indexes for the fields that tell us about each property's ownership: Currownr and TaxOwner.

## Primary key-Take 1

The last index we'll place on the Properties table is a primary key, which will speed performance. We have two options for creating a primary key, but they both require the use of a field containing unique values.

The first option places a primary key onto an existing field; the second creates a new field that contains the unique values.

We can use the first option by placing the primary key index on the PropID field, which contains a unique identifier for each property. Put your cursor on the PropID field name and then click the Key button on the tool-

*continued on page 17*

**Figure 2**

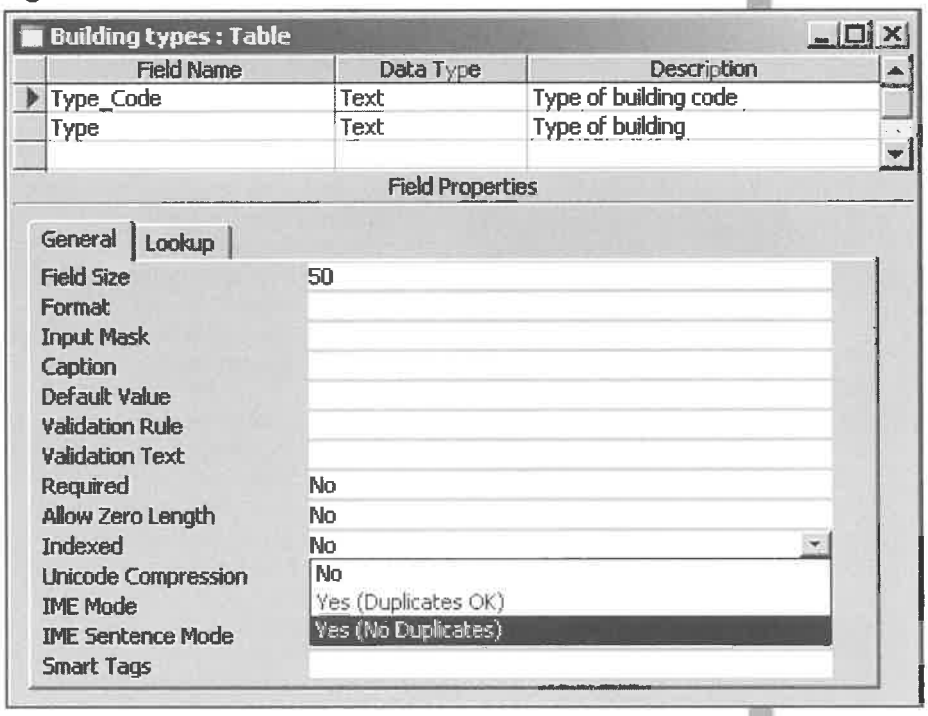
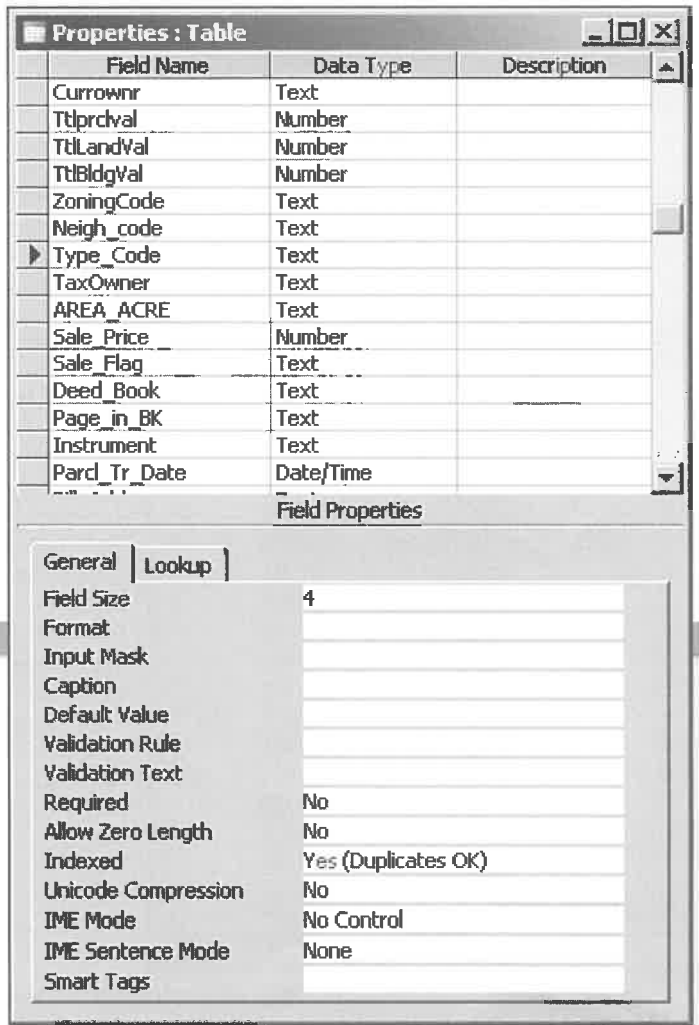



**Figure 3**



# TECH TIP

bar. (See figure 4.) When you switch back to the table view, Access places the primary key index on the field.

## Primary key-Take 2

Return to the design view of the properties table so we can create a Primary Key using the second option.

First, you will need to remove the Primary Key from the PropID field by right clicking on the field name and then picking Primary Key from the pop-up menu.

We're going to create a new field that will contain the Primary Key. So, with your cursor anywhere on PropID, pick Insert\Rows from the menu and Access will create new blank field.

Name the field IDX (short for index) and make the data type Autonumber. (This data type starts with 1 and sequentially numbers the records. See figure 5.) Then apply the Primary Key to the IDX field and switch to table view. Access will prompt you to save the table first, press Yes.

Good work. You've created the Primary Key field! (See figure 6.)

As you can see, it's simple to create indexes. The few minutes you spend making sure your tables are properly indexed now will save you many more later.

Contact David Herzog by e-mail at *dherzog@nicar.org*.

**Figure 4**

Properties : Table

| Field Name | Data Type | Description |
|---|---|---|
| PropID | Text | |
| Plat | Number | |
| Lot | Number | |
| Unit | Text | |
| Streetnmbr | Text | |
| Street | Text | |
| Zip | Text | |
| Zip_4 | Text | |
| TaxID | Number | |
| Currownr | Text | |
| Ttlprclval | Number | |
| TtlLandVal | Number | |
| TtlBldgVal | Number | |
| ZoningCode | Text | |
| Neigh_code | Text | |

Field Properties

General | Lookup

| | |
|---|---|
| Field Size | 50 |
| Format | |
| Input Mask | |
| Caption | |
| Default Value | |
| Validation Rule | |
| Validation Text | |
| Required | No |
| Allow Zero Length | No |
| Indexed | Yes (No Duplicates) |
| Unicode Compression | No |
| IME Mode | No Control |
| IME Sentence Mode | None |
| Smart Tags | |

**Figure 5**

Properties : Table

| Field Name | Data Type | Description |
|---|---|---|
| IDX | AutoNumber | |
| PropID | Text | |
| Plat | Number | |
| Lot | Number | |
| Unit | Text | |
| Streetnmbr | Text | |
| Street | Text | |
| Zip | Text | |
| Zip_4 | Text | |

Field Properties

General | Lookup

| | |
|---|---|
| Field Size | Long Integer |
| New Values | Increment |
| Format | |
| Caption | |
| Indexed | Yes (Duplicates OK) |
| Smart Tags | |

**Figure 6**

Properties : Table

| IDX | PropID | Plat | Lot | U |
|---|---|---|---|---|
| 1 | 55-426-0 | 55 | 426 | 0 |
| 2 | 122-157-0 | 122 | 157 | 0 |
| 3 | 97-101-0 | 97 | 101 | 0 |
| 4 | 120-412-0 | 120 | 412 | 0 |
| 5 | 80-851-0 | 80 | 851 | 0 |
| 6 | 63-375-0 | 63 | 375 | 0 |
| 7 | 69-40-0 | 69 | 40 | 0 |
| 8 | 20-16-0 | 20 | 16 | 0 |
| 9 | 120-12-0 | 120 | 12 | 0 |
| 10 | 55-26-0 | 55 | 26 | 0 |
| 11 | 122-557-0 | 122 | 557 | 0 |
| 12 | 102-104-0 | 102 | 104 | 0 |
| 13 | 61-881-0 | 61 | 881 | 0 |
| 14 | 81-388-0 | 81 | 388 | 0 |
| 15 | 59-839-0 | 59 | 839 | 0 |
| 16 | 80-104-0 | 80 | 104 | 0 |
| 17 | 80-504-0 | 80 | 504 | 0 |
| 18 | 81-188-0 | 81 | 188 | 0 |
| 19 | 82-41-0 | 82 | 41 | 0 |
| 20 | 35-12-0 | 35 | 12 | 0 |
| 21 | 35-412-0 | 35 | 412 | 0 |
| 22 | 81-88-0 | 81 | 88 | 0 |
| 23 | 61-981-0 | 61 | 981 | 0 |
| 24 | 80-604-0 | 80 | 604 | 0 |
| 25 | 35-312-0 | 35 | 312 | 0 |
| 26 | 80-4-0 | 80 | 4 | 0 |
| 27 | 81-288-0 | 81 | 288 | 0 |
| 28 | 63-193-0 | 63 | 193 | 0 |

Record: 1

# PATENTS DATA HIGHLIGHT LOCAL RESEARCH TRENDS

By Alex Gary
*Rockford* (Ill.) *Register Star*

**Using our spreadsheet, we determined who has been the most inventive person in our area in the past 10 years. It turned out to be a local ophthalmologist who had received 27 patents for surgical equipment and golf technology, among other things.**

Roughly 25 percent of the work force in Winnebago County, Ill., works in manufacturing, and because of the heavy reliance on job shops, our area has always been the first in and last out of a recession.

The last recession in 2002 and 2003, though mild, cost the area about 15,000 blue-collar jobs. In the 1980s, Rockford, Ill., became national news because the jobless rate topped 25 percent several times.

Although times are much better, there is always a feeling the other shoe is about to drop.

I was eating breakfast with an economist from Northern Illinois University in DeKalb when we started talking about using economic data to measure whether the area is preparing for the next economic downturn.

One area that we discussed was patents. It's not a perfect measure of research and development because many of the best ideas are kept by companies as trade secrets. It's also a lagging indicator. It usually takes from 18 months to three years to go from application to official patent, so patents won in 2003 and 2004 really indicate research and development activity in 2000 and 2001. Still, it can help uncover which companies are investing in new products and procedures.

The U.S. Patent Office has a searchable database (*www.uspto.gov/patft/index.html*) where you can find the full text on patents back to 1976 and images of patents all the way back to 1790. Since March 2001, the Patent Office also has listed patent applications.

The drawback was that I could find no easy way to extract the data. I couldn't create a list of patents from an area and quickly narrow it down. It's always easiest if an agency provides a raw data file that you can analyze. In this case, I was going to have to build a spreadsheet. I decided to go back just 10 years to make it more manageable. Still, slogging through cities decidedly larger than Rockford could be a nightmare; it might be worth a call to the Patent Office to see if they can be of assistance.

Once I finished Rockford, I then searched for the second largest city – Belvidere – and only cut and pasted the inventions from Belvidere inventors that did not also have Rockford inventors. I continued on through the third largest, fourth largest, etc. until I'd gone through all of our area's cities, villages and unincorporated areas.

Once I was finished with patents, I did the same for applications, which didn't take nearly as long since the data is only available from March 2001.

In the end, I had a Microsoft Excel spreadsheet of more than 1,400 patents won in the past 10 years by inventors from my area.

Key findings:

- The number of local patents plummeted in the period from 2002 to 2005, while the numbers increased nationwide, which is not an encouraging sign.
- The number of patent applications has increased each year since 2002, which was a good sign.
- The area's most patent-happy company, the aerospace company Hamilton Sundstrand, saw the number of patents won by local inventors fall after the company was bought out by Connecticut-based United Technologies Corp. It won 30 to 40 patents a year when it was an independent company.

We ran a main story focusing on the declining number of patents and what that might mean to the area. In the main piece, we talked to Hamilton Sundstrand's head of research in Rockford about whether the takeover by United Technologies was causing a brain drain. Was the corporation moving our best and brightest to other operations?

Using our spreadsheet, we determined who has been the most inventive person in our area in the past 10 years. It turned out to be a local ophthalmologist who had received 27 patents for surgical equipment and golf technology, among other things.

Finally, to make the data usable for the future, we are now running a list of patents won by local inventors each month to highlight the creative people in the area. It also tips us off to when companies are delving into new areas or ramping up product development.

You can find all of the pieces above as well as a listing of Illinois' most famous inventors (Abraham Lincoln had a patent) at *www.rrstar.com/patents*.

Contact Alex Gary at
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