# Bardwell Consulting We Make Statistics Work for You June 2007

## Focus: Elections Audits & Sampling

Bardwell Consulting continued to expand our work on survey and sample design. In February we finished the program that the Federal Election Commission (FEC) is using to monitor contributions and expenditures for all federal elections. The Audit Sampling Program (ASP) was developed as a web-based application that can also run on auditors' notebook computers, using the same code base. This represents a major step forward for the FEC in terms of usability and efficiency, and will help to ensure a thorough and

accurate election auditing process.

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Screenprint from the SamplePower program

#### Fighting Climate Change

Both Nancy and Andy became better informed and more concerned about global warming and the potential devastating impact of climate change during 2006. Nancy is taking a sabbatical from her justice integration consulting work to focus full-time on collaborating with a national network of lawyers and citizen activists working to stem the tide of 160+ expensive and polluting new coal plants, and to advocate for a saner energy policy.

After committing to make their home as energy self-sufficient as possible, Andy and Nancy found that the energy retrofit business had few "energy contractors" to help homeowners through the energy retrofit process from start to finish. They decided to start a full-service energy contracting business, Integrated Home Energy. Andy's professional interest focused on creating a computer model to optimize the design of energy retrofits, integrating all available technologies in the most cost-effective designs possible. Andy has finished the model and is currently working with independent reviewers to verify the model result. Look for an update in the next newsletter.

### Expert Advice

Electronic document preservation is a key part of document production in litigation. "The same legal rules apply to the destruction of documents," states an article in *The Colorado Lawyer*, "whether . . . destruction involves hitting a button, shredding, or any other means." Companies involved in civil or criminal litigation should be prepared to produce all discoverable documentation, including electronic documentation.

The article "Duty to Preserve Electronic Evidence After Enron and Andersen" recommends that companies "adopt policies that provide rational and defensible guidelines addressing the treatment and destruction of electronic documents." Electronic documentation that should be preserved includes but is not

limited to backup records of e-mail correspondence, computer hard drives, voicemail, and personal digital assistants.

The authors further recommend that, in the case of litigation, clients should be advised to stop or alter the "normal document retention/destruction policy," and institute more rigorous document retention practices. Any practices, including the recycling of backup tapes and the deletion of relevant e-mail, which could result in the destruction of discoverable documentation should be stopped "once a conflict reaches the stage that litigation appears likely."

All material paraphrased or direct quotes from: Lipinsky, Eiselein, and Snyder, "Duty to Preserve Electronic Evidence After Enron and Andersen," 23 *The Colorado Lawyer* 55 (June 2003).

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#### <u>www.bardwellconsulting.com</u>

Andy has partnered with Bardwell Consulting team members Stephen Canner and Jason Rust to create www.the-member-ship.com (TMS) to help progres-

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Screenprint from the new Bardwell Consulting website

sive non-profits "Keep their membership afloat." Currently, TMS is offering lowcost website development and hosting on a dedicated server. These services have been

> well-received, and the TMS crew is working on expanding their offerings for an eventual Online Toolkit of technical resources for nonprofits.

The new Bardwell Consulting website was designed by our talented web programmer, Jason Rust, using Jason's own photography and TMS' flagship websitedesign product. Let us know what you think!

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#### Election Audits & Sampling: Cont'd

ASP is one of the first web-based programs that can deliver functionality comparable to what we're familiar with from PC-based programs. Users can open any Excel spreadsheet and ASP will design, draw, and estimate a random sample. The only data entry required of the user is the desired precision of the sample and discrepancies revealed during audit of sample transactions. Results have been validated using the American Institute of Certified Public Accountants statistical auditing programs and thoroughly tested by a team of auditors at the FEC.

We are currently working on expanding this product for commercial distribution. The commercial product, SamplePower, would be the first web-based sampling software, and the first low-cost user-friendly solution for conducting statistical sampling. We encourage you to test the beta version of SamplePower at www.rustedcode.com/asp with username "auditor" and password "auditme."

Andy has also been involved in the national debate on the security of elections, primarily in his role as an expert in sampling theory and focussing on how better sampling could improve audits of election results. His testimony in committee hearing for Colorado Senate Bill 07-083 was well received.

Bardwell Consulting is also participating in five proposals to the Pew Charitable Trust to improve our electoral process. These proposed projects include:

- Testing a dramatically more efficient auditing strategy, which would verify that our election results are correct with a fraction of the resources required for the ineffectual audits that are currently being conducted;
- Drafting fiscal notes for improved audits for participating states;
- Conducting a threat analysis to determine the security of mail-in ballots;
- Two projects with the National Election Data Archive to develop a full tool kit for

election officials, including forms, training materials, and computer programs for conducting secure elections.

#### Next Newsletter

Read our next newsletter for:

- Two projects to improve the quality of life for our children. We're working on a HUD study to assess housing-related health risks affecting the children of recent immigrant families, and on a groundbreaking case to ensure quality education for all children in a Florida school district.
- Updates on Nancy's and Andy's work to fight climate change.
- A new tracking system for non-maturity bank deposits.

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