

# STATISTICS IN THE COMMUNITY @ IOWA STATE

MARCH 2009

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## StatCom on the Web

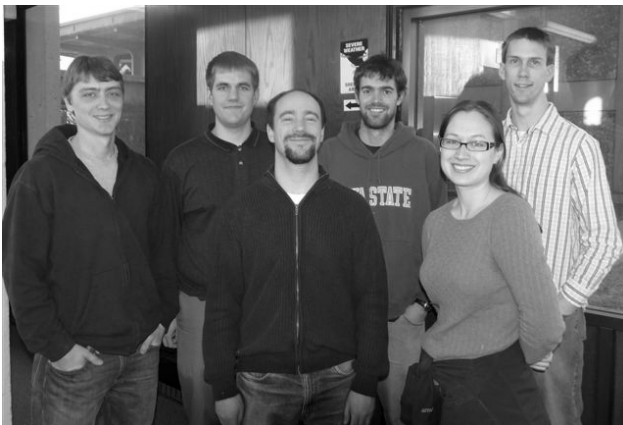
- ISU StatCom Website  
<http://streaming.stat.iastate.edu/~STATCOM>
- StatCom Network Website  
<http://www.amstat.org/education/statcom/>
- Executive Committee Email  
[statcom@iastate.edu](mailto:statcom@iastate.edu)

## Executive Committee Coordinates

### StatCom Activities

The StatCom Executive Committee coordinates all Statistics in the Community efforts at Iowa State University. Executive Committee members initiate contact with potential clients and recruit team members and team leaders when projects become available. The committee has also been active in seeking out potential clients in the community and coordinating efforts with ISU Extension. As StatCom continues to grow, the committee hopes to recruit members from the ranks of experienced StatCom team leaders.

The executive committee thanks StatCom's faculty advisers, professors Alicia Carriquiry, Sarah Nusser and Yongzhao Shao, for valuable input on a number of StatCom matters.



2008-09 Iowa State StatCom executive committee members (left to right) Tim Bancroft, Jon Hobbs, David Rockoff, Nick Beyler, Anna Peterson and Mark McKelvey

## StatCom Teams Continue Local Projects

After completing several successful projects in its initial year, Iowa State StatCom has continued to serve local organizations in 2008-09. New projects have come from a number of sources, including existing StatCom clients, faculty referrals, and word-of-mouth referrals from previous clients.

One StatCom team continues to work with the local Retired and Senior Volunteer Program (RSVP) on a survey of its volunteers and their use of technology. The team has provided recommendations on questionnaire format and a sampling design for the telephone survey. The team will assist with the analysis when the data have been collected.

Another StatCom team has utilized historical data from the City of Ames Electric Services along with annual energy demand projections to develop models for predicting the city's monthly peak energy demand. The team has provided the client with several alternative models and information for updating predictions as new data are available.

Through a referral from another StatCom client, the executive committee learned of Project Smyles, which is an outreach program of the Ames Public Library that provides early literacy services for local day care centers and preschools. A StatCom team has assisted the Project Smyles coordinator in refining a client satisfaction survey, and the team is currently analyzing the data and preparing to present the results.

Yet another StatCom team has been working with officials at the Ames Public Library on an extensive survey of library patrons. The survey will be deployed in several waves, with the first beginning in late March, and will be administered by library volunteers to library patrons according to a design outlined by the StatCom team. Participants will complete the survey online in the library and the team will begin to analyze the first wave of data when it becomes available.

The StatCom executive committee continues to work with faculty and other local contacts to identify potential projects in the community.

# STATCOM HAPPENINGS

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## StatCom Reaches Clients Statewide

Over the last several months, Iowa State StatCom has commenced work on projects with ties across the state. StatCom continues to develop visibility within Iowa State Extension's Community Economic Development (CED) division. StatCom joined a number of service programs on CED's Program Builder website and was recently highlighted in *Community Matters*, CED's quarterly newsletter.

The City of Waukee recently contacted StatCom about the possibility of conducting a community survey to assess interest in and to prioritize a number of planned development projects. The project would potentially feature a number of interesting aspects in questionnaire and sampling design and could serve as a template for similar projects in the local area.

Through a faculty referral, a StatCom team has been working with state officials to analyze data from the Iowa Lottery. The client is especially interested in evaluating the frequencies of winners

of high-tier lottery prizes.

In a project that had its beginnings at the 2008 Joint Statistical Meetings, another StatCom team is working with Iowans for Voting Integrity and statisticians at other Iowa universities to develop some recommendations for implementing post-election audits in Iowa. The team has received many helpful suggestions from American Statistical Association personnel and statisticians around the country with interest in post-election audits. Some initial discussions with election officials have been positive, and the team continues to learn about the relevant statistical ideas behind risk-limiting audits.

In conjunction with the ASA Committee on Student Pro Bono Statistics, Iowa State StatCom will participate in an invited panel on pro bono statistics at the 2009 Joint Statistical Meetings in Washington, D.C. In addition, the work of the StatCom election audit team will be part of a topic contributed session on post-election audits across the nation.

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## Pre K-12 Outreach Program

In addition to providing consulting services in the community, StatCom is working on developing an active community outreach program. Efforts will be targeted toward education on topics in statistics and probability for students of a variety of ages.

StatCom is planning to be part of the festivities at VEISHEA, Iowa State's annual spring celebration. On Saturday, April 18, central campus will be a hub of activity as the VEISHEA Village provides ISU organizations and departments the opportunity to showcase their efforts to thousands of visitors. Look for the StatCom display in the College of Liberal Arts and Sciences tent just south of Catt Hall.

The executive committee is looking for several students for a VEISHEA Village planning team. The team will organize and develop the StatCom display for the VEISHEA Village. The display will hopefully include some fun educational activities

illustrating concepts in probability and statistics along with materials highlighting other StatCom activities. Please contact Jon Hobbs (jonhobbs@iastate.edu) if you are interested in joining the VEISHEA planning team. In addition, several StatCom members will be needed to staff the display on the day of the event.

In addition, the executive committee has been working with some AP Statistics instructors in the state. Beginning later this spring, StatCom teams may work with the AP classes on comprehensive projects that will explore many ideas covered in the course with many interesting applications. Future plans for the P-12 outreach program include outreach to local schools through participation in science nights.

The executive committee thanks Professor Amy Froelich for a number of valuable suggestions as the outreach program gets underway.