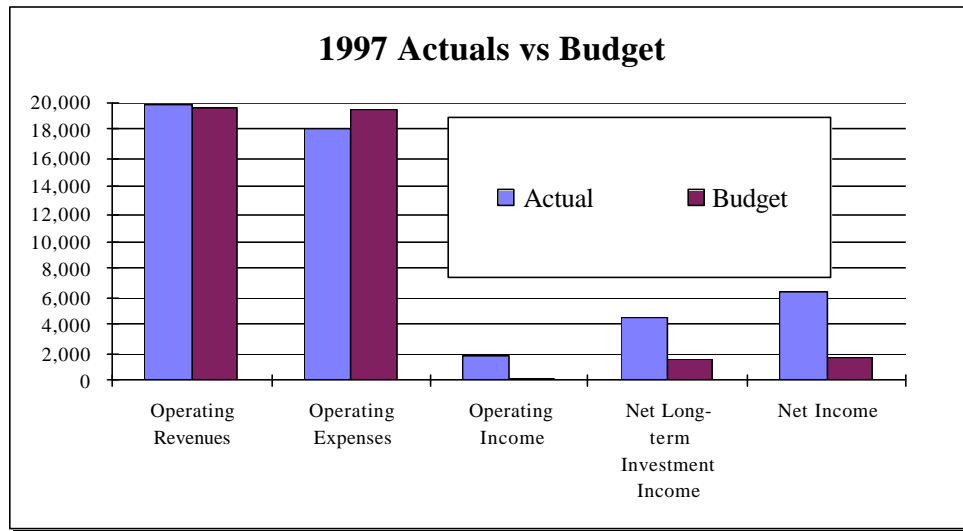


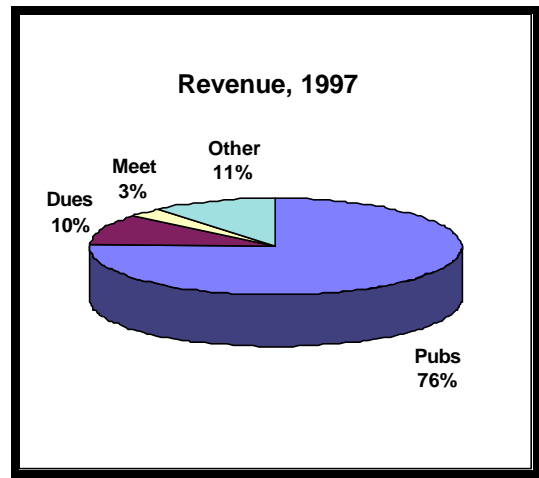
State of the AMS, 1998

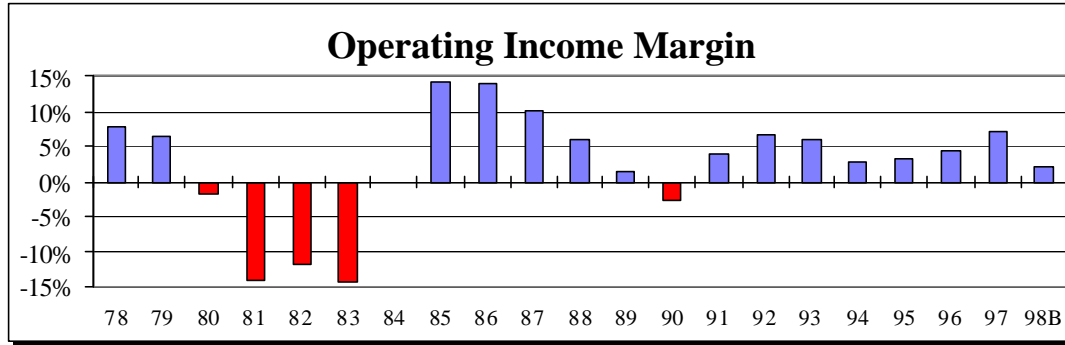
The American Mathematical Society is financially healthy at the moment, having had a surprisingly good year in 1997. There are two parts to that financial health—reserves and operating income. Our reserves have grown during the past several years as the market grew so that we have now exceeded the goals set when the fund was established. In addition, our operating income was higher than expected, because of increased revenues and decreased expenses. The combination of substantial reserves and increased operating revenue is a healthy sign for the future.



But there are other ways in which the Society is healthy, and they are even more important than finances. The AMS gained a new view of itself in recent years, and it recognizes that it serves many functions in a broad community. We support research through meetings and publications, but we also concern ourselves with education and with policy and with issues common to a diverse community of science. That makes the Society more complicated, of course, and adds slightly to the risk that we lose focus on the *primary* mission – support of mathematical research and scholarship. But it also gives the Society added purpose and, ultimately, added strength.

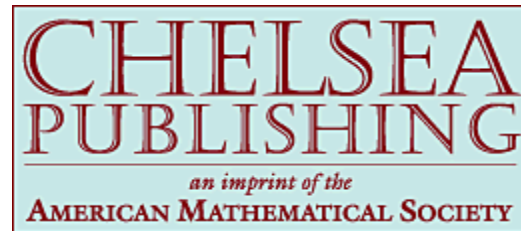
There are many ways to view a complicated organization like the American Mathematical Society, and each view helps us to understand the whole Society better. Here are three views that shed some light on both our successes and our vulnerabilities.





The AMS is a publisher – an extremely successful publisher. We are building on our strengths, experimenting with new media, fully involved in what everyone believes the future of scholarly publication will be – electronic publication.

- MathSciNet is a great success, and as I travel about the country mathematicians who otherwise are cranky about nearly everything the Society does will make a special effort to praise MathSciNet. Math Reviews is not a journal but rather a database, which is why it is ideally suited to electronic publication. We are investing in MathSciNet, and we produce a new, enhanced version each year. We are also investing substantial sums in adding to the database; by early 1999 we will have added *all* reviews (from 1940 to the present) to the online version.
- The book program continues to expand as well. We published almost 100 new titles in 1997. The mix of books has shifted to authored books and away from proceedings. New series are underway to add to our program. And, of course, we added a substantial set of classic titles by purchasing Chelsea, which provided more than 40,000 books in our inventory and (more importantly) many important titles. Authors are beginning to seek out the AMS as a publisher, and that's a very good sign.
- Our journals have all been published electronically since January of 1996. The primary journals – Transactions, Proceedings, Mathematics of Computation, and the Journal of the AMS – are all in paper as well. Three journals – Electronic Research Announcements, Representation Theory, and Conformal Geometry and Dynamics – are only published electronically. We have lots of experience with the technical details of putting journals online, with licensing and copyright issues, and with pricing and usage. We can make good use of that experience, and in fact we are about to make a major push to improve the delivery and functionality of our electronic journals.



These are the obvious parts of the publication program. The part that's not so obvious, but extremely important, takes place out of sight. We have repriced our books to make them the lowest priced among all major mathematics publishers; we have instituted consortium

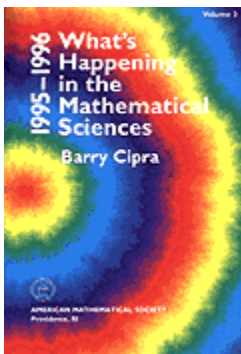
pricing for MathSciNet, allowing small colleges to group together with larger institutions and obtain MathSciNet for as little as \$250; we have led the scientific community in providing author-friendly policies for copyright and web-posting. We are *also* active members in the group that led the MathML effort (creating standards for posting mathematics on the web), and we are members of several groups of publishers, from Stipub to the new group supporting the Digital Object Identifiers. We are in every sense a professional publisher. Publishing is what makes money for the rest of our activities, of course, but allows us to support research and scholarship (what we're all about, after all) and to lead other publishers as well..

The AMS is a service organization, representing the interests of mathematics and mathematicians. We have become more sophisticated in doing this in recent years, and we recognize that service requires steady, persistent efforts over long periods of time. We are better at doing that; we still have much to learn and far to go.

One of our most visible outreach activities is our Washington office, which gives mathematicians a presence in Washington, involving everything from policy to education. While part of the benefit of that presence is a voice on important issues, the much larger benefit is our interaction with the broader scientific community in Washington. Mathematicians are now viewed as part of that scientific community, which is represented by dozens of different organizations, and the combined strength of all has made a real difference. Much of this effort has been led by Arthur Jaffe with the help of Sam Rankin in the Washington office. I will not repeat the details provided in Arthur's report.

There is much more in our outreach efforts, however. We have made a good beginning on expanding public awareness efforts during the past several years.

- We created the Working Group on Public Awareness of Mathematics, chaired by Steve Weintraub. That group is working on several projects, including a joint project with the American Physical Society on radio spots and glossy handouts called Mathematics Success stories. Their most tangible effort has been the What's New in Mathematics section of e-Math, aimed at the general public.
- We produced and distributed a 30 second public service announcement, narrated by (then) Secretary of Defense, William Perry (who has a PhD in mathematics).



- We continue to produce What's Happening, which the science community has praised as a model for others to emulate. The fourth volume will appear later this year.
- We are now working with the American Chemical Society and American Physical Society on their publication Wonder Science, aimed at middle school students (and their parents). They produce 8 issues each academic year of a small magazine, with science (and now mathematics) ideas for parents and students.
- We support AAAS media fellows each summer – two last year

and two this. These are graduate students in mathematics who are paired with a news organization (radio, TV, newspaper, or magazine) to work on science writing. The aim is to develop a cadre of science writers, who either work in journalism or work in science.

One *planned* outreach activity has not been successful. We tried to form a Joint Office for Minority Participation with the MAA and NCTM. After nearly 2 years of complicated negotiations and false starts, we are (temporarily) giving up on the idea. Instead, the AMS has begun a deliberate program to reach out to minority science organizations, such as the Society for the Advancement of Chicano and Native American Scientists (SACNAS), by having a presence at their annual meetings and participating to the extent possible in their programs. Building the connections to the minority community seems to be a valuable first step in making more substantial progress.

Internationally, we reach out to developing countries with special memberships (Category-S), which are growing steadily each year. This is a substantial investment by the Society. We have provided other special programs as well, including a discounted national Data Access Fee program, a slow phasing out of the special discounts for institutions in the Former Soviet Union, and a program to ship donations of library materials to selected institutions in developing countries.

One of our oldest and largest international programs is our effort to collect donations for the International Mathematical Union each year. During the past four years leading up to this year's Congress, the AMS collected more than \$125,000 in donations, which it passed on to the IMU. These funds are used entirely at the discretion of the IMU.

Perhaps the *largest* outreach activity by the AMS is the one taken most for granted. Our web site, e-MATH, provides information to subscribers and members, but it also provides many services to the mathematics community in general. In addition to the services on e-MATH itself, we provide web sites for several other mathematics organizations, as well as a mirror site for the European Mathematical Society.

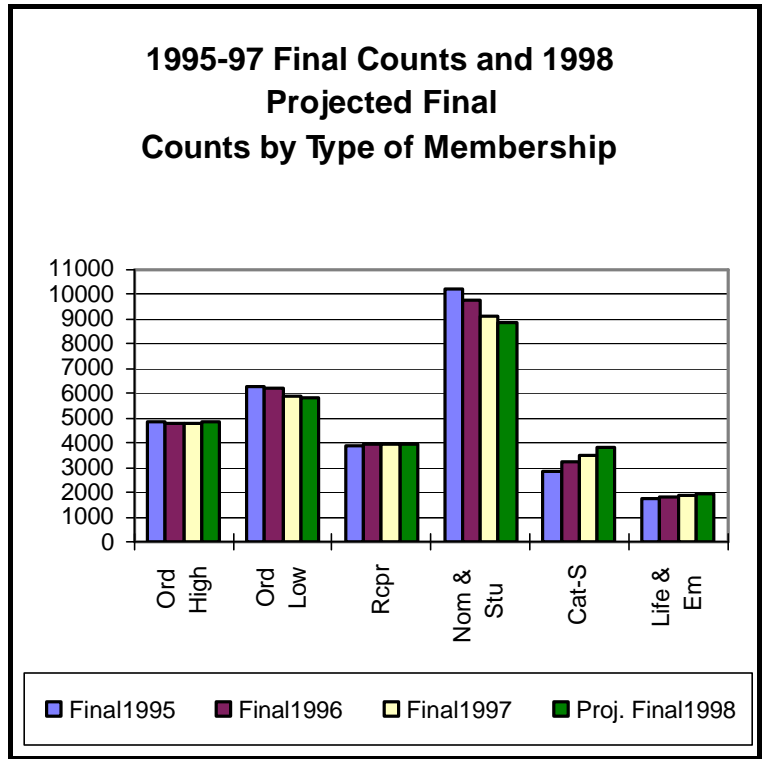
The AMS is a membership organization, which must focus on providing value to its members in return for their loyalty (and dues). Like all membership organizations, the Society must review the 'bargain of membership' from time to time. What are the services and benefits? Are the dues appropriate? How can one improve the bargain?

For the AMS, the main services to members have been the member publications (Bulletin and Notices) along with meetings and discounts on publications. There are many other services to the community, of course – things such as the surveys provided each year on employment, the various ad hoc surveys on the profession, the job-seekers list circulated each spring, and the employment registers at national meetings. Most members view those community services as part of the bargain. And *many* members recognize that membership organizations provide less tangible benefits as well as services; membership supports the profession and makes one a part of the community.

But like all membership organizations, the AMS is vulnerable to the trends of the moment. In general, there is less interest in membership organizations, less need to feel that membership is part of a typical professional life. Young mathematicians tend to review that 'membership bargain' with a more skeptical eye, and they are less concerned in the services that bring general benefit to the community (which they often feel is not especially concerned with them.) The bargain is shifting.

Membership organizations need members. We must therefore react to the trends in a careful and deliberate way. The bargain involves two quantities – dues and benefits. We are now considering the dues side, but the benefits side is equally important. We plan to work on that over the next two years.

The new Task Force on Membership will help to analyze the problem and suggest some possible steps the Society should take. In the meantime, we are already making some changes that will begin to help. We are creating a members-only section of e-Math, so that we can more easily offer member benefits using the web. We have instituted a small service to benefit *some* members – email forwarding (which allows a member to obtain a permanent email address and stipulate where mail should be forwarded at any time in the future.) We will soon implement an electronic version of current mathematical publications, sending up to three sections of current mathematical publications to members every three weeks. We hope to add a system of threaded bulletin boards to the member section later in the year. We are looking for other benefits that can be offered in similar ways, including various enhanced information services that could be provided to members. We have far to go, however, and this will be an ongoing effort over a long period of time.



Publishing, outreach, membership. Those are three different views of the AMS, and each is an equally valid way to understand the Society – at least part of it. A professional society is a *balance* of these aspects, and it is the balancing that is the key to maintaining a healthy organization. *We must invest in all three to achieve that balance.* It is easy to forget this fact, especially for people who are closely involved in any one of these aspects. It is important to remember.

John Ewing