AMERICAN MATHEMATICAL SOCIETY
EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES MEETING
NOVEMBER 20-21, 2009
PROVIDENCE, RHODE ISLAND

MINUTES

A joint meeting of the Executive Committee of the Council (EC) and the Board of Trustees (BT) was held Friday and Saturday, November 20-21, 2009, at the AMS Headquarters in Providence, Rhode Island.

The following members of the EC were present: George E. Andrews, Sylvain E. Cappell, Robert J. Daverman, James G. Glimm, Craig L. Huneke, and Joseph H. Silverman. Ruth M. Charney was unable to attend.

The following members of the BT were present: George E. Andrews, John B. Conway, John M. Franks, Eric M. Friedlander, Linda Keen, Ronald J. Stern, and Carol S. Wood. Karen Vogtmann attended (by phone) only the BT closed executive session on Saturday afternoon (items 3E.6 – 3E.9).

Also present were the following AMS staff members: Thomas J. Blythe (Chief Information Officer), Gary G. Brownell (Deputy Executive Director), Graeme Fairweather (Executive Editor, Mathematical Reviews), Sergei Gelfand (Publisher), Ellen H. Heiser (Assistant to the Executive Director [and recording secretary]), Elizabeth A. Huber (Associate Executive Director, Publishing), Ellen J. Maycock (Associate Executive Director, Meetings and Professional Services), Donald E. McClure (Executive Director), Constance W. Pass (Chief Financial Officer), and Samuel M. Rankin (Associate Executive Director, Washington Office).

President George Andrews presided over the EC and ECBT portions of the meeting (items beginning with 0, 1, or 2). Board Chair John Conway presided over the BT portion of the meeting (items beginning with 3).

Items in these minutes occur in numerical order, which is not necessarily the order in which they were discussed at the meeting.

0 CALL TO ORDER AND ANNOUNCEMENTS

0.1 Opening of the Meeting and Introductions.

President Andrews called the meeting to order and asked those present to introduce themselves.

0.2 2009 AMS Election Results.

Secretary Daverman announced the following election results:

President
Eric M. Friedlander, University of Southern California
Term is one year as President Elect (1 February 2010 - 31 January 2011), two years as President (1 February 2011 - 31 January 2013), and one year as Immediate Past President (1 February 2013 - 31 January 2014)

Vice President
Sylvain Cappell, Courant Institute of Mathematical Sciences, New York University
Term is three years (1 February 2010 - 31 January 2013)

Trustee
Mark L. Green, University of California, Los Angeles
Term is five years (1 February 2010 - 31 January 2015)

Members at Large of the Council
Alejandro Adem, University of British Columbia
Richard Hain, Duke University
Jennifer Schultens, University of California, Davis
Janet Talvacchia, Swarthmore College
Christoph Thiele, University of California, Los Angeles
Terms are three years (1 February 2010 - 31 January 2013)

Nominating Committee
William Beckner, University of Texas at Austin
Richard T. Durrett, Cornell University
Carla D. Savage, North Carolina State University
Terms are three years (1 January 2010 - 31 December 2012)

Editorial Boards Committee
Anatoly Libgober, University of Illinois at Chicago
Simon Tavener, Colorado State University
Terms are three years (1 February 2010 - 31 January 2013)

0.3 Housekeeping Matters.

Executive Director McClure mentioned some details about the schedule and arrangements for the events that took place during this meeting.

1 EXECUTIVE COMMITTEE ACTION/DISCUSSION ITEMS

1.1 Draft Agenda for the January 2010 Council Meeting.

The EC reviewed a draft of the agenda for the January 2010 Council meeting and recommended that an agenda item on modifications to the Fellows Program be added.

The EC also decided to do another round on employment prospects in the mathematical sciences as the discussion topic at the April 2010 Council meeting.

1I EXECUTIVE COMMITTEE INFORMATION ITEMS

1I.1 Secretariat Business by Mail. Att. #2.

Minutes of Secretariat business by mail during the months May 2009 – November 2009 are attached (#2).

2 EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES ACTION/DISCUSSION ITEMS

2.1 Report on Mathematical Reviews Editorial Committee (MREC). Att. #3.

The ECBT received the attached report (#3) on the October 5, 2009 MREC meeting.

2.2 Report on Committee on Publications (CPub). Att. #4.

The ECBT received the attached report (#4) on the September 11-12, 2009 CPub meeting.

2.3 Report on Committee on the Profession (CoProf). Att. #5.

The ECBT received the attached report (#5) on the September 12-13, 2009 CoProf meeting.

2.4 Report on Committee on Education (COE). Att. #28.

The ECBT received the attached report (#28) on the October 23-24, 2009 COE meeting.

2.5 Report on Committee on Meetings and Conferences (COMC).

The ECBT was informed that the last COMC meeting was held on March 14, 2009, and a report of that meeting was given at the May 2009 ECBT meeting. The next COMC meeting will be held on Saturday, March 20, 2010 at the O'Hare Hilton Hotel in Chicago.

2.6 Report on Committee on Science Policy (CSP).

The ECBT was informed that the last CSP meeting was held on March 6-7, 2009, and a report of that meeting was given at the May 2009 ECBT meeting. The next CSP meeting will be held March 12-13, 2010 in Washington, DC.

CSP will host a panel discussion on the Board of Mathematical Sciences and Applications Report "Evaluation of NSF's Program of Grants and Vertical Integration of Research and Education (VIGRE) in the Mathematical Sciences" at the Joint Mathematics Meetings in San Francisco, CA in January 2010.

2.7 Washington Office Report. Att. #6.

The ECBT received the attached report (#6)on recent activities of the Washington Office.

2.8 Report from the President.

President Andrews commented on the following matters that are of particular interest to him:

- research support for young faculty (see item 2.9 of these minutes)
- jobs for mathematicians (see item 2.13 of these minutes)
- "big tent" issues (e.g., AMS-MAA-SIAM joint membership [see item 2.12 of these minutes] and the possibility of AMS getting involved in MAA MathFest)
- mathematics education (e.g., common core standards effort, Intel and the Vermont Mathematics Initiative)
- reconsideration of an AMS fellows program proposal (it was noted that this will be discussed by the January 2010 Council)

2.9 Report on Long Range Planning Committee (LRPC).

President Andrews reported that the LRPC met on November 20, 2009 and discussed plans for launching a new development initiative in 2010 to support special programs for early career mathematicians. (See also item 2E.2 of the executive session minutes of this ECBT meeting).

2.10 2011 Individual Member Dues. Att. #7. *MAYCOCK.*

The ECBT reviewed Att. #7, which presents the principles and procedures for setting individual member dues, along with the information used by staff in formulating their recommendation that the 2011 dues rate for individual members NOT be increased above the 2010 level.

The ECBT concurred with the staff and voted to recommend to the January 2010 Council that individual member dues NOT be increased for 2011.

2.11 Registration Fees for Sectional Meetings.

It was reported that the November 1999 ECBT had voted to raise registration fees for sectional meetings for the first time since 1987. The new fees ($40 for members, $60 for non-members and $15 for students, unemployed and emeriti) were made effective with the sectional meetings in fall 2000. The November 2000 ECBT reconsidered the new fees and voted to maintain these for members and non-members, but to reduce the fees for students, unemployed and emeriti to $5. They also requested that registration fees for Sectional Meetings be routinely reviewed by the ECBT every three years. The ECBT discussed registration fees for Sectional Meetings in November 2003 and November 2006 but did not change them.

The ECBT received a report containing the following information regarding sectional meetings: history of registration fees, annual summaries of registrants, and revenue and expenses for the past nine years.

The ECBT set sectional meeting registration fees as follows:

sectional meetings during **2010-2011** academic year:
$50 member, $70 non-member, $5 student/unemployed/emeritus

sectional meetings during **2011-2012** academic year:
$52 member, $72 nonmember, $5 student/unemployed/emeritus

sectional meetings during **2012-2013** academic year:
$53 member, $74 non-member, $5 student/unemployed/emeritus

It was noted that sectional meeting registration fees will be considered by the ECBT again in November 2012.

2.12 Update on Discussions Regarding Joint Membership.

At the suggestion of President Andrews the November 2008 ECBT had a preliminary discussion of the possibility of offering a discounted joint membership in the AMS, MAA and SIAM. The Presidents and Executive Directors of the three organizations met at the January 2009 Joint Meetings and concluded that it might be possible to offer a single option to join all three for a combined dues payment slightly greater than the sum of the dues to join any two of the organizations. To determine the level of interest of the mathematics community and the likely impact on dues revenue for each organization, a sample survey of members was commissioned and carried out in October.

On November 16 the Executive Director received some results from the market survey and he presented a preliminary report to the ECBT; however, analysis at this time is not complete enough to frame any specific proposals.

2.13 Update on Employment Market and Program Plan for Career and EmploymentServices. Att. #17.

In the spring of 2009, the AMS Task Force on the Employment Prospects issued a report on the employment situation in mathematics. The ECBT received the attached (#17) update of the employment data, and a summary of steps taken by the AMS in 2009 to improve employment services.

2.14 Motions of the Secretary.

The following motions were approved by acclamation:

The Executive Committee and Board of Trustees of the American Mathematical Society record their thanks to ***Sylvain E. Cappell*** *for his service to the Society as a member of the Executive Committee during the past four years. The ECBT expresses its gratitude to Professor Cappell for his thoughtful participation and notes with pleasure that his service to the Society will continue when he assumes the office of Vice President at the beginning of next year.*

The Executive Committee and Board of Trustees of the American Mathematical Society record their thanks to ***Eric M. Friedlander*** *for his service to the Society as a member of the Board of Trustees during the past ten years. The ECBT expresses its gratitude to Professor Friedlander for his wisdom in contributing to the management of the Society and notes with pleasure that his service to the Society will continue when he assumes the office of President Elect at the beginning of next year.*

2C EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES CONSENT ITEMS

2C.1 May 2009 ECBT Meeting.

The ECBT approved the minutes of the meeting of the Executive Committee and Board of Trustees held May 15-16, 2009, in Providence, Rhode Island, which had been distributed separately. These minutes include:

- ECBT open minutes prepared by the Secretary of the Society (http://www.ams.org/secretary/ecbt-minutes/ecbt-minutes-0509.pdf),
- ECBT "open" executive session minutes prepared by the Secretary of the Society

See also item 3C.1 below.

2C.2 Funding Project NExT Fellows for 2011.

Project NExT (New Experiences in Teaching) is a program of the Mathematical Association of America that provides training for young mathematicians beginning their careers. The AMS first provided funding for six fellows in 2002. The November 2003 ECBT agreed to continue funding of $15,000 (six fellows at $2,500 each) each year, subject to review on the consent agenda at its November meeting two years prior. When this automated arrangement for providing sponsorship funds was approved, the ECBT agreed to review the program and the Society's role every two years. This was done in November 2008 and it was agreed that AMS support of the program should continue.

The ECBT consented to a commitment of $15,000 for Project NExT in 2011.

2I EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES INFORMATION ITEMS

2I.1 2010 Operating Plan.

The ECBT was notified on November 13, 2009 that the 2010 Operating Plan had been posted.

[It is noted for the record that after the final Section of the Plan (Section VI - Report on Projects and Activities) is completed in spring 2011, a complete, official copy of the 2010 Operating Plan will be attached to record copies of the May 2011 ECBT minutes.]

2I.2 Schedule for November 2009 ECBT Meeting. Att. #9.

It was reported that the Secretary and Executive Director set the schedule for the November 2009 ECBT meeting (Att. #9).

2I.3 Congressional Fellow.

The AMS is sponsoring Katherine Crowley as the AMS-AAAS Congressional Fellow for 2009-2010.

The AMS plans to sponsor a Congressional Fellow again in 2010-11. The deadline for receipt of applications for that fellowship is January 31, 2010. An announcement and information on the application process will be sent to mathematical sciences department chairs this fall, in addition to being publicized in the *Notices* and on the AMS website.

2I.4 AAAS-AMS Mass Media Fellowship.

The AMS sponsored Baldur Hedinsson, a Ph.D. student in mathematics at Boston University, as the AMS-AAAS Mass Media Fellow this past summer. He worked at the *Milwaukee Journal Sentinel*, a daily morning newspaper in Wisconsin.

The AMS plans to sponsor a Mass Media Fellow again in 2010. The deadline for receipt of applications for that fellowship is January 15, 2010. An announcement and information on the application process will be sent to graduate students in the mathematical sciences this fall, in addition to being publicized in the *Notices* and on the AMS website.

2I.5 Public Policy Award.

Helaman Ferguson, a mathematician and sculptor, has designed and is creating the AMS Public Policy Award sculpture, which should be ready soon. The award selection committee (George Andrews, James Glimm, and Ronald Stern) has chosen Speaker of the House Nancy Pelosi to receive the award and the AMS Executive Committee has approved this choice. The Washington Office is working to arrange a presentation of the award.

2I.6 Changes in Registration Fees for Conferences, Employment Center or Short Course. Att. #10.

The Executive Director is authorized to make changes in the following registration fees and then report at the next ECBT meeting: conferences, the Employment Center and Short Courses held at the Joint Mathematics Meetings, and MathJobs.org. Only the fees for the Employment Center have been changed since the last ECBT meeting.

The Employment Center is receiving a major enhancement for January 2010 as the AMS contracts with Boxwood Technologies to provide a completely electronic registration and interview scheduling process. Att. #10 contains a more complete description of the enhancements and the updated fees schedule.

2I.7 Travel Grants for Graduate Students for the JMM. Att. #11.

The AMS has once again received a gift from an anonymous donor to fund graduate students attending the 2010 Joint Mathematics Meeting in San Francisco. The gift of $35,000 will provide partial support of up to $500 each to approximately 75 graduate students. Att. #11 contains a report on how this program is being implemented.

2I.8 Back File Digitization Project. Att. #12.

Work has begun to digitize the back files of the AMS primary journals published prior to 1996. The outside expenses associated with this project are being funded by an anonymous donor. A recap of the project is attached (#12).

2I.9 Status Report on MathJax Project. Att. #23.

MathJax is server-based software that works with standard web browsers to render expressions in TeX and display the resulting mathematical expressions in a browser window. The development of MathJax is being sponsored equally by the AMS, SIAM and Design Science. The AMS expects to incorporate MathJax into MathSciNet in the near future. MathJax is potentially a very important development for communicating mathematics on the web. An example of MathJax is attached (#23).

2I.10 Status Report on *Friends of the IMU*.

The Society worked with the International Mathematical Union to form a U.S.-based 501(c)(3) corporation for support of the charitable mission of the IMU. In December 2008, the IRS approved the 501(c)(3) application.

One of the main purposes of Friends of the International Mathematical Union (FIMU) is to administer the funds for the Chern Medal which will be awarded for the first time at ICM2010. But in addition, FIMU makes it possible to make tax deductible contributions for other work of the IMU in support of mathematics. In particular, contributions made for purposes of the IMU Special Development Fund are now managed through FIMU.

In September, the AMS and FIMU signed a Services Agreement under which the AMS provides basic administrative services for FIMU. The joint effort has the potential for cooperation between the AMS and IMU on programs of mutual interest. One possible area is support of Young Scholars programs in developing countries.

3 BOARD OF TRUSTEES ACTION/DISCUSSION ITEMS

3.1 Budget Review.

The BT discussed items 3.1.1 through 3.2.5 and then voted to approve the 2010 budget as presented (subject to the discussion of item 3E.6 [Salary Increments for 2010] in closed executive session).

3.1.1 Discussion of Fiscal Reports.

The BT received and discussed various fiscal reports, as well as a memo discussing major variances between 2009 projections and the 2009 budget, and between 2009 projections and the 2010 budget. See 3.1.

3.1.2 Capital Expenditures – 2009 and 2010 Capital Purchase Plans.

The BT reviewed the 2010 capital purchase plan, and approved it as part of the 2010 budget. See item 3.1.

3.1.3 Capital Expenditures - Approval of Specific Purchases. Att. #24 and Att. #25.

The BT took the following actions:

- Approved the attached minutes of the meeting by technical means to authorize the expenditure of up to $226,500 for a four-color press (Att. #24).
- Approved the request presented in Att. #25 to retroactively authorize the expenditure of an additional $6,500 for a four-color press (bringing the total to $233,000).
- Approved the request presented in Att. #25 to retroactively authorize the expenditure of an additional $3,878 for the virtual server purchase as described in the original capital request (see May 2009 ECBT minutes, item 3.1.4). This brings the total for this purchase to $122,000.
- The BT concurred that the Executive Director has flexibility to allow modest cost overruns such as the above on capital expenditures and then report them to the BT.

3.2 Spendable Income, Operations Support Fund and Other Related Items. Att. #20.

The Society uses its long-term investments for several purposes, and for that reason it divides its investments into various funds. The following five standing items deal with those funds – additions, transfers and spending.

The description of the way in which the AMS uses its long-term investment portfolio was presented in the Fiscal Reports that had been provided to the ECBT separately. A diagram summarizing this description is attached (#20).

3.2.1 Addition to Operations Support Fund (OSF).

At its May meeting, the Board approved the staff recommendation to add $2,000,000 to the long-term investment portfolio, to be added to the OSF. The investment vehicles purchased were recommended by the Investment Committee, approved by the Board and the purchases were completed by the end of May 2009.

The amount due operations from the long-term investment portfolio at the end of 2009 is estimated to be approximately $2,380,000, principally consisting of spendable income and the estimated recovery of approximately 90% of the $615,000 that had to be transferred to certain true endowment funds to maintain their value at the original gift amount at the end of 2008 under the assumption there is no precipitous downturn in the investment markets before year end. While cash receipts for 2010 memberships and subscription renewals are well behind those of previous years, at the time of this writing there appears to be no pressing operational need for additional liquidity, so leaving these funds invested as has been done in previous years is appropriate.

The BT approved the Chief Financial Officer's recommendation that the amount due operations from the long-term investment portfolio at 12/31/09 (estimated to be approximately $2,380,000) remain there and be officially added to the OSF.

3.2.2 Rebalancing of Economic Stabilization and Operational Support Funds.

Under the policy adopted by the Board of Trustees at its May 2006 meeting, at the end of each fiscal year the allocated values of the Economic Stabilization Fund (ESF) and the Operations Support Fund (OSF) are rebalanced such that the ESF always equals the target balance. The BT reviewed a chart showing the increments and decrements in the OSF and ESF since their separation at 12/31/2000.

It was noted that the amount and direction of the rebalancing required at each year end is principally dependent upon the return on the long-term investment portfolio. If the long-term investment portfolio maintains or exceeds the current level of positive return through year end, the annual rebalancing transfer will be directed from the ESF to the OSF in 2009.

3.2.3 Allocation of Operations Support Fund (OSF) Spendable Income.

The May 2001 Board of Trustees approved the following (from item 2E.5):

Income from reserves should be allocated to each year's budget to service and outreach programs of the Society (without specifying exactly which programs). The total amount should be approved by the May ECBT, when revenue projections for the following year are made.

The BT was informed that the income from the OSF for 2009 and 2010, determined according to the guidelines approved by the BT are $1,399,500 and $1,451,100, respectively. Both the 2009 and 2010 amounts have been previously approved.

3.2.4 Appropriation of Spendable Income from Unrestricted Endowment. Att. #21.

The May 2001 Board of Trustees approved the following (from item 2E.5):

Each year, the budgeting process will include recommendations for allocating spendable income from the Unrestricted Endowment for specific projects. The allocated income will be treated as revenue for

> *operations, offsetting (part of) the expenses. These recommendations will be brought to the Board for approval at its November meeting in the normal budgeting process. The goal will not be to use all the income from such funds each year, but rather to use some of the income every year for the support of mathematical research and scholarship. Using such income should be a regular part of our operations rather than an exceptional situation.*

The 2010 revenue budget currently includes the full $272,200 of spendable income from true endowment funds whose use of income is unrestricted expected for 2010.

The BT approved the recommended appropriations for 2010 as outlined in Att. #21.

3.2.5 Report on Changes in Appropriated Spendable Income.

The Executive Director has the authority to transfer spendable income that will not be used on an approved project to another approved project, in case additional support is needed. A report of any such changes shall be made at the May 2010 ECBT meeting for 2009.

The BT was informed that there have been no such transfers to date in 2009.

3.3 Investment Committee Report.

Investment Committee Chair John Franks reported on the Committee's November 20, 2009 meeting as follows:

- Peter Kuechle of Frontier Capital Management attended the first part of the meeting and reviewed Frontier's approach and the AMS portfolio.
- The Committee considered whether any rebalancing was needed to conform to the current asset allocation policy and determined no changes were needed.
- The Committee reviews the spending rate (currently 5%) every five years – the next review will take place in May 2012.
- The Committee reviewed the spendable income history since 2003.
- The Committee asked staff to consider how to facilitate remote attendance at meetings using technology such as WebEx.
- It was noted that Henry Laufer's term on the Committee is about to expire. Suggestions for his replacement will be provided to the Chair of the Board, who will make the appointment.

3.4 Report on Information Architecture Project for the AMS Website. Att. #14.

The BT received the attached status report (#14) on the information architecture project.

3.5 Report on Personify Installation. Att. #13.

The BT received the attached status report (#13) on the Personify association management software installation.

3.6 Trustees' Officers.

The Board elected Carol Wood as Chair of the Board for the term February 1, 2010 – January 31, 2011.

The Board re-elected Karen Vogtmann as Secretary of the Board for the term February 1, 2010 – January 31, 2011.

3.7 Trustees' Committees, etc. Att. #15.

Board Chair John Conway made the appointments/assignments as shown on the attached list (#15).

[It is noted for the record that Henry Laufer's appointment on the Investment Committee has expired, but he has not been reappointed or replaced as of the date these minutes were written.]

3C BOARD OF TRUSTEES CONSENT ITEMS

3C.1 May 2009 BT Closed Executive Session Meeting.

The BT approved the minutes of the closed executive session meeting of the Board of Trustees held May 16, 2009, in Providence, Rhode Island, that had been distributed separately.

3C.2 Request for Support of Speakers at 2011 AAAS Annual Meeting.

The BT authorized $12,000 to support mathematics speakers at the 2011 American Association for the Advancement of Science (AAAS) annual meeting and permit the Secretary of Section A of AAAS to over-commit funds up to 20%, with the understanding that the goal is not to exceed the target amount of $12,000.

3C.3 Retirement Plan Restatement. Att. #26.

The BT approve the attached Retirement Plan Restatement (Att. #26).

3C.4 Tax-deferred Annuity Plan Restatement. Att. #27. *McCLURE*.

The BT approved the attached Retirement Plan Restatement (Att. #27).

3C.5 Resolution for Retiree.

The BT approved the following resolution:

Be it resolved that the Trustees accept the retirement of ***Prudence M. Gallagher*** *with deep appreciation for her faithful service over a period of sixteen years. The Board expresses its profound gratitude for this long record of faithful service. It is through the dedication and service of its employees that the Society is able to effectively serve its members and the greater mathematical community. The Trustees offer Dee their special thanks and heartfelt good wishes for a happy and well-deserved retirement.*

3C.6 Recognition for Length of Service.

The BT approved the following proclamations for the employees noted:

20 years of service:

Thomas F. Costa
Charlotte A. Mello
Amy Wagner Carpenter
Randal D. King
Patricia Wai-Ching Leung

The Board of Trustees takes great pride in recognizing _________ for twenty years of faithful service. It is through the dedication and service of its employees that the Society is able to effectively serve its members and the greater mathematical community. The Trustees offer _______ their special thanks and their best wishes.

25 years of service:

James W. Maxwell
Mary H. Medeiros
Michelle M. Ogilvie
William P. Olson
Christine Vendettuoli
Maxine L. Wolfson
Georgia Greene

The Board of Trustees takes great pride in recognizing _______________ who has devoted twenty-five years of service to the Society. The Board expresses its profound gratitude for this long record of faithful service. It is through the dedication and service of its employees that the Society is *able to effectively serve its members and the greater mathematical community. The Trustees offer their special thanks and their best wishes to __________ for being such a loyal employee and wish him/her well in the future.*

30 years of service:

Carol J. Couto
Beverly J. Demchuk-Burke

The Board of Trustees takes great pride in recognizing _______________for the outstanding distinction of serving the Society for thirty years. The Board expresses its profound gratitude for this long record of faithful service to the Society. It is through the dedication and service of its employees that the Society is able to effectively serve its members and the greater mathematical community. The Trustees offer their special thanks and their best wishes to this loyal employee.

35 years of service:

Gregory B. Sousa
Lila M. Dann
Bogdan D. Dudzik

The Board of Trustees takes great pride in recognizing _________________ for the outstanding distinction of serving the Society for thirty-five years. The Board expresses its profound gratitude for this long record of faithful service. It is through the dedication and service of its employees that the Society is able to effectively serve its members and the greater mathematical community. The Trustees offer their special thanks and their best wishes to ___________ for being such a loyal employee and wish her/him well in the future.

40 years of service:

Leslie J. DiPierro
Carol A. Hill
Muriel C. Toupin

The Board of Trustees takes great pride in recognizing ___________________ for the outstanding distinction of serving the Society for forty years. The Board expresses its profound gratitude for this long record of faithful service. It is through the dedication and service of its employees that the Society is able to effectively serve its members and the greater mathematical community. The Trustees offer *their special thanks and their best wishes to _____________ for being such a loyal employee and wish her well in the future.*

3I BOARD OF TRUSTEES INFORMATION ITEMS

3I.1 Future Change in Fringe Benefits.

In 1989 the Society restructured retirement benefits for staff adopting both a Retirement Plan [403(a)] and a Tax-Deferred Annuity Plan [403(b)]. At that time, although the 403(a) plan was subject to an annual audit, there were very few other administrative responsibilities placed on the Society. Over the years the audit and subsequent 5500 filings have expanded in scope. With adoption of Internal Revenue Code Section 403(b), effective 01/01/2009, the 403(b) plan is now subject to annual audit. In addition, the administrative responsibilities of the Society have increased. In an effort to simplify administration of retirement benefits, Angell Pension has been engaged to review the current plans and offer recommendations on consolidating the plans into one. Their report is expected by December and a recommendation will be brought to the Board next May.

3I.2 Small Changes in Fringe Benefits.

The November 1996 BT authorized the Executive Director to approve changes in benefit plans (except for those changes which would significantly enhance or degrade the Society's financial health or relations with its employees) and asked that these changes be reported to the BT when appropriate. No changes have been made since the last ECBT meeting.

Respectfully submitted,

Robert J. Daverman, Secretary
Knoxville, Tennessee
December 16, 2009

AMERICAN MATHEMATICAL SOCIETY

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SECRETARIAT
Business by Mail
May 1, 2009

MINUTES
from the Ballot dated April 1, 2009

There were five votes cast by Robert Daverman, Susan Friedlander, Michel Lapidus, Matthew Miller and Steven Weintraub.

1. Approved electing to membership the individuals named on the list dated March 20, 2008.

2. Approved Seattle, Washington, as the site of the 2016 Joint Mathematics Meetings.

3. Approved Atlanta, Georgia, as the site of the 2017 Joint Mathematics Meetings.

4. Approved a (new) Reciprocity agreement with the Tunisian Mathematical Society.

5. Approved a (new) Reciprocity agreement with the Vietnam Mathematical Society. The agreement would offer Foreign Affiliate Status to AMS members, since by national law the VMS is unable to call someone a member unless they are a citizen of Vietnam. However, Foreign Affiliate Stratus will carry all the same privileges as membership.

6. Approved the University of Richmond, Virginia, as the location of the November 6-7, 2010, (Sat-Sun) Southeastern Section Fall Secretariat meeting.

7. Approved the nomination of Doron Zeilberger as the 2010 Erdös Lecturer. The lecture will be held the University of Kentucky in Spring 2010.

8. Approved AMS co-sponsorship of a Workshop extending the Conference on Geometric Topology in 3 and 4 Dimensions (in honor of Martin Scharlemann). The Workshop will take place on June 26-29, 2009, and like the Conference honoring Scharlemann, it will be hosted by UC Davis. Abby Thompson will be the AMS representative on the program

committee. This Workshop grew out the Summer 2008 Mathematical Research Communities workshop on Low Dimensional Topology and it is aimed at participants from the event.

9. Approved AMS co-sponsorship of a meeting in June 2010 in Coimbra, Portugal, entitled "Coimbra Meeting on 0-1h Matrix Theory and Related Topics." For more information about the theme and current members of the scientific organizing committee see http://www.mat.uc.pt/~cmf/01MatrixTheory . Approval is contingent on consent that there be an AMS member on the Scientific (Program) Committee, appointed in time for meaningful participation.

10. Approved the minutes of the Secretariat Business by Mail from the ballot dated March 2, 2009.

Robert J. Daverman

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SECRETARIAT
Business by Mail
June 1, 2009

MINUTES
from the Ballot dated May 1, 2009

There were four votes cast by Robert Daverman, Michel Lapidus, Matthew Miller and Steven Weintraub.

1. Approved electing to membership the individuals named on the list dated April 20, 2009.

2. Approved a Joint International Meeting between the AMS and the Sociedad de Matematica de Chile to be held in Pucon, Chile, on December 15-18, 2010 (to be treated as the AMS joint meeting for 2011).

3. Approved holding the Spring 2011 Meeting of the Western Section at the University of Nevada in Las Vegas on Saturday and Sunday, April 30 and May 1st, 2011.

4. Approved for International Institutional Membership the CRMAIIMBAR (Inst ID: CRMA-BAR) Centre de Recerca Matematica, Apartat 50, E-08193 Barcelona, Spain.

5. Approved the minutes of the Secretariat Business by Mail from the ballot dated April 1, 2009.

Robert J. Daverman

AMERICAN MATHEMATICAL SOCIETY

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Robert J. Daverman, Secretary
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SECRETARIAT
Business by Mail
July 1, 2009

MINUTES
from the Ballot dated June 1, 2009

There were five votes cast by Robert Daverman, Susan Friedlander, Michel Lapidus, Matthew Miller and Steven Weintraub.

1. Approved electing to membership the individuals named on the list dated May 20, 2009.

2. Approved the minutes of the Secretariat Business by Mail from the ballot dated May 1, 2009.

Robert J. Daverman

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SECRETARIAT
Business by Mail
August 3, 2009

MINUTES
from the Ballot dated July 1, 2009

There were four votes cast by Robert Daverman, Michel Lapidus, Matthew Miller and Steven Weintraub.

1. Approved electing to membership the individuals named on the list dated June 20, 2009.

2. Approved holding the fall 2011 meeting of the Western Section at the University of Utah, Salt Lake City, on Saturday and Sunday, October 22-23.

3. Approved the minutes of the Secretariat Business by Mail from the ballot dated June 1, 2009.

Robert J. Daverman

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SECRETARIAT
Business by Mail
September 1, 2009

MINUTES
from the Ballot dated August 3 2009

There were four votes cast by Robert Daverman, Michel Lapidus, Matthew Miller and Steven Weintraub.

1. Approved electing to membership the individuals named on the list dated July 20, 2009.

2. Approved the minutes of the Secretariat Business by Mail from the ballot dated July 1, 2009.

Robert J. Daverman

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SECRETARIAT
Business by Mail
October 1, 2009

MINUTES
from the Ballot dated September 1, 2009

There were four votes cast by Robert Daverman, Michel Lapidus, Matthew Miller and Steven Weintraub.

1. Approved electing to membership the individuals named on the dated August 20, 2009.

2. Approved the minutes of the Secretariat Business by Mail from the ballot dated August 3, 2009.

Robert J. Daverman

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SECRETARIAT
Business by Mail
November 2, 2009

MINUTES
from the Ballot dated October 1, 2009

There were five votes cast by Robert Daverman, Susan Friedlander, Michel Lapidus, Matthew Miller and Steven Weintraub.

1. Approved electing to membership the individuals named on the list dated September 20, 2009.

2. Approved co-sponsorship by the AMS of the Queen Dido Conference to be held May 24-29, 2010 in Carthage, Tunisia. Official conference title: "From Carthage to the World: the Isoperimetric Problem of Queen Dido and its Mathematical Ramifications." See attachment.

3. Approved VLORIIMVLO (UVLOR-VLO), Univ of Vlora, in Vlora, ALBANIA, for International Institutional membership.

4. Approved holding a meeting of the AMS Central Section at the University of Nebraska-Lincoln on October 14-16, 2011.

5. Approved the minutes of the Secretariat Business by Mail from the ballot dated September 1, 2009.

Robert J. Daverman

Report on the 2009 Meeting of the Mathematical Reviews Editorial Committee

The Mathematical Reviews Editorial Committee (MREC) held its annual meeting at the Mathematical Reviews offices on Monday, October 5, 2009. In attendance were committee members, Cameron Gordon, Jonathan Hall (Chair), Peter Maass, Tadao Oda, Ronald Solomon and Trevor Wooley; invited guests, Linda Keen, AMS Associate Treasurer, and Shigefumi Mori, who will join MREC in 2010; AMS Executive Director, Don McClure; the MR editors and administrative assistant.

After the customary preliminaries, including a discussion of future membership of the committee, the meeting continued with informational items including overviews of the 2010 Operating Plan and the 2008 report of Planned Activities and Projects. It was noted that MR now processes 360 regular items a day, and in 2009, a record number of reviews (68,805) were published in paper MR. The committee was also apprised of progress that is being made in obtaining permission from publishers to provide reviewers with electronic copies of papers for review. This was followed by a demonstration of several new internal processing tools.

A synopsis of the committee's actions and discussion of agenda items follows.

The committee approved a policy for extending the choice of Database Expansion items which was prepared by the MR editors at the request of the committee. Database Expansion items are presented in MathSciNet with full bibliographic information, author identification and, if available, article links, but without subject classifications. Heretofore, MR added only items in Statistics and Computer Science to the database as Database Expansion Items.

The committee also learned how the MR database will be enhanced through a recent agreement with ProQuest, which will provide MR with bibliographic details of Ph.D. dissertations in mathematics and statistics free of charge. Such data will be shared with the Mathematical Genealogy Project with which the AMS now has a signed agreement of cooperation. The committee was also apprised of a current project in which MR is investigating the development of an automatic process for the preliminary posting of bibliographic data of items from high density journals, with full cataloging, including author identification, being done later. In this process, the data would be posted as soon as an item is submitted to CrossRef. This would be a significant enhancement to MathSciNet, providing bibliographic listings as much as three months earlier than is currently possible.

The committee briefly discussed the matter of MR's coverage of the Chinese language mathematics literature. Since the panel discussion at last year's meeting, MR is now receiving books from Higher Education Press and is working to develop a relationship with Science Press. The committee recommended that this issue should be revisited by MREC periodically.

The committee was given a demonstration of enhancements that will be included in the next version of MathSciNet , planned for release in October 2009. The Digital Object Identifier (DOI), which has become widespread in identifying publications on the web, will be included in

BibTeX and AMSRefs formats available from MathSciNet. In response to a request from librarians for library branding, customer names from the AMS Customer Database will be added. To further leverage the database, additional queries will be added such as: a) top cited books or all publications per two-, three- or five-digit classification; b) top 25 most cited journal articles for a given year or all publications for that year. A MathJax display choice will be released later in the year as an alternative to the current display choices of plain HTML and PDF. MathJax is an open source platform displaying mathematics in a wide range of browsers. Its development is supported by a consortium including the AMS, SIAM, Design Science and the APS.

The committee approved a list of 17 journals recommended by MR editors for addition to the collection of Reference List Journals. This brings the number of journals for which every listing on MathSciNet is accompanied by a reference list to approximately 425. Reference lists for articles from these journals published in 2000 or later will be appended to existing listings. This backfill work will be completed early in 2010.

The committee discussed suggestions from MR editors on possible ways that MR might acknowledge extraordinary service of MR reviewers. MR now has almost 15,000 voluntary reviewers around the globe. Currently, each month, the Executive Editor writes a letter of thanks to authors of reviews which are rated by MR editors as outstanding. Since 2005, only 191 reviews have received this designation, approximately three out of approximately 5000 reviews per month. The committee recommended that copies of such letters be sent to the reviewer's department chair and dean. It was also suggested that, each year, a prize be awarded to the best of these outstanding reviews, judged by MREC. Additional suggestions include service awards which would be presented to reviewers when they published certain numbers of reviews. MR editors will follow up on these suggestions.

The committee reviewed the MR Editorial Statement and no changes were suggested.

As is done annually, the committee was provided with comparative information concerning the Mathematical Reviews and the Zentralblatt Math databases. The joint MR-Zbl revision of the 2000 Mathematics Subject Classification was released as MSC2010 in July 2009. The committee was informed of other collaborations between MR and Zbl including plans for a joint reception at ICM 2010 in Hyderabad, India, in August 2010.

The date for the next MREC meeting is Monday, October 18, 2010.

Graeme Fairweather, October 2009

AMS Committee on Publications
September 11-12, 2009
Report

A meeting of the AMS Committee on Publications (CPub) was held on September 11-12, 2009, at the Chicago Hilton O'Hare, Chicago, IL. Robert Devaney, CPub Chair, presided over the meeting.

On Friday evening, AMS Publisher Sergei Gelfand presented an overview of e-publishing, including its history and current trends. General issues of scientific publishing in journals, books, and database products were discussed, as well as specific issues encountered in e-publication of mathematics.

Overall, the advantages of e-publishing seem to far outweigh the disadvantages not only for publishing database-type products, but also for journal and book publishing. However, factors such as the lack of agreement on standard formats and the enduring preference for tangible paper products have kept the scientific publishing industry from investing too heavily in e-only publishing. Rapidly evolving technology has further added to publisher ambiguity regarding e-publications. It was noted, for instance, that currently there are approximately 26 different e-book formats and 20 different e-readers available.

Other "side-effects" of e-publishing, such as increased occurrences of piracy, present challenges to both authors and publishers. Scientific publishers also have to determine whether they feel that allowing authors to post their work on personal webpages or databases such as arXiv will ultimately be beneficial or detrimental to sales.

Saturday's agenda included the following topics:

CPub 2008 Updates

The Publisher gave a summary of actions taken as a result of the 2008 CPub meeting:

- Issues of Journals: Open Access-Green vs. Gold

At its January 2009 meeting, the Council approved the following statement regarding author-pay models of open access:

> *The American Mathematical Society strongly endorses the principle that a paper in the mathematical sciences should have the opportunity to be evaluated and possibly published without regard to the financial circumstances of its authors. For this reason, the AMS does not charge authors any fees for publication in its journals.*

- Memoirs Pages

A temporary 600 page increase for *Memoirs* was extended through 2010 by the Executive Committee and Board of Trustees (ECBT) at its May 2009 meeting. Extending the temporary increase will allow staff to evaluate the impact of electronic availability of the *Memoirs* prior to considering any permanent increase in pages.

- New Book Series

The general description and charge for the Pure and Applied Undergraduate Text (AMSTEXT) series was approved by the Council in January 2009. Editorial committee members have been appointed and include: Chair, Paul Sally, *University of Chicago*; Joseph Silverman, *Brown University*; Frances Su, *Harvey Mudd College*; and Susan Tolman, *University of Illinois*. Approximately 2-3 new titles in this series are expected to be published in 2010.

Guidelines for Book Editors

Subcommittee members presented a proposed draft of book editor guidelines. The Committee discussed the importance of seeking input from book editorial committee chairs on the proposed guidelines. AMS will distribute the current draft of the "Guidelines for Members of Book Series Editorial Committees: *To guide the decision making process*" to the chairs of all AMS book editorial committees for comment. CPub moved to recommend the proposed guidelines for approval by the Council once comments/suggestions have been solicited from book editorial committee chairs and incorporated as applicable.

Policy on Plagiarism

A revised draft of the AMS Policy on Plagiarism, as prepared by subcommittee, was presented. As additional agenda attachments, the Subcommittee provided some resources for journal editors and examples of how other publishers have dealt with past occurrences of plagiarism. One of the resources discussed, Elsevier's Publishing Ethics Resource Kit (PERK), is available online and contains flowcharts developed by the Committee on Publication Ethics (COPE) that illustrate problem solving procedures for editors to follow when they suspect publication misconduct. An overview of the procedures followed by Mathematical Reviews (MR) in the event of suspected plagiarism was also provided to the Committee by Executive Editor Graeme Fairweather. The Committee made two revisions in the text of the proposed statement and moved to recommend the Policy on Plagiarism for approval by the Council.

Review of the AMS Member Journals

The report of the CPub subcommittee which reviewed the AMS member journals (*Notices*, *Bulletin*, and *Abstracts*) was presented. The Subcommittee's evaluation was conducted to determine the overall scientific health of the member journals with particular focus on their effectiveness in serving the needs of the Society and the mathematical community.

The Subcommittee offered the following suggestions based on their review:

- Consider inviting the *Notices* chief editor to attend Council meetings to remain informed about current issues facing the AMS.
- Consider making *Notices* more interactive online.
- Continue discussion on eliminating paper copies of the *Abstracts* if it is found to be a cost-effective measure.

- Consider modifying current procedures for providing copies of *Bulletin* and *Notices* to nominee members.

- The Subcommittee noted that the AMS is in the implementation stage of a new policy whereby nominee members will receive mailed copies of the *Bulletin* and *Notices* only if they request that such copies be sent.

Author Offprints

The Associate Executive Director of Publishing informed the Committee of the upcoming change in the distribution of author offprints. Beginning in January 2010, proceedings and journal article offprints will be provided to authors in PDF format. Authors will be notified via email when their offprints are available and will then be able to access them by logging-in to their AMS account and clicking on the link(s) provided.

Backfile Digitization Project

The Committee was provided with an update on the status of the backfile digitization project for the four (4) AMS primary journals by the Associate Executive Director of Publishing. Although this project was not scheduled to be revisited by CPub until 2010, an anonymous benefactor has committed to funding the project in full, and it is now underway. Apex, the outside vendor contracted by the AMS, has begun work on phase 1 of the project. When the project is complete, approximately 375,000 pages of content from the primary journals published prior to 1996 will be freely accessible on the AMS Journals webpages. The project is expected to take approximately one year to complete.

Report on Journal Backlogs

The agenda included the standard journal backlog reports: the annual report of the mathematical research journals which appears in the *Notices*, and the internal production report for the AMS primary journals and the *Memoirs* as of July 31, 2009. AED Huber informed the Committee that a slight overall decrease in the primary journal backlogs is attributed to the 10% page increases implemented in both 2007 and 2008. The backlogs for *Proceedings* and *Transactions*, however, remain at unacceptable levels, and staff is working with the managing editors of these journals to address this issue.

Report on Mathematical Reviews

The annual report on Mathematical Reviews was provided to the Committee by the Executive Editor. The MR database continues to grow steadily, with roughly 360 entries being added daily and 35 new journals added for coverage so far this year. Expansion of the scope of the database also continues, with 4,000 items projected to be added in non-traditional areas such as applied statistics and computer science. Upgrades to MathSciNet will also be instituted. The 2010 Mathematical Subject Classification (MSC2010), developed collaboratively by the editors of MR and Zentralblatt, was released in July.

AMS Publication Language

The Committee discussed whether the AMS should consider establishing a policy on its primary publication language(s). In the past five (5) years, the AMS has published 22 items in French, and regularly receives submissions in languages other than English. Each AMS journal currently handles non-English submissions differently, at the discretion of the managing editor. It was suggested that establishing a "preferred" publication language would be more appropriate and less exclusive than setting policy on acceptable publication language(s). The Publisher will discuss the Committee's suggestion with staff and add a statement to current author resource materials indicating that the AMS' preferred publication language is English.

The next meeting of the Committee was scheduled for October 22-23, 2010, at the AMS Headquarters in Providence, RI. A review of the primary journals: *Journal of the AMS, Mathematics of Computation, Proceedings of the AMS,* and *Transactions of the AMS* will be conducted during the year and presented at the 2010 meeting.

Sergei Gelfand, *Publisher*
October 20, 2009

Committee on the Profession
September 12-13, 2009
Chicago O'Hare Hilton Hotel

The Committee on the Profession (CoProf) held its annual meeting on September 12-13, 2009, at the O'Hare Hilton Hotel in Chicago, IL. Highlights of that meeting are provided below.

Annual review: CoProf's annual review, conducted by a subcommittee, was on the topic of the Society's activities related to the human rights of mathematicians. The subcommittee felt that the charge of the Committee on the Human Rights of Mathematicians (HRM), revised in 2003 by CoProf, now has the appropriate balance between being "too political" and "too limited" (opinions held by former members of the HRM committee). The current chair of the HRM committee has asked for additional staff support from the AMS, such as providing information at the beginning of the chair's term about committee members and their contact information, and helping to set up conference calls. The subcommittee endorsed this request for staff support. The subcommittee observed that the charge to the HRM committee suggests that there might be actions taken after investigation of an issue or event. It needs to be made clear whether it should be HRM committee members or others in the AMS governance structure who should act.

2009 Information Statement on the Culture of Research and Scholarship in Mathematics: The Committee on the Profession has been making a series of statements that highlight ways in which the traditions of mathematics differ from those in other disciplines, especially other sciences and engineering. This year, CoProf discussed a statement concerning citation and impact in mathematical publications. The subcommittee is working on a revision that will be circulated by email for approval by the full committee.

Programs that Make a Difference: In January 2005, Council endorsed CoProf's recommendation to recognize two programs each year that: (1) aim to bring more persons from underrepresented minority backgrounds into some portion of the pipeline beginning at the undergraduate level and leading to an advanced degree in mathematics, or retain them in the pipeline; (2) have achieved documentable success in doing so; and (3) are replicable models. Last year, the subcommittee requested that they proceed on a different schedule, with a call for nominations sent out in the summer, and the subcommittee to make its decisions in the fall. This year's subcommittee is following a similar schedule, and will make its decision in November. Subsequently, CoProf will have the opportunity to endorse the subcommittee's decision by email. Three nominations were continued from last year, and three more have been received. The two programs that are chosen will be featured in the May 2010 issue of the *Notices* and will be presented on a web site linked to the AMS home page. The two programs recognized in 2009 were the Department of Mathematics at the University of Mississippi and the Department of Statistics at North Carolina State University.

Prizes: In February 2009, President George Andrews appointed a Task Force on Prizes, whose charge is "to carefully consider the principles by which the Society seeks and creates new prizes". The members of the Task Force are Alejandro Adem, Eric Friedlander, Robert Guralnick, William Jaco, Chawne Kimber, Bryna Kra and Francis Edward Su, many of whom are also members of CoProf. CoProf's discussion on prizes, attended also by the Task Force chair William Jaco, was held in order to inform the Task Force about the concerns that CoProf has had on this topic. The Task Force will meet at the 2010 Joint Mathematics Meetings. CoProf approved the recommendation that the AMS journal editors be polled as a matter of policy in order to come up with nominations for the Moore Prize. CoProf also discussed the possibility of changing the time limit for eligibility for the Satter Prize, but decided not to change the current time limit of six years.

Nominee Program: For some time, there has been concern about the Nominee program, which allows institutional members with graduate programs to enroll all of their graduate students as members of the AMS. The Committee on Publications expressed particular concern in its annual review this year about a "Green Initiative" that was launched in early 2009 for Nominees, requiring a Nominee member to alert the AMS if he or she wished to receive paper copies of the *Notices.* AMS staff members who work on membership issues asked CoProf to establish a Working Group, composed of several AMS staff members as well as volunteers, in order to discuss ways to improve the current Nominee program. The Working Group will be appointed in the fall of 2009, and will report back to CoProf in the fall of 2010 with its conclusions.

Employment Issues: CoProf was informed about the report of the Task Force on Employment Prospects, and the updated employment services of the AMS. The committee discussed the Claremont Colleges Math-In-Industry Workshop as a model for how the job landscape could be enlarged for early career mathematicians. CoProf decided, after reviewing a preliminary report by a subcommittee, not to write a general statement on the ethics of faculty hiring.

CoProf Panel at the 2010 JMM: CoProf will have a panel at the 2010 Joint Mathematics Meeting in San Francisco. The panel will be: *What I wish I had known when applying for a job,* moderated by Christopher McCord, Northern Illinois University. The panelists are Elizabeth Beazley, University of Michigan and Williams College; Julie Bergner, University of California, Riverside; Tony DeRose, Pixar Animation Studios; Karl Kempf, Intel and Arizona State University; Bryna Kra, Northwestern University; and Ken Ono, University of Wisconsin-Madison.

Panel description: This panel will give a first-person look at the process of applying for positions, both inside and outside academia. Through their experiences, panelists will help young mathematicians understand how to approach the job search process: what to expect; how to prepare; what to do; and what not to do. This session will focus on the employment opportunities for doctoral students and recent PhD graduates, and will give you lots of chances for Q & A with the panelists. The panelists will include both people who have recently been on the job market, and people who have recently been on hiring committees.

Next meeting: The Committee on the Profession will hold its next meeting on October 23 – 24, 2010, in Providence. The Committee selected the Society's activities in the area of Professional Development as the topic of the next year's annual review. This topic was last reviewed in 2001. CoProf has chosen teaching loads as a topic for next year's information statement on the culture of mathematics.

Ellen J. Maycock
Associate Executive Director
October 21, 2009

Washington Office Report

October 21, 2009

At the time of the writing of this report, only one appropriations bill has been signed by the President and has become public law. Most of the federal government is running on a Continuing Resolution, which has become the usual mode of operation for this time of year. The Commerce, Justice, Science and Related Agencies (CJS) bill, which stipulates the budgets for the National Science Foundation (NSF), National Aeronautics and Space Administration (NASA), and National Oceanic and Atmospheric Administration, has been passed by the House but not by the Senate. The Energy and Water bill, containing the budget of the Department of Energy's Office of Science, has been passed both by the House and Senate and a compromised bill has been cleared to be sent to the White House.

The House CJS bill has given the NSF an FY 2010 budget of $6.94 billion, while the Senate Appropriations Committee has passed a CJS bill giving NSF an FY 2010 budget of $20 million less than the House at $6.92 million. Once the full Senate passes the Senate CJS bill, the House and Senate will conference to come up with a budget number for the NSF. From my conversations with staffers on both the Senate and House CJS subcommittees, the NSF budget should end up in proximity of these budget numbers. The only thing that might change this is pressure to add more money to NASA for human space flight. Money for this project would have to be found within the CJS bill and NSF is a likely target.

The longer it takes to complete appropriations, the more likely the chance that an omnibus appropriations bill will be the vehicle to complete the process. In an omnibus situation, individual appropriations subcommittees lose control of their parts of the appropriation and budgets are sometimes changed in order to accommodate a particular constituency. The NSF budget has been negatively impacted in the past when an omnibus bill was used to finish up appropriations.

Both the House and Senate FY 2010 NSF budgets are under the Administration Budget Request of $7.05 billion. The Division of Mathematical Sciences (DMS) is allocated $246.41 million in the Request. Given that the FY 2010 NSF budget will probably be lower than the Requested budget, DMS will receive proportionally less.

The FY 2010 Energy and Water bill, which will go to the President for his signature, has allocated $394 million to the Office of Advanced Scientific Computing Research (ASCR), one of the six interdisciplinary research offices of DOE's Office of Science. This budget level for FY 2010 is an increase of $25 million over the FY 2009 regular appropriated budget of ASCR, an increase of 6.9 percent. Mathematics at DOE is funded through ASCR via the Applied Mathematics program and the Scientific Discovery through Advanced Computing program.

Dixon Butler, the House Appropriations staffer that oversees the NSF part of the CJS bill, is a scientist and very supportive of NSF. He is concerned, as I am, about future growth of federal science budgets. Even though the current Administration is supportive of science, continuing large budget deficits and other pressures on the federal budget are bound to affect funding levels into the future. The science advocacy community will have to work hard to maintain adequate budget growth for NSF and other federal science budgets. Dixon has written concern about the future growth of the NSF budget in the FY 2010 House CJS Bill Report.

The Commission on Professionals in Science and Technology has invited Sam Rankin to participate in an NSF supported project: "Women in International Chemistry, Computer Science, and Mathematics and Statistics." An outcome of this project will be a book-length manuscript containing data and narratives measuring advancement of women in science. The manuscript will include a chapter on mathematics and statistics. Sam participated in a two-day workshop in September to kick off the project. He will be working with Keith Crank of the American Statistical Association and Diane Wilcox of the University of Witwatersrand, Johannesburg, South Africa to put together the chapter on mathematics and statistics.

Katherine Crowley, AMS 2009-2010 Congressional Fellow, has taken a position in Senator Al Franken's office. She will be involved with education issues, among other duties. Katherine is an assistant professor of mathematics at Washington and Lee University. Her fellowship term is from September 1, 2009 through August 31, 2010. Jim Rath, the 2008-2009 AMS Congressional Fellow has returned to Austin, Texas where he will do computational consulting. Jim also plans to run for the Austin school board.

Baldur Hedinsson, a graduate student at Boston University, completed his ten-week AMS-AAAS Mass Media Fellowship at the Milwaukee Journal Sentinel in August. Several of Baldur's articles were published in the Sentinel during his fellowship period. Baldur's experience has motivated him to consider including writing for the general population as part of his professional career.

This fall the Washington Office is preparing for the October 23-24 Committee on Education meeting, assisting chair, Larry Gray, in developing the meeting agenda, advertising the meeting to department chairs (29 will attend), and performing the logistics for the meeting. Also during this time, Sam Rankin helped Ron Stern, chair of the Committee on Science Policy, develop a panel for the Joint Mathematics Meetings (JMM) on the Board of Mathematical Sciences and Applications evaluation of the NSF VIGRE program.

On October 28, 2009, Stuart Geman of Brown University will present the annual AMS Congressional Luncheon Briefing. His talk is titled "The Movies, The Markets, and Mathematics." Don McClure will serve as Master of Ceremonies for the event.

The Annual Department Chairs Workshop will be held again the day before the JMM in San Francisco. Workshop leaders are Larry Gray, University of Minnesota; John Meakin, University of Nebraska – Lincoln; and Stephen Robinson, Wake Forest University.

The Washington Office continues to be active working with coalitions advocating for science research and education, including the Coalition for National Science Funding (CNSF) and the Task Force for the Future of American Innovation. Sam Rankin also attends monthly meetings of the Council of Graduate Schools where aspects and issues of graduate education are discussed.

Speaker Nancy Pelosi has been chosen by the AMS Public Policy Award Selection Committee (George Andrews, Jim Glimm, and Ron Stern) to be the first recipient of the Award. The Award is a sculpture designed and created by mathematician Helaman Ferguson. Sam Rankin made a request to present the Award to the Speaker at the JMM in San Francisco, her congressional district. This request was turned down, so we will try to set up a date for a reception and presentation in Washington in December or early in 2010. The Award primary form is currently at the foundry so December is the earliest that we can have the presentation.

Sam Rankin, once again, prepared a chapter "Mathematical Sciences in the FY 2010 Budget" for the *AAAS Report XXXIV: Research and Development FY 2010 (http://www.aaas.org/spp/rd/rdreport2010/).* This *Report* outlines federal funding for science research based on the FY 2010 Budget Request. It includes agency and discipline information. A version of the chapter will also appear in the November issue of the *NOTICES.*

Respectfully submitted,

Sam Rankin

Determining the 2011 Individual Member Dues Recommendation to the Council

The Guidelines.
In May 2004 the Board of Trustees approved, and the Executive Committee recommended to the January 2005 Council, a new procedure for setting dues each year, replacing the (almost) automatic formula that was used for many years by a procedure based on a set of principles for setting dues. The new procedure was approved by the Council and was first used in setting dues for 2006. The procedure requires beginning the process of setting dues slightly earlier than before. To change the dues rate for year X+2, the discussions must begin in year X.

- In November of year X, staff makes a recommendation about dues, following the principles described below. The ECBT recommends a dues rate for year X+2 to the Council.

- In January of year X+1, the Council reviews the ECBT recommendation and sets the dues rate for year X+2.

- In May of year X+1, the Board of Trustees approves the dues set by Council.

The process for setting dues is meant to be guided by the following principles.

Principle 1: The total revenue from individual dues should exceed the total net direct costs of the following membership related areas: privilege journals, members-only services, membership development, membership administration and governance, as reported to the Board of Trustees.

Principle 2: When an increase in dues rates is deemed to be appropriate, the following factors should guide the Council and the Board of Trustees in establishing the new dues rates:

- The current rate of inflation.
- The recent rate of growth in faculty salaries.
- The rate of growth in the net direct costs of the membership related areas listed in Principle 1.

Principle 3: A single increase in dues rates substantially beyond the level of the factors listed in Principle 2 should be avoided in favor of several successive moderate annual increases.

Recommendation for 2011 Dues.

The dues rate for 2010 was increased from the 2009 rate by $4, to yield dues of $168/$126 (high/low). Additionally, the cut-off salary for high/low rates was raised to $85,000. The table on the following page provides the information required under Principle 1. It includes actual results for 2001-2008, projected results for 2009, budgeted results for 2010 and an estimate of 2011 results assuming no increase in dues, a $4 increase in dues and an $8 increase in dues.

Prior to the change in the process of setting dues, the net difference between dues revenue and net direct costs of membership was a positive $569,000 in 2001. By the end of 2008, the difference had decreased to a deficit of $137,000. The difference is expected to be a deficit of $125,000 in 2009, which is significantly more of a deficit than what was expected ($33,000) when the 2009 dues were established. The difference is budgeted to be a deficit of $62,000 in 2010, which is a smaller deficit than what was expected ($98,000) when 2010 dues were established.

Dues Revenue and Net Direct Cost of Membership Activities (1,000's)

Year	Individual Dues Revenue	Net Direct Cost of Membership Activities	Surplus (Deficit) of Revenue over Costs
2001	1,413	(844)	569
2002	1,388	(960)	428
2003	1,369	(1,042)	327
2004	1,318	(1,189)	129
2005	1,345	(1,108)	237
2006	1,355	(1,112)	243
2007	1,364	(1,264)	100
2008	1,386	(1,523)	(137)
2009 Projected	1,368	(1,493)	(125)
2010 Budget	1,333	(1,395)	(62)
2011-$168	1,333	(1,444)	(111)
2011-$172	1,365	(1,444)	(79)
2011-$176	1,396	(1,444)	(48)

Explanatory Notes:

Membership Activities under Principle 1 are:
a) *Notices & Bulletin*,
b) Membership development and administration, and
c) Governance
The amounts are taken directly from the B-Pages, pages 5 and 7, as presented to the ABC.

None of the dues scenarios presented in the table above satisfies the requirements of Principle 1. An increase in dues of $16, or 9.52%, would not meet the requirements of Principles 2 and 3.

Principles 2 and 3 describe the factors to be taken into consideration for the determination of the amount of a dues increase. Shown in the chart at the end of this attachment are the economic data related to growth in faculty salaries and general inflation. The data on salaries relate to the general ability of members and potential members to pay dues with total personal income. It seems prudent for a membership organization to increase dues at the same or slower rate than its members' salaries increase. As of the end of 2008 (the last year of actual data), the cumulative dues increase lags the salary increase by slightly over three years. Similar results are seen if one uses the AAUP salary data, although the lag time and differences in the cumulative increases are about six months less than the results using the AMS survey.

The data on inflation relate to the ability of members and potential members to pay dues from discretionary income. Again, it seems prudent for a membership organization to maintain the cumulative increase in dues in line with general inflation in the absence of any significant financial needs. It should be noted that dues for year X are generally paid by members in the last quarter of year X-1, so the inflationary effect of dues on discretionary income felt by the individual member is likely somewhere in between the cumulative increase of year X (dues paid during dues year) and X-1 (dues paid in advance).

Principle 3 states that small increases in dues over time are preferable to a large increase in any one year. Although an increase of $8 in dues for 2011 is the option closest to meeting the requirements of Principle 1, it is a significant increase not seen in over two decades. Without regard to the requirements of Principle 1, staff do not believe that the Society's current financial condition warrants such an increase, as there are sufficient liquid assets available to fund the Society's expected internal investments as currently expected.

During a financial crisis, every member will be affected financially to some (negative) degree. It is disturbing to note that the salary increases for faculty based on the Annual Survey data is 1.6% in 2008. In fact, many members have experienced salary freezes or furloughs over the past year. We have seen membership numbers drop, probably because many members view dues as being a discretionary expense. Institutional dues and journal pricing will be held fixed for 2010 in response to the financial cuts many departments and libraries are facing. It might be politically wise to freeze individual dues in recognition of the difficulties that individual members will continue to have over the next few years.

Ultimately, the decision regarding 2011 dues comes down to a balancing act between the provisions of the principles, and the realities of the difficult financial times. Principle 1 precludes holding dues steady for 2011 at the 2010 rate, but Principles 2 and 3 would be violated if the dues were raised by an amount sufficient to meet the requirements of Principle 1. While raising the dues by $8 or $12 would get the Society closer to meeting the requirements of Principle 1, only the $4 increase is in line with inflation assumptions. Keeping the dues at the 2010 level, although not in strict keeping with the principles, could be in the best interests of our members and of the Society for the long term.

Ellen Maycock, Associate Executive Director
Constance Pass, Chief Financial Officer
October 2009

Factors for Consideration in Setting Individual Dues Rates for 2011

	Faculty Salaries Data					Inflation Data		Regular High Dues Rates				Dues Rev.
	AAUP Reports		AMS Annual Survey									
Academic Year Beginning	Annual Increase	Cumulative Increase	Annual Inc. Grps 1-3 combined	Cumulative Increase	Calendar Year	Annual Increase CPI-U	Cumulative Increase CPI-U	Actual Dues	Cumulative Increase	Covert Dues	High/Low Cutoff	Total Dues Revenue (1000's)
1996	3.0%				1996	3.3%		120		117.637	45,000	
1997	3.3%	3.3%	2.7%	2.7%	1997	1.7%	1.7%	124	3.3%	121.048	45,000	1,414
1998	3.6%	7.0%	3.8%	6.6%	1998	1.6%	3.3%	128	6.7%	124.679	45,000	1,437
1999	3.7%	11.0%	3.8%	10.7%	1999	2.7%	6.1%	132	10.0%	128.918	55,000	1,380
2000	3.5%	14.9%	5.0%	16.2%	2000	3.4%	9.7%	132	10.0%	128.918	65,000	1,384
2001	3.8%	19.2%	4.2%	21.1%	2001	1.6%	11.4%	136	13.3%	133.559	75,000	1,413
2002	3.0%	22.8%	3.3%	25.1%	2002	2.4%	14.1%	140	16.7%	138.501	75,000	1,388
2003	2.1%	25.4%	2.0%	27.6%	2003	1.9%	16.2%	144	20.0%	143.349	75,000	1,369
2004	2.8%	28.9%	2.2%	30.4%	2004	3.3%	20.0%	148	23.3%	148.796	80,000	1,318
2005	3.1%	32.9%	4.0%	35.6%	2005	3.4%	24.1%	152	26.7%	153.260	80,000	1,345
2006	3.8%	37.9%	3.5%	40.3%	2006	2.5%	27.2%	152	26.7%	156.478	80,000	1,355
2007	3.8%	43.2%	4.2%	46.2%	2007	4.1%	32.4%	156	30.0%	160.860	80,000	1,364
2008	3.4%	48.0%	1.6%	48.6%	2008	0.1%	32.6%	160	33.3%	166.973	80,000	1,386
					2009 est	3.0%	36.5%	164	36.7%	173.317	80,000	1,368
					2010 est	3.0%	40.6%	168	40.0%	179.210	85,000	1,333
					2011	3.0%	44.9%	**168**	40.0%		85,000	**1,333**
					2011	3.0%	44.9%	**172**	43.3%		85,000	**1,365**
					2011	3.0%	44.9%	**176**	46.7%		85,000	**1,396**

Explanatory Notes:
1. AAUP data: Percentage increase in average nominal salaries for institutions reporting comparable data for adjacent one-year periods.
2. CPI-U data: Based on the Dec. to Dec. annual change in the index, with estimates for 2009, 2010 and 2011.
3. Covert Dues: For the period 1990-1999, covert dues for Year N+1 were calculated by increasing the covert dues for year N by an amount equal to the AAUP percentage for Year N-1. A"holiday" was taken in applying the usual AAUP increase for 2000, and the formula was applied subsequent to 2000 using the AAUP figure for Year N-2. The formula approach is no longer used to determine the dues rate in any given year, but is presented here for informational purposes.
4. 2009 dues revenue reflects current projections and 2010 dues revenue is as budgeted. The three scenarios presented for 2011 dues assume a paying membership similar to that budgeted for 2010.
5. January 2009-September 2009 CPI-U is 2.73%;

AMERICAN MATHEMATICAL SOCIETY
EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES
(and other contiguous meetings)
NOVEMBER 20-21, 2009

MEETING LOCATION:	**HOTEL ACCOMMODATIONS:**
AMS Headquarters www.ams.org/secretary/pvd-local-info.pdf 201 Charles Street, Providence, Rhode Island 800-321-4267 or 401-455-4103 (phone) 401-331-3842 (fax)	Providence Marriott www.providencemarriott.com One Orms Street, Providence, Rhode Island 866-807-2171 or 401-272-2400 (phone) 401-273-2686 (fax)

	FRIDAY, NOVEMBER 20	**SATURDAY, NOVEMBER 21**
MORNING	10:00 – 12:00 Investment Committee Meeting[1] *Hille Conference Room*	8:00 Breakfast *Cafeteria* 8:00 – 9:00 EC Agenda *Hille Conference Room* 9:00 – 11:00 ECBT Agenda *Cafeteria* 11:00 – 11:15 Break 11:15 – 1:00 ECBT Agenda *Cafeteria*
AFTER-NOON	12:30 – 1:30 Lunch *Cafeteria* 1:30 – 2:30 Long Range Planning Committee Meeting[2] *Hille Conference Room* 3:00 – 4:00 Liaison Committee Meeting[3] *Don McClure's Office*	1:00 – 2:00 Lunch *Cafeteria* 2:00 – 4:30 BT Agenda *Cafeteria* 4:30 – 4:45 Break 4:45 – 6:30 BT Closed Executive Session *Hille Conference Room*
EVENING	4:30 – 6:00 ECBT Agenda *Cafeteria* 6:00 Dinner *Cafeteria*	7:00 Dinner *Brown Faculty Club (Portrait Room)* *(www.brown.edu/Facilities/Faculty_Club/)* *One Magee St, Providence* *401-863-3023*

[1] The members of the Investment Committee are: Franks (Chair), Keen, Laufer, Stern. Brownell, Daverman, McClure, Mollohan, Pass, and representatives from Frontier Capital Management are also invited to attend.

[2] The members of the Long Range Planning Committee are: Andrews (Chair), Charney, Conway, Daverman, Franks, Huneke, McClure. Glimm and Heiser are also invited to attend.

[3] The members of the Liaison Committee are: Andrews (Chair), Conway, Daverman, Franks. McClure is also invited to attend.

Fee Changes for the Employment Center

The fees listed in the chart below are in effect for the 2010 Employment Center in San Francisco, CA. This is a revision of the memo dated April 6, 2009.

The Employment Center is receiving a major enhancement for January, 2010 as the AMS contracts with Boxwood Technologies to provide a completely electronic registration and interview scheduling process (by employer invitation only). The employers and applicants will benefit from:

- a broader set of searchable/sortable information
- an electronic messaging/invitation process
- online schedule keeping
- work stations in the Employment Center for employers and applicants to access the system

Most of the scheduling process will take place from home in the months leading up to the meeting, thereby making the process more predictable and easing the stress on site.

The fees below include use of a table, the web information system, and the web appointment scheduling system. Tables can be obtained without the submission of an ad, for the same prices, for those who prefer to use a table but not attract any new applications. Since more and more "short list" interviews are happening in January, this has been requested by users.

Note also that applicants no longer pay fees. It is standard practice to have employers pay the cost of a service like this, and the AMS is now in a position to follow that practice. This is especially appropriate right now since applicants may be less likely to get interviews in the current job climate.

ALL participants will need a meeting badge for admittance into the room. This is not a new policy, but will now be strictly enforced.

Summary of recent and proposed fees

	2007	2008	2009	**2010**
Quiet Area table (1-2 int)	235	245	250	**265**
Second Quiet Area table	85	95	100	**100**
Committee table (3-6 int)			350	**365**
Second Committee table				**100**

Ellen J. Maycock
Associate Executive Director
October 5, 2009

Graduate Student Travel Grants to the 2010 Joint Mathematics Meetings

For the second year, the AMS has received a gift from an anonymous donor of $35,000 to support the travel of graduate students to the 2010 Joint Mathematics Meeting in San Francisco. The Membership and Programs Department has put in place the procedures for implementing the program during the fall of 2009.

This year, applications from graduate student are being accepted via the new electronic application site MathPrograms.org, which is an amended clone of Mathjobs.org. This program is open to full time graduate students (in good standing) in mathematical sciences departments at North American institutions. An applicant is able to log in and apply; the applicant's institution is given password access to upload a brief statement confirming its intention to match the AMS funding. The AMS expects to make awards in the amount of US$500 per student. The deadline for applications is October 28, 2009. As of the deadline, 372 applications had been received.

An evaluation panel of three mathematical scientists will read and rank applications via MathPrograms.org. Assuming they are able to complete their work quickly, award notifications will be made in November.

The program was announced in the September, 2009 Notices, on the AMS home page, in Headlines & Deadlines and in Headlines & Deadlines for Students. In addition, a mass emailing was sent to mathematics and applied mathematics departments of PhD granting institutions in early October. The web site for the program is linked to the Joint Mathematics Meetings web site.

Ellen J. Maycock
Associate Executive Director
October 29, 2009

BACKFILE DIGITIZATION PROJECT OVERVIEW

Since 1997 the only electronic access to AMS journals published prior to 1996 has been through JSTOR. Under our arrangement with JSTOR the AMS "shares" any profit JSTOR makes on the sale of subscriptions to their database with all the contributing publishers. This relationship with JSTOR is non-exclusive, which means that the AMS could put its back-files online in some other manner at any future date.

Although this arrangement with JSTOR provides access for a large number of institutions, not *every* mathematician has access to JSTOR. The only way to extend access to the entire community would be for the Society to digitize its own journals and put them up separately, integrating them into the current holdings, similar to what was done for the Bulletin. In keeping with our policy, all of this content would be freely available online since it would be well beyond our 5 year moving wall for journal access.

In 2007, the Committee on Publications recommended to then Executive Director and Publisher John Ewing that AMS staff investigate the possibility of completing a limited to full-scale backfile digitization project for the primary journals. At that time it was anticipated that such a project would be costly, the non-staff expenses were estimated to be in the range of approximately $350,000 to digitize over 375,000 pages of content.

Although the backfile digitization project had strong merits, it was determined in 2007 following consultation with the Board of Trustees, that work would be delayed on the project due to the financial demands of several large and costly projects that the Society was facing.

In 2008 an anonymous benefactor of the Society made a commitment to support the backfile digitization effort. With this commitment, work began on the project in early 2009 with the understanding that all the outside costs, which represent the majority of the expense, be underwritten by the anonymous benefactor. The timing of the project has enabled us to take advantage of aggressive pricing from our selected vendor. Work which was estimated to cost approximately $1.00 per page in 2007 is being performed at approximately $0.49 per page today.

This project entails using the outside vendor to scan the covers, front matter, back matter and articles for all paper issues of the primary journals prior to 1996. The vendor then uses Optical Character Recognition (OCR) software to create searchable text. Detailed information about each article title and author, mined from the Math Reviews database, will be merged with the article's supplemental metadata (abstract text, references, keywords, etc.). The outside vendor will then deliver article level PDF and XML tagged metadata files to the AMS for posting.

Phase I of the project which includes digitization of the *Journal of the AMS,* 1988-1995 and *Transactions of the AMS,* 1981-1995 is well underway. Although posting of the backfiles will begin in November we will not publicize the project until it is completed sometime in 2010.

Beth Huber
Associate Executive Director, Publishing
August 2009

Report on Personify Installation

Summary

In January 2009, the Board of Trustees approved the capital request for the purchase and implementation of the Personify association management software from TMA Resources (TMAR). Since then, AMS staff has been working with TMAR on the implementation process. TMAR follows a well-documented implementation process that includes the following tasks:

1. analysis of the Society's needs
2. configuration of the Personify software
3. identification of possible modifications
4. analysis of modifications
5. design and development of modifications
6. data conversion
7. system testing
8. user training
9. production support

The first four tasks are referred to as the Discovery stage. Each of these tasks requires communication between the Society and TMAR and need to be well documented. TMAR has setup a SharePoint website that is used for the sharing and exchange of documents with the AMS.

The initial project schedule targets production use of Personify in June 2010. The schedule will be refined after the Discovery phase has been completed, when the number and scope of modifications and conversion issues will have been identified.

TMAR's project team consists of the Director of Professional Services, a project manager, a business specialist, and a technical specialist. These four people are permanently assigned to the AMS implementation project and will call upon other resources within TMAR as necessary.

We have completed tasks 1 through 3 as described above and have begun task 4, analysis of modifications. During this task AMS staff and TMAR analyst develop specifications for modifications that are needed in the Personify package to meet our needs. If possible, internal procedures are modified or procedural work arounds are discussed to avoid unnecessary modifications.

The Personify software has been installed on the new, virtual server environment approved by the BT this spring. This virtual environment is expected to provide a stable, efficient environment for this software and a number of other systems. Personify software has a direct interface to the new Epicor accounting system that will allow for sharing of information between Personify and Epicor.

Project Report

TMAR's implementation process recommends that the AMS create a Core Implementation Team. The Core Implementation Team includes key decision makers from each of the major functional areas for the system to be installed. It includes representatives from Information Systems and Finance. It is recommended that the team include people who can make decisions on how things will be done using the new system and who can understand how internal procedures can be changed to accomplish a task, rather than just recreating an old workflow in the new system. The core implementation team includes:

Tom Blythe
Diane Boumenot
Gary Brownell
Janice Clark
Christine Davis
Tom Freitas
Ellen Heiser
Carol Hill
Beth Huber
Stephen Hultquist
Gerry Loon
Cheryl Marino
Ellen Maycock
Donald McClure
Lori Melucci
Joanne O'Meara
Bill Olson
Connie Pass
Penny Pina
Donna Salter
Lori Sprague
Peter Sykes
Barbara Veznaian

TMAR's implementation methodology consist of four stages:

1. Discovery
2. Design and Development
3. Configuration, Conversion & Testing
4. Roll Out

Each of the stages is described below.

Discovery

The discovery stage contains all of the analysis efforts of the project. The primary activity of this stage is for the TMA Resources Business Consultant to meet with the client's Core Implementation Team to collect the business requirements for the project. Any gap that is identified between the base functionality of Personify and the client's business requirements is captured as a "Fit Item".

The deliverables from the Discovery Stage include a Configuration Workbook, Prototype Personify Setups, Implementation Services Workbook, Implementation Statement of Work, and Implementation Project Plan. The Implementation Services workbook is made up of four reports: a Fit Analysis Report, eBusiness Integration Analysis Report, Reports Analysis Report, and Data Conversion Analysis Report. After completion of the Discovery Stage, a refined project schedule will be developed.

Design & Development

During this stage, any approved enhancements to Personify or the eBusiness software will be written. This is also when custom reports development takes place. Development may be done by AMS staff or by TMAR. Any enhancements developed by TMAR will be subject to “In Process Reviews”, where AMS staff is presented with progress towards enhancements to the system and are given the opportunity to provide feedback on the development. Deliverables from the Design and Development Stage include Detail Design Documents for each approved “Fit Item”, “In Process Reviews”, and the custom components ready for testing.

Configuration, Conversion & Testing

During this stage, TMAR will work with the AMS to complete the Personify system setups, convert data from the Society’s existing systems to the Personify database, and test the completed application prior to the system being used in production. Although a conversion analysis has already taken place during the Discovery Stage, this stage is when detailed data conversion mapping will take place. A Technical Consultant will work with the AMS to assist us in mapping our data to the Personify conversion templates. Once the mapping is completed, the first of the conversion cycles is initiated. Other milestones during this stage include Personify User Acceptance Testing and training on Baseline Financial Reconciliation. Deliverables for this Stage include completed data conversion cycle(s) with accompanying conversion reports, Baseline Reconciliation Workbook, and a System Testing Checklist.

Roll Out

The Roll Out stage consists of three main components: end user training, final conversion, and go live support. TMAR will work closely with the AMS to create a training plan to meet our needs, taking into consideration timing, staff size, number of modules being implemented, and method of delivery. Go live support, both on-site as well as phone support, will be scheduled and performed to successfully support our needs.

Tom Blythe, Chief Information Officer
Information Services Division

Report on Information Architecture Project for the AMS Website Project

Summary

The simply stated goal of the website reorganization project is to make it easier for people to navigate the AMS website and find the information for which they are looking. The basic structure of the AMS website has remained fundamentally unchanged since its inception in 1995. There have been facelifts over the years, but the core infrastructure is based on old (pre-Web1.0) concepts and the organization of the information has gradually degraded over time. In order to achieve this simple goal, the AMS website has to fundamentally change. Over the past year we have aggressively worked towards that change and we are close to launching a very much-improved AMS website. There have been some challenges along the way, but progress is being made and results are promising. The original target launch date for the site (12/15/2009) is being delayed to sometime in Q1/2010.

Detailed Report

Below are brief descriptions of the major milestones of the project:

Website Research and Analysis (completed): In late 2008, we engaged Contextual Analysis (CA) of Chicago, IL, to assist us with developing a new website Information Architecture (IA) and identifying features that are inherent to a well functioning website. This process included conducting stakeholder interviews, performing a comparative analysis of websites of three organizations similar to AMS, collecting and analyzing website statistics, auditing all of the existing AMS web content, and conducting user research and testing.

Website Mission Statement (completed): On January 29, 2009, CA worked with a group of senior managers and the IA project team to develop a mission statement for the website.

Website Governance Structure (completed): At the recommendation of CA and the IA project team the AMS Staff Executive Committee approved the adoption of a Website Governance Structure that includes an Executive Sponsor and an Advisory Group. The Web Advisory Group is responsible for the oversight of strategic and tactical initiatives for the website.

Information Architecture Schema (completed): We created a new Information Architecture schema based on a combination of user research conducted by CA and AMS staff's subject matter expertise. This schema is the base method for navigating the site and contains approximately 190 landing pages.

Website Page Design (completed): The Web Advisory Group has approved a new web page design for the AMS website.

Design Guidelines (completed): We have created a set of guidelines covering writing style and page formatting practices for staff to use when preparing web content for the new site.

Database Infrastructure (completed): Most of the web content is now categorized into three types (Informational, News & Calendar, and FAQ) all of which will be stored and maintained in a database. Storing the content in the database allows the content to be independent from the web page design and format.

Web Page Delivery Infrastructure (completed): Most pages in the new website are dynamically constructed from various database sources (information, navigation options, news snippets, calendar snippets, etc.) using a framework methodology. The framework concept allows us easily impose page design and formatting changes to the website.

Web Page Content Management Tool (completed): Our original web-based content management tool was extensively enhanced to include all the features necessary for informational web page content maintenance.

News & Calendar Content Management Tool (in-progress): News and Calendar related content is now stored in a database separately from informational and FAQ content. Doing so allows us to dynamically generate news and calendar snippets that are in the context of the displayed page. Currently developing a web-based maintenance tool to include all the features necessary for news and calendar content maintenance.

FAQ Content Management Tool (in-progress): The content for Frequently Asked Questions (FAQ) is now stored in a database, separate from informational and news content. Doing so allows us to search for and dynamically generate FAQ results in context. We are currently developing a web-based maintenance tool to include all the features necessary for FAQ content maintenance.

Prepare Web Content (in progress): Staff content providers are currently in the process of re-writing existing pages and writing original content for the approximately 190 landing pages that are in the new website information architecture. Substantial changes to the website content are necessary because most pages need to be written or rewritten in the context of the new site architecture and many of the existing website pages contain only navigational links. We are planning to write as many pages as possible using the new writing-style guidelines. The Web Advisory Group decided to include a copyediting component to the web content authoring process. This process will likely run through much of Q4 2009.

FAQ Data Migration (pending): During this task, staff will identify all current FAQ files on current website, classify each question using the new class scheme, remove redundant and outdated questions, and likely re-write questions.

News & Calendar Data Migration (pending): This task involves identifying all current News content on the website, classifying each news item appropriately, archiving older news content, and rewriting some news items.

Staff Training (pending): AMS staff will be trained to use the new suite of Web Content Management tools and to understand the writing and design guidelines.

Final Testing, Content Audit, and Data Migration (pending): During this task, staff will perform extensive testing on all aspects of the new website, ensure that all content is up-to-date (merge changes to current site content with the new site content), and perform final data moves from old site to new.

Gerry Loon, Director

Business and Publication Computing

BOARD OF TRUSTEES
STANDING COMMITTEES

AGENDA AND BUDGET COMMITTEE
(as of February 1, 2010)

George Andrews, Chair (ex officio - President)
Robert Daverman (ex officio - Secretary)
John Franks (ex officio - Treasurer)
Linda Keen (ex officio - Associate Treasurer)
Carol Wood (ex officio - Chair of BT)

AUDIT COMMITTEE
(as of February 1, 2010)

John Franks, Chair (ex officio - Treasurer)
Linda Keen (ex officio – Associate Treasurer)
Karen Vogtmann (ex officio – third-year Trustee/incoming Chair of BT)
Carol Wood (ex officio - Chair of BT)

INVESTMENT COMMITTEE
(as of February 1, 2010)

John Franks, Chair (ex officio - Treasurer)
Linda Keen (ex officio - Associate Treasurer)
Ronald Stern (February 1, 2009 - January 31, 2014)
to be appointed (February 1, 2010 - January 31, 2013)

LIAISON COMMITTEE
(NOT REALLY A BT COMMITTEE, BUT LISTED HERE FOR CONVENIENCE)
(as of February 1, 2010)

George Andrews, Chair (ex officio - President)
Robert Daverman (ex officio - Secretary)
John Franks (ex officio - Treasurer)
Carol Wood (ex officio - Chair of BT)

SALARY COMMITTEE
(as of February 1, 2010)

John Franks, Chair (ex officio - Treasurer)
Linda Keen (ex officio - Associate Treasurer)
Carol Wood (ex officio - Chair of BT)

EXECUTIVE COMMITTEE AND BOARD OF TRUSTEES
STANDING COMMITTEES

LONG RANGE PLANNING COMMITTEE
(as of February 1, 2010)

George Andrews, Chair (ex officio - President)
Robert Daverman (ex officio - Secretary)
John Franks (ex officio - Treasurer)
Craig Huneke (ex officio - third-year member of EC)
Donald McClure (ex officio - Executive Director)
Joseph Silverman (ex officio - second-year member of EC)
Carol Wood (ex officio - Chair of BT)

ECBT NOMINATING COMMITTEE
(as of February 1, 2010)

Karen Vogtmann, Chair (ex officio - third-year member of BT)
Craig Huneke (ex officio - third-year member of EC)
Sheldon Katz (ex officio – Chair of Council Nominating Committee)
NOTE: When the position of Secretary is under consideration, the Treasurer is a member of this Committee. When the position of Treasurer is under consideration, the Secretary is a member of this Committee.

TRUSTEE APPOINTMENTS TO POLICY COMMITTEES

COMMITTEE ON EDUCATION

Ronald Stern (February 1, 2010 - January 31, 2011)

COMMITTEE ON MEETINGS AND CONFERENCES

Mark Green (February 1, 2010 - January 31, 2011)

COMMITTEE ON THE PROFESSION

John Conway (February 1, 2010 - January 31, 2011)

COMMITTEE ON PUBLICATIONS

Carol Wood (February 1, 2010 - January 31, 2011)

COMMITTEE ON SCIENCE POLICY

Karen Vogtmann (February 1, 2010 - January 31, 2011)

TRUSTEE LIAISON ASSIGNMENTS TO DIVISIONS FOR 2010

Division (Director)	**Board Liaisons**
Executive Director (McClure) Deputy Executive Director (includes Development) Human Resources	John Conway Ron Stern
Editorial (Sergei Gelfand) Acquisitions	Mark Green Karen Vogtmann
Finance (Connie Pass) Facilities and Purchasing Fiscal	John Franks Linda Keen Karen Vogtmann
Information Services (Tom Blythe) Business and Publications Computing Systems and Operations	John Franks Mark Green
Mathematical Reviews (Graeme Fairweather) Administration Associate Editors Bibliographic Services Copy Editors Reviewer Services/ Production Slavic Languages Systems Support	Linda Keen Carol Wood
Meetings and Professional Services (Ellen Maycock) Meetings and Conferences Membership and Programs Public Awareness	Ron Stern Carol Wood
Publishing (Beth Huber) Distribution Member and Customer Services Printing Production (includes Electronic Prepress and Creative Services) Sales Administration	Mark Green Ron Stern
Washington Office (Sam Rankin)	John Conway Carol Wood

Update on Employment Market and Program Plan for Career and Employment Services

In the spring of 2009, the AMS Task Force on the Employment Prospects issued a report on the employment situation in mathematics. What follows is the most recent data available, plus an update on steps taken by the AMS in 2009 to improve employment services.

Recent Data

Table 1 provides some highlights of the 2008-09 cohort of new doctoral recipients from mathematics and statistics departments in the U.S. The 2008-09 highlights are based on preliminary data from the departments. These data will be updated in the early spring of 2010 with some additional survey responses from departments and with further information provided by the new doctorates.

Table 1	**2008-09**	**2007-08**	**2006-07**
Preliminary Count of Newdocs	1430	1235	1157
Final Count of Newdocs	-	1378	1333
Preliminary unemployment rate	6.9%	5.4%	4.0%
Final unemployment rate	-	3.8%	2.4%

The graph below shows two views of the change in unemployment rate of new doctorates over eleven years. The "Traditional Unemployment Rate" is the rate reported in *Notices* and includes in the denominator all new docs whose employment status is known, including those who have returned to a foreign country. The "New US Unemployment Rate" includes in the denominator only those who are still in the US.

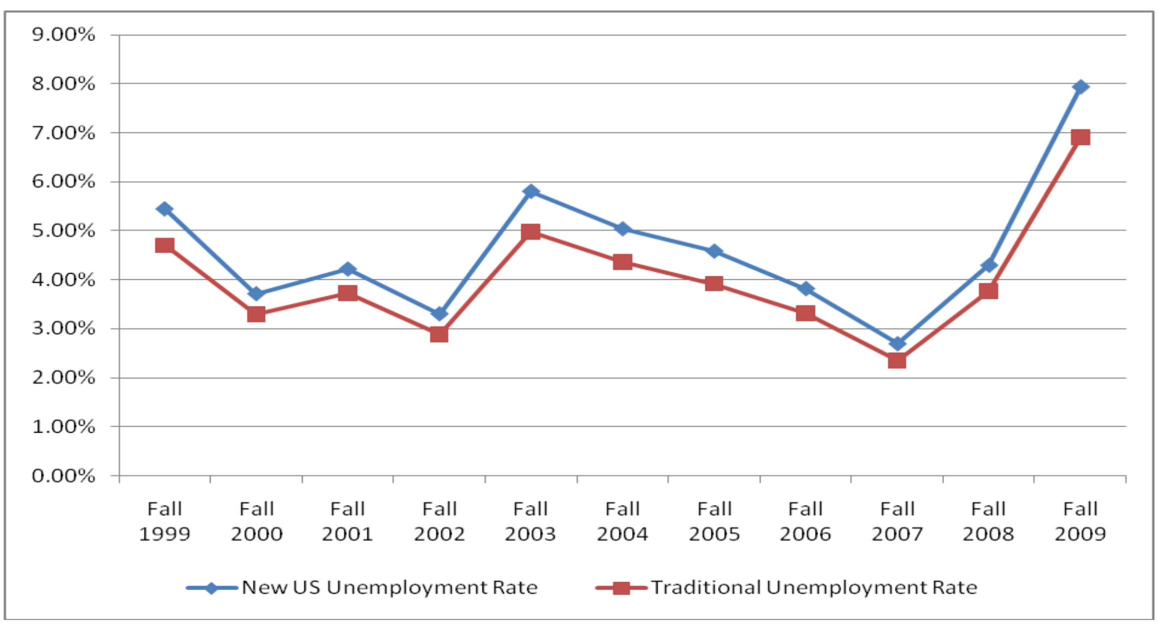


Table 2 summarizes US employment of new doctorates by major category of employer showing the preliminary counts provided in the last three survey cycles.

Table 2

Type of US Employer	**2008-09**	**2007-08**	**2006-07**
Academic	699	620	620
Research Institute/Non-Profit	42	29	30
Government	62	30	27
Business/Industry	184	207	187
Total	*987*	*886*	*864*

Improvements in Services

Thanks to a 2008 planning effort, the AMS was well positioned to quickly improve employment services in 2009. Upgrades included:

- Fully electronic Employment Center for the January 2010 JMM (all information available in advance and on site on the web), integration of Employment Center into the EIMS web ad service, and added functionality including online scheduling by mutual consent
- Addition of a resume bank to the EIMS/Employment Center online services
- Elimination of applicant fees for the Employment Center at the JMM (now there are no applicant fees in any AMS employment service)
- Expansion of Mathjobs.org internationally for ads only; full functioning reserved for North American employers
- Better promotion of Notices as the appropriate place for print ads

The following pages contain the 2009 update of the Operating Plan for Career and Employment Services.

Ellen J. Maycock
Associate Executive Director
October 21, 2009

Operating Plan
Career and Employment Services

Mission

The mission of the AMS in the area of career and employment services is:

1. To advance the professional opportunities for those in the mathematical sciences by providing effective career and employment services.
2. To understand and communicate the career environment for mathematical scientists to the mathematical community and to the broader community.

Vision

The design and operation of our career services should facilitate high standards and best practices among all users, and reflect current trends and needs. We should meet the needs of users in a manner that promotes efficiency, accessibility, and economy for all parties. When practical, we should endeavor to provide useful services, centrally, which individuals or institutions in our community could not build alone.

Meeting the initial vision then allows for some additional opportunities:

- Our services should incorporate new technologies where feasible.
- Using our services should enhance the Society's reputation and provide insight into best practices and an ethical hiring environment.
- Our employment services should provide appropriate infrastructure and opportunities for volunteers from the community who wish to assist young professionals.

Operating and Financial Objectives

- In the areas of student information, data collection and employment services, make sure that those who use one service become aware of all related services. Also, make sure there are appropriate services to draw the attention of students.
- Manage processes within the career services realm by streamlining and modernizing them, so as to create an image for users of a modern, well run, responsive organization, and also for the purpose of controlling long term labor costs.
- Price products so that our various employment services, under normal circumstances, do not show a combined operating loss.

Trends and Issues, 2009 update

Since reporting a year ago on current trends and issues (see original Trends and Issues section, following) there have been important shifts in the national and world economy that are only just beginning to be felt within the realm of mathematical sciences.

The most important trend is that academic hiring of PhD's is projected to decline. Overall, the national unemployment rate in May, 2009 was 9.4%, up from 5.5% in May, 2008 *(U.S. Bureau of Labor Statistics)*. Due to the economic downturn in 2008, the AMS appointed an Employment Prospects Task Force in early 2009. To understand the current situation in academic hiring, a Recruitment and

Retirement Survey was conducted in Spring, 2009 by AMS staff for the Task Force. Departments of Mathematical Sciences reported that recruitment for positions beginning in Fall, 2009 was down:

Projected Faculty Recruitment for Fall, 2009	
	Percentage change
PhD-granting departments	-29.9%
Masters-granting	-57.8%
Bachelors-granting	-56.3%
TOTAL	-47.3%

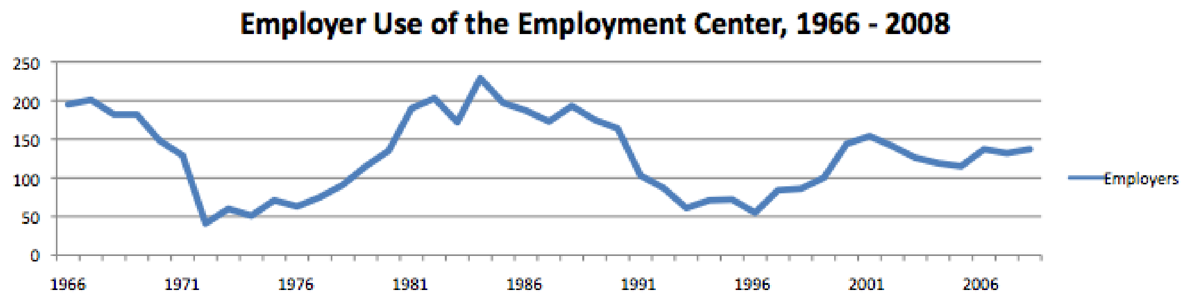
The survey also reported that 27% of planned retirements in those departments were being postponed. The community is only beginning to realize the effects of this economic downturn; unemployment is likely to become a more visible problem in 2009/10. The Task Force examined the evidence and made some short- and long-term suggestions for action by the AMS. The actions that are to be staff-managed now appear on the Assignments list.

The other visible trend this year is the influx of commercial software into the AMS operation. Using outside software with more sophisticated web capabilities has led to some quick upgrades of existing services. Contracting for commercial association management software has raised the possibility of integrating some of the survey record-keeping into the new central AMS database. A clone of Mathjobs.org is being developed in 2009 to help the community with application processing (other than job applications); six AMS programs will be among the first users of this software developed under an agreement with Duke University. And finally, the AMS has contracted with Boxwood Technology to replace the software currently used for the EIMS job ads and the Employment Center (held at the January meetings) which will not only integrate data for these two services but will dramatically increase service to users.

Trends and Issues (original)

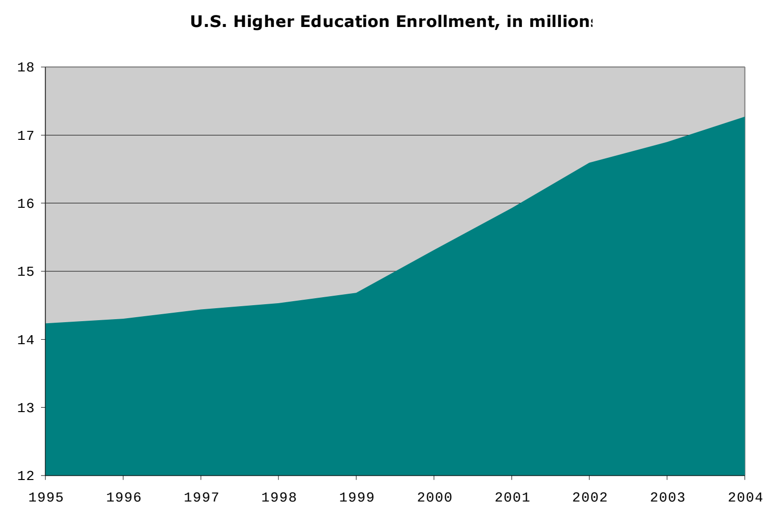
Prior to 1950, those in search of AMS employment services would have had to settle (perhaps not unfruitfully) for a list of university addresses in the Professional Directory. The post-World War II decade saw a huge investment in U.S. science and technology, the start of the National Science Foundation, growth in college enrollments, and a growing need in the mathematics community for job ads, interviews, and data collection. The original purpose of the employment services, essentially unchanged today, was to take the hiring process out of the hands of advisors and back-room conversations and make it more open and transparent. Beginning in 1952, the Employment Register literally “registered” job openings by collecting and circulating binders full of job ads at mathematical meetings. Spurred on by the Russians’ launching of Sputnik in 1957, hiring in mathematics became so frenzied that the AMS saw a need for a central (and impartial) source of starting salary information and the Annual Survey was begun.

The computer scheduling of appointments at the Employment Register began during the explosion in mathematics PhD production in the 1960’s. By 1971 jobs were scarce and fine candidates remained unemployed going into the fall; this was the era of the “driving taxicabs” anecdotes. In response, the Employment Register split in 1972 into two services: the scheduled interviews at the Joint Mathematics Meetings and the yellow periodical “Employment Information in the Mathematical Sciences” (EIMS). The quiet decade of the 1980’s ended with a gradual job market downturn which became a well known crisis by 1991, fueled partly by the lifting of hiring restrictions on finishing PhDs after the Tiananmen Square riots in China.



During the difficult 1990's the employment services, as well as the Annual Survey, responded to a depressed job market by increasing in scope and accessibility. EIMS job ads were reproduced on early ftp and gopher servers, and later evolved into a world wide web site. The Employment Center computer scheduling was completely reprogrammed. The paper AMS coversheet was created to assist departments in sorting and responding to applications. Additional data on faculty, departments, degrees and salaries were gradually added to the Annual Survey.

The status of the mathematical sciences job market in the current decade has been characterized by small ups and downs, rather than one major trend. Job ad numbers from EIMS and the Employment Center, while higher in the current decade than at most points in the 1990's, show slight dips from 2002 (most likely post-9/11) to 2005. The emergence of NSF VIGRE (Vertical Integration of Research and Education) grants in 2000, and their recent demise, created additional postdoc positions which may now disappear from the market. Annual Survey reports show an increasing production of PhDs in the mathematical sciences (1333 in 2006-07, up from 1037 five years earlier). The fact that there has been no real hiring crisis in over 12 years is most likely attributable to a swell of college age students that is currently peaking and is projected to begin to decline in the next few years (table data source: National Center for Higher Education Management Systems; www.higheredinfo.org).



In the next three to five years, it is possible that a bourgeoning job applicant pool will meet a declining higher education market and a continuing economic downturn, resulting in hard times for job seekers. History shows us that dramatic shifts in the market have frequently brought about dramatic operational updates in employment services. Since the AMS cannot predict the job market and cannot create jobs, of course, the Society has a responsibility to do the one thing it can do - be well positioned for any market before a crisis comes.

Today's services are poised on the brink of the fully electronic era: no longer completely mired in printing and surface mail, but not yet paperless. Many of the concerns discussed during this planning cycle involved the gradual transition from our old style of information transfer (published lists or printed forms) to new web products.

In the realm of employment services for PhD mathematicians, AMS strengths are: the broad recognition of EIMS and the Employment Center, the modern sparkle and power of Mathjobs.org, and the ubiquity of the “AMS coversheet.” Together they position us as the major player in the North American PhD job market. There is some cross-promotion of these services, and some identity as an AMS brand, but not enough.

AMS employment services are a stable and extremely important part of the infrastructure of the mathematical science professions. The services should be priced for the purpose of enhancing their stability and providing for long-term change and improvement. Overall, the employment services show a profit in 2007 of 133K. The table below shows that most of the income is from EIMS, although income from Mathjobs is growing.

	Employment Center		**EIMS**		**Mathjobs.org**		**Combined**	
	2007	2006	2007	2006	2007	2006	2007	2006
Total revenues	58,968	53,296	215,588	193.415	73,300	48,300	347,856	295,011
Total expenses	120,099	105,664	49,625	54,282	44,724	32,966	214,448	192,912
Rev Over (Under) Exp	**(61,131)**	**(52,368)**	**165,963**	**139,133**	**28,576**	**15,334**	**133,408**	**102,099**

The Employment Center has undergone some changes. Use of the computer-scheduled tables has dropped 50% in the last 6 years (with each applicant now receiving an average of two interviews), and survey comments show us that applicants use it once but never plan to again. Of the registered applicants, 15% change their minds on site and do not participate in the scheduling program. Much of the change seems due to a shift in the timing of the job market; there is reason to believe that January now falls later in the process when most employers are dealing with a short list, instead of seeking new applications. Therefore a decision has recently been made to discontinue the computer scheduling. The employers still using the scheduling service will be moved to the more stable self-scheduled area, with a little added help from staff. Elimination of computer scheduling gives the AMS the opportunity to reallocate resources to help employers and applicants with new electronic functionality, making the service more pre-scheduled (by invitation only) and predictable, and therefore less stressful.

Mathjobs.org Employer Count	
April, 2006	63
April, 2007	113
April, 2008	166

The Mathjobs.org online job application system is expanding dramatically each year. In the last 12 months 386 jobs were posted, and some listings covered multiple hires. Compared with a U.S. average of 1,800 job openings per year (obtained from Annual Survey data), Mathjobs.org is capturing over 25% of the market, and growing quickly. Within three to five years it is possible that Mathjobs.org will host between 1,000 and 1,200 job postings per year. There are questions about how international Mathjobs.org should become. A number of European and Asian universities have requested accounts. From a technical standpoint, Mathjobs could be global, but considering the depth of the Mathjobs service in specifying application documents and allowing access for reference submission and faculty review, there is concern about whether Mathjobs.org could or should accommodate all hiring customs and practices worldwide.

While EIMS thrives as a standard web advertising site, subscriptions to the paper EIMS have fallen below 100. The difficulty in ending the paper version is that advertisers use the paper ad, later, as documentation of a proper job search should there be legal concerns (such as the need for a permanent visa). However, the classified section of the *Notices of the AMS* provides a stable setting for paper-circulated job ads. Perhaps, someday, *Notices* will be the only opportunity for paper classifieds offered by the AMS.

The online version of EIMS, while very successful, is currently being challenged by other societies. Both MAA and SIAM have launched almost identical comprehensive job/resume posting sites provided by the vendor JobTarget. The sites collect fees both for postings and for setting up contact between self-selected matches of employers and applicants. Both sites are trying to reach a broader audience than just the PhD market. The AMS is not currently serving the bachelors or masters degree segments of the job market directly, although a few jobs at that level appear on EIMS. It seems increasingly likely that the efforts of MAA and SIAM will move them far ahead in the masters/bachelors market. It is less likely that their new products will make major inroads in the PhD job market.

With regard to the broader career services area, the AMS is strongly positioned in the area of data collection and reporting. Programs include the Annual Survey and the 5-year CBMS survey of undergraduate programs. The Annual Survey, in particular, enjoys large recognition and respect in the community. While the survey is steered by a multi-organization committee, all contact for the survey is through the AMS. Important factors in survey work include response rates and reliability of the data analysis; these factors must be continually reviewed and enhanced where possible.

Most of the other AMS general career programs are aimed at a young audience, from high school through postdocs. Strengths in this area include the well-known AMS web site, on which the AMS maintains a number of helpful lists and reports. Another strength is the contribution of the AMS Public Awareness Officers, who produce posters, and also help to get the word out about many professional services. Also, most graduate students are AMS members, so there is easy access to them. But at the student level, there are many organizations trying to reach the same audiences. It is important that the AMS be timely, modern and flexible. It seems likely that new programs will be added from time to time, such as the Early Career Profiles begun about four years ago. The most recent addition was the Grad School Fair at the Joint Meetings. Also, some aspects of the new Mathematics Research Communities program will help the AMS to learn more about networking and mentoring. Meanwhile, the prime AMS service in this area, the *Assistantships and Graduate Fellowships* is probably not reaching its target audience (finishing undergraduates) since it continues to be published as a book and appears on the web as an unwieldy pdf document, full of abbreviations which must be deciphered.

Since most growth and change in career services happened during times of public outcry, it is not surprising that the leadership that requested the changes sometimes acted in collaboration with other mathematical societies. The Employment Register (now the Employment Center) was financially sponsored by AMS, SIAM and MAA, although AMS staff performed the actual work. The small MAA and SIAM contributions were phased out about a decade ago, as well as the contribution MAA had been making to the EIMS publication. Beginning in 1987, the MAA and three other societies gradually joined the Annual Survey, under a cost sharing agreement which is still in place, and a joint Data Committee has overseen the program.

For decades, a joint committee of volunteers has had some oversight responsibilities for the employment-related services. Today, the other societies are running their own employment programs, the AMS provides all financial support to the employment services reviewed above, and the AMS has its own committees in place to monitor policy issues. The newest programs, including the AMS coversheet and the Mathjobs.org electronic application site, are solely AMS programs. Therefore it has become more appropriate to increase reporting within the AMS governance, by consulting a new Employment Advisory Board about policy issues and, through them, also reporting to the AMS Committee on the Profession.

Needs (2009 update)

The most important change in the needs of the community is in the area of employment services. In an era of precipitous decline in hiring, the AMS must take quick action to help applicants who may be affected by the downturn. Upgrading the existing employment services is a primary need. Specifically, the AMS has contracted with Boxwood Technology to provide software which integrates EIMS ad and Employment Center (at the January meetings) data. Fees for applicants have been eliminated. Upgrades in functionality include a resume and document bank, enhanced searching, saved searches and feeds, and online communications and scheduling in advance of the Employment Center. A paperless Employment Center should be planned and implemented for January, 2010. To make up for the discontinuation of the paper EIMS, the AMS needs to steer advertisers to the Notices.

The AMS Employment Prospects Task Force has written suggestions aimed at graduate departments for better preparing their PhD’s for the existing academic and nonacademic job market, and some ethical guidelines for the academic community. These need to be distributed broadly. Nonacademic employers need to be encouraged to utilize AMS employment services so that new PhD's can easily access that information. Additional Task Force suggestions include assisting graduate departments to have career advice for students who wish to seek employment outside of academia, and keeping the importance of mathematical research and the professional development of mathematicians in the minds of our legislators, the decision-makers at NSF and the general public.

Needs (original)

Employment Services
The various AMS employment services grew up separately, but now need to become better connected. Through better integration on the website, more cohesive graphics and branding, and central oversight within the AMS, the services will be better able to serve the community. The Employment Center needs to have a more modern appearance, and more modern functionality. It should be responsive to current interviewing practices in the community. Also, it should operate more electronically so that users are better able to manage their contacts and plan their schedules in advance of the meeting. EIMS is a stable product which seems to be serving its purpose. Internally, the AMS should make sure that production of EIMS is efficient and timely, and should check from time to time that the paper EIMS continues to have value. Mathjobs.org should no longer be viewed as an experiment; it is popular and rapidly growing. Therefore the AMS should clarify who should be using Mathjobs.org, continue to build documentation, and make sure Mathjobs.org policies are appropriate for the community.

Professional Services
The Annual Survey is one of the most visible professional services that the AMS runs. The operation of the Annual Survey needs to be less paper-driven and more electronic. Data gathering should become increasingly electronic, thereby allowing time for further cleaning and improved response rates. Processing of data, in preparation for reporting, should be modern and streamlined. The layout and appearance of survey reports should encourage readership, confidence and ease of use. Needs such as thoroughness, historical data and special views of the data are important, but could be covered by expanded use of various media, for instance, placing complete information on the web. One special circumstance is that our long-time survey champion, Jim Maxwell, will retire at some point. It would be good to have internal software systems in excellent shape before that.

Student and Professional Information
For communicating with students at any level, the AMS should be relying on the internet. Paper publications such as the *Professional Directory* and *Assistantships and Graduate Fellowships* serve purposes which have been largely superceded by the advancement of the internet. We should re-direct those efforts to accommodate needs not easily met by web searching; for example, a central web list of all mathematical sciences advanced-degree granting universities, with links and some standard data for each. Since the Professional Directory serves multiple purposes, its information could be scattered in appropriate places on the website. Also, some information has been printed annually in *Notices* for many years which may be handled more appropriately on a regularly updated web page.

Report on Projects and Activities

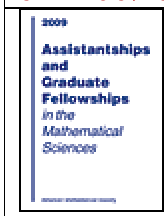
Task	Timing	Responsible Staff	Comment
Employment Services, general			
Develop graphic design/branding for AMS employment services. STATUS: Completed	2009	Creative Services Group (CSG)	
Make one simple employment services web page that directs people to the appropriate service. STATUS: Completed	2009	Membership & Programs Dept. (MPD) Electronic Products Development (EPD)	
Report annually on policy issues to the AMS Committee on the Profession. STATUS: Completed for 2009 and ongoing	2009	Meetings & Professional Services (MPS)	
Make the suggestions of the Task Force on Employment Prospects visible on the web to those using employment services. STATUS: Completed	2009	MPD	Task added in 2009
Hold Tutorials at the January meetings on topics pertinent to current industrial work.	2010	MPS	Task added in 2009
At the annual Workshop for Directors of Graduate Studies, held at the January meetings, include non-academic advising issues. Also, organize panel session at JMM on non-academic careers.	2010	MPS, Washington Office	Task added in 2009
Monitor the utilization of Boxwood Technology (for EIMS ads and Employment Center data) in terms of service to the profession and financial stability.	2010	MPD	Task added in 2009

Publicize the AMS "Policy Statement on Supportive Practices and Ethics in the Employment of Young People in the Mathematical Sciences"	2010	Public Awareness Office (PAO), MPS	Task added in 2009
Build a three-person advisory committee (as a subcommittee of CoProf) of current users to advise on policy concerns that arise from time to time. The intention is to be sure that Mathjobs.org reflects best practices in the job market. Operating decisions can remain within the current reporting structure. Draft a charge for the subcommittee. STATUS: Charge, appointments and initial deliberations completed in 2009	2009, 2010	MPS, MPD	Task moved to this section in 2009
Find opportunities to keep the importance of mathematical research and the professional development of mathematicians in the minds of our legislators, the decision-makers at NSF and the general public.	2010, 2011	PAO, Washington Office, Executive Director	Task added in 2009
Mathematical Sciences Employment Center ***Employment Center***			
Eliminate computer-scheduled tables. Enhance services to self-scheduled tables. Adjust applicant pricing. STATUS: Completed	January, 2009	MPD	
Split the current self-scheduled interview center into 2 sections: a "quiet" section for 1 – 2 interviewers and a "committee" section for 3 – 6 interviewers. Make the entrances adjacent so staff can easily direct applicants to their interview tables. STATUS: Completed	January, 2009	MPD	
The Employment Center information, scheduling and messaging should be completely electronic. Participants should get logins for a web site where they post their own data and possibly some documents, access information submitted by the other side, share interview invitations (probably employer-initiated only), set appointments, review their schedules, and (possibly) share messages. Requires wireless access and workstations (and software). Implement this in stages:			

▪ Building on the existing applicant and employer web forms, increase functionality to allow for searching and browsing of approved forms, with password protected access. Provide 10 – 20 stand-up workstations for participants on site (with full internet access). Continue to provide wireless internet access to employers. Eliminate production and mailing of Winter List books. Consider instituting an employer lounge on site for the purposes of computer access, printing, coffee, and general noise reduction in the table area. STATUS: Completed	2009, for launch August, 2009	EPD Systems & Operations (S&O) MPD	
▪ Build rudimentary employer-driven scheduling invitation and appointment system, allowing applicants to respond to invitations by accessing employer schedules and filling in a slot. STATUS: Completed early	2010, for launch August, 2010	EPD MPD	No longer needed
▪ Evaluate feedback from participants and consider adding additional services such as electronic messaging, electronic posting of additional applicant documents (such as vitas), and additional functionality to help applicants keep track of their schedules. STATUS: Completed early, but feedback will be monitored.	2011, for implementation August, 2011	MPD (to be decided)	No longer needed
EIMS			
Analyze all aspects of the processing of EIMS ads with the intention of minimizing costs and increasing efficiency. (+ billing) STATUS: Completed by outsourcing the processing to Boxwood Technology.	2009	MPD MIS Fiscal (FIS) Electronic Pre-Press (EPP) Member and Customer Services (MCS)	

Monitor subscription levels each year and balance what makes sense operationally with the needs of the community, in terms of continuing the paper EIMS. STATUS: Completed by terminating the print version in 2009.	2009	MPD	2010 and 2011 follow-up has been cancelled.
MathJobs.Org ***Mathjobs.org***			
Institute an advertising-only (limited) employer account (this is currently a user option). STATUS: Completed	2008	MPD	
Allow non-North American employers to purchase advertising-only accounts; monitor use and feedback. STATUS: Completed; the account option is in place and use and feedback will be monitored.	2009, 2010	MPD	Task Added in 2009
Enhance user documentation with additional FAQ's, videos, and on-screen instructions. STATUS: launch of this project has been moved to 2010.	2009, 2010, 2011	MPD	
Annual Survey of the Mathematical Sciences AMS · ASA · IMS · MAA · SIAM ***Surveys***			
Forms (controlled by login identities) will be on the web for all surveys, accompanied by a simple and convenient method for transferring the data collected. Will continue initial paper mailing. The result will be less data entry time and less proofing of data (and more effective cleaning of data). Convene a staff committee to investigate technical questions and plan. STATUS: Planning phase (2009) is underway and two software packages are being investigated by staff.	Planning: 2009 Implementation: 2010, 2011	MPD EPD	
Need graphic design/branding for annual survey for paper forms, web, reporting. STATUS: Completed	2009	MPD CSG	
Additional reporting, and special reporting, on web and in flyers for distribution at meetings.	2010	MPD	

Enhance *Notices* reports by using color, and also improve readability with consolidation and reorganization of reports. Consider making printed reports more succinct, and placing full data on the web only. STATUS: Ongoing; planning phase is underway in 2009; reports are about 20% converted with about 12 months of preparation time left before anticipated launch in late autumn, 2010.	2009, 2010	MPD *Notices* Staff	
Investigate statistical software packages for integration into data analysis processes. STATUS: Ongoing; investigation is still underway.	2009	MPD	



Assistantships & Graduate Fellowships

Build a web service for informing undergraduates of graduate programs in the mathematical sciences (start modestly if necessary). Allow controlled math dept. entry to the site for making updates. Consider ways to build revenue with such a service. Discontinue paper publication.	Planning: 2010 Product development: 2011 Implementation: 2012	MPD EPD	

Early Career Profiles

Attract additional schools to this project in order to increase the number of profiles posted. STATUS: Completed, but only one school was added.	2009	MPD	
Review current content for possible deletion of aged-out entries	2010	MPD	Task Added in 2009

Professional Directory

Incorporate the information in the Professional Directory into various locations on the AMS web site (possibly dropping some sections) and discontinue publication.	2010	MPS	

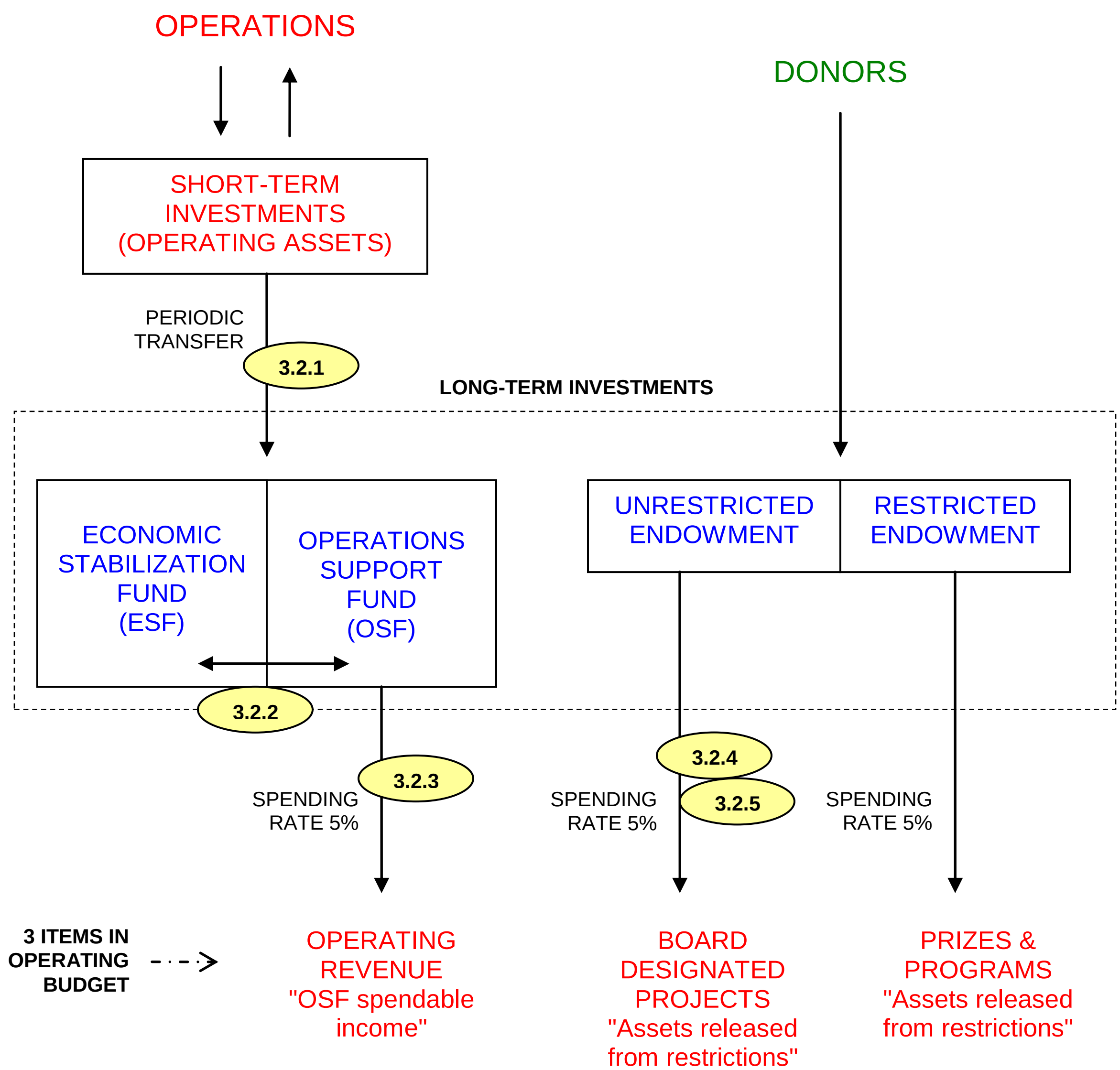
Investigate feasibility of a department login page that would allow mathematics departments to update their information for the AMS web site, and possibly access various AMS forms.	2010	EPD	
Sources of support			
Build web page containing information currently found in annual "Stipends for Study and Travel" list in *Notices*. STATUS: Completed early.	2010	MPD	
Consider adding a "Research Experience for Undergraduates" (REU) application site (possibly by having Duke duplicate the Mathjobs.org system, and rewording it to serve as a central REU application web site). Consult REUs first. STATUS: Completed; the Mathjobs.org clone "MathPrograms.org" was launched in August 2009 and is open for public use. The website will serve a broad range of math-related programs and opportunities, not just REU's.	2009	MPD	Date changed from 2011 to 2009.

Special notes on resources.

- No notes -

AMS Long-term Investments
Cliffs Notes

(*For details, see section D of Fiscal Reports*)



ESF = 75% annual operating expenses + unfunded medical liability (APBO)
OSF = remainder of quasi-endowment (spending on 3-yr rolling average)
Rebalanced annually, December 31
Note: Spendable income from true endowment funds held in Temp Restricted net assets and 'released' to operations as related expenses are incurred.

Values as of:	*9/30/09*	*12/31/08*
ESF	$28.1 M	$22.9 M
OSF	25.8 M	20.1 M
Unrestricted	5.2M	4.5 M
Restricted	4.3M	3.6 M

Appropriated Spendable Income

Each year, the Board approves a list of designated projects that are paid for (in part) by spendable income from the unrestricted endowment. Those projects are selected to represent a variety of activities all of which are consistent with the mission of the Society.

Here are brief descriptions of the projects for 2010 appropriations.

Discoveries and Breakthroughs in Science ($20,000)

This is a large program run by the American Institute of Physics, with a number of society partners providing support. The goal is to produce a regular stream of news spots for local television stations. In 2009 we participated at the level of $30,000. On evaluating the program in relation to other activities of the Public Awareness Office, we felt that $20,000 was a more appropriate level. We value the program and are trying to encourage other societies to become partners.

Book and Journal Donations ($10,000)

This program has been funded by contributions from the Stroock Family Foundation, and it pays for shipping of donated books and journals to institutions in developing countries. Interest from eligible institutions in paper journals seems to be waning, but there is still interest in donated books.

AAAS Mass Media Fellow ($10,000)

For the past 10 years, the AMS has supported a graduate student participant in this widely recognized program run by the American Association for the Advancement of Science. The student is placed in a media outlet during the summer and gains experience while providing scientific expertise. The former media fellows frequently contribute to the work of the Public Awareness Office.

AAAS Congressional Fellow ($90,000)

For several years now the AMS has supported a congressional fellow. Fellows are placed in a congressional office (or equivalent) and spend a year serving that office. Fellows do NOT represent the AMS, but they provide mathematical expertise, in addition to gaining governmental expertise themselves. The goal is to build a cadre of knowledgeable mathematicians who can serve the interests of mathematics, either inside or outside government.

MR Database keyboarding ($35,000)

Mathematical Reviews continues to build its citation database by keyboarding lists of citations. There are both catch-up costs (to backfill lists) and ongoing costs (to keyboard lists of over 400 current journals). Seventeen new journals were added to the list of *Reference List Journals* in October. The citation database continues to grow and provides an increasingly valuable resource for the Society.

Mathematics Research Communities ($35,000)

The MRC program is funded (mainly) by a grant from the National Science Foundation, which pays for participant support and the basic cost of operation. We found last year, however, that having a budget for extras not covered by the NSF grant greatly enriched the program. MRC promises to be a gem in the Society's outreach programs, and investing some extra money in those extras will pay great dividends in the future.

Young Scholars Programs ($20,000)

While the Epsilon Fund is meant to provide spendable income to support this program in future years, the downturn in the market means that we will continue to supplement the spendable income from Epsilon for a few more years.

Project NExT ($15,000)

Project NExT is a program run by the MAA (and reviewed elsewhere on this agenda). The AMS provides support for six fellows at $2,500 each. The ECBT decided in November 2008 to continue this support through 2010, when continuation of support will be reviewed again.

High School Outreach ($24,000)

The Public Awareness Office produces some outstanding material, including Math Moments and a number of attractive posters. We have become better and better at *producing* material. We are not as good, however, at distributing that material. In part, this is because we have not devoted enough attention to distribution. One obvious place to concentrate our effort is high schools. A number of high school teachers have communicated their enthusiasm about our materials, and we have discovered Math Moments and posters spontaneously appearing in a number of schools. Starting in 2009, we have made a more systematic effort to produce printed materials and distribute them to a larger collection of high schools throughout North America.

What's Happening ($13,000)

Recently, *What's Happening in the Mathematical Sciences* has been a biennial publication. It highlights recent research in mathematics in clear chapters accessible to a scientifically literate reader. The last volume was published at the beginning of 2009. *What's Happening* is regarded as having an important role in public awareness.

MathJax

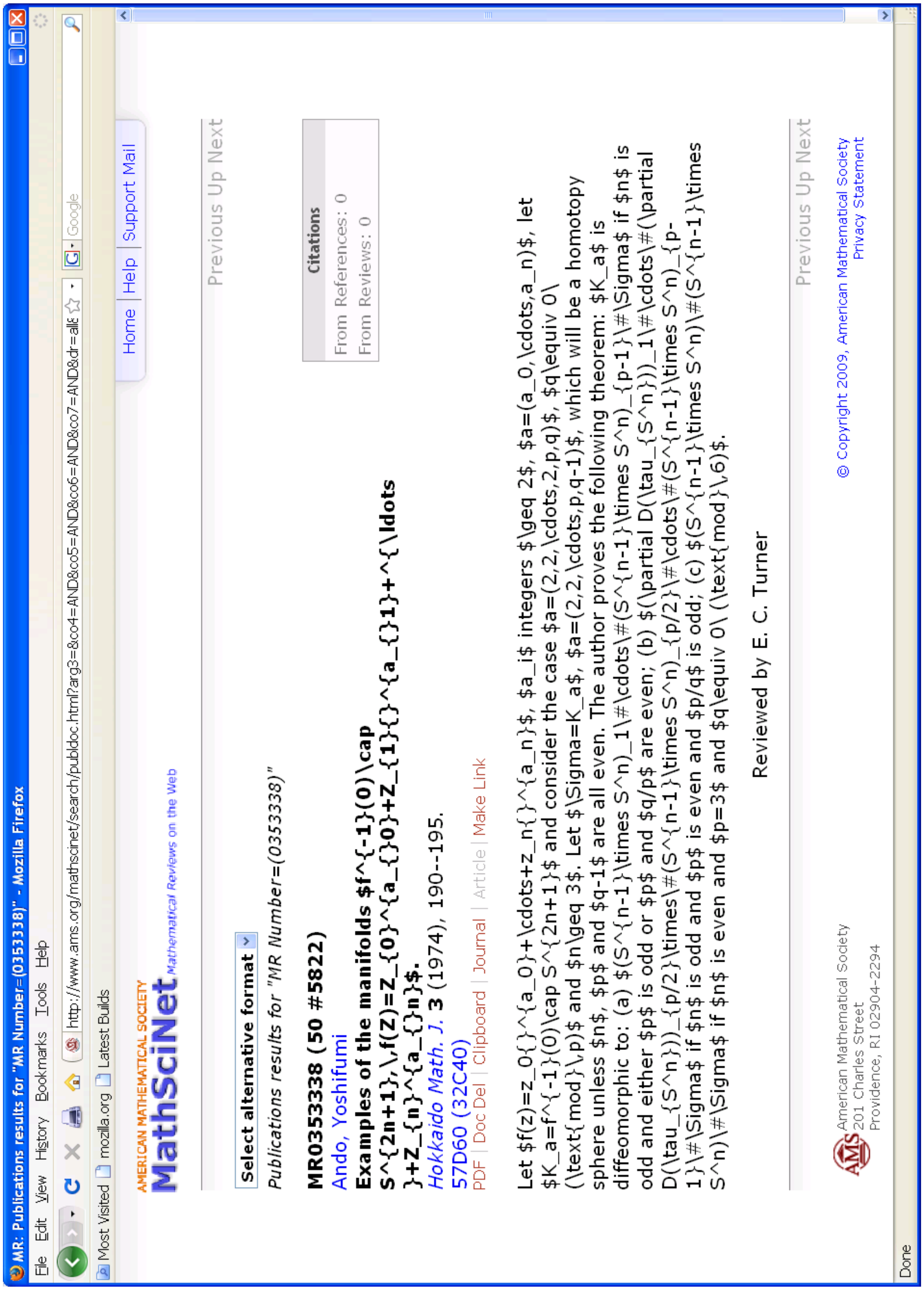
The MathJax project has as its primary goal the display of mathematics embedded in HTML in an efficient, high-quality, multi-browser manner. To that end, the project aims to produce software that will be published under an open source license and become the *de facto* standard for displaying mathematics in HTML content. The software will support relevant standards, be capable of taking advantage of the latest advances in web font and math accessibility technology, and utilize a modular, extensible architecture that facilitates integration in a wide range of applications. The initial software release of the project is expected by the end of 2009. The work for the initial general release of the MathJax project will be carried out jointly by Davide Cervone and Design Science, Inc.

The development of MathJax is supported by the American Mathematical Society, SIAM and Design Science, Inc. as equal partners in the *MathJax Consortium*. Additional sponsors are being recruited. The American Physical Society is now a sponsor and we expect others to join soon.

The first release of an alpha version of MathJax was completed at the end of September. Within a few days after the release, demonstrations of MathJax enabled within MathSciNet were shown. The development seems to be progressing rapidly and we are optimistic about the goal of releasing a MathJax enabled version of MathSciNet within a few months.

The following two pages show a review from MathSciNet before-and-after MathJax.

MathSciNet Before MathJax



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Publications results for "MR Number=(0353338)"

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MR0353338 (50 #5822)
Ando, Yoshifumi
Examples of the manifolds $f^{-1}(0)\cap S^{2n+1},\,f(Z)=Z_{0}^{a_{}0}+Z_{1}^{a_{}1}+^{\ldots}+Z_{n}^{a_{}n}$.
Hokkaido Math. J. **3** (1974), 190--195.
57D60 (32C40)
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Let $f(z)=z_0{}^{a_0}+\cdots+z_n{}^{a_n}$, a_i integers ≥ 2, $a=(a_0,\cdots,a_n)$, let $K_a=f^{-1}(0)\cap S^{2n+1}$ and consider the case $a=(2,2,\cdots,2,p,q)$, $q\equiv 0\ (\text{mod}\,p)$ and $n\geq 3$. Let $\Sigma=K_a$, $a=(2,2,\cdots,p,q-1)$, which will be a homotopy sphere unless n, p and $q-1$ are all even. The author proves the following theorem: K_a is diffeomorphic to: (a) $(S^{n-1}\times S^n)_1\#\cdots\#(S^{n-1}\times S^n)_{p-1}\#\Sigma$ if n is odd and either p is odd or p and q/p are even; (b) $(\partial D(\tau_{S^n}))_1\#\cdots\#(\partial D(\tau_{S^n}))_{p/2}\#\cdots\#(S^{n-1}\times S^n)_{p/2}\times\#(S^{n-1}\times S^n)_{p-1}\#\Sigma$ if n is odd and p is even and p/q is odd; (c) $(S^{n-1}\times S^n)\#(S^{n-1}\times S^n)\#\Sigma$ if n is even and $p=3$ and $q\equiv 0\ (\text{mod}\,6)$.

Reviewed by E. C. Turner

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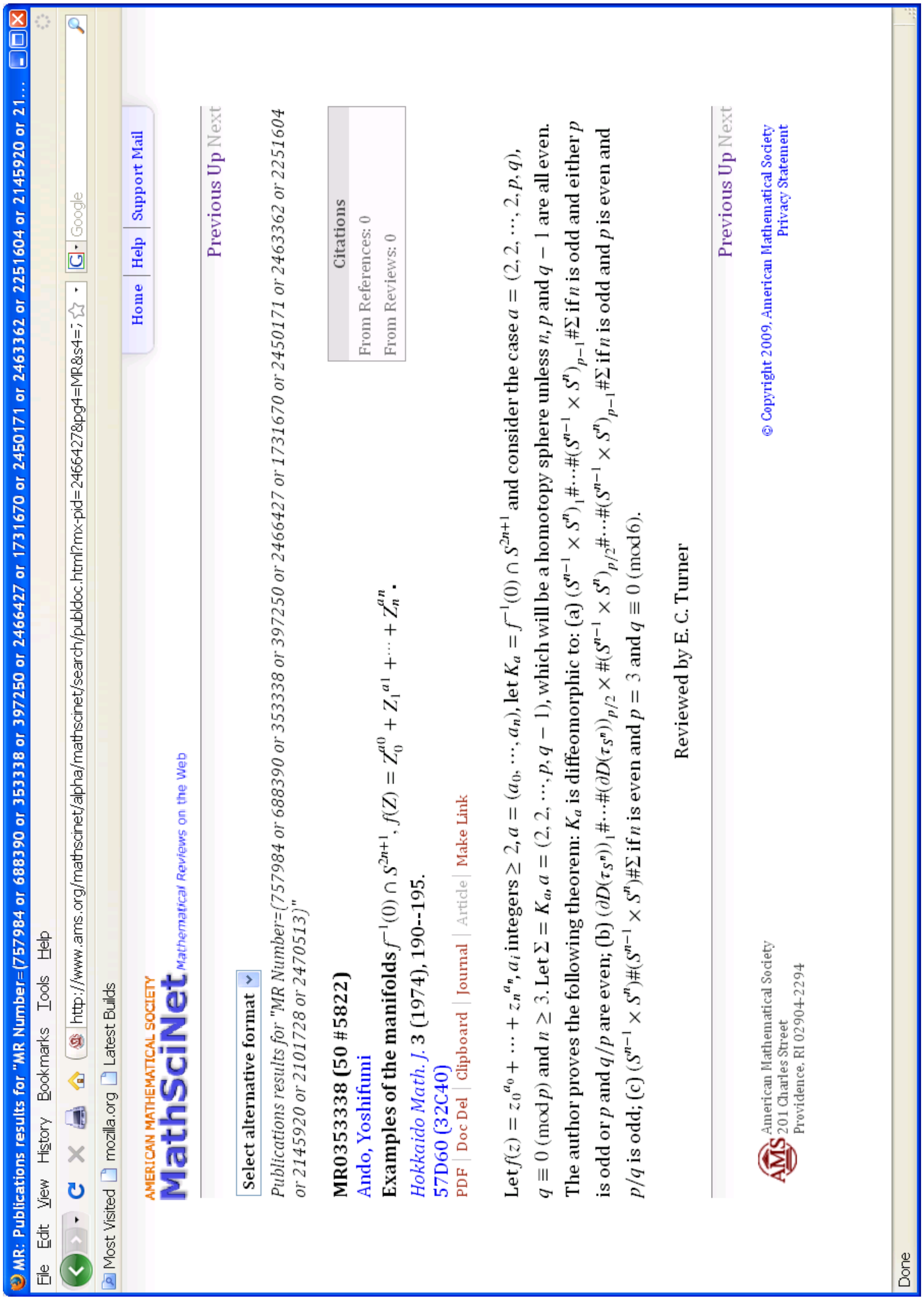
MathSciNet with MathJax Enabled



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Citations
From References: 0
From Reviews: 0

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Ando, Yoshifumi
Examples of the manifolds $f^{-1}(0) \cap S^{2n+1}$, $f(Z) = Z_0^{a0} + Z_1^{a1} + \cdots + Z_n^{an}$.
Hokkaido Math. J. 3 (1974), 190--195.
57D60 (32C40)
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Let $f(z) = z_0^{a_0} + \cdots + z_n^{a_n}$, a_i integers ≥ 2, $a = (a_0, \cdots, a_n)$, let $K_a = f^{-1}(0) \cap S^{2n+1}$ and consider the case $a = (2, 2, \cdots, 2, p, q)$, $q \equiv 0 \pmod p$ and $n \geq 3$. Let $\Sigma = K_a$, $a = (2, 2, \cdots, p, q-1)$, which will be a homotopy sphere unless n, p and $q-1$ are all even. The author proves the following theorem: K_a is diffeomorphic to: (a) $(S^{n-1} \times S^n)_1 \# \cdots \# (S^{n-1} \times S^n)_{p-1} \# \Sigma$ if n is odd and either p is odd or p and q/p are even; (b) $(\partial D(\tau_{S^n}))_1 \# \cdots \# (\partial D(\tau_{S^n}))_{p/2} \times \#(S^{n-1} \times S^n)_{p/2} \# \cdots \# (S^{n-1} \times S^n)_{p-1} \# \Sigma$ if n is odd and p is even and p/q is odd; (c) $(S^{n-1} \times S^n) \# (S^{n-1} \times S^n) \# \Sigma$ if n is even and $p = 3$ and $q \equiv 0 \pmod 6$.

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MINUTES OF MEETING BY TECHNICAL MEANS

BOARD OF TRUSTEES
AMERICAN MATHEMATICAL SOCIETY
JULY 20, 2009

Members present: George Andrews, John B. Conway (Chair), John M. Franks, Eric M. Friedlander, Linda Keen, Ronald Stern, Karen Vogtmann, and Carol S. Wood.

John Franks forwarded information from Don McClure to the Board on Tuesday, July 14 about the capital request for purchase of a used Shinohara 75VP 4-color press. The summary information and capital request is included as Attachment 1 (memorandum from Beth Huber, Associate executive director and Head of publishing division). Memoranda detailing the rationale for the purchase of this press were available for inspection by the Board in a secured area of the AMS website.

Pursuant to the approved procedures for a meeting by technical means, Treasurer John Franks initiated the call for such a meeting on Tuesday, July 14. The call for the meeting was sent by email to the email alias on the same day and the meeting was conducted by email. There was one item on the agenda: Capital request for purchase of a used Shinohara 75VP 4-color press.

Board secretary Karen Vogtmann made the following motion.

Motion: The Board of Trustees approves spending up to $226,500 for purchase of a 4-color press for the AMS Printing Department, as detailed in the July 9, 2009 memorandum from Beth Huber attached hereto.

The motion was seconded by John Franks. Discussion and voting were scheduled to end on Saturday, July 18 at 12:00 noon Pacific Standard Time. By that time, all members had voted by email. The result of the vote was 8 votes in favor, so the motion carried unanimously.

Minutes prepared by Karen Vogtmann
Secretary, Board of Trustees

INTEROFFICE MEMORANDUM

FROM: BETH HUBER

SUBJECT: PURCHASE OF A USED PRESS FOR THE PRINTING DEPARTMENT

DATE: 7/9/2009

This memo seeks authorization to purchase a used 4-color press for the AMS Printing Department for an amount not to exceed $226,500.00. This purchase will replace our oldest Miller Press that is 33 years old.

Summary: We believe that this investment in our printing operations is a sound business decision for several reasons including:

- Projected reduction in yearly expenditures on outside printing will provide for a payback on the investment in approximately 5 years.
- Improvements in overall productivity including enhancement to our ability to respond to the niche print runs of our book program and the projected drop off in journal print runs.
- Reduction in our vulnerability to equipment failure by retiring our oldest press.

AMS Printing Requirements. Since 1981, when we purchased our first sheet fed press we have printed the majority of all AMS publications in our Pawtucket facility. We continue to outsource the Notices and Bulletin due to the size of the print runs as well as Mathematical Review and Current Mathematical Publications due to the type of paper required. The purchase of a new press for the Pawtucket facility will not change the outsourcing decisions for these publications.

Almost all of the initial print runs of our books are also printed in our Pawtucket facility. The only books that require outside printing are books which contain random color or those that are printed on coated stock due to heavy black coverage. The purchase of a new press will result in this print work being done in our Pawtucket facility.

Our overall publishing program expanded during the late eighties, principally due to the expansion of the book program. Since 1987, 20 new book series have been introduced many of which have complicated multi-color covers. Over that same period we have added 1 new AMS quarterly journal as well as 4 quarterly Sale-of-Service Journals.

The “workhorses” of our operation are three Miller presses: black and white, perfecting, sheet-fed presses capable of printing 16 pages on one plate. We acquired our first Miller press in 1981, the second in 1997 and the third in 2000. Our first Miller was purchased new and the other two were purchased used. This equipment has served us well and we have successfully achieved high-quality output at a cost-effective price per page.

The following summarizes the work produced on our black and white sheet fed presses over the past 5 years.

BOOKS & JOURNALS	2004	2005	2006	2007	2008
New Books	100	92	97	114	94
Reprinted Books	20	30	54	41	42
Journal Issues	93	108	109	103	97
Total Publications	213	230	260	258	233
Pages	60,701	61,320	77,583	77,592	72,128
Impressions	3,838,830	3,443,986	4,461,178	4,425,510	4,182,310

The increase in units printed over the past 5 years is attributed to the increase in the number of monographs reprinted each year. It is important to note that even with the increase in reprinted books and the page increases attributed to both books and journals, the number of impressions printed has not increased at the same rate. This is attributed to two key factors: we are doing a better job at setting the initial print runs for our books and the number of paper subscriptions to the journals continues to decline.

Since the early 80's we have struggled with the printing of color in our printing facility. In 1987, we purchased a new 1-color Shinohara press. This press is a non-perfecting, single color press, acquired to print single color journal covers and the small number of 2-color covers then required by a book program that was publishing only 21 books a year.

Since acquiring the Shinohara our publishing program, in particular the book program, has expanded significantly. The covers required by the book program are more complex multi-color covers that are not efficiently printed on the Shinohara. The combination of an increase in complex covers and the growth in reprints has required that we outsource a significant amount of cover work. It should also be noted that our current color capacity is insufficient to address the growing demand for color printing required by the various divisions of the Society. These printing needs include promotional pieces associated with various products and services, various member communications and public awareness work.

Over the past few years we have also seen an increase in the number of authors who are requesting that we publish color in their books. In increasing numbers, the competitive nature of book acquisition requires that we meet this author demand for color, particularly with our monographs. If we can convince an author to restrict color to 1 signature we outsource just that piece. The color signature is then married with the black and white signatures produced in our facility when the book is bound. In increasing instances the color is dispersed throughout the book which requires that we outsource the entire project.

Condition of our Equipment. The age of our main presses, 33, 28, and 27 years old continues to present the greatest threat to continuity of our printing operation. Press breakdowns have increased over the past several years and we now find it difficult to obtain replacement parts; in many cases parts have to be manufactured which is expensive and time consuming. Even when parts are available there are fewer skilled repair technicians available to work on equipment this old. Our oldest Miller, which would be retired with this purchase, can no longer work on the lighter weight journal paper and the repairs required to do so represent an unacceptable investment in equipment of this age.

The Shinohara press was purchased in 1987. The press is in overall excellent condition and performs single color printing well. The biggest limitation of this equipment is the inability to print multiple colors in one pass. We with either sell this equipment following the purchase of a new color press or use the press to varnish covers.

Our bindery and prepress areas have benefited from recent capital investments, specifically the purchase of a new binder in 2003 and computer-to-plate hardware and software in 2006. The only area where we may consider additional investment is in a new laminator which is used primarily to protect cover stock. The laminator was purchased in 1994.

Assessment of What Is Required To Meet Our Current and Future Printing Needs. After reviewing our current operation as well as the work we outsource we determined that we should retire at least one Miller Press and add a more modern multi-color press. We established a list of requirements for new equipment which would be used to evaluate the new and used equipment markets. Those requirements include:

- 4 color perfecting press, capable of producing all the work currently produced by our existing presses as well as a majority of the outsourced printing (excluding MR related products, Notices and Bulletin)
- A press that can accommodate a varied paper size including
  - 20.5 x 28.5 inches required by our book and journal work
  - 23x29 inches required by promotional work and book and journal covers
- A high speed press equipped with the newest quality control technology, capable of high quality and consistent output
- Semi-auto plate change-over capability
- A plate size that fits into our current plate processing and burning equipment
- A footprint that can be accommodated in our printing facility
- A machine that would be supported by the manufacturers for many years.

Over the past several years Printing Department Manager Don Proulx, assisted by Facilities and Purchasing Manager Patty Hickey, and Publications Technical Group Specialist Stephen Moye have evaluated the printing equipment market to determine which press would be best suited to the AMS operation. A survey of the equipment market prepared by Don Proulx is presented in **Attachment A**.

At the conclusion of this analysis we determined that the capital requirements for a new press were not justified. We turned to the used equipment market and determined that the Shinohara 75VP was the best fit for our facility for several reasons including that this press satisfied all of our key requirements in the lowest possible price range. The 75VP has all the features and automation required to recapture the majority of the color printing we are currently outsourcing as well as handling a portion of our current black and white printing needs. Key reasons why this equipment suits our operation include:

- **Paper Size.** We can move to a single page size for almost all our work. We currently use two paper sizes. The Miller presses use a 23" x 29" sheet and our current Shinohara utilizes a 14" x 20" sheet. We will regularly operate the 75VP on one sheet size, 23" x 29". This allows us to:
  - Produce any of the regular black and white book and journal work as well as the occasional 4-color book required by our book program.
  - Run 4-color covers 2-up which is more efficient than our current color press that runs 1-up.

  - Produce 8.5” x 11” sheets running 6-up, which is a typical requirement of promotional printing including catalogs, calendars and other promotional work.

- **Plate Change Over Technology.** The Shinohara 75VP offers plate change technology that is semi-automatic. Plates are changed at the touch of a button. No tools are required and plates are changed quicker and more precisely than with manual plate changes. Plate changeover takes less than a minute per plate. This speeds press make-ready, increasing press run time. Our current plate change over requires pressmen to physically get down on the press and in-between the cylinders in order to set the plates using special pin wrenches.

  The Shinohara also provides us the option of moving to polyester based plates from aluminum should our needs change in the future.

- **Color.** The 75VP is a 4-color press that will work well with our computer-to-plate system. The press can be quickly changed over from color to black and white printing.

- **Reliability.** We have been very pleased with the performance of the Shinohara color press we have owned for the last 22 years. This equipment has proved to be very reliable and the Shinohara Company has been a good company to work with.

A more detailed summary of the feature of this press is presented in **Attachment B.**
Shinohara of New England quoted us a purchase price of $625,000 for the new 75VP. We quickly determined that an expenditure of this magnitude was not required by our operation so we decided to pursue the Shinohara press in the used equipment market.

Details of the Used Press We Recommend Purchasing. Printing Department Manager Don Proulx located two Shinohara 75VPs that meet our requirements for age and number of impressions. After reviewing each press Don is recommending that we pursue the purchase of a one owner press that has been operating in an insurance company in Japan since 2003. The press was taken offline earlier this year and shipped to Florida where it is currently warehoused.

We prefer to pursue the purchase of the press from Japan over the other used 75VP press we located for 3 key reasons:

- The press has been well maintained by the original owner. The other press we have identified was not well cared for and was operated by untrained pressmen.
- The selected press has a larger delivery pile height which will allow more press time before restocking of paper.
- This press is currently being offered for $216,500 plus a contingency of $10,000 to cover reorganization of the press room and electrical etc. The other press is currently being offered for $250,000 and requires approximately $26,000 in maintenance and repairs plus installation charges and contingency funds.

Impact of This Purchase on Outside Printing Expenditures. Purchasing a new press will expand the capacity of the Printing Department. With this press we will gain the ability to print the majority of the work we have outsourced to local printers over the past few years with no further additions to staff. This work includes product promotional material, public awareness and membership information, books printed in full color and color book and journal covers. In 2008 we outsourced $159,000 of printing/binding/finishing work in these categories. We project that about $107,000 of these outside printing cost could be moved back in-house with the purchase of the new press. The cost of producing that work in-house is conservatively estimated at $42,000 for a savings of over $65,000. Offsetting this savings would be an increase in depreciation of approximately $22,000 a year.

Attachment C recaps our expenditures on outside printing over the past 5 years.

Summary of the Printing Department. The Printing Department currently operates with a staff of 9.0 FTEs, 2.6 fewer than the peak staffing level of 11.6 FTEs in 1997. The total operating and allocated expenses associated with the Printing Department were $1,109,829 in 2008 and are broken down as follows:

Category	2008 Actual
Personnel Expense (including benefits)	$584,648
Operating Expenses	$388,015
Allocated Expenses	$137,166
TOTAL	**$1,109,829**

Capital Investment History 2000-2008. Several capital investments were made in the printing operation since 2000.

Capital Item	Capital Costs
Miller #3 (24 years old)	$14,500
Jogger	$3,222
Plate Punch	$2,470
Binder	$67,031
Conversion of Miller pumps from oil to air	$6,825
Conversion of gatherer pumps from oil to air	$1,595
Xerox Copier	$32,250
Ikon Color Copier	$41,124
UV Image Setter/Plate Burner	$105,178
Air Compressor	$1,922
Sharpe Copier	$24,800
Total	**$300,917**

Terms of Sale: The purchase price is $216,500 which includes delivery and set up of the press in the Pawtucket facility and removal and disposal of our 1976 Miller press. The seller will provide 80 hours of a factory trained technician to install and train our staff on operating the new press.

Payment terms requested by the seller which are subject to further negotiation are 15% when signing a purchase agreement, 80% prior to removing the Miller press from the our floor and loading of the press at our warehouse, and the balance when the press is ready for plates on our floor.

TO: Beth Huber
FROM: Donald Proulx
SUBJECT: 4 Color Press

This memo summarizes the analysis of the printing equipment market that I have undertaken along with Pat Hickey and Steven Moye to determine what equipment is best suited to the AMS printing operation. Before starting our analysis we developed the following key requirements/specifications for equipment that would be well suited to our operation.

Press Requirements

1. We require a press that is multi-functional, capable of producing the work currently produced internally as well as most of the printing work that is outsourced. Specifically we require a press that:
   - Accommodates a varied paper size including
     - 20.5 x 28.5 inches required by our book and journal work
     - 23x29 which will allow us to print 8.5x11 - 6-up (for promo-pieces) and 11x17 - 3-up (required by book and journal covers)
   - Can print single color and 4-color work as well as perfect.
   - Possesses the newest technology for speed purposes as well as quality control. This includes an operating console that will allow us to store repeat jobs (covers etc) so that the color keys are automatically set to allowing tremendous consistency in all of our repeat work.
   - Semi-auto plate changes allowing for quicker set-up and much better quality control (registration)
   - Plate size that would fit into our system without having to purchase newer plate processor or plate burners

2. The press must have a footprint that we could accommodate in the current Printing facility.

3. A machine that could be supported by the manufacturers for many years

During this investigative process Pat, Steven and I attended the Graph Expo in Chicago where we could get a look at all the machines in one setting. We also have talked with vendors and operator of various equipment. The trip to Graph Expo was really helpful and came away with increased knowledge of the 5 different pieces of equipment that could certainly serve our needs in the area of color printing. We also have been looking more intensely into this at local Print Shops in the area to see what their experience has been on the equipment we would consider.

The following is a description of the machines we considered in the new equipment market:

Man-Rolland. This press is certainly top of the class in printing machines in the industry. They took us out to their facility in Chicago to see the ROLLAND 500 running. They believed that although the 500 was more than we needed, (as they were proposing a Rolland

200,) we would still get a lot out of seeing this machine in action. Basically it's the same as the 200 with a lot more of the bells and whistles.

As it turns out, the Rolland 200 doesn't perfect and they don't have a machine in this class that does. This we found out when we returned as we were told otherwise at the time. They claim that they will have a perfector in this class in another 2 years. The Rolland 500 is a perfector, and does all we want and much more but at a price tag of over $1.3 million even they admitted this was not justifiable.

Sakurai-Oliver 475 SDP. This was another press we seen at the show in Chicago and we were somewhat interested in as it fit our needs in size and ability to perfect. I was not as familiar with it as I felt I needed to be. Pasquariello Graphics, Inc. contacted me and we set up a time when I could go see a shop in Stoneham Mass. that was running **3** of them.(l six color 1 four color and 1 was a two color). Scott and I went there and spoke with the owner of the company and the pressman. When we were done we did not have a good feeling about this machine for several reasons.

Jimmy Faiola, the salesman was an independent and was in fact not working as an employee of Pasquariello Graphics but was selling the machines for them when an interested party inquired. He basically works for himself, although claims that he is putting together a company that will strictly sell these machines as well as service them. I had a bad feeling about this.

When we spoke with the pressman without the salesman around, they were not too high on the machines, one suggested that he would much rather run a Komori which he had in the past.

The cost was much higher than what I felt it should be in standing with other presses in its class. Basically, at a price tag of $725,000.00, and a service staff not yet hired or trained and a middle man we were not quite sure who he was selling this machine; I am not recommending this machine.

HEIDLEBERG-SPEEDMASTER CD-74. Heidelberg was at the show with the usual line of equipment running, we didn't spend a lot of time there as I am familiar with what they have. Scott and I attended an open house at PDQ in Middletown, RI before I went to Chicago they had just purchased a 14x20 press from Heidelberg.

As expected, we were impressed with their equipment as they are one of the top presses in the industry. Their machines will certainly do all that we ask of them and then some, but with that comes a very high price tag. Also, their support and service is very expensive. I had a chance to speak with the owner of this shop and asked him why he went with this machine, he told me that it was between Shino-Hara and Heidelberg and he felt that the name would help him in selling his company as Heidelberg is a well known press and Shino Hara doesn't have the same name recognition. Name recognitions means little to me or to the Society were as the presses are concerned.

They prepared a quote for me for the Speedmaster **CD-74** and came in at $1,042,865.00 Personally, not a machine I would recommend for the price.

Next in line are the last two machines on my list, they both have pluses and minuses but I would like to recommend one of them for the AMS Print Shops future.

SHINOHARA 75 VP. As you know we are very familiar with the Shinohara presses as we have been using a 1-color for many years, and had a 2 color perfector as well. This press intrigues me as it fits all of our needs in size and perfecting. It appears that the quality it can produce as well as quantity fit our needs well. There are no **75** VP's in the area so I have not yet gone to see one operating, nor have I spoken with operators. Should this project continue going in a positive direction I would need to fly out and see these presses in action, as well as speak to people who are using them before I could conclusively recommend one. Never the less I believe this one is a good fit for the shop going on what we know from the machines we have used in the past. The positives are as follows:

- Maximum paper size is 23x29 this would allow us to produce **8.5** x 11 6-up for promotional pieces
- Pressman is fairly familiar with machine
- Paper size allows us to use this press to print text black and white when its not busy running promotional pieces allowing us to continue to have a back-up to the Millers
- Plate changers allowing for optimal print time. Pressman will not be spending a lot of time mounting plates as they are mounted automatically.
-

One negative with this press, the lack of a presence of Shinohara's in this area. I have had extensive talks with them and have been assured that service in this area, out of Maine is very good. But this is something I need to investigate further. I should point out that there are Shinohara's in the area, just not the one being proposed. I should also point out that our single color has not had a service call in close to 5 yrs and that was only for replacement chains.

The price tag on this machine; $5 10,000.00. They claim to be giving us a credit of $115,000.00 for our used equipment (Miller 3 and the single color Shinohara) but I was informed that should we sell them before the new press is brought in, the Society could keep the money. In other words they don't want the used equipment.

KOMORI-SPICA 29. Yet another machine we learned about at the show in Chicago. Komori takes a back seat to no one; this machine has everything we were looking for except size. When we returned we traveled to 3 different shops to see the Komori's running. The first was a local shop we have used in the past, Colonial Printing. Ray Mena spoke with us about the Komori presses as he has become strictly a Komori shop; he feels there is no better deal.

Ray has taken his little printing copy shop and transformed it into an extremely successful large print manufacturer in RI. Ray was running much bigger machines than what we were interested in but we wanted to get a feel from him as to how well the machines run and how well service could be counted on. Both rated high with him.

The second shop we visited, Red Sun, just outside of Boston had been running the Spica 29 (which is the one we are looking at) for just about a year now and they claim they love it. They are also running a Komori 2 color and have for years. What was impressive about this shop is how small it was and how they got that machine to fit in there without breaking down walls. (It has a very small footprint for a 4 color machine) the running console is actually mounted on the back of the machine for better space management.

The 3rd shop we visited, ExecuPrint, in Holbrook, MA had this machine on their floor for approximately 5 months and was very happy with the quality and make-up of this machine. They went from a 2 color Komori Lithrone to the Spica 4 color.

Asking price on the Spica. $714,230.00 - trade-in of Miller3 and 1 color $556,341. Obviously the prices given were ones quoted to me upon request, I am quite sure that should we ask Patty Hickey to get involved the prices would look much different.

Summary: After review of the new equipment market we have determined that our printing needs can be well serviced with a piece of quality used equipment. Specifically, I feel that the SHINOHARA 75 VP will meet our needs at the most attractive acquisition price. Although we were impressed with the Komori, the press is only two years old so the used market is not priced at a level we wish to pursue.

I will continue to monitor the used equipment market through various periodicals and online for a press that would meet the following requirements

- An advertised price less than $300,000
- Equipment models produced after 2000
- Equipment with low impressions, preferably out of a one shift operation

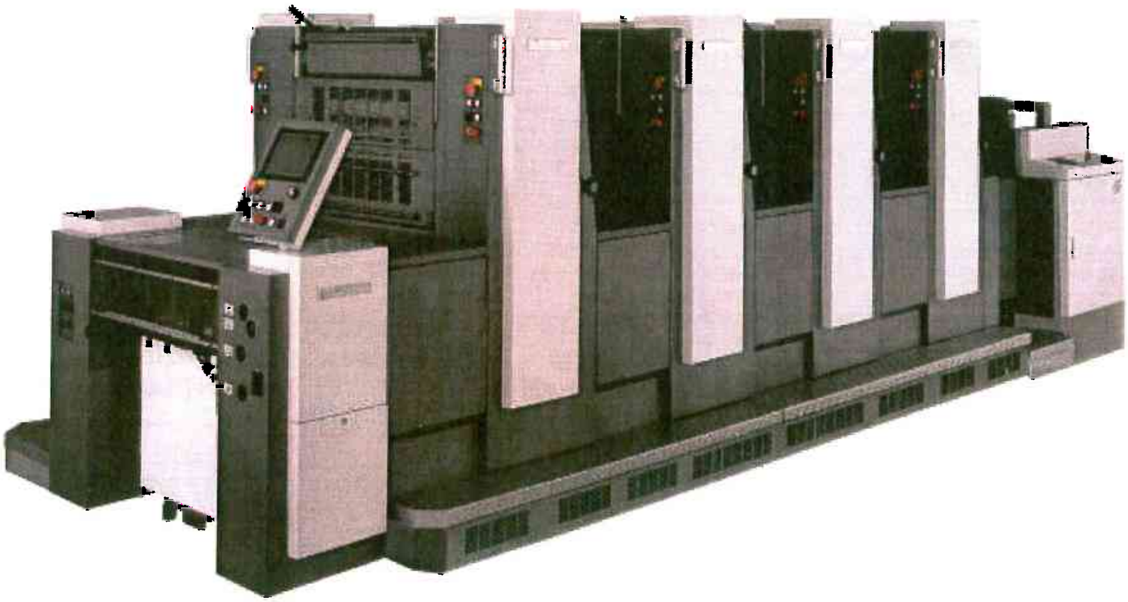
ATTACHMENT B

75 Maximum printing speed **15000** SPH
maximum sheet size **585 X 750**

MEDIUM-PILE

4C

High quality, high productivity, and user-friendly operation make the 75 Multicolor Medium-pile ideal for the needs of today's market.



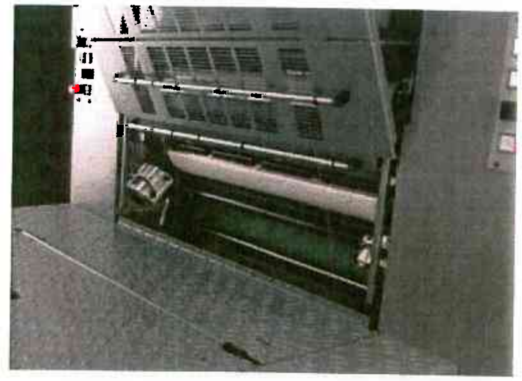
SHINOHARA 75IVP

MAJOR EQUIPMENT

Shinohara Plate Changer (SPC)

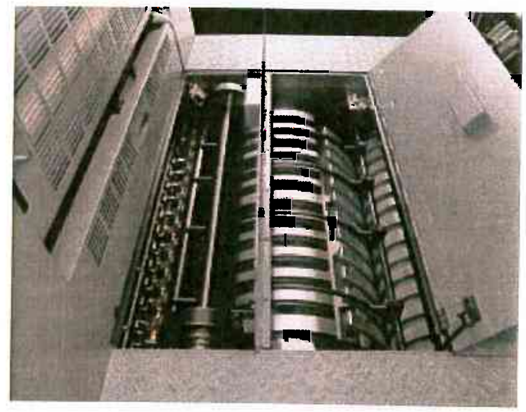
The Shinohara semi-automatic Plate Changer (SPC) reduces the time and skill needed to change plates. With the SPC, plate changing is reduced to a one-minute operation per unit that begins at the POD control screen.
The SPC requires no bender, resulting in more efficient operation.

Regardless of whether plates are aluminum or polyester base, the tension can be adjusted to the proper levels with a simple operation. There is no need to bend the leading edge of the plate, so plate changeover is easy. The operator simply inserts plates into the leading edge clamp on the cylinder.



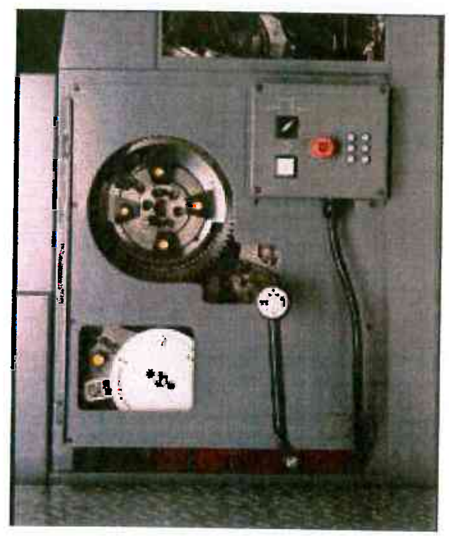
Perfecting system

The rigid, mono cast turnover cylinder uses a patented master/sub gripper system to offer precision, speed, and high reliability in single- or double-sided printing.



Semi-automatic changeover Perfecting System

Switching from straight to perfecting printing, and vice-versa, is a simple matter in fact, complete perfecting changeover takes only about a minute. The semi-automated changeover system uses a safety monitor to guide operators through three easy steps, resulting in higher operator efficiency and greater throughput.



Easy plate Cocking

Shinohara's exclusive cocking system is the only one in the world to allow the plate clamp to be skewed during operation. Cocking adjustments can be entered electronically via the operation console, or imported from floppy disk data taken on the SRIM automatic register-mark and image area measurement device.
A cocking adjustment can be dramatically achieved with the superior combination of motors on the plate clamp device and motors on the plate cylinder.

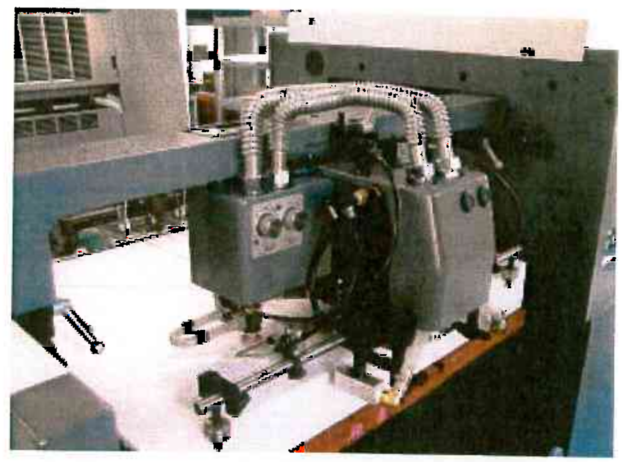
Operation Console

Through the use of multiple CPUs, Shinohara has made it possible to control all the different motors in the press simultaneously though the operation console, dramatically reducing make-ready time. The operation console also provides bar graphs of ink key apertures besides the touch keys, and features a color PC touch panel. Improved readability prevents errors and enhances the communications between operator and machine.

(PHOTO For Shinohara 75 IV/V MP)

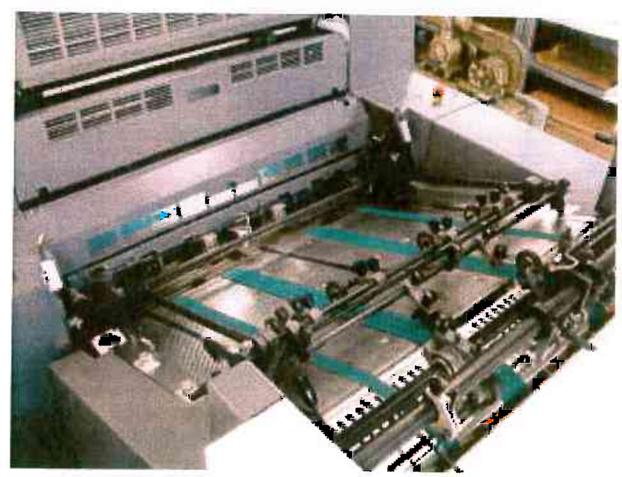
Feeder & Register system

- **15,000 sheets per hour**
- **Vacuum belts**
- **Wheel to rail pull guide.**



Built-in quality for dependable results

A comprehensive approach to quality control ensures optimum precision, performance and dependability.



Precision is paramount in the field of high-quality offset printing, and this is the driving force behind both our Quality Control and Quality Assurance programs. Our comprehensive approach to QC and QA begins in the design stage, where feedback from our service operations around the world is given top priority in the design of our new models, Personnel from several different divisions of our organization meet regularly to exchange information, working together to assure the best product possible even before the machine is off the drawing board. This approach then extends to the materials, parts and assemblies which are thoroughly checked and tested before they are considered for use in our products. Finally, our approach moves to the manufacturing and assembly arena, where supervisors and production staff hold regular QC circle meetings to minimize and eliminate defects before they have a chance to occur. In the long run, this amount of time and attention is well spent, helping to ensure that each machine we produce and deliver will require a minimum of attention in the years to come.

SHINOHARA acquires the authentication of the international standard ISO9001 of the quality guarantee.

ISO 9001
Certificate Number: 34672

75 IV/ IVP Standard Features

1. Major Specifications

* Max. Production Speed		: 15,000 IPH
* Max. Sheet Size		: 585 x 750 mm (23 1/32" x 29 17/32")
* Min. Sheet Size	(Single-sided)	: 260 x 400 mm (10 15/64" x 15 3/4")
	(Perfecting)	: 300 x 400 mm (11 13/16" x 15 3/4")
* Max. Printing Area	(Single-sided)	: 575 x 740 mm (22 41/64" x 29 1/8")
	(Perfecting)	: 565 x 740 mm (22 15/64" x 29 1/8")
* Plate Size		: 635 x 745 or 754 x 0.24 or 0.3 mm (25" x 29 21/64"or 29 11/16" x 0.009" or 0.012")
* Runnable Paper Thickness	(Single-sided)	: 0.04 to 0.4 mm (0.002" to 0.016")
	(Perfecting)	: 0.04 to 0.3 mm (0.002" to 0.012")
* Feeder Pile Height		: 900 mm (35 7/16")
* Delivery Pile Height		: 600 mm (23 5/8")
* Blanket Size (W x L x T)		: 765 x 780 x 1.95 mm (30 1/8"" x 30 45/64" x 5/64")
* Inking Roller		: 19 per unit
* Dampening System		: Continuous Dampening System
* Dampening Roller		: 5 per unit
* Feeder System		: Stream Feeder
* Delivery System		: 3 Gripper Bars with Medium-Pile Delivery

1-2. Cylinder System

* "Rubber Blanket "Forio" 780 x 765 x 1.95 mm (L x W x T)	: 1 for each unit
* Blanket Cylinder Under Packing Sheet 690 x 760 x 0.3 mm (L x W x T)	: 2 for each unit
* Plate Cylinder Under Packing Sheet : 745 x 585 x 0.25/0.31 mm (W x L x T)	1 for each unit
* ICP Paper for Single Diameter Transfer Cylinder 582 x 750 mm x 0.23 mm (L x W x T)	: 1 for each Transfer Cylinder
* ICP Paper for Turnover Drum 460 x 750 mm x 0.23 mm (L x W x T)	: 1

1-3. Inking System

* Form Rubber Roller	: 4 per unit
* Distributor Rubber Roller	: 6 per unit
* Distributor Rider Roller	: 1 per unit
* Auxiliary Rider Roller	: 3 per unit
* Ductor Rubber Roller	: 1 per unit
* Ink Steel Distributor Roller	: 4 per unit
* Ink Steel Fountain Roller	: 1 per unit
* Ink Sludge Basin	: 1 per unit

1-4. Dampening System

* Rubber Form Roller	: 1 per unit
* Metering Roller	: 1 per unit
* Bridge Roller	: 1 per unit
* Fountain Pan Roller	: 1 per unit
* Steel Rider on form	: 1 per unit

2 Built-in Standard Attachments, Devices and Systems

2-1. Feeder System

* Stream Feeder System including Feeder Head with two Lifting and two Forwarding Suckers
* On-the-Run Height Adjustment of the Lifting and Forwarding Suckers
* Feeder Paper Pile Sheet Separation Side Blowers with Individual Air Pressure
* On-the-Run Feeder Timing Microadjustment
* Feeder Pile Paper Preloading Device
* Electromechanical Double Sheet Detector
* Feed Pile Table Up/Down Motor
* Feeder Board Brush Wheel and Roller Positioning Device
* Infrared Detector for Feed Pile Table Ascending Stop
* Suction Belt

2-2. Registering System

* Infrared Skew and Overrun Sheet Detectors
* Automatic Function Double Sheet Detector
* Swing Gripper Infeed Device
* On-the-Run Side Guide Microadjustment Device
* On-the-Run Microadjustment for Back/Forth and Skew for Front Guide System
* Front Guide Height Adjustment
* Plate Clamp Register Pin System

2-3. Inking System

* Remote Controlled Ink Key / Fountain Roller Sweep from Free-Standing Operation Console
* Segmented Ink Fountain Blade
* Mechanical Brake for Ink Ductor Roller on each Unit
* Random Side Self-Oscillating Rollers, Rilsan-Coated Steel Rollers on each Unit
* Form Rollers ON/OFF Operation via Pneumatic Cylinder Operation
* Automatic Ink Roller Cleaning System Type 1 (Solvent only)
* Remote Controlled Bridge Connection between Water Fountain Roller and Ink Roller
* Shinohara Pre-Inking System (S.P.I.S.)

2-4. Dampening System

* Shinohara Design Continuous Dampening System with Four Rollers, including Dampening Form Roller ON/OFF via Pneumatic Cylinder Operation
* Metering Roller with On-the-Run Skew and Pressure Adjustment
* Free-standing Dampening Cooling/Circulating Unit (Baldwin) with Alcohol Control and Fountain Solution Mixing Device
* Dampening Solution Level Detector on each Fountain Pan
* Dampening System can be operated in either Integrated or Segregated Mode with Inker Unit
* Air Knife for Anti-Emulsification on each Unit
* Dampening Fountain Roller Speed Control via Free-Standing Operation Console
* Dampening Fountain Roller Speed Compensation Program via Free-Standing Operation Console
* Dampening Fountain Roller Oscillating Mechanism

2-5. Cylinder System

* Seven-O'clock Cylinder Layout of Plate, Blanket and Impression Cylinders for Gap-Shock Prevention
* Semi-Automatic Plate Changer (SPC)
* Unit-to Unit Sheet Transfer System consists of one Double-Diameter Transfer Cylinders and one Single-Diameter Transfer Cylinder and one Turnover Drum on the Perfecting Press
* Unit-to Unit Sheet Transfer System consists of one Double-Diameter Transfer Cylinder and two Single-Diameter Transfer Cylinders on the Straight Press
* Impression Pressure Adjusting Dial at Operation Side of each Unit
* Radial and Lateral Registration of Plate Cylinder is Remote Controlled via Free-Standing Operation Console
* Plate, Impression, and Blanket Cylinders are Chrome Alloy Metal-Sprayed Coated for Anti-corrosion
* Bearer-to-Bearer Contact between Plate and Blanket Cylinders during Printing
* Automatic Blanket Wash-up System Type1 (Roller Type: Solvent only)
* Hickey Picker Device

2-6. Perfecting System (Machines equipped with Perfecting System only)

* Perfecting System made up of three Cylinders, including Monocast (Solid Surface) Turnover Drum, Double-Diameter Transfer Cylinder, and Single-Diameter Transfer Cylinder
* Changeover Operation from Single-Sided to Perfecting or Vice Versa Monitored through a Safety Display Panel with LED Lamps
* Adjustable Air Blower System for Antimarking Control
* A Patented Master/Sub-Gripper Turnover Control
* Semi-Automatic Perfecting Changeover System

2-7. Delivery System

* Delivery Drum equipped with laterally Adjustable Sheet Guide Wheels
* Sheet Decurler
* Static Electricity Eliminator
* Spray Powder Equipment with Powder Heater, Spray Length Timing Control via POD Touch Screen
* Delivery Pile Table Quick Elevating Device
* Adjustable Sheet Control Air Shower
* Inspection Sheet Catcher with Faulty Position Detector interconnected with POD Touch Screen and Warning Buzzer
* Full Stop Paper Jam Detector
* Delivery Pile Height Detector
* Missing Sheet Detector
* Sheet Slowdown Wheels with Lateral Adjustment and Speed Control

2-8. Operation Controls

On Press
* Programmable Operation Display (POD) at Machine Delivery-End
* Sub Operation Panels at each Printing Unit
* Safety Guards Open Indication on POD Screen
* Total/Preset Sheet Counter on POD Screen
* Total Non-Resetable Sheet Counter on POD Screen
* Machine Troubleshooting Instructions on POD Screen

Free-Standing Operation Console
* Remote Controlled Ink Key / Fountain Roller Sweep
* Dampening Fountain Roller Speed Control
* Dampening Fountain Roller Speed Compensation Program
* Radial and Lateral Registration of Plate Cylinder control
* Equipped with either Internal IC Memory or Floppy Drive (2DD) for Job Storage
* Built-in Light Stand
* 15-inch Color POD Screen

2-9. Lubrication System

* Oil Bath and Positive-Feed Oil Circulation Pump
* Weekly and Monthly Manual Lubrication Reminder Message Display on POD Screen

Note: The manufacture reserves the right to make changes in design and specification without prior notice.

DEPARTMENT	2008	2007	2006	2005	2004
Public Awareness	$ 32,307	$ 24,826	$ 32,988	$ 23,654	$ 14,376
Membership and Programs	$ 8,131	$ 8,021	$ 8,385	$ 7,044	$ 7,789
Deputy Executive Director	$ 640	$ 2,715	$ -	$ -	$ 340
Creative Services (Promo)	$ 34,916	$ 26,193	$ 20,631	$ 25,976	$ 21,924
Member and Customer Services	$ 3,568	$ -	$ -	$ -	$ -
Executive Director	$ 1,758	$ 1,190	$ -	$ -	$ -
Meetings and Professional Services	$ 2,086	$ 685	$ -	$ -	$ -
Publications *	$ 76,004	$ 73,814	$ 68,493	$ 5,116	$ 10,457
Total Outsourced	**$ 159,410**	**$ 137,444**	**$ 130,498**	**$ 61,790**	**$ 54,886**
* Books Outsourced due to color	2	2	3	0	0

Revisiting Approval of Specific Capital Requests

In 2009, the Board of Trustees has approved two requests for specific capital purchases in special Meetings by Technical Means.

On March 26, the Board approved a request for $118,122 for computer hardware and software to create a new virtual server environment at the Providence headquarters. The new systems replaced a number of old servers and will achieve significant savings in maintenance and other operating costs, as well as providing a better, more modern computing environment.

On July 20, the Board approved a request for $226,500 for a used four color press for the print shop. A press was purchased in September and installed at the beginning of October. The press was put to work right away and will allow us to save a lot in expenses formerly incurred for outsourcing color printing of books, promotional material, and public awareness publications. The picture below shows the press in operation on November 4.

In carrying out both of these projects, we incurred small cost overruns. At the time the costs were incurred, they were discussed by senior staff and approved by the Executive Director. I shall describe the circumstances in each case and seek approval of the Board for the final amounts.

Virtual Server Environment

The virtual server environment was installed in late May. When software for the virtual environment was being configured, the outside vendor recommended a software option that would increase the efficiency of the multiple virtual servers and substantially reduce the amount of memory (RAM) recommended for the hardware. This option had not been mentioned during the process of soliciting quotes, and its cost, about $3,500, was not included in the original request.

The original request was budgeted very carefully, and we learned a lesson. We should always build in a small amount for unanticipated contingencies. It was important to install the optional software at the same time that the initial configuration was being set up. We confirmed that the additional amount needed would fit within the approved 2009 capital budget, so purchasing the option would not be a budget buster. Given the pressure of timing and the modest amount, I approved the purchase. The final actual expenditure for the virtualization project was $121,677.

The Board needs to authorize a change in the capital expense.

I am requesting that the Board of Trustees authorize up to $122,000 for the Virtual Server Project as described in the original capital request.

Four Color Press

When the capital request for the four color press was made in July, we had a specific 2003 Shinohara press already identified for purchase. That press had printed about 20 million impressions during its lifetime. We were confident that we could negotiate a price around $216,500, even though the offering price at the time was higher. We had learned our lesson from the virtualization environment request and we built in $10,000 to cover installation costs and contingencies.

We did such a good job of bringing the price down during the negotiation that another buyer swept in and purchased it right out from under us.

We knew at the time of a second press that was on the market, which Don Proulx had actually inspected last winter. It was also a 2003 model, had fewer than 20 million impressions and had been taken in trade by another press manufacturer. The seller would make no guarantees about the operating condition of that press. We worked through a dealer who was willing to inspect the press and make guarantees to us about its operability. We worked with the dealer as an intermediary and made an offer for this press. But another buyer had beaten us by about an hour.

In late July, we were back in the market looking for a comparable used press. On August 31, we were offered one by the same dealer who had helped us try to buy the second one offered. This third press was a 2005 model with about 3 million impressions. It was two years newer and much less used than the first two we tried to buy. The dealer offered it to us for $228,000, an amount $1,500 greater than the Board approved amount. This press was a bank repossession.

Given the first two experiences with the critical importance of timing, the small cost difference and the newness of this press, I approved making an offer, subject to prior inspection and assurance from the dealer about its condition. The report from the inspection was very positive and our bid was successful.

We also incurred a cost of $4,905 for the installation, bringing the total cost of the project to $232,905, an amount $6,405 greater than the approved amount.

The Board needs to authorize a change in the capital expense.

I am requesting that the Board of Trustees authorize up to $233,000 for the Four Color Press as described in the original capital request.

Déjà vu

The cost overruns are slightly awkward. After all, there is a good reason that the Board is required to give *prior* approval for capital requests over $100,000. However, I believe the decisions in both cases were responsible and necessary ones.

In 2007, there was a similar situation with the cost of the new conference room in Ann Arbor. John Ewing consulted with the Treasurer (John Franks) and Associate Treasurer (me). John informed the Board of the overrun at the November 2007 meeting and requested approval that mirrors the current requests.

When John Ewing first notified John Franks and me, I sent him an email which stated:

I don't feel that we need another special meeting for Board discussion. Strictly speaking, I guess this does require Board approval. But the amount we're talking about is really quite small and should be allowable by simple management decision. …

I would suggest thinking about a way to give you a little more "wiggle room" when aiming for a target budget figure on capital requests that involve a number of variables. For example, a motion approving such a capital expenditure could include a sentence acknowledging greater uncertainty of the target.

If the Board generally agrees that the Executive Director does have some flexibility in these matters, then I don't think we need a general resolution to authorize modest cost overruns. However, I plan to include a statement about approval for modest cost overruns in future specific requests.

Don McClure

American Mathematical Society Retirement Plan Document

Restated 01/01/2009

Table of Contents

Article I: Definitions

1.1 ***Accumulation Account*** means the separate account(s) established for each Participant. The current value of a Participant's Accumulation Account includes all Plan Contributions, less expense charges, and reflects credited investment experience.

"Credited investment experience" shall mean investment gains and losses.

1.2 ***Annual Additions*** means the sum of the following amounts credited to a Participant's Accumulation Account during the Limitation Year: (a) Plan Contributions; (b) forfeitures, if any; and (c) individual medical account amounts described in section 415(l)(2) and 419A(d)(2) of the Code, if any.

1.3 ***Beneficiary(ies)*** means the individual, institution, trustee, or estate designated by the Participant to receive the Participant's benefits at his or her death.

1.4 ***Board*** means the Institution's Board of Trustees.

1.5 ***Break in Service*** means a 12-consecutive month period (computation period) during which the Participant does not complete more than 500 Hours of Service with the Institution. For determining whether a Break in Service has occurred in a computation period, an individual who is absent from work for maternity or paternity reasons will receive credit for the Hours of Service that would otherwise have been credited to the individual but for his or her absence, or in any case in which the hours cannot be determined, 8 Hours of Service per day for the absence. For this paragraph, an absence from work for maternity or paternity reasons means an absence (a) because of the pregnancy of the individual, (b) because of a birth of a child of the individual, (c) because of the placement of a child with the individual in connection with the adoption of the child by the individual, or (d) for purposes of caring for the child for a period beginning immediately following birth or placement. The Hours of Service credited under this paragraph will be credited (a) in the computation period in which the absence begins if the crediting is necessary to prevent a Break in Service in that period, or (b) in all other cases, in the following computation period. The total number of Hours of Service credited shall not exceed 501 hours.

1.6 ***Code*** means the Internal Revenue Code of 1986, as amended.

1.7 ***Compensation*** means the amount paid by the Institution to a Participant that must be reported as wages on the Participant's Form W-2 plus compensation that is not currently includable in the Participant's gross income because of the application of Code Section 125, 132(f)(4) or 403(b) through a salary reduction agreement.

In addition to other applicable limitations stated in the plan, and notwithstanding any other provision of the Plan to the contrary, for Plan years beginning on or after January 1, 1994 the annual compensation of each employee taken into account under the plan shall not exceed the OBRA '93 annual compensation limit. The OBRA '93 annual compensation limit is $150,000, as adjusted by the Commissioner of the Internal Revenue Service for increases in the cost of living in accordance with section 401(a)(17)(B) of the Internal Revenue Code. The cost-of-living adjustment in effect for a calendar year applies to any period, not exceeding 12 months, over which compensation is determined (determination period) beginning in such calendar year. If a determination period consists of fewer than 12 months, the OBRA '93 annual compensation limit will be multiplied by a fraction, the numerator of which is the number of months in the determination period, and the denominator of which is 12.

For plan years beginning on or after January 1, 1994, any reference in this plan to the limitation under section 401(a)(17) of the Code shall mean the OBRA '93 annual compensation limit stated in this provision.

If compensation for any prior determination period is taken into account in determining an employee's benefits accruing in the current Plan Year, the compensation for that prior determination period is subject to the OBRA '93 annual compensation limit in effect for that prior determination period. For this purpose, for determination periods beginning before the first day of the first Plan Year beginning on or after January 1, 1994, the OBRA '93 annual compensation limit is $150,000.

The annual compensation of each participant taken into account in determining allocations for any plan year beginning after December 31, 2001, shall not exceed $200,000, as adjusted for cost-of-living increases in accordance with section 401(a)(17)(B) of the Code. Annual compensation means compensation during the plan year or such other consecutive 12-month period over which compensation is otherwise determined under the plan (the determination period). The cost-of-living adjustment in effect for a calendar year applies to annual compensation for the determination period that begins with or within such calendar year.

Credited Compensation for non-exempt (hourly) employees means all wages paid (excluding overtime wages and severance payments) and payments made under the Society's Short Term Disability program including payments from a state disability plan in any Plan Year for the period during which the Employee is a Participant in the Plan, up to but not exceeding the amount of the Employee's regularly scheduled weekly wages at the time of the commencement of the disability. For exempt employees Credited Compensation shall mean all salaries paid (excluding severance payments) including payments made under the Society's Short Term Disability program including payments made for a state disability plan in any Plan Year for the period during which the Employee is a Participant in the Plan, up to but not exceeding the amount of the Employee’s regularly scheduled weekly salary at the time of the commencement of the disability.

For both non-exempt and exempt employees, compensation shall also include amounts contributed to an annuity or account pursuant to a salary reduction agreement and which is not included in the Participant's gross income under Section 403(b) of the Code. In addition, Credited Compensation shall also include amounts contributed to a Premium Reduction Account, Dependent Care Account and/or Medical Reimbursement Account. Credited Compensation shall be limited to a Participant's first $200,000 for any Plan Year of such greater amount as prescribed by the Secretary of the Treasury in accordance with Section 415(d) of the Internal Revenue Code (i.e. $235,840 for 1993). For Plan Years beginning on or after January 11, 1994, the first $160,000 (indexed as of year 1999) or any such greater amount as permitted under Section 401(a)(17) of the Code of an Employee's Compensation shall be taken into account for purposes of the Plan in any one Plan Year.

Effective for Plan Years beginning on or after the effective date of this Amendment, the Employer may elect to treat any compensation described in this Section that is paid within 2 ½ months after an Employee’s Severance from Employment as compensation under the Plan (within the meaning of Code Section 415(c)(3)). The following are types of post-severance payments that are not excluded from compensation if they are paid within 2 ½ months following Severance from Employment:

(i) Payments that, absent a Severance from Employment, would have been paid to the Employee while the Employee continued in employment with the Employer and are regular compensation for services during the Employee's regular working hours, compensation for services outside the Employee's regular working hours (such as overtime or shift differential), commissions, bonuses, or other similar compensation; and

(ii) Payments for accrued bona fide sick, vacation, or other leave, but only if the Employee would have been able to use the leave if employment had continued.

Any payment that is not described in this Section is not considered compensation if paid after Severance from Employment, even if it is paid within 2-1/2 months following Severance from Employment. Thus, for example, compensation does not include amounts paid after Severance from Employment that are severance pay, unfunded nonqualified deferred compensation, or parachute payments within the meaning of Code section 280G(b)(2).

1.8 ***Date of Employment or Reemployment*** is the first day upon which an employee completes an Hour of Service for performance of duties during the employee's most recent period of service with the Institution.

1.9 ***Eligible Employee*** means all employees who are scheduled to work 20 hours per week or more (including employees whose compensation and conditions of employment are established by the terms of a collective bargaining agreement). However, an employee who is customarily employed on a part-time, temporary, or irregular basis for less than 1,000 Hours of Service a year is an Eligible Employee only if credited with 1,000 hours or more of service (or 800 hours for a key board operator working at home), including paid absence, during any 12 consecutive month calendar period commencing with his or her Date of Employment or any anniversary, in which event he or she becomes an Eligible Employee as of the beginning of the 12-month period during which he or she was credited with at least 1,000 Hours of Service. Eligible Employee does not include a person whose employment is incidental to his or her educational program.

For purposes of this Plan, the term Eligible Employee shall not include Students, Leased Employees deemed to be employees of the Institution provided in Code Section 414(n), or individuals who are deemed to be independent contractors as determined by the Plan Administrator in its sole discretion.

Once an employee satisfies the requirements for an Eligible Employee, such employee shall continue to be an Eligible Employee in the Plan until the entire balance of his Accounts has been reduced to zero through distributions or forfeitures.

"Students" shall mean any employee enrolled in an educational institution on a full-time basis.

"Leased Employee" means, effective for Plan Years beginning January 1, 1997, any person (other than an employee of the recipient) who pursuant to an agreement between the recipient and any other person ("leasing organization") has performed services for the recipient (or for the recipient and related persons determined in accordance with IRC section 414(n)(6)) on a substantially full time basis for a period of at least one year, and such services are performed under the recipient's primary direction or control.

1.10 ***Employee*** means any person employed by the Employer. Employee shall not include any individual who is either (1) engaged by the Company as an independent contractor or (ii) not reflected on the payroll records of the Company as a common law employee solely on account of the reclassification of such individual by the Internal Revenue Service, a court or administrative agency as a common law employee.

1.11 ***Fund Sponsor*** means an insurance, variable annuity or investment company that provides Funding Vehicles available to Participants under this Plan.

1.12 ***Funding Vehicles*** means the annuity contracts or custodial accounts that satisfy the requirements of Code Section 401(f) issued for funding accrued benefits under this Plan and specifically approved by the Institution for use under this Plan.

1.13 ***Highly Compensated Employee*** for any Plan Year means any Employee who (A) was a five-percent owner at any time during the year or the preceding year, or (B) for the preceding year had compensation from the Company in excess of $80,000. Compensation for this purpose means compensation as defined in Code Section 415(c)(3) (which shall include Code Section 132(f)(4) deferrals effective January 1, 2001). The provisions of Code Section 414(q) are otherwise incorporated by reference herein. The Employer has not made a top-paid group election.

1.14 ***Hours of Service means:***

(a) Each hour for which an employee is paid, or entitled to payment, for the performance of duties for the Institution. For the purposes of this Section, service with any educational institution while assigned to work for the American Mathematical Society shall be treated as service with the Society.

(b) Each hour for which an employee is paid, or entitled to payment, on account of a period of time during which no duties are performed (regardless of whether employment has terminated) due to vacation, holiday, illness, incapacity (including disability), layoff, jury duty, military duty, leave of absence, or maternity or paternity leave (whether paid or unpaid). However, any period for which a payment is made or due under a plan maintained solely for the purpose of complying with Workers' Compensation or unemployment compensation or disability insurance laws, or solely to reimburse the employee for medical or medically-related expenses is excluded. An employee is directly or indirectly paid, or entitled to payment by the Institution regardless of whether payment is made by or due from the Institution directly or made indirectly through a trust fund, insurer or other entity to which the Institution contributes or pays premium. No more than 501 Hours of Service will be credited under this paragraph. Hours of Service under this paragraph will be calculated and credited pursuant to Section 2530.200b-2 of the Department of Labor Regulations, incorporated herein by reference.

(c) Each hour for which back pay, irrespective of mitigation of damages, is either awarded or agreed to by the Institution, without duplication of hours provided above, and subject to the 501-hour restriction for periods described in (b) above.

Hours of Service will be credited for employment with other members of an affiliated service group (under Code Section 414(m)), a controlled group of corporations (under Code Section 414(b)), or a group of trades or businesses under common control (under Code Section 414(c)) of which the Institution is a member, and any other entity required to be aggregated with the employer pursuant to Code Section 414(o) and the regulations thereunder. Hours of Service also will be credited for any person considered an employee for this Plan under Code Sections 414(n) or 414(o) and the regulations thereunder.

Hours of Service will be determined on the basis of actual hours that an employee is paid or entitled to payment.

1.15 ***Institution*** means American Mathematical Society.

1.16 ***Institution Plan Contributions*** means contributions made by the Institution under this Plan.

1.17 ***Limitation Year*** means a calendar year.

1.18 ***Normal Retirement Age*** means age 60.

1.19 ***Participant*** means any Eligible Employee of the Institution participating in this Plan.

1.20 ***Plan*** means the Institution's Defined Contribution Retirement Plan as set forth in this document.

1.21 ***Plan Contributions*** means contributions made under this Plan by the Institution.

1.221 ***Plan Entry Date*** means the first of the month beginning after the date that the employee has met the participation requirements set forth in Article III.

1.23 ***Plan Year*** means January 1 through December 31.

1.24 ***Qualified Election*** means a waiver of a Qualified Joint and Survivor Annuity or a Qualified Pre-retirement Survivor Annuity. Any waiver of a Qualified Joint and Survivor Annuity or a Qualified Pre-retirement Survivor Annuity shall not be effective unless: (a) the Participant's spouse consents in writing to the election; (b) the election designates a specific Beneficiary(ies), including any class of Beneficiaries or any contingent Beneficiaries, which may not be changed without spousal consent (unless the spouse expressly permits designations by the Participant without any further spousal consent); (c) the spouse's consent acknowledges the effect of the election; and (d) the spouse's consent is witnessed by a Plan representative or notary public. Additionally, a Participant's waiver of the Qualified Joint and Survivor Annuity shall not be effective unless the election designates a form of benefit payment that may not be changed without spousal consent (or the spouse expressly permits designations by the Participant without any further spousal consent). If it is established to the satisfaction of a Plan representative that there is no spouse or that the spouse cannot be located, a waiver will be deemed a Qualified Election.

Any consent by a spouse obtained under this provision (or establishment that the consent of a spouse may not be obtained) shall be effective only with respect to such spouse. A consent that permits designations by the Participant without any requirement of further consent by such spouse must acknowledge that the spouse has the right to limit consent to a specific Beneficiary(ies), and a specific form of benefit where applicable, and that the spouse voluntarily elects to relinquish either or both of such rights. A revocation of a prior waiver may be made by a Participant without the consent of the spouse at any time before the commencement of benefits. The number of revocations shall not be limited. No consent obtained under this provision shall be valid unless the Participant has received notice as provided in Article VII.

1.25 ***Qualified Joint and Survivor Annuity*** means an immediate annuity for the life of the Participant with a survivor annuity for the life of the spouse that is not less than 50 percent (and not more than 100 percent) of the amount payable during the joint lives of the Participant and the spouse that can be purchased with the Participant's vested Accumulation Account. The percentage of the survivor annuity under the Plan shall be 50 percent.

1.26 ***Qualified Pre-retirement Survivor Annuity*** means an annuity for the life of the surviving spouse of a deceased Participant the actuarial equivalent of which is not less than 50 percent of the Participant's Accumulation Account(s) at the date of death.

1.27 ***Social Security Bend Point*** means the dollar amounts used in the basic benefit formula as determined by the Social Security Administration.

1.28 ***Year of Participation Service*** means a consecutive 12-month period during which the Eligible Employee is credited with 1,000 or more Hours of Service (except for key board operators who work at home, the requirement shall be 800 hours or more Hours of Service) with the Society or any Affiliated Employer. The initial twelve (12) month period shall be the period commencing on the date the Employee first performs an Hour of Service for the Society, but if the Employee is not credited with 1,000 (800 hours for key board operators) or more Hours of Service during such period, the twelve (12) month period shall be the first Plan Year beginning after the Employee commences employment or any succeeding Plan Year.

1.29 ***Year of Vesting Service*** means an Eligible Employee will be credited with a Year of Vesting service for each Plan Year in which he is credited with 1,000 or more Hours of Service (except for key board operators who work at home, the requirement shall be 800 or more Hours of Service) with the Society or any Affiliated Employer (regardless of whether the Employee commenced or terminated employment in any such year). If a Participant incurs a Break in Service before accruing 2 years of Vesting Service, his pre-break Years of Vesting Service shall be disregarded if he fails to return to employment with the Employer prior to incurring five (5) consecutive One Year Breaks in Service. Service with any educational institution while assigned to work for the American Mathematical Society shall be treated as service with the Society.

Article II: Establishment of Plan

2.1 ***Establishment of Plan.*** The Board of American Mathematical Society (the "Institution") established the Plan as of January 1, 1989.

This plan document sets forth the provisions of this Code Section 403(a) Plan. The Plan was restated as of December 31, 1999 and again as of January 1, 2005. Plan Contributions are invested, at the direction of each Participant, in one or more of the Funding Vehicles available to Participants under the Plan. Plan Contributions shall be held for the exclusive benefit of Participants.

Article III: Eligibility for Participation

3.1 ***Eligibility.*** An Eligible Employee will begin participation in this Plan on the first of the month following fulfillment of the following requirement(s):

- The completion of 1 Year of Participation Service at the Institution.

3.2 ***Notification.*** The Institution will notify an Eligible Employee when he or she has completed the requirements necessary to become a Participant. An Eligible Employee who complies with the requirements and becomes a Participant is entitled to the benefits and is bound by all the terms, provisions, and conditions of this Plan, including any amendments that, from time to time, may be adopted, and including the terms, provisions and conditions of any Funding Vehicle(s) to which Plan Contributions for the Participant have been applied.

3.3 ***Enrollment in Plan.*** To participate in this Plan, an Eligible Employee must complete the necessary enrollment form(s) and return them to the Institution.

3.4 ***Reemployment.***

(a) A former Participant will become a Participant immediately upon returning to the employ of the Institution if the former Participant had a nonforfeitable right to all or a portion of the Accumulation Account derived from the Institution Plan Contributions at the time of termination from service and the former Participant is an Eligible Employee.

(b) A former Participant who did not have a nonforfeitable right to any portion of the Accumulation Account derived from the Institution Plan Contributions at the time of termination from service will be considered a new employee for eligibility purposes, if the number of consecutive one-year Breaks in Service equals or exceeds five. If the Years of Service before termination from service cannot be disregarded pursuant to the preceding sentence, the former Participant will participate immediately upon reemployment provided the former Participant is an Eligible Employee.

If a former Participant is reemployed before he has incurred five consecutive one-year Breaks-in-Service and such Participant had previously received (or is deemed to have received) a distribution of his entire nonforfeitable interest at a time when he was not fully vested in the value of his Accumulation Account, the value of the nonvested portion which was forfeited may be restored. The nonvested portion of his Accumulation Account shall be restored if the Participant repays the full count of the prior distribution on or before the fifth anniversary of his reemployment date.

3.5 ***Termination of Participation.*** A Participant will continue to be eligible for the Plan until one of the following conditions occurs:

- he or she ceases to be an Eligible Employee;
- the Plan is terminated.

Article IV: Plan Contributions

4.1 ***Plan Contributions.*** Plan Contributions will be made for Eligible Employees who have satisfied the requirements of Article III in accordance with the schedule below.

Plan Contributions as a Percentage of Credited Compensation

	By the Institution
On the Portion of Credited Compensation below the Social Security Second Bend Point	9.5%
On any Credited Compensation Between the Social Security Second Bend Point And the Social Security Earnings Base	12%
On any Credited Compensation above the Social Security Earnings Base	14.5%

Social Security Earnings Base means the applicable contribution base for Old-Age, Survivors, and Disability Insurance (OASDI) as determined under section 3121(x) of the Code.

Plan Contributions are considered to be credited to Participants no later than the last day of the Plan Year for which the Plan Contributions are made.

Plan Contributions under this Plan are contingent upon an Eligible Employee's satisfaction of the Mandatory Plan Contribution requirement under the American Mathematical Society Tax Deferred Annuity Plan.

4.2 ***When Contributions Are Made.*** Plan Contributions will begin on the first of the month when the Institution has determined that the Participant has met or will meet the requirements of Article III. Any part of a year's Plan Contributions not contributed before this determination will be included in contributions made for that year after the determination. Plan Contributions will be forwarded to the Fund Sponsor(s) in accordance with the procedures established by the Institution. Institution Plan Contributions will be forwarded to the Fund Sponsor(s) at least annually. If, at the end of the Plan year an individual who is not regularly scheduled to work 1,000 or more Hours of Service (800 for a key board operator working at home), does complete 1,000 Hours of Service (800 for a keyboard operator working at home), the Society will make a contribution for such individual for the Plan Year in an amount equal to the contribution specified in 4.1 above (without credit for interest or income thereon).

4.3 ***Allocation of Contributions.*** A Participant may allocate Plan Contributions to the Funding Vehicle(s) in any whole-number percentages that equal 100 percent. A Participant may change his or her allocation of future contributions to the Funding Vehicle(s) at any time.

4.4 ***Leave of Absence.*** During a paid leave of absence, Plan Contributions will continue to be made for a Participant on the basis of Compensation then being paid by the Institution. No Plan Contributions will be made during an unpaid leave of absence.

4.5 ***Transfer of Funds from Another Plan.*** The Fund Sponsor shall accept contributions that are transferred directly from any other plan qualified under sections 401(a) or 403(a) of the Code, whether such plans are funded through a trustee arrangement or through an annuity contract, if such contributions are attributable only to employer and employee contributions and the earnings thereon and accompanied by instructions showing the respective amounts attributable to employer and employee contributions. Such funds and the accumulation generated from them shall always be fully vested and nonforfeitable.

4.6 ***Acceptance of Rollover Contributions.*** If a Participant is entitled to receive a distribution from another plan qualified under sections 401(a) or 403(a) of the Code that is an eligible rollover distribution under section 402 of the Code, the Fund Sponsor will accept such amount under this Plan provided the rollover to this Plan is made 1) directly from another plan; or 2) by the Participant within 60 days of the receipt of the distribution.

Direct Rollovers:

The plan will accept a direct rollover of an eligible rollover distribution from:

-- a qualified plan described in section 401(a) or 403(a) of the Code, including after-tax employee contributions.

-- an eligible plan under section 457(b) of the Code which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state.

Participant Rollover Contributions from Other Plans:

The plan will accept a participant contribution of an eligible rollover distribution from:

-- a qualified plan described in section 401(a) or 403(a) of the Code.

-- an annuity contract described in section 403(b) of the Code.

-- an eligible plan under section 457(b) of the Code which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state.

Participant Rollover Contributions from IRAs:

The plan will accept a participant rollover contribution of the portion of a distribution from an individual retirement account or annuity described in section 408(a) or 408(b) of the Code that is eligible to be rolled over and would otherwise be includible in gross income.

Effective Date of Direct Rollover and Participant Rollover Contribution Provisions:

Rollovers From Other Plans, shall be effective for plan years beginning after December 31, 2001.

4.7 ***Uniformed Services.*** Notwithstanding any provision of this Plan to the contrary, contributions, benefits, and service credit with respect to qualified military service will be provided in accordance with §414(u) of the Code.

4.8 ***Maximum Plan Contributions.*** Notwithstanding anything contained in this Plan to the contrary, the total Annual Additions made for any Participant for any year will not exceed the amount permitted under section 415 of the Code. The limitations of Code Section 415 are hereby incorporated by reference.

For the purpose of calculating the limits of Code Section 415, compensation means a Participant's earned income, wages, salaries, and fees for professional services and other amounts received for personal services actually rendered in the course of employment with the employer maintaining the plan and excluding the following: (a) employer contributions to a plan of deferred compensation that are not includible in the employee's gross income for the taxable year in which contributed, or employer contributions under a simplified employee pension plan to the extent such contributions are deductible by the employee, or any distributions from a plan of deferred compensation; and (2) other amounts that received special tax benefits, or contributions made by the employer (whether or not under a salary reduction agreement towards the purchase of an annuity described in Code Section 403(b) (whether or not the amounts are actually excludible from the gross income of the employee). For years beginning after December 31, 1998, compensation shall include any elective deferral (as defined in Code §402(g)(3)) and any amount which is contributed or deferred by the Institution at the election of the Participant and which is not includible in the gross income of the Participant by reason of Code §125, 132(f)(4) or 457.

To the extent permitted by Code Section 415 and the regulations promulgated thereunder, if the Annual Additions exceed the Section 415 limitations, the excess amounts will be disposed of as follows: (a) any Participant Plan Contributions (plus any gain attributable to the excess), to the extent they would reduce the excess amount, will be returned to the Participant; and, to the extent necessary, (b) if, after the application of (a) an excess still exists, the excess will be held unallocated in a suspense account and will be applied to reduce Institution Plan Contributions in succeeding limitation years.

If the limitations are exceeded because the Participant is also participating in another Plan required to be aggregated with this Plan for Code Section 415, then the extent to which annual contributions under this Plan will be reduced, as compared with the extent to which annual benefits or contributions under any other plans will be reduced, will be determined by the Institution in a manner as to maximize the aggregate benefits payable to the Participant from all plans. If the reduction is under this Plan, the Institution will advise affected Participants of any additional limitation on their annual contributions required by this paragraph.

Effective for Plan Years beginning on or after July 1, 2007, excess annual additions will be corrected based on the methodology pursuant to the Employee Plan Compliance Resolution System.

Article V: Funding Vehicles

5.1 ***Funding Vehicles.*** Plan Contributions are invested in one or more Funding Vehicles available to Participants under this Plan. The Fund Sponsors are:

A. Teachers Insurance and Annuity Association (TIAA)

B. College Retirement Equities Fund (CREF)

CREF Retirement Unit-Annuity (RA):

The Institution's current selection of Fund Sponsors and Funding Vehicles isn't intended to limit future additions or deletions of Fund Sponsors and Funding Vehicles. Any additional accounts offered by a Fund Sponsor will automatically be made available to Participants in accordance with the procedures established by the Institution and the Fund Sponsor.

5.2 ***Fund Transfers.*** Subject to a Funding Vehicle's rules for transfers and in accordance with the provisions of the Code for maintaining the tax deferral of the Accumulation Account(s), a Participant may transfer funds accumulated under the Plan among the Plan's approved Funding Vehicles to the extent permitted by the Funding Vehicles.

For a Participant who has terminated employment with the Institution, this Plan's transfer rules will continue to govern vested amounts accumulated under the Plan.

Article VI: Vesting

6.1 ***Plan Contributions.*** Institution Plan Contributions shall be nonforfeitable and fully vested in the Participant in accordance with the following vesting schedule:

Completed Years of Service	**Vested Percentage**	**Forfeitable Percentage**
1	0%	100%
2	20%	80%
3	40%	60%
4	60%	40%
5	80%	20%
6	100%	0%
Reaching age 60	100%	0%

Notwithstanding the above vesting schedule, Institution Plan Contributions shall be nonforfeitable and fully vested at Normal Retirement Age, death or disability, if earlier.

If employment terminates before the date of full vesting, the contracts or certificates issued to the Institution for a Participant are returned to the Fund Sponsors and amended to provide for a transfer of ownership in the vested amount of the Accumulation Account(s), if any, to the Participant. The nonvested amount of the Accumulation Account(s) will constitute a forfeiture that will be applied to reduce Institution Plan Contributions for the next Plan Year.

6.2 ***Termination of Service; Reinstatement.*** If a Participant in this Plan terminates before full vesting in the Institution Plan Contributions, the Participant's pre-break and post-break service will be counted for vesting of the pre-break and post-break Institution-derived Accumulation only if the Participant is reemployed before the number of consecutive one-year Breaks in Service equals five years.

In the case of a Participant who has five or more consecutive one-year Breaks in Service, post-break Years of Service will be disregarded for vesting of the pre-break Institution-derived Accumulation. However, both pre-break and post-break service will be counted for vesting the Institution-derived account that accumulates subsequent to reemployment.

6.3 ***Computation Period for Vesting.*** For purposes of determining Years of Service and Breaks in Service, the computation period shall be measured by the Participant's Date of Employment or Reemployment and each anniversary thereof.

6.4 ***Amendment to Vesting Schedule or Provisions.*** In the event the vesting schedule is amended, or the Plan is amended in any way that directly or indirectly affects the computation of the Participant's vested percentage, those Participants with at least three Years of Service may elect to have their nonforfeitable percentage computed without regard to the amendment. For this purpose, a shift between the Top-Heavy vesting schedule and the non-Top-Heavy vesting schedule shall be deemed an amendment to the vesting schedule.

The period during which the election may be made shall commence with the date the amendment is adopted or deemed to be made and shall end on the latest of: (a) 60 days after the amendment is adopted; (b) 60 days after the amendment becomes effective, or (c) 60 days after the Participant is issued a written notice of the amendment by the Institution or the Plan administrator.

Article VII: Benefits

7.1 ***Retirement Benefits.*** A Participant who has terminated employment may elect to receive retirement benefits under any of the forms of benefit, as provided below.

Forms of Benefit. The forms of benefit are the benefit options offered by the Funding Vehicles available under this Plan. These forms are equally available to all Participants choosing the Funding Vehicle. The forms of benefit available under this Plan include:

- Single life annuities as provided under the Funding Vehicle contract.
- Joint and survivor annuities as provided under the Funding Vehicle contract.
- Cash withdrawals (to the extent the Funding Vehicle permits and subject to the limitations in the "Cash Withdrawal" section of this Article).
- Fixed period annuities, as permitted by the Funding Vehicle contract.
- Retirement Transition Benefit.
- Such other annuity and withdrawal options as provided under the Funding Vehicle contract.

Notwithstanding the above, benefits may be received before termination of employment if the Participant is disabled. A Participant shall be considered disabled as provided in section 72(m)(7) of the Code.

7.2 ***Cash Withdrawals.*** Subject to spousal rights to survivor benefits, a participant who has terminated employment and has attained age 55 may elect to receive benefits in any form the relevant Funding Vehicle permits, including a 100% percent lump sum cash distribution of the vested portion of their account balance.

7.3 ***Retirement Transition Benefit.*** Unless the Minimum Distribution Annuity, or the Limited Periodic Withdrawal Option is elected, a Participant may elect to receive a one time lump-sum payment of up to 10 percent of his or her Accumulation Account(s) in TIAA and/or the CREF account(s) at the time annuity income begins, provided the one sum payment from each TIAA contract and/or CREF account(s) doesn't exceed 10 percent of the respective Accumulation Account(s) being converted to retirement income.

7.4 ***Survivor Benefits.*** If a Participant dies before the start of retirement benefit payments, the full current value of the Accumulation Account(s) is payable to the Beneficiary(ies) under the options offered by the Funding Sponsors. Distribution of Survivor Benefits is subject to the required distribution rules set forth in Code Section 401(a)(9).

7.5 ***Application for Benefits.*** Procedures for receipt of benefits are initiated by writing directly to the Fund Sponsor. Benefits will be payable by the Fund Sponsor upon receipt of a satisfactorily completed application for benefits and supporting documents. The necessary forms will be provided to the Participant, the surviving spouse, or the Beneficiary(ies) by the Fund Sponsor.

7.6 ***Minimum Distribution Requirements..*** The requirements of this section shall apply to any distribution of a Participant's vested Accumulation Account(s) and will take precedence over any inconsistent provisions of this Plan except as otherwise provided in the "Joint and Survivor Annuity Requirements" section of Article VII. Distributions in all cases will be made in accordance with Code Section 401(a)(9) and the regulations promulgated thereunder, including the minimum distribution incidental benefit requirement of Section 1.401(a)(9)-2 of the proposed regulations.

(1) Limits on Settlement Options. Distributions may only be made over one of the following periods (or a combination thereof): i) the life of the Participant; ii) the life of the Participant and a designated Beneficiary(ies); iii) a period certain not extending beyond the life expectancy of the Participant; or iv) a period certain not extending beyond the joint and last survivor life expectancy of the Participant and designated Beneficiary(ies).

(2) Required Beginning Date. The entire interest of a Participant must be distributed or begin to be distributed no later than the Participant's Required Beginning Date. The Required Beginning Date of a Participant is April 1 of the calendar year following the calendar year in which the Participant attains age 70 1/2 or, if later, April 1 of the calendar year following the calendar year that the Participant retires.

a) Any Participant attaining age 70-1/2 in years after 1995 may elect by April 1 of the calendar year following the year in which the Participant attained age 70-1/2 (or by December 31, 1997 in the case of a Participant attaining age 70-1/2 in 1996) to defer distributions until the calendar year following the calendar year in which the Participant retires. If no such election is made, the Participant will begin receiving distributions by the April 1 of the calendar year following the year in which the Participant attained age 70-1/2 (or December 31, 1997 in the case of a Participant attaining age 70-1/2 in 1996).

b) Any Participant attaining Age 70-1/2 in years prior to 1997 may elect to stop distributions and recommence by the April 1 of the calendar year following the year in which the Participant retires. There is no new annuity starting date upon recommencement.

c) The preretirement age 70-1/2 distribution date is eliminated with respect to Participants who reach age 70-1/2 after December 31, 1999. The preretirement age 70-1/2 distribution option is an optional distribution form of benefit under which benefits payable in a particular distribution form (including any modification that may be elected after benefit commencement) commence at a time during the period that begins on or after January 1 of the calendar year in which a Participant attains age 70-1/2 and ends April 1 of the immediately following calendar year.

(3) Death Distribution Provisions. Upon the death of the Participant, the following distribution provisions will take effect:

(a) If the Participant dies after distribution of his or her vested Accumulation Account has begun, the remaining portion of the vested Accumulation Account(s) will continue to be distributed at least as rapidly as under the method of distribution being used before the Participant's death;

(b) If the Participant dies before distribution of his or her vested Accumulation Account(s) begins, distribution of the Participant's entire vested Accumulation Account(s) shall be completed by December 31 of the calendar year containing the fifth anniversary of the Participant's death except where an election is made to receive distributions in accordance with (i) or (ii) below:

(i) If any portion of the Participant's vested Accumulation Account is payable to a designated Beneficiary(ies), distributions may be made over a period certain not greater than the life expectancy of the designated Beneficiary(ies) commencing by December 31 of the calendar year immediately following the calendar year in which the Participant died;

(ii) If the designated Beneficiary(ies) is the Participant's surviving spouse, the date distributions are required to begin in accordance with (1) above must not be earlier than the later of (a) December 31 of the calendar year immediately following the calendar year in which the Participant died and (b) December 31 of the calendar year in which the Participant would have attained age 70 1/2.

If the Participant has not made an election pursuant to this section by the time of his or her death, the Participant's designated Beneficiary(ies) must elect the method of distribution no later than the earlier of (1) December 31 of the calendar year in which distributions would be required to begin under this section, or (2) December 31 of the calendar year that contains the fifth anniversary of the date of death of the Participant. If the Participant has no designated Beneficiary(ies), or if the designated Beneficiary(ies) does not elect a method of distribution, distribution of the Participant's entire vested Accumulation Account(s) must be completed by December 31 of the calendar year containing the fifth anniversary of the Participant's death.

Section 1. Minimum Distribution Requirements.

1.1 Effective Date. The provisions of this article will apply for purposes of determining required minimum distributions for calendar years beginning with the 2003 calendar year.

1.2. Precedence. The requirements of this article will take precedence over any inconsistent provisions of the Plan.

1.3. Requirements of Treasury Regulations Incorporated. All distributions required under this article will be determined and made in accordance with the Treasury regulations under section 401(a)(9) of the Internal Revenue Code.

1.4. TEFRA Section 242(b)(2) Elections. Notwithstanding the other provisions of this article, other than section 1.3, distributions may be made under a designation made before January 1, 1984, in accordance with section 242(b)(2) of the Tax Equity and Fiscal Responsibility Act (TEFRA) and the provisions of the plan that relate to section 242(b)(2) of TEFRA.

Section 2. Time and Manner of Distribution.

2.1. Required Beginning Date. The participant's entire interest will be distributed, or begin to be distributed, to the participant no later than the participant's required beginning date.

2.2. Death of Participant Before Distributions Begin. If the participant dies before distributions begin, the participant's entire interest will be distributed, or begin to be distributed, no later than as follows:

(a) If the participant's surviving spouse is the participant's sole designated beneficiary, then, except as provided in the plan, distributions to the surviving spouse will begin by December 31 of the calendar year immediately following the calendar year in which the participant died, or by December 31 of the calendar year in which the participant would have attained age 70½, if later.

(b) If the participant's surviving spouse is not the participant's sole designated beneficiary, then, except as provided in the Plan, distributions to the designated beneficiary will begin by December 31 of the calendar year immediately following the calendar year in which the participant died.

(c) If there is no designated beneficiary as of September 30 of the year following the year of the participant's death, the participant's entire interest will be distributed by December 31 of the calendar year containing the fifth anniversary of the participant's death.

(d) If the participant's surviving spouse is the participant's sole designated beneficiary and the surviving spouse dies after the participant but before distributions to the surviving spouse begin, this section 2.2, other than section 2.2(a), will apply as if the surviving spouse were the participant.

For purposes of this section 2.2 and section 5, distributions are considered to begin on the participant's required beginning date (or, if section 2.2(d) applies, the date distributions are required to begin to the surviving spouse under section 2.2(a)). If annuity payments irrevocably commence to the participant before the participant's required beginning date (or to the participant's surviving spouse before the date distributions are required to begin to the surviving spouse under section 2.2(a)), the date distributions are considered to begin is the date distributions actually commence.

2.2A Election to Allow Participants or Beneficiaries to Elect 5-Year Rule. Participants or beneficiaries may elect on an individual basis whether the 5-year rule or the life expectancy rule in sections 2.2 and 4.2 of Article IX of the plan applies to distributions after the death of a participant who has a designated beneficiary. The election must be made no later than the earlier of September 30 of the calendar year in which distribution would be required to begin under Article VIII of the plan, or by September 30 of the calendar year which contains the fifth anniversary of the participant's (or, if applicable, surviving spouse's) death. If neither the participant nor beneficiary makes an election under this paragraph, distributions will be made in accordance with Article VIII of the plan.

2.3. Form of Distribution. Unless the participant's interest is distributed in the form of an annuity purchased from an insurance company or in a single sum on or before the required beginning date, as of the first distribution calendar year distributions will be made in accordance with sections 3, 4 and 5 of this article. If the participant's interest is distributed in the form of an annuity purchased from an insurance company, distributions thereunder will be made in accordance with the requirements of section 401(a)(9) of the Code and the Treasury regulations. Any part of the participant's interest which is in the form of an individual account described in section 414(k) of the Code will be distributed in a manner satisfying the requirements of section 401(a)(9) of the Code and the Treasury regulations that apply to individual accounts.

Section 3. Determination of Amount to be Distributed Each Year.

3.1. General Annuity Requirements. If the participant's interest is paid in the form of annuity distributions under the plan, payments under the annuity will satisfy the following requirements:

(a) the annuity distributions will be paid in periodic payments made at intervals not longer than one year;

(b) the distribution period will be over a life (or lives) or over a period certain not longer than the period described in section 4 or 5;

(c) once payments have begun over a period certain, the period certain will not be changed even if the period certain is shorter than the maximum permitted;

(d) payments will either be nonincreasing or increase only as follows:

(1) by an annual percentage increase that does not exceed the annual percentage increase in a cost-of-living index that is based on prices of all items and issued by the Bureau of Labor Statistics;

(2) to the extent of the reduction in the amount of the participant's payments to provide for a survivor benefit upon death, but only if the beneficiary whose life was being used to determine the distribution period described in section 4 dies or is no longer the participant's beneficiary pursuant to a qualified domestic relations order within the meaning of section 414(p);

(3) to provide cash refunds of employee contributions upon the participant's death; or

(4) to pay increased benefits that result from a plan amendment.

3.2. Amount Required to be Distributed by Required Beginning Date. The amount that must be distributed on or before the participant's required beginning date (or, if the participant dies before distributions begin, the date distributions are required to begin under section 2.2(a) or (b)) is the payment that is required for one payment interval. The second payment need not be made until the end of the next payment interval even if that payment interval ends in the next calendar year. Payment intervals are the periods for which payments are received, e.g., bi-monthly, monthly, semi-annually, or annually. All of the participant's benefit accruals as of the last day of the first distribution calendar year will be included in the calculation of the amount of the annuity payments for payment intervals ending on or after the participant's required beginning date.

3.3. Additional Accruals After First Distribution Calendar Year. Any additional benefits accruing to the participant in a calendar year after the first distribution calendar year will be distributed beginning with the first payment interval ending in the calendar year immediately following the calendar year in which such amount accrues.

Section 4. Requirements For Annuity Distributions That Commence During Participant's Lifetime.

4.1. Joint Life Annuities Where the Beneficiary Is Not the Participant's Spouse. If the participant's interest is being distributed in the form of a joint and survivor annuity for the joint lives of the participant and a nonspouse beneficiary, annuity payments to be made on or after the participant's required beginning date to the designated beneficiary after the participant's death must not at any time exceed the applicable percentage of the annuity payment for such period that would have been payable to the participant using the table set forth in Q&A-2 of section 1.401(a)(9)-9 of the Treasury regulations. If the form of distribution combines a joint and survivor annuity for the joint lives of the participant and a nonspouse beneficiary and a period certain annuity, the requirement in the preceding sentence will apply to annuity payments to be made to the designated beneficiary after the expiration of the period certain.

4.2. Period Certain Annuities. Unless the participant's spouse is the sole designated beneficiary and the form of distribution is a period certain and no life annuity, the period certain for an annuity distribution commencing during the participant's lifetime may not exceed the applicable distribution period for the participant under the Uniform Lifetime Table set forth in section 1.401(a)(9)-9 of the Treasury regulations for the calendar year that contains the annuity starting date. If the annuity starting date precedes the year in which the participant reaches age 70, the applicable distribution period for the participant is the distribution period for age 70 under the Uniform Lifetime Table set forth in section 1.401(a)(9)-9 of the Treasury regulations plus the excess of 70 over the age of the participant as of the participant's birthday in the year that contains the annuity starting date. If the participant's spouse is the participant's sole designated beneficiary and the form of distribution is a period certain and no life annuity, the period certain may not exceed the longer of the participant's applicable distribution period, as determined under this section 4.2, or the joint life and last survivor expectancy of the participant and the participant's spouse as determined under the Joint and Last Survivor Table set forth in section 1.401(a)(9)-9 of the Treasury regulations, using the participant's and spouse's attained ages as of the participant's and spouse's birthdays in the calendar year that contains the annuity starting date.

Section 5. Requirements For Minimum Distributions Where Participant Dies Before Date Distributions Begin.

5.1. Participant Survived by Designated Beneficiary. Except as provided in the Plan, if the participant dies before the date distribution of his or her interest begins and there is a designated beneficiary, the participant's entire interest will be distributed, beginning no later than the time described in section 2.2(a) or (b), over the life of the designated beneficiary or over a period certain not exceeding:

(a) unless the annuity starting date is before the first distribution calendar year, the life expectancy of the designated beneficiary determined using the beneficiary's age as of the beneficiary's birthday in the calendar year immediately following the calendar year of the participant's death; or

(b) if the annuity starting date is before the first distribution calendar year, the life expectancy of the designated beneficiary determined using the beneficiary's age as of the beneficiary's birthday in the calendar year that contains the annuity starting date.

5.2. No Designated Beneficiary. If the participant dies before the date distributions begin and there is no designated beneficiary as of September 30 of the year following the year of the participant's death, distribution of the participant's entire interest will be completed by December 31 of the calendar year containing the fifth anniversary of the participant's death.

5.3. Death of Surviving Spouse Before Distributions to Surviving Spouse Begin. If the participant dies before the date distribution of his or her interest begins, the participant's surviving spouse is the participant's sole designated beneficiary, and the surviving spouse dies before distributions to the surviving spouse begin, this section 5 will apply as if the surviving spouse were the participant, except that the time by which distributions must begin will be determined without regard to section 2.2(a).

Section 6. Definitions.

6.1. Designated beneficiary. The individual who is designated as the beneficiary under section 9.4 of the plan and is the designated beneficiary under section 401(a)(9) of the Internal Revenue Code and section 1.401(a)(9)-4, of the Treasury regulations.

6.2. Distribution calendar year. A calendar year for which a minimum distribution is required. For distributions beginning before the participant's death, the first distribution calendar year is the calendar year immediately preceding the calendar year which contains the participant's required beginning date. For distributions beginning after the participant's death, the first distribution calendar year is the calendar year in which distributions are required to begin pursuant to section 2.2.

6.3 Life expectancy. Life expectancy as computed by use of the Single Life Table in section 1.401(a)(9)-9 of the Treasury regulations.

6.4. Required beginning date. The date specified in Article VII of the plan.

7.7 ***Commencement of Benefits.*** Unless the Participant elects otherwise, distribution of benefits will begin no later than the 60th day after the latest of the close of the Plan Year in which:

i) the Participant attains age 65 (or Normal Retirement Age, if earlier);
ii) occurs the 10th anniversary of the year in which the Participant commenced participation in the Plan; or,
iii) the Participant terminates service with the Institution.

Notwithstanding the foregoing, the failure of a Participant and spouse to consent to a distribution while a benefit is immediately distributable shall be deemed to be an election to defer commencement of payment of any benefit sufficient to satisfy this section.

A Participant who elects to defer receipt of benefits may not do so to the extent that he or she is creating a death benefit that is more than incidental.

No distribution in excess of $5,000 shall be made to a Participant without the consent of the Participant and the Participant's spouse (or where either the Participant or the spouse has died, the survivor.

Effective March 28, 2005, if a Participant's vested benefit is not greater than $1,000, the entire vested benefit shall be distributed to the Participant as soon as practicable after the Participant's termination from employment. The distribution shall be in a lump-sum, and any non-vested amounts shall be immediately forfeited. In determining whether a Participant's vested benefit is not greater than $1,000 for this purpose, a Participant's rollover contributions to this Plan shall be included.

7.8 ***Joint and Survivor Annuity Requirements.*** The provisions of this section shall apply to any Participant who is credited with one Hour of Service at the Institution on or after August 23, 1984. However, any Participant in this Plan not receiving benefits as of August 23, 1984 may elect to have benefits paid in a manner described herein.

Pre-retirement Spousal Entitlement. Unless a Qualified Election is made, if a married Participant dies before the date benefits commence, the Participant's vested Accumulation Account shall be applied toward the purchase of a Qualified Pre-retirement Survivor Annuity. The surviving spouse may elect to have such annuity distributed within a reasonable period after the Participant's death.

Notification of Pre-retirement Spousal Entitlement. In the case of a Qualified Pre-retirement Survivor Annuity, the Institution shall provide each Participant, within the applicable period for such Participant, a written explanation of the Qualified Pre-retirement Survivor Annuity in such terms and in such manner as would be comparable to the explanation provided for meeting the requirements for notification of a Qualified Joint and Survivor Annuity.

The applicable period for a Participant is whichever of the following periods ends last: (a) the period beginning with the first day of the Plan Year in which the Participant attains age 32 and ending with the close of the Plan Year preceding the Plan Year in which the Participant attains age 35; (b) a reasonable period after an Eligible Employee becomes a Participant; or (c) a reasonable period ending after this section first applies to the Participant. Notwithstanding the foregoing, notice must be provided within a reasonable period ending after separation of service in the case of a Participant who separates from service before attaining age 35.

For applying the preceding paragraph, a reasonable period ending after the enumerated events is the end of the two-year period beginning one year before the date the applicable event occurs, and ending one year after that date. For a Participant who separates from service before the Plan Year in which age 35 is attained, notice should be provided within the two-year period beginning one year before separation and ending one year after separation. If such a Participant thereafter returns to employment with the Institution, the applicable period for such Participant shall be redetermined.

Post-retirement Spousal Entitlement. Unless a Qualified Election is made within the 90-day period ending on the date benefits commence, a married Participant's vested Accumulation Account will be paid in the form of a Qualified Joint and Survivor Annuity and an unmarried Participant's vested Accumulation Account will be paid in the form of a single life annuity.

Notification of Post-retirement Spousal Entitlement. In the case of a Qualified Joint and Survivor Annuity, the Institution shall no less than 30 days and no more than 90 days before the date benefits commence provide each Participant a written explanation of: (a) the terms and conditions of a Qualified Joint and Survivor Annuity; (b) the Participant's right to make and the effect of an election to waive the Qualified Joint and Survivor Annuity form of benefit; (c) the rights of a Participant's spouse; and (d) the right to waive a Qualified Joint and Survivor Annuity.
A Participant may elect with spousal consent to waive any requirement that the written explanation be provided at least 30 days prior to the annuity starting date if the distribution commences more than 7 days after such explanation is provided.

If the Participant, after receiving the explanation, elects a form of benefit and the spouse consents to the benefit (if necessary), the Plan will not fail to satisfy the requirements of this paragraph merely because the annuity starting date is less than 30 days after the written explanation is given to the Participant provided (1) the explanation is provided prior to the annuity starting date; (2) the distribution does not commence before the expiration of the 7-day period that begins the day after the explanation is provided to the Participant; and (3) prior to the expiration of the 7-day period, or the annuity starting date, if later, the Participant may revoke the distribution election.

The Plan may not require a surviving spouse to begin receiving benefits under a QPSA prior to the time the participant would have attained the later of age 62 or normal retirement age except where the present value of the nonforfeitable benefit does not exceed $5,000 (effective March 28, 2005, $1,000)

7.9 ***Repurchase.*** A Participant's accumulations in TIAA-CREF Retirement Annuities may be received in a single sum through "repurchase" if certain conditions are met. If a Participant in this Plan terminates employment with the Institution and requests that TIAA-CREF repurchase his or her Retirement Annuities, the Institution will approve such repurchase if, at the time of the request, all of the following conditions apply:

(a) The total TIAA Traditional Annuity accumulation in all Retirement Annuities owned by the Participant is not over $2,000.

(b) The Participant does not have a TIAA Transfer Payout Annuity (TPA) in effect.

Amounts paid to the Participant on repurchase will be in full satisfaction of the Participant's and his or her spouse's rights to retirement or survivor benefits from TIAA-CREF attributable to such amounts.

7.10 ***Direct Rollovers.*** This section applies to distributions made on or after January 1, 1993. Notwithstanding any provision of the Plan to the contrary that would otherwise limit a distributee's election under this section, a distributee may elect, at the time and in the manner prescribed by the plan administrator, to have any portion of an eligible rollover distribution paid directly to an eligible retirement plan specified by the distributee in a direct rollover.

For this section, the following definitions apply:

1) Eligible rollover distribution: An eligible rollover distribution is any distribution of all or any portion of the balance to the credit of the distributee, except that an eligible rollover distribution does not include: any distribution that is one of a series of substantially equal periodic payments (not less frequently than annually) made for the life (or life expectancy) of the distributee or the joint lives (or joint life expectancies) of the distributee and the distributee's designated beneficiary, or for a specified period of ten years or more; any distribution to the extent such distribution is required under Code Section 401(a)(9); the portion of any distribution that is not includable in gross income (determined without regard to the exclusion for net unrealized appreciation with respect to employer securities); and any hardship distribution under Section 401(k)(2)(B)(i)(IV) of the Code.

2) Eligible retirement plan: An eligible retirement plan is an individual retirement account described in Code Section 408(a), an individual retirement annuity described in section 408(b) of the Code, or a qualified retirement plan described in Code Section 401(a) or 403(a) of the Code, that accepts the distributee's eligible rollover distribution. However, in the case of an eligible rollover distribution to the surviving spouse, an eligible retirement plan is an individual retirement account or individual retirement annuity.

3) Distributee: A distributee includes an employee or former employee. In addition, the employee's or former employee's surviving spouse and the employee's or former employee's spouse or former spouse who is the alternate payee under a qualified domestic relations order, as defined in section 414(p) of the Code, are distributees with regard to the interest of the spouse or former spouse.

4) Direct rollover: A direct rollover is a payment by the Plan to the eligible retirement plan specified by the distributee.

<u>Effective Date</u>. This section shall apply to distributions made after December 31, 2001.

> <u>Modification of Definition of Eligible Retirement Plan</u>. For purposes of the direct rollover provisions of the plan, if applicable, an eligible retirement plan shall also mean an annuity contract described in section 403(b) of the Code and an eligible plan under section 457(b) of the Code which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state and which agrees to separately account for amounts transferred into such plan from this plan. The definition of eligible retirement plan shall also apply in the case of a distribution to a surviving spouse, or to a spouse or former spouse who is the alternate payee under a qualified domestic relations order, as defined in section 414(p) of the Code.
>
> Modification of definition of eligible rollover distribution to exclude hardship distributions. For purposes of the direct rollover provisions in the Plan, any amount that is distributed on account of hardship shall not be an eligible rollover distribution and the distributee may not elect to have any portion of such a distribution paid directly to an eligible retirement plan.
>
> <u>Modification of Definition of Eligible Rollover Distribution to Include After-Tax Employee Contributions</u>. For purposes of the direct rollover provisions in the plan, if applicable, a portion of a distribution shall not fail to be an eligible rollover distribution merely because the portion consists of after-tax employee contributions which are not includible in gross income. However, such portion may be paid only to an individual retirement account or annuity described in section 408(a) or (b) of the Code, or to a qualified defined contribution plan described in section 401(a) or 403(a) of the Code that agrees to separately account for amounts so transferred, including separately accounting for the portion of such distribution which is includible in gross income and the portion of such distribution which is not so includible.

7.11 ***Distribution Upon Severance From Employment.***

1. Effective Date. This section shall apply for distributions and severances from employment occurring after December 31, 2001.

2. New Distributable Event. A participant's elective deferrals, qualified nonelective contributions, qualified matching contributions, and earnings attributable to these contributions shall be distributed on account of the participant's severance from employment. However, such a distribution shall be subject to the other provisions of the plan regarding distributions, other than provisions that require a separation from service before such amounts may be distributed.

Article VIII: Administration

8.1 ***Plan Administrator.*** The Institution, located at 201 Charles Street, Providence, RI 02904, is the administrator of this Plan and has designated the Chief Financial Officer to be responsible for the operation of the Plan.

8.2 ***Authority of the Institution.*** The Institution has all the powers and authority expressly conferred upon it herein and further shall have discretionary and final authority to determine all questions concerning eligibility and contributions under the Plan, to interpret and construe all terms of the Plan, including any uncertain terms, and to determine any disputes arising under and all questions concerning administration of the Plan. Any determination made by the Institution shall be given deference, if it is subject to judicial review, and shall be overturned only if it is arbitrary or capricious. In exercising these powers and authority, the Institution will always exercise good faith, apply standards of uniform application, and refrain from arbitrary action. The Institution may employ attorneys, agents, and accountants as it finds necessary or advisable to assist it in carrying out its duties. The Institution will be a "named fiduciary" as that term is defined in section 402(a)(2) of the Employee Retirement Income Security Act for determining eligibility and computing and making Plan Contributions. The Institution, by action of its Board, may designate a person or persons other than the Institution to carry out any of its powers, authority, or responsibilities. Any delegation will be set forth in writing.

8.3 ***Action of the Institution.*** Any act authorized, permitted, or required to be taken by the Institution under the Plan, which has not been delegated in accordance with the "Authority of the Institution" section of Article VIII, may be taken by a majority of the members of the Board, either by vote at a meeting, or in writing without a meeting. All notices, advice, directions, certifications, approvals, and instructions required or authorized to be given by the Institution under the Plan will be in writing and signed by either (i) a majority of the members of the Board, or by any member or members as may be designated by an instrument in writing, signed by all members, as having authority to execute the documents on its behalf, or ii) a person who becomes authorized to act for the Institution in accordance with the provisions of the "Authority of the Institution" section of Article VIII. Any action taken by the Institution that is authorized, permitted, or required under the Plan and is in accordance with Funding Vehicles contractual obligations are final and binding upon the Institution, and all persons who have or who claim an interest under the Plan, and all third parties dealing with the Institution.

8.4 ***Indemnification.*** The Institution will satisfy any liability actually and reasonably incurred by any members of the Board or any person to whom any power, authority or responsibility of the Institution is delegated pursuant to the "Authority of the Institution" section of Article VIII (other than the Fund Sponsors). These liabilities include expenses, attorney's fees, judgments, fines, and amounts paid in connection with any threatened, pending or completed action, suit or proceeding related to the exercise (or failure to exercise) of this authority. This is in addition to whatever rights of indemnification exist under the articles of incorporation, regulations or by-laws of the Institution, under any provision of law, or under any other agreement.

8.5 ***Investment Manager.*** To the extent that Participants allocate contributions to the TIAA Real Estate Account, TIAA will be the investment manager (within the meaning of Section 3(38) of ERISA) with respect to the account balance in the TIAA Real Estate Account. TIAA acknowledges that it is a fiduciary with respect to such assets.

8.6 ***No Reversion.*** Under no circumstances or conditions will any Plan Contributions of the Institution revert to, be paid to, or inure to the benefit of, directly or indirectly, the Institution. However, if Plan Contributions are made by the Institution by mistake of fact, these amounts may be returned to the Institution within one year of the date that they were made.

8.7 ***Statements.*** The Institution will determine the total amount of contributions to be made for each Participant from time to time on the basis of its records and in accordance with the provisions of this Article. When each contribution payment is made by the Institution, the Institution will prepare a statement showing the name of each Participant and the portion of the payment that is made for him or her, and will deliver the statement to the appropriate Fund Sponsors with the contributions payment. Any determination by the Institution, evidenced by a statement delivered to the Fund Sponsors, is final and binding on all Participants, their Beneficiaries or contingent annuitants, or any other person or persons claiming an interest in or derived from the contribution's payment.

8.8 ***Reporting.*** Records for each Participant under this Plan are maintained on the basis of the Plan Year. At least once a year the Fund Sponsors will send each Participant a report summarizing the status of his or her Accumulation Account(s) as of December 31 each year. Similar reports or illustrations may be obtained by a Participant upon termination of employment or at any other time by writing directly to the Fund Sponsors.

Article IX: Amendment and Termination

9.1 ***Amendment and Termination.*** While it is expected that this Plan will continue indefinitely, the Institution reserves the right to amend, otherwise modify, or terminate the Plan, or to discontinue any further contributions or payments under the Plan, by resolution of its Board. In the event of a termination of the Plan or complete discontinuance of Plan Contributions, the Institution will notify all Participants of the termination. As of the date of complete or partial termination, all Accumulation Accounts will become nonforfeitable to the extent that benefits are accrued.

9.2 ***Limitation.*** Notwithstanding the provisions of the "Amendment and Termination" section of Article IX, the following conditions and limitations apply:

(a) No amendment will be made which will operate to recapture for the Institution any contributions previously made under this Plan. However, Plan Contributions made based on a mistake of fact may be returned to the Institution within one year of the date on which the Plan Contribution was made. Also, Plan Contributions made in contemplation of approval by the Internal Revenue Service may be returned to the Institution if the Internal Revenue Service fails to approve the Plan.

(b) No amendment will deprive, take away, or alter any then accrued right of any Participant insofar as Plan Contributions are concerned.

Article X: Miscellaneous

10.1 ***Plan Non-Contractual.*** Nothing in this Plan will be construed as a commitment or agreement on the part of any person to continue his or her employment with the Institution, and nothing in this Plan will be construed as a commitment on the part of the Institution to continue the employment or the rate of compensation of any person for any period, and all employees of the Institution will remain subject to discharge to the same extent as if the Plan had never been put into effect.

10.2 ***Claims of Other Persons.*** The provisions of the Plan will not be construed as giving any Participant or any other person, firm, or corporation, any legal or equitable right against the Institution, its officers, employees, or directors, except the rights as specifically provided for in this Plan or created in accordance with the terms and provisions of this Plan.

10.3 ***Merger, Consolidation, or Transfers of Plan Assets.*** In the event of a merger or consolidation with, or transfer of assets to, another plan, each Participant will receive immediately after such action a benefit under the plan that is equal to or greater than the benefit he or she would have received immediately before a merger, consolidation, or transfer of assets or liabilities.

10.4 ***Finality of Determination.*** All determinations with respect to the crediting of Years of Service under the Plan are made on the basis of the records of the Institution, and all determinations made are final and conclusive upon employees, former employees, and all other persons claiming a benefit interest under the Plan. Notwithstanding anything to the contrary contained in this Plan, there will be no duplication of Years of Service credited to an employee for any one period of his or her employment.

10.5 ***Non-Alienation of Retirement Rights or Benefits.*** No benefit under the Plan may, at any time, be subject in any manner to alienation, encumbrance, the claims of creditors or legal process to the fullest extent permitted by law. No person will have power in any manner to transfer, assign, alienate, or in any way encumber his or her benefits under the Plan, or any part thereof, and any attempt to do so will be void and of no effect. However, this Plan will comply with any judgment, decree or order which establishes the rights of another person to all or a portion of a Participant's benefit under this Plan to the extent that it is a "qualified domestic relations order" under section 414(p) of the Code.

10.6 ***Claims Review.***

Effective Date. This section shall be effective as of January 1, 2002.

(a) All claims for benefits under the Plan shall be filed in writing with the Plan Administrator.

(b) If the claim is wholly or partially denied, the Plan Administrator shall furnish the claimant written notice of its decision within ninety (90) days after receipt of the claim by the Plan Administrator. The notice of denial shall set forth in a manner calculated to be understood by the claimant:

(i) The specific reason or reasons for the denial;

(ii) Specific references to pertinent Plan provisions on which the denial is based;

(iii) A description of any additional material or information necessary for the claimant to perfect a claim and an explanation of why such material or information is necessary; and

(iv) An explanation of the Plan's claims review procedure.

(c) If the Plan Administrator determines that an extension of time will be necessary to process the claim, written notice of the extension shall be provided to the claimant prior to the expiration of the ninety-day period. The length of the extension shall not exceed ninety days.

The extension notice shall specify the circumstances requiring the extension and the anticipated date for which the Plan Administrator wishes to render a decision. The claimant shall have at least forty-five days within which to provide the specific information. If the Plan Administrator files an extension due to a claimant's failure to submit information necessary to decide a claim, the period for making the determination shall be tolled from the date the extension notice is sent to the claimant until the date the claimant responds to the request for the additional information.

(d) Within sixty (60) days after the receipt of a notice of denial, the claimant may file with the Plan Administrator a written request for a full review of the Plan Administrator's decision. The review on appeal shall not afford deference to the initial adverse benefit determination and shall be conducted by the appropriate named fiduciary who is neither the individual who made the adverse benefit determination nor the subordinate of such individual.

The claimant shall have the opportunity to submit written comments, documents, records and other information relating to the claim for benefits. Upon request of the claimant and free of charge, reasonable access to, and copies of, all documents, records and other information relevant to the claim shall be made available to the claimant. The review shall take into account all comments, documents, records and other information submitted without regard to whether such information was submitted or considered in the initial benefit determination.

If the benefit application is denied upon review, the named fiduciary shall provide a written explanation of its adverse determination explaining the specific reason(s) for the adverse determination, specific references to the Plan provisions on which the denial is based, a statement that the claimant is entitled to receive documents relevant to your claim, upon request and free of charge, and a statement describing any voluntary appeal procedures offered by the Plan and the right to receive information about those procedures, and a statement of the claimant's right to bring an action under Section 502(a) of ERISA.

(e) The decision of the review shall be made within a reasonable period of time, and not later than sixty (60) days after the receipt of the request for review, unless special circumstances require an extension of time for processing. If an extension is required, the claimant shall be provided a notice of the extension prior to the expiration of the sixty-day period, of which such notice shall satisfy the requirements outlined in Section 10.6(c) above.

Article XI: Top-Heavy Provisions

11.1 ***Effect of Top Heavy Status.*** If the Plan is Top Heavy, as determined by this Article, for any Plan Year, the requirements of this Article will apply during the Plan Year, superseding all other plan provisions inconsistent with its terms.

11.2 ***Definitions.*** In this Article, the following words and phrases have the meaning specified below:

(a) ***Determination Date.*** "Determination Date" means in any Plan Year the last day of the immediately preceding Plan Year. However, in the first Plan Year the Determination Date is the last day of the Plan Year.

(b) ***Key Employee.*** "Key Employee" means any employee or former employee (and the beneficiaries of such employee) who at any time during the determination period was an officer of the employer if such individual's annual compensation exceeds 50 percent of the dollar limitation under section 415(b)(1)(A) of the Code, an owner (or considered an owner under section 318 of the Code) of one of the ten largest interests in the employer if such individual's compensation exceeds 100 percent of the dollar limitation under section 415(c)(1)(A) of the Code, a 5 percent owner of the employer, or a 1 percent owner of the employer who has an annual compensation of more than $150,000. Annual compensation means compensation as defined in section 415(c)(3) of the Code, but including amounts contributed by the employer pursuant to a salary reduction agreement that are excludable from the employee's gross income under sections 403(b), 125, 132(f)(4), 402(a)(8), or 402(h) of the Code. The determination period is the Plan Year containing the Determination Date and the four preceding Plan Years.

The determination of who is a Key Employee will be made in accordance with section 416(i)(1) of the Code and the regulations thereunder.

(c) ***Top Heavy Plan:*** For any Plan Year beginning after December 31, 1983, this Plan is Top Heavy if any of the following conditions exists:

(1) If the Top Heavy Ratio for this Plan exceeds 60 percent and this Plan is not part of any required aggregation group of plans.

(2) If this Plan is a part of a required aggregation group of plans but not part of a permissive aggregation group and the Top Heavy Ratio for the group of plans exceeds 60 percent.

(3) If this Plan is a part of a required aggregation group and part of a permissive aggregation group of plans and the Top Heavy Ratio for the permissive aggregation group exceeds 60 percent.

(d) ***Top Heavy Ratio:***

(1) If the employer maintains one or more defined contribution plans (including any Simplified Employee Pension Plan) and the employer has not maintained any defined benefit plan that during the five-year period ending on the Determination Date(s) has or has had accrued benefits, the Top-Heavy Ratio for this Plan alone or for the required or permissive aggregation group as appropriate is a fraction, the numerator of which is the sum of the account balances of all Key Employees as of the Determination Date(s) (including any part of any account balance distributed in the five-year period ending on the Determination Date(s)), and the denominator of which is the sum of all account balances (including any part of any account balance distributed in the five-year period ending on the Determination Date(s)), both computed in accordance with section 416 of the Code and the regulations thereunder. Both the numerator and denominator of the Top Heavy Ratio are increased to reflect any contribution not actually made as of the Determination Date, but that must be taken into account on that date under section 416 of the Code and the regulations thereunder.

(2) If the employer maintains one or more defined contribution plans (including any Simplified Employee Pension Plan) and the employer maintains or has maintained one or more defined benefit plans that during the five-year period ending on the Determination Date(s) has or has had any accrued benefits, the Top Heavy Ratio for any required or permissive aggregation group as appropriate is a fraction, the numerator of which is the sum of account balances under the aggregated defined contribution plan or plans for all Participants, determined in accordance with (1) above, the present value of accrued benefits under the aggregated defined benefits plan or plans for all Key Employees as of the Determination Date(s), and the denominator of which is the sum of the account balances under the aggregated defined contribution plan or plans for all Participants determined in accordance with (1) above, and the present value of accrued benefits under the defined benefit plan or plans of all Participants as of the Determination Date(s), all determined in accordance with section 416 of the Code and the regulations thereunder. The accrued benefits under a defined benefit plan in both the numerator and denominator of the Top Heavy Ratio are increased for any distribution of an accrued benefit made in the five-year period ending on the Determination Date.

(3) For (1) and (2) above, the value of account balances and the present value of accrued benefits will be determined as of the most recent valuation date that falls within or ends with the 12-month period ending on the Determination Date, except as provided in section 416 of the Code and the regulation thereunder for the first and second plan years of a defined benefit plan. The account balances and accrued benefits of a Participant (1) who is not a Key Employee but who was a Key Employee in a prior year, or (2) who has not been credited with at least one hour of service with any employer maintaining the plan at any time during the five-year period ending on the Determination Date will be disregarded. The calculation of the Top Heavy Ratio, and the extent to which distributions, rollovers, and transfers are taken into account will be made in accordance with section 416 of the Code and the regulations thereunder. Deductible employee contributions will not be taken in to account for computing the Top Heavy Ratio. When aggregating plans, the value of account balances and accrued benefits will be calculated with reference to the Determination Dates that fall within the same calendar year.

The accrued benefit of a Participant other than a Key Employee shall be determined under (a) the method, if any, that uniformly applied for accrual purposes under all defined benefit plans maintained by the employer, or (b) if there is no such method, as if such benefit accrued not more rapidly than the slowest accrual rate permitted under the fractional rule of section 411(b)(1)(C) of the Code.

(e) ***Permissive Aggregation Group:*** The required aggregation group of plans plus any other plan or plans of the employer that, when considered as a group with the required aggregation group, would continue to satisfy the requirements of sections 401(a)(4) and 410 of the Code.

(f) ***Required Aggregation Group:*** (1) Each qualified plan of the employer in which at least one Key Employee participates or participated at any time during the determination period (regardless of whether the plan has requirements of sections 401(a)(4) or 410 of the Code.

(g) ***Valuation Date:*** December 31 of each year.

(h) ***Present Value:*** Present value shall be based on the interest and mortality rates reflected in the actuarial valuation reports for the Determination year for all defined benefit plans maintained by the employer.

11.3 ***Minimum Top Heavy Allocation.***

(a) Except as otherwise provided in (c) below, the employer contributions and forfeitures allocated for any Participant who is not a Key Employee shall not be less than the lesser of 3 percent of such Participant's Compensation or, when the employer has no defined benefit plan that designates this Plan to satisfy section 401 of the Code, the largest percentage of employer contributions and forfeitures, as a percentage of the Key Employee's Compensation, allocated for any key employee for that year. The minimum allocation is determined without regard to any Social Security contribution. This minimum allocation shall be made even though, under other plan provisions, the Participant would not otherwise be entitled to receive an allocation, or would have received a lesser allocation for the year because of (i) the Participant's failure to complete 1,000 hours of service (or any equivalent provided in the Plan), or (ii) the Participant's failure to make mandatory employee contributions to the Plan, or (iii) compensation less than a stated amount.

(b) For computing the minimum allocation, compensation shall mean compensation as defined in section 414(q)(7) of the Code.

(c) The provision in (a) above shall not apply to any Participant who was not employed by the employer on the last day of the Plan Year.

11.4 ***Minimum Top Heavy Vesting.*** For any Plan Year in which this Plan is Top Heavy, the following minimum vesting schedule will automatically apply except where the normal vesting schedule specified in this Plan is more favorable to the Participant.

Completed Years of Service	Vested Percentage	Forfeitable Percentage
Less than 2	0%	100%
2 but less than 3	20%	80%
3 but less than 4	40%	60%
4 but less than 5	60%	40%
5 but less than 6	80%	20%
6 or more	100%	0%

The minimum vesting schedule applies to all benefits within the meaning of section 411(a)(7) of the Code except those attributable to employee contributions, including benefits accrued before the effective date of Section 416 and benefits accrued before the Plan became Top Heavy. Further, no decrease in a Participant's nonforfeitable percentage may occur if the Plan's status as Top Heavy changes for any Plan Year. However, this section does not apply to the account balances of any employee who does not have an hour of service after the Plan has initially become Top Heavy and such employee's account balance attributable to employer contributions and forfeitures will be determined without regard to this section.

The minimum allocation required (to the extent required to be nonforfeitable under Section 416(b)) may not be forfeited under Section 411(a)(3)(B) or 411(a)(3)(D).

11.5 ***Adjustment to Limitation on Annual Additions.*** If the Plan is Top Heavy for the year and the Institution also maintains a qualified defined benefit plan, the limitations in the "No Reversion" section of Article VIII shall be adjusted as provided in section 416(h) of the Code.

11.6 ***Modification of Top-Heavy Rules***

1. Effective Date. This section shall apply for purposes of determining whether the plan is a top-heavy plan under section 416(g) of the Code for plan years beginning after December 31, 2001, and whether the plan satisfies the minimum benefits requirements of section 416(c) of the Code for such years.

2. Determination of Top-Heavy Status.

2.1 Key Employee. Key employee means any employee or former employee (including any deceased employee) who at any time during the plan year that includes the determination date was an officer of the employer having annual compensation greater than $130,000 (as adjusted under section 416(i)(1) of the Code for plan years beginning after December 31, 2002), a 5-percent owner of the employer, or a 1-percent owner of the employer having annual compensation of more than $150,000. For this purpose, annual compensation means compensation within the meaning of section 415(c)(3) of the Code. The determination of who is a key employee will be made in accordance with section 416(i)(1) of the Code and the applicable regulations and other guidance of general applicability issued thereunder.

2.2 Determination of Present Values and Amounts. This section 2.2 shall apply for purposes of determining the present values of accrued benefits and the amounts of account balances of employees as of the determination date.

2.2.1 Distributions During Year Ending on the Determination Date. The present values of accrued benefits and the amounts of account balances of an employee as of the determination date shall be increased by the distributions made with respect to the employee under the plan and any plan aggregated with the plan under section 416(g)(2) of the Code during the 1-year period ending on the determination date. The preceding sentence shall also apply to distributions under a terminated plan which, had it not been terminated, would have been aggregated with the plan under section 416(g)(2)(A)(i) of the Code. In the case of a distribution made for a reason other than severance from employment, death, or disability, this provision shall be applied by substituting 5-year period for 1-year period.

2.2.2 Employees not Performing Services During Year Ending on the Determination Date. The accrued benefits and accounts of any individual who has not performed services for the employer during the 1-year period ending on the determination date shall not be taken into account.

3. Minimum Benefits. For purposes of satisfying the minimum benefit requirements of section 416(c)(1) of the Code and the plan, in determining years of service with the employer, any service with the employer shall be disregarded to the extent that such service occurs during a plan year when the plan benefits (within the meaning of section 410(b) of the Code) no key employee or former key employee.

Employer Identification Number: 05-0264797
Plan Number: 003

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(Signature of Administrator

____
Date

#1009606

American Mathematical Society
Tax-Deferred Annuity Plan Document

Restated 01/01/2009

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Article I: Definitions

1.1 ***Accumulation Account*** means the separate account(s) established for each Participant. The current value of a Participant's Accumulation Account includes all Plan Contributions, less expense charges, and reflects credited investment experience.

1.2 ***Beneficiary(ies)*** means the individual, institution, trustee, or estate designated by the Participant to receive the Participant's benefits at his or her death.

1.3 ***Board*** means the Institution's Board of Trustees.

1.4 ***Code*** means the Internal Revenue Code of 1986, as amended.

1.5 ***Compensation*** means the amount paid by the Institution to a Participant that must be reported as wages on the Participant's Form W-2 plus compensation that is not currently includable in the Participant's gross income because of the application of Code Sections 125 or 403(b) through a salary reduction agreement.

In addition to other applicable limitations stated in the plan, and notwithstanding any other provision of the Plan to the contrary, for Plan years beginning on or after January 1, 1994, the annual compensation of each employee taken into account under the plan shall not exceed the OBRA '93 annual compensation limit. The OBRA '93 annual compensation limit is $150,000, as adjusted by the Commissioner of the Internal Revenue Service for increases in the cost of living in accordance with section 401(a)(17)(B) of the Internal Revenue Code. The cost-of-living adjustment in effect for a calendar year applies to any period, not exceeding 12 months, over which compensation is determined (determination period) beginning in such calendar year. If a determination period consists of fewer than 12 months, the OBRA '93 annual compensation limit will be multiplied by a fraction, the numerator of which is the number of months in the determination period, and the denominator of which is 12.

For plan years beginning on or after January 1, 1994, any reference in this plan to the limitation under section 401(a)(17) of the Code shall mean the OBRA '93 annual compensation limit stated in this provision.

If compensation for any prior determination period is taken into account in determining an employee's benefits accruing in the current Plan Year, the compensation for that prior determination period is subject to the OBRA '93 annual compensation limit in effect for that prior determination period. For this purpose, for determination periods beginning before the first day of the first Plan Year beginning on or after January 1, 1994, the OBRA '93 annual compensation limit $150,000.

The annual compensation of each participant taken into account in determining allocations for any plan year beginning after December 31, 2001, shall not exceed $200,000, as adjusted for cost-of-living increases in accordance with section 401(a)(17)(B) of the Code. Annual compensation means compensation during the plan year or such other consecutive 12-month period over which compensation is otherwise determined under the plan (the determination period). The cost-of-living adjustment in effect for a calendar year applies to annual compensation for the determination period that begins with or within such calendar year.

Effective for Plan Years beginning on or after the effective date of this Amendment, the Employer may elect to treat any compensation described in this Section that is paid within 2 ½ months after an Employee's Severance from Employment as compensation under the Plan (within the meaning of Code Section 415(c)(3)). The following are types of post-severance payments that are not excluded from compensation if they are paid within 2 ½ months following Severance from Employment:

(i) Payments that, absent a Severance from Employment, would have been paid to the Employee while the Employee continued in employment with the Employer and are regular compensation for services during the Employee's regular working hours, compensation for services outside the Employee's regular working hours (such as overtime or shift differential), commissions, bonuses, or other similar compensation; and

(ii) Payments for accrued bona fide sick, vacation, or other leave, but only if the Employee would have been able to use the leave if employment had continued.

Any payment that is not described in this Section is not considered compensation if paid after Severance from Employment, even if it is paid within 2-1/2 months following Severance from Employment. Thus, for example, compensation does not include amounts paid after Severance from Employment that are severance pay, unfunded nonqualified deferred compensation, or parachute payments within the meaning of Code section 280G(b)(2).

1.6 ***Date of Employment or Reemployment*** is the first day upon which an employee completes an Hour of Service for performance of duties during the employee's most recent period of service with the Institution.

1.7 ***Elective Deferrals*** means any contributions made to the Plan at the election of the Participant pursuant to a salary reduction agreement that complies with the requirements of Internal Revenue Code Section 403(b). This also includes any contributions for a Participant pursuant to an election to defer compensation under any Code Section 401(k), 408(k) (Simplified Employee Pension), 457(b) or 403(b) plan.

1.8 ***Eligible Employee*** means:

(a) For purposes of voluntary, Elective Deferrals, all employees who are scheduled to work 20 hours per week or more, (including employees whose compensation and conditions of employment are established by the terms of a collective bargaining agreement).

(b) For purposes of Mandatory Plan Contributions, any category of employee who is employed by the Institution. However, an employee who is customarily employed on a part-time, temporary, or irregular basis for less than 1,000 Hours of Service a year is an Eligible Employee only if credited with 1,000 hours or more of service (or 800 hours for a keyboard operator working at home), including paid absence, during any 12 consecutive month calendar period commencing with his or her Date of Employment or any anniversary, in which event he or she becomes an Eligible Employee as of the beginning of the 12-month period during which he or she was credited with at least 1,000 Hours of Service. Eligible Employee does not include a person whose employment is incidental to his or her educational program.

(c) For purposes of this Plan, the term Eligible Employee shall not include Students, Leased Employees deemed to be employees of the Institution provided in Code Section 414(n), or individuals who are deemed to be independent contractors as determined by the Plan Administrator in its sole discretion

"Students" shall mean any employee enrolled in an educational institution on a full-time basis.

"Leased Employee" means, effective for Plan Years beginning January 1, 1997, any person (other than an employee of the recipient) who pursuant to an agreement between the recipient and any other person ("leasing organization") has performed services for the recipient (or for the recipient and related persons determined in accordance with IRC section 414(n)(6)) on a substantially full time basis for a period of at least one year, and such services are performed under the recipient's primary direction or control.

(d) Once an employee satisfies the requirements for an Eligible Employee, such employee shall continue to be an Eligible Employee in the Plan until the entire balance of his Accounts has been reduced to zero through distributions or forfeitures.

1.9 ***Excess Elective Deferrals*** means those Elective Deferrals that are includable in a Participant's gross income under section 402(g) of the Code to the extent the Participant's Elective Deferrals for a taxable year exceed the dollar limitation under such Code Section.

1.10 ***Fund Sponsor*** means an insurance, variable annuity or investment company that provides Funding Vehicles available to Participants under this Plan.

1.11 ***Funding Vehicles*** means the annuity contracts or custodial accounts that satisfy the requirements of Code Section 401(f) issued for funding accrued benefits under this Plan and specifically approved by the Institution for use under this Plan.

1.12 ***Highly Compensated Employee*** for any Plan Year means any Employee who (A) was a five-percent owner at any time during the year or the preceding year, or (B) for the preceding year had compensation from the Company in excess of $80,000. Compensation for this purpose means compensation as defined in Code Section 415(c)(3) (which shall include Code Section 132(f)(4) deferrals effective January 1, 2001). The provisions of Code Section 414(q) are otherwise incorporated by reference herein. The Employer has not made a top-paid group election.

1.13 ***Hours of Service*** means:

(a) Each hour for which an employee is paid, or entitled to payment, for the performance of duties for the Institution. For the purposes of this Section, service with any education institution while assigned to work for the American Mathematical Society shall be treated as service with the Society.

(b) Each hour for which an employee is paid, or entitled to payment, on account of a period of time during which no duties are performed (regardless of whether employment has terminated) due to vacation, holiday, illness, incapacity (including disability), layoff, jury duty, military duty, leave of absence, or maternity or paternity leave (whether paid or unpaid). However, any period for which a payment is made or due under a plan maintained solely for the purpose of complying with Workers' Compensation or unemployment compensation or disability insurance laws, or solely to reimburse the employee for medical or medically-related expenses is excluded. An employee is directly or indirectly paid or entitled to payment by the Institution regardless of whether payment is made by or due from the Institution directly or made indirectly through a trust fund, insurer or other entity to which the Institution contributes or pays premium. No more than 501 Hours of Service under this paragraph. Hours of Service under this paragraph will be calculated and credited pursuant to Section 2530.200b-2 of the Department of Labor Regulations, incorporated herein by reference.

(c) Each hour for which back pay, irrespective of mitigation of damages, is either awarded or agreed to by the Institution, without duplication of hours provided above, and subject to the 501-hour restriction for periods described in (b) above.

Hours of Service will be credited for employment with other members of an affiliated service group (under Code Section 414(m)), a controlled group of corporations (under Code Section 414(b)), or a group of trades or businesses under common control (under Code Section 414(c)) of which the Institution is a member, and any other entity required to be aggregated with the employer pursuant to Code Section 414(o) and the regulations thereunder. Hours of Service also will be credited for any person considered an employee for this Plan under Code Sections 414(n) or 414(o) and the regulations thereunder.

Hours of Service will be determined on the basis of actual hours that an employee is paid or entitled to payment.

1.14 ***Institution*** means American Mathematical Society.

1.15 ***Limitation Year*** means a calendar year.

1.16 ***Mandatory Plan Contributions*** means contributions required to be made by the Participant under this plan as described in Section 4.1.

1.17 ***Normal Retirement Age*** means age 65.

1.18 ***Participant*** means any Eligible Employee of the Institution participating in this Plan.

1.19 ***Plan*** means the Institution's Tax-Deferred Annuity (TDA) Plan as set forth in this document.

1.20 ***Plan Contributions*** means Elective Deferrals and Mandatory Plan Contributions made under this Plan.

All employees who are eligible to make elective deferrals under this Plan and who have attained age 50 before the close of the Plan year shall be eligible to make catch-up contributions in accordance with, and subject to the limitations of, section 414(v) of the Code. Such catch-up contributions shall not be taken into account for purposes of the provisions of the plan implementing the required limitations of sections 402(g) and 415 of the Code. The Plan shall not be treated as failing to satisfy the provisions of the plan implementing the requirements of section 401(k)(3), 401(k)(11), 401(k)(12), 410(b), or 416 of the Code, as applicable, by reason of the making of such catch-up contributions.

Matching contributions shall not apply to catch-up contributions, if any, made to the Plan.

1.21 ***Plan Year*** means January 1 through December 31.

1.22 ***Qualified Election*** means a waiver of a Qualified Joint and Survivor Annuity or a Qualified Pre-retirement Survivor Annuity. Any waiver of a Qualified Joint and Survivor Annuity or a Qualified Pre-retirement Survivor Annuity shall not be effective unless: (a) the Participant's spouse consents in writing to the election; (b) the election designates a specific Beneficiary(ies), including any class of Beneficiaries or any contingent Beneficiaries, which may not be changed without spousal consent (unless the spouse expressly permits designations by the Participant without any further spousal consent); (c) the spouse's consent acknowledges the effect of the election; and (d) the spouse's consent is witnessed by a Plan representative or notary public. Additionally, a Participant's waiver of the Qualified Joint and Survivor Annuity shall not be effective unless the election designates a form of benefit payment that may not be changed without spousal consent (or the spouse expressly permits designations by the Participant without any further spousal consent). If it is established to the satisfaction of a Plan representative that there is no spouse or that the spouse cannot be located, a waiver will be deemed a Qualified Election.

Any consent by a spouse obtained under this provision (or establishment that the consent of a spouse may not be obtained) shall be effective only with respect to such spouse. A consent that permits designations by the Participant without any requirement of further consent by such spouse must acknowledge that the spouse has the right to limit consent to a specific Beneficiary(ies), and a specific form of benefit where applicable, and that the spouse voluntarily elects to relinquish either or both of such rights. A revocation of a prior waiver may be made by a Participant without the consent of the spouse at any time before the commencement of benefits. The number of revocations shall not be limited. No consent obtained under this provision shall be valid unless the Participant has received notice as provided in Article VII.

1.23 ***Qualified Joint and Survivor Annuity*** means an immediate annuity for the life of the Participant with a survivor annuity for the life of the spouse that is not less than 50 percent (and not more than 100 percent) of the amount payable during the joint lives of the Participant and the spouse that can be purchased with the Participant's vested Accumulation Account. The percentage of the survivor annuity under the Plan shall be 50 percent.

1.24 ***Qualified Pre-retirement Survivor Annuity*** means an annuity for the life of the surviving spouse of a deceased Participant the actuarial equivalent of which is not less than 50 percent of the Participant's Accumulation Account(s) at the date of death.

1.25 ***Regular Salary*** means the amount paid by the Institution to a Participant which is required to be reported as wages on the Participant's Form W-2, and shall also include Compensation which is not currently includible in the Participant's gross income by reason of the application of Code Sections 125 or 403(b) through a salary reduction agreement. In no event will the salary taken into account under the Plan exceed the Limits of Code Section 401(a)(17).

1.26 ***Year of Participation Service*** means a consecutive 12-month period during which the Eligible Employee is credited with 1,000 or more Hours of Service (except for key board operators who work at home, the requirement shall be 800 hours or more Hours of Service) with the Society or any Affiliated Employer. The initial twelve (12) month period shall be the period commencing on the date the Employee first performs an Hours of Service for the Society, but if the Employee is not credited with 1,000 (800 hours for key board operators) or more Hours of Service during such period, the twelve (12) month period shall be the first Plan Year beginning after the Employee commences employment or any succeeding Plan Year.

Article II: Establishment of Plan

2.1 ***Establishment of Plan.*** The Board of the American Mathematical Society (the "Institution") established the Plan as of June 8, 1975.

This plan document sets forth the provisions of this Code Section 403(b) Plan. The Plan was restated as of December 31, 1999 and again as of January 1, 2005. Plan Contributions are invested, at the direction of each Participant, in one or more of the Funding Vehicles available to Participants under the Plan. Plan Contributions shall be held for the exclusive benefit of Participants.

A Code Section 403(b) Defined Contribution Retirement Plan is a plan that provides for a separate account(s) for each Participant that meets the requirements of Code Section 403(b). Benefits are based solely on the amounts of Plan Contributions to the Participant's Accumulation Account(s) and earnings, if any. All benefits under the Plan are fully funded and provided through the Funding Vehicle(s) selected by the Participant. Benefits are not subject to, nor covered by, federal plan termination insurance.

Article III: Eligibility for Participation

3.1 ***Eligibility.***

Elective Deferrals:

With respect to Elective Deferrals, an Eligible Employee shall be eligible to participate in the Plan upon his date of hire. To participate in Elective Deferrals, an Eligible Employee must complete a salary reduction agreement and return it to the Institution.

Mandatory Plan Contributions:

With respect to Mandatory Plan Contributions, an Eligible Employee must begin participation in this portion of the Plan, as a condition of employment, on the first of the month following the completion of one Year of Participation Service at the Institution.

3.2 ***Notification.*** The Institution will notify an Eligible Employee when he or she has completed the requirements necessary to become a Participant. An Eligible Employee who complies with the requirements and becomes a Participant is entitled to the benefits and is bound by all the terms, provisions, and conditions of this Plan, including any amendments that, from time to time, may be adopted, and including the terms, provisions and conditions of any Funding Vehicle(s) to which Plan Contributions for the Participant have been applied.

3.3 ***Enrollment in Plan.*** To participate in this Plan, an Eligible Employee must complete the necessary enrollment form(s) and return them to the Institution.

3.4 ***Reemployment.*** A former employee who is reemployed by the Institution will be eligible to participate upon meeting the requirements stated in the "Eligibility" section of Article III. A former employee who satisfied these requirements before termination of employment will be eligible to begin participation immediately after reemployment provided the former employee is an Eligible Employee.

3.5 ***Termination of Participation.*** A Participant will continue to be eligible for the Plan until one of the following conditions occur:

- his or her contributions under the Plan are terminated;
- he or she ceases to be an Eligible Employee;
- the Plan is terminated.

Article IV: Plan Contributions

4.1 ***Plan Contributions.***

A. Elective Deferrals.

An Eligible Employee may begin making voluntary Elective Deferrals as of his date of hire. Elective Deferrals are fully and immediately vested. To participate, an Eligible Employee must enter into a written salary reduction agreement with the Institution. Under the salary reduction agreement, the employee's salary (paid after the agreement is signed) is reduced and the amount of the reduction is applied as premiums to the Funding Vehicles available under this Plan. An election to make Elective Deferrals under this Section may not be made retroactively, and shall remain in effect until modified or terminated. A Participant may terminate his or her salary reduction agreement at any time. Subject to any reasonable rules established by the Plan Administrator, a Participant may modify his or her salary reduction agreement during a Plan Year by filing an appropriate form with the Plan Administrator. Such rules may include the number and frequency of such modifications during any Plan Year but a Participant shall be permitted to make a modification at least once each Plan Year. Plan contributions shall be made at least weekly except for weeks in which no salary is paid. Contributions shall be forwarded by the Institution to the Fund Sponsor as soon as it is administratively feasible for the Institution to segregate contributions but, in any event, within the time required by law.

B. Mandatory Plan Contributions.

An Eligible Employee must make Mandatory Plan Contributions after a Year of Participation Service (as described in section 1.26) according to the following schedule:

Mandatory Plan Contributions as a Percentage of Credited Compensation

By the Participant

2.0%

Mandatory Plan Contributions are required to be made as a condition of employment on a tax-deferred basis. If you are eligible, you will continue to be eligible for this portion of the plan until (a) you cease to be an eligible employee, or (b) the plan is terminated.

4.2 ***When Contributions Are Made.*** Plan Contributions will begin when the Institution has determined that the Participant has met or will meet the requirements for a Year of Participation Service. Plan Contributions will be forwarded to the Fund Sponsor as soon as it is administratively feasible for the Institution to segregate contributions, but in any event, within the time required by law.

4.3 ***Allocation of Contributions.*** A Participant may allocate Plan Contributions to the Funding Vehicle(s) in any whole-number percentages that equal 100 percent. A Participant may change his or her allocation of future contributions to the Funding Vehicle(s) at any time.

4.4 ***Limitations on Elective Deferrals.*** The total Elective Deferrals made by the Institution on behalf of the Participant for any year under this Plan and all other plans, contracts or arrangements of the Institution will not exceed the limits imposed by Code Sections 402(g), 403(b), and 415. The limits of Code Sections 402(g), 403(b), and 415 are herein incorporated by reference.

If the limitations are exceeded because the Participant is also participating in another plan required to be aggregated with this Plan for the purposes of Code Section 415, then the extent to which annual contributions under this Plan will be reduced, as compared with the extent to which annual benefits or contributions under any other plans will be reduced, will be determined by the Institution in a manner as to maximize the aggregate benefits payable to the Participant from all plans. If the reduction is under this Plan, the Institution will advise the affected Participants of any limitations on their annual contributions required by this paragraph.

If the 415 limit is exceeded, the excess amount, plus any gain attributable to the excess, will be distributed to the Participant to the extent permitted by Code Section 415 and the regulations promulgated thereunder.

Effective for Plan Years beginning on or after July 1, 2007, excess annual additions will be corrected based on the methodology pursuant to the Employee Plan Compliance Resolution System.

4.5 ***Return of Excess Elective Deferrals.*** If a Participant has Elective Deferrals that exceed the dollar limits in effect under Code Section 402(g) at the beginning of the tax year, he or she may designate the contributions made during a taxable year to this Plan as Excess Elective Deferrals by notifying the Plan Administrator by March 1 of the following year of the amount of the excess. A Participant who has Elective Deferrals under this Plan that exceed such limits may be deemed to have given the Plan Administrator notice to distribute such Excess Elective Deferrals. Notwithstanding any other provision of this Plan, Excess Elective Deferrals, adjusted to reflect any credited investment experience up to the date of distribution, must be distributed to any Participant who designates the contribution as excess for a taxable year no later than April 15 of the following year.

4.6 ***Leave of Absence.*** During a paid leave of absence, Plan Contributions will continue to be made in accordance with the salary reduction agreement. No Plan Contributions will be made during an unpaid leave of absence.

4.7 ***Transfer of Funds from Another Plan.*** The Fund Sponsor shall accept contributions that are transferred directly from any other plan described in section 403(b) of the Code, whether such plans are funded through a trustee arrangement or through an annuity contract, if such contributions are attributable only to employer and employee contributions and the earnings thereon and accompanied by instructions showing the respective amounts attributable to employer and employee contributions. Such funds and the accumulation generated from them shall always be fully vested and nonforfeitable.

4.8 ***Acceptance of Rollover Contributions.*** If a Participant is entitled to receive a distribution from another plan described in section 403(b) of the Code that is an eligible rollover distribution under section 402 of the Code, the Fund Sponsor will accept such amount under this Plan provided the rollover to this Plan is made 1) directly from another plan; or 2) by the Participant within 60 days of the receipt of the distribution.

The plan will accept a direct rollover of an eligible rollover distribution from:

-- a qualified plan described in section 401(a) or 403(a) of the Code, including after-tax employee contributions.

-- an eligible plan under section 457(b) of the Code which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state.

Participant Rollover Contributions from Other Plans:

The plan will accept a participant contribution of an eligible rollover distribution from:

-- a qualified plan described in section 401(a) or 403(a) of the Code.

-- an annuity contract described in section 403(b) of the Code.

-- an eligible plan under section 457(b) of the Code which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state.

Participant Rollover Contributions from IRAs:

The plan will accept a participant rollover contribution of the portion of a distribution from an individual retirement account or annuity described in section 408(a) or 408(b) of the Code that is eligible to be rolled over and would otherwise be includible in gross income.

Effective Date of Direct Rollover and Participant Rollover Contribution Provisions:

Rollovers from Other Plans, shall be effective for plan years beginning after December 31, 2001.

4.9 ***Uniformed Services.*** Notwithstanding any provision of this Plan to the contrary, contributions, benefits, and service credit with respect to qualified military service will be provided in accordance with Section 414(u) of the Internal Revenue Code.

Article V: Funding Vehicles

5.1 ***Funding Vehicles.*** Plan Contributions are invested in one or more Funding Vehicles available to Participants under this Plan. The Fund Sponsors are:

A. Teachers Insurance and Annuity Association (TIAA)

B. College Retirement Equities Fund (CREF)

The Institution's current selection of Fund Sponsors and Funding Vehicles isn't intended to limit future additions or deletions of Fund Sponsors and Funding Vehicles. Any additional accounts offered by a Fund Sponsor will automatically be made available to Participants in accordance with the procedures established by the Institution and the Fund Sponsor.

5.2 ***Fund Transfers.*** Subject to a Funding Vehicle's rules for transfers and in accordance with the provisions of the Code for maintaining the tax deferral of the Accumulation Account(s), a Participant may transfer funds accumulated under the Plan among the Plan's approved Funding Vehicles to the extent permitted by the Funding Vehicles.

Article VI: Vesting

6.1 ***Plan Contributions.*** Plan Contributions shall be fully vested and nonforfeitable when such Plan Contributions are made.

Article VII: Benefits

7.1 ***Retirement Benefits.*** The Participant may elect to receive benefits under any of the forms of benefit permitted by the relevant Funding Vehicles. However, distributions attributable to amounts accrued in an annuity contract after December 31, 1988 and amounts that have at any time been invested in a mutual fund custodial account, regardless of date, may be paid only when a Participant attains age 59 1/2, separates from service, dies or becomes disabled. Participants may also withdraw their accumulation if they encounter hardship. Hardship distributions are subject to the rules and restrictions set forth in the "Hardship Distributions" section of Article VII and to the limitations of the Code.

Forms of Benefit. The forms of benefit are the benefit forms offered by the Funding Vehicles available under this Plan. These forms are equally available to all Participants choosing the Funding Vehicle. The forms of benefit available under this Plan include:

- Single life annuities as provided under the Funding Vehicle contract.
- Joint and survivor annuities as provided under the Funding Vehicle contract.
- Cash withdrawals (to the extent the Funding Vehicle permits).
- Fixed period annuities, to the extent the Funding Vehicle permits.
- Repurchase, subject to the limitations in the "Repurchase" section of this Article.
- Such other annuity and withdrawal options as provided under the Funding Vehicle contract.

7.2 ***Cash Withdrawals.*** Subject to spousal right to survivor benefits, a participant may receive a 100% lump sum cash withdrawal as permitted by the Funding Vehicle, subject to the limitations of the Code.

7.3 ***Retirement Transition Benefit***. Unless the Minimum Distribution Annuity, or the Limited Periodic Withdrawal Option is elected, a Participant may elect to receive a one time lump-sum payment of up to 10 percent of his or her Accumulation Account(s) in TIAA and/or the CREF account(s) at the time annuity income begins, provided the one sum payment from each TIAA contract and/or CREF account(s) doesn't exceed 10 percent of the respective Accumulation Account(s) being converted to retirement income.

7.4 ***Hardship Distributions.*** Hardship distributions of the Accumulation Account attributable to Plan Contributions shall be approved only if the Plan Administrator determines that the Participant has an immediate and heavy financial need and the distribution is necessary to satisfy the need. The amount of the need may include any amount necessary to pay any federal, state, or local income taxes or penalties reasonably anticipated to result from the distribution. In such cases, there shall be paid to such Participant out of his Accumulation Account only such portion of the amount requested as is necessary to prevent or alleviate the hardship. In making its determination hereunder, the Plan Administrator shall follow uniform and nondiscriminatory practices and its determination shall be final and binding. Income earned on or after January 1, 1989 shall be available for distribution on account of hardship only to the extent permitted by the Code.

The following are deemed to be immediate and heavy financial needs of the Participant: (a) medical expenses described in Code Section 213(d) incurred by the Participant, his spouse or his dependents, or necessary for these persons to obtain such medical care; (b) purchase (excluding mortgage payments) of a principal residence for the Participant; (c) payment of tuition and related educational fees and room and board expenses for the next 12 months of post-secondary education for the Participant, his spouse, his children or his dependents; (d) the payment of amounts necessary to prevent the eviction of the Participant from his principal residence or the foreclosure on the mortgage of his principal residence; (e) for taxable years beginning on or after January 1, 2006, funeral or burial expenses of Participant's deceased parent, spouse, children or dependents; (f) for taxable years beginning on or after January 1, 2006, payment to repair damage to the Participant's principal residence that would qualify for a casualty loss deduction under Section 165 of the Code (determined without regard to whether the loss exceeds 10 percent of adjusted gross income); or (g) such other circumstances as may be specified in Regulation Section 1.401(k)-1(d)(2)(iii)(B) or subsequent promulgations.

A distribution will be treated as necessary to satisfy a financial need if the employee reasonably represents that the need cannot be relieved: (a) through reimbursement or compensation by insurance or otherwise; (b) by reasonable liquidation of the employee's assets (or the assets of a spouse or child available to the employee) to the extent the liquidation would not cause hardship; (c) by other distributions or nontaxable loans from the plans of the Institution or by borrowing from commercial sources on reasonable terms; or (d) by cessation of Plan Contributions.

Notwithstanding the above, hardship distributions will be deemed to be necessary to satisfy an immediate and heavy financial need of the Participant if all of the following are satisfied: (a) the distribution does not exceed the amount of the applicable need under the second paragraph of this section; (b) the Participant has obtained all distributions, other than hardship distributions, and all nontaxable loans currently available under the Plan and any other deferred compensation plan maintained by the Institution; (c) the Plan Contributions under the Plan, and the Participant's elective and employee contributions under any other deferred compensation plan maintained by the Institution, are suspended for twelve (12) months after receipt of the hardship distribution; and (d) the maximum amount of Plan Contributions under the Plan, together with elective contributions under any other plan maintained by the Institution, for the Participant's taxable year immediately following the taxable year of the hardship distribution, do not exceed the applicable limit under Code Section 402(g) for such year less the amount of the Plan Contributions and elective contributions to such plans for the taxable year of such hardship distribution; and/or (e) such additional or alternative requirements as may be prescribed in Regulation Section 1.401(k)-1(d)(2)(iii)(B) or subsequent promulgations.

A participant who receives a distribution of elective deferrals after December 31, 2001, on account of hardship shall be prohibited from making elective deferrals and employee contributions under this and all other plans of the employer for 6 months after receipt of the distribution.

A participant who receives a distribution of elective deferrals in calendar year 2001 on account of hardship shall be prohibited from making elective deferrals and employee contributions under this and all other plans of the employer for the period specified in the provisions of the plan relating to suspension of elective deferrals that were in effect prior to this amendment.

7.5 ***Survivor Benefits.*** If a Participant dies before the start of retirement benefit payments, the full current value of the Accumulation Account(s) is payable to the Beneficiary(ies) under the options offered by the Funding Vehicle. Distribution of Survivor Benefits is subject to the required distribution rules set forth in Code Section 401(a)(9).

7.6 ***Application for Benefits.*** Procedures for receipt of benefits are initiated by writing directly to the Fund Sponsor. Benefits will be payable by the Fund Sponsor upon receipt of a satisfactorily completed application for benefits and supporting documents. The necessary forms will be provided to the Participant, the surviving spouse, or the Beneficiary(ies) by the Fund Sponsor.

7.7 ***Minimum Distribution Requirements.*** The requirements of this section shall apply to any distribution of a Participant's vested Accumulation Account(s) and will take precedence over any inconsistent provisions of this Plan except as otherwise provided in the "Joint and Survivor Annuity Requirements" section of Article VII. Distributions in all cases will be made in accordance with Code Section 401(a)(9) and the regulations promulgated thereunder, including the minimum distribution incidental benefit requirement of Section 1.401(a)(9)-2 of the proposed regulations.

(1) Limits on Settlement Options. Distributions may only be made over one of the following periods (or a combination thereof): i) the life of the Participant; ii) the life of the Participant and a designated Beneficiary(ies); iii) a period certain not extending beyond the life expectancy of the Participant; or iv) a period certain not extending beyond the joint and last survivor life expectancy of the Participant and designated Beneficiary(ies).

(2) Required Beginning Date. The entire interest of a Participant must be distributed or begin to be distributed no later than the Participant's Required Beginning Date. The Required Beginning Date of a Participant is April 1 of the calendar year following the calendar year in which the Participant attains age 70 1/2 or, if later, April 1 of the calendar year following the calendar year that the Participant retires.

a) Any Participant attaining age 70-1/2 in years after 1995 may elect by April 1 of the calendar year following the year in which the Participant attained age 70-1/2 (or by December 31, 1997 in the case of a Participant attaining age 70-1/2 in 1996) to defer distributions until the calendar year following the calendar year in which the Participant retires. If no such election is made, the Participant will begin receiving distributions by the April 1 of the calendar year following the year in which the Participant attained age 70-1/2 (or December 31, 1997 in the case of a Participant attaining age 70-1/2 in 1996).

b) Any Participant attaining Age 70-1/2 in years prior to 1997 may elect to stop distributions and recommence by the April 1 of the calendar year following the year in which the Participant retires. There is no new annuity starting date upon recommencement.

c) The preretirement age 70-1/2 distribution date is eliminated with respect to Participants who reach age 70-1/2 after December 31, 1999. The preretirement age 70-1/2 distribution option is an optional distribution form of benefit under which benefits payable in a particular distribution form (including any modification that may be elected after benefit commencement) commence at a time during the period that begins on or after January 1 of the calendar year in which a Participant attains age 70-1/2 and ends April 1 of the immediately following calendar year.

(3) Death Distribution Provisions. Upon the death of the Participant, the following distribution provisions will take effect:

(a) If the Participant dies after distribution of his or her vested Accumulation Account has begun, the remaining portion of the vested Accumulation Account(s) will continue to be distributed at least as rapidly as under the method of distribution being used before the Participant's death;

(b) If the Participant dies before distribution of his or her vested Accumulation Account(s) begins, distribution of the Participant's entire vested Accumulation Account(s) shall be completed by December 31 of the calendar year containing the fifth anniversary of the Participant's death except where an election is made to receive distributions in accordance with (i) or (ii) below:

(i) If any portion of the Participant's vested Accumulation Account is payable to a designated Beneficiary(ies), distributions may be made over a period certain not greater than the life expectancy of the designated Beneficiary(ies) commencing by December 31 of the calendar year immediately following the calendar year in which the Participant died;

(ii) If the designated Beneficiary(ies) is the Participant's surviving spouse, the date distributions are required to begin in accordance with (1) above must not be earlier than the later of (a) December 31 of the calendar year immediately following the calendar year in which the Participant died and (b) December 31 of the calendar year in which the Participant would have attained age 70 1/2.

If the Participant has not made an election pursuant to this section by the time of his or her death, the Participant's designated Beneficiary(ies) must elect the method of distribution no later than the earlier of (1) December 31 of the calendar year in which distributions would be required to begin under this section, or (2) December 31 of the calendar year that contains the fifth anniversary of the date of death of the Participant. If the Participant has no designated Beneficiary(ies), or if the designated Beneficiary(ies) does not elect a method of distribution, distribution of the Participant's entire vested Accumulation Account(s) must be completed by December 31 of the calendar year containing the fifth anniversary of the Participant's death.

Section 1. Minimum Distribution Requirements.

1.1 Effective Date. The provisions of this article will apply for purposes of determining required minimum distributions for calendar years beginning with the 2003 calendar year.

1.2. Precedence. The requirements of this article will take precedence over any inconsistent provisions of the Plan.

1.3. Requirements of Treasury Regulations Incorporated. All distributions required under this article will be determined and made in accordance with the Treasury regulations under section 401(a)(9) of the Internal Revenue Code.

1.4. TEFRA Section 242(b)(2) Elections. Notwithstanding the other provisions of this article, other than section 1.3, distributions may be made under a designation made before January 1, 1984, in accordance with section 242(b)(2) of the Tax Equity and Fiscal Responsibility Act (TEFRA) and the provisions of the plan that relate to section 242(b)(2) of TEFRA.

Section 2. Time and Manner of Distribution.

2.1. Required Beginning Date. The participant's entire interest will be distributed, or begin to be distributed, to the participant no later than the participant's required beginning date.

2.2. Death of Participant Before Distributions Begin. If the participant dies before distributions begin, the participant's entire interest will be distributed, or begin to be distributed, no later than as follows:

(a) If the participant's surviving spouse is the participant's sole designated beneficiary, then, except as provided in the plan, distributions to the surviving spouse will begin by December 31 of the calendar year immediately following the calendar year in which the participant died, or by December 31 of the calendar year in which the participant would have attained age 70½, if later.

(b) If the participant's surviving spouse is not the participant's sole designated beneficiary, then, except as provided in the Plan, distributions to the designated beneficiary will begin by December 31 of the calendar year immediately following the calendar year in which the participant died.

(c) If there is no designated beneficiary as of September 30 of the year following the year of the participant's death, the participant's entire interest will be distributed by December 31 of the calendar year containing the fifth anniversary of the participant's death.

(d) If the participant's surviving spouse is the participant's sole designated beneficiary and the surviving spouse dies after the participant but before distributions to the surviving spouse begin, this section 2.2, other than section 2.2(a), will apply as if the surviving spouse were the participant.

For purposes of this section 2.2 and section 5, distributions are considered to begin on the participant's required beginning date (or, if section 2.2(d) applies, the date distributions are required to begin to the surviving spouse under section 2.2(a)). If annuity payments irrevocably commence to the participant before the participant's required beginning date (or to the participant's surviving spouse before the date distributions are required to begin to the surviving spouse under section 2.2(a)), the date distributions are considered to begin is the date distributions actually commence.

2.2A Election to Allow Participants or Beneficiaries to Elect 5-Year Rule. Participants or beneficiaries may elect on an individual basis whether the 5-year rule or the life expectancy rule in the plan applies to distributions after the death of a participant who has a designated beneficiary. The election must be made no later than the earlier of September 30 of the calendar year in which distribution would be required to begin under the plan, or by September 30 of the calendar year which contains the fifth anniversary of the participant's (or, if applicable, surviving spouse's) death. If neither the participant nor beneficiary makes an election under this paragraph, distributions will be made in accordance with the plan.

2.3. Form of Distribution. Unless the participant's interest is distributed in the form of an annuity purchased from an insurance company or in a single sum on or before the required beginning date, as of the first distribution calendar year distributions will be made in accordance with sections 3, 4 and 5 of this article. If the participant's interest is distributed in the form of an annuity purchased from an insurance company, distributions thereunder will be made in accordance with the requirements of section 401(a)(9) of the Code and the Treasury regulations. Any part of the participant's interest which is in the form of an individual account described in section 414(k) of the Code will be distributed in a manner satisfying the requirements of section 401(a)(9) of the Code and the Treasury regulations that apply to individual accounts.

Section 3. Determination of Amount to be Distributed Each Year.

3.1. General Annuity Requirements. If the participant's interest is paid in the form of annuity distributions under the plan, payments under the annuity will satisfy the following requirements:

(a) the annuity distributions will be paid in periodic payments made at intervals not longer than one year;

(b) the distribution period will be over a life (or lives) or over a period certain not longer than the period described in section 4 or 5;

(c) once payments have begun over a period certain, the period certain will not be changed even if the period certain is shorter than the maximum permitted;

(d) payments will either be nonincreasing or increase only as follows:

(1) by an annual percentage increase that does not exceed the annual percentage increase in a cost-of-living index that is based on prices of all items and issued by the Bureau of Labor Statistics;

(2) to the extent of the reduction in the amount of the participant's payments to provide for a survivor benefit upon death, but only if the beneficiary whose life was being used to determine the distribution period described in section 4 dies or is no longer the participant's beneficiary pursuant to a qualified domestic relations order within the meaning of section 414(p);

(3) to provide cash refunds of employee contributions upon the participant's death; or

(4) to pay increased benefits that result from a plan amendment.

3.2. Amount Required to be Distributed by Required Beginning Date. The amount that must be distributed on or before the participant's required beginning date (or, if the participant dies before distributions begin, the date distributions are required to begin under section 2.2(a) or (b)) is the payment that is required for one payment interval. The second payment need not be made until the end of the next payment interval even if that payment interval ends in the next calendar year. Payment intervals are the periods for which payments are received, e.g., bi-monthly, monthly, semi-annually, or annually. All of the participant's benefit accruals as of the last day of the first distribution calendar year will be included in the calculation of the amount of the annuity payments for payment intervals ending on or after the participant's required beginning date.

3.3. Additional Accruals After First Distribution Calendar Year. Any additional benefits accruing to the participant in a calendar year after the first distribution calendar year will be distributed beginning with the first payment interval ending in the calendar year immediately following the calendar year in which such amount accrues.

Section 4. Requirements For Annuity Distributions That Commence During Participant's Lifetime.

4.1. Joint Life Annuities Where the Beneficiary Is Not the Participant's Spouse. If the participant's interest is being distributed in the form of a joint and survivor annuity for the joint lives of the participant and a nonspouse beneficiary, annuity payments to be made on or after the participant's required beginning date to the designated beneficiary after the participant's death must not at any time exceed the applicable percentage of the annuity payment for such period that would have been payable to the participant using the table set forth in Q&A-2 of section 1.401(a)(9)-9 of the Treasury regulations. If the form of distribution combines a joint and survivor annuity for the joint lives of the participant and a nonspouse beneficiary and a period certain annuity, the requirement in the preceding sentence will apply to annuity payments to be made to the designated beneficiary after the expiration of the period certain.

4.2. Period Certain Annuities. Unless the participant's spouse is the sole designated beneficiary and the form of distribution is a period certain and no life annuity, the period certain for an annuity distribution commencing during the participant's lifetime may not exceed the applicable distribution period for the participant under the Uniform Lifetime Table set forth in section 1.401(a)(9)-9 of the Treasury regulations for the calendar year that contains the annuity starting date. If the annuity starting date precedes the year in which the participant reaches age 70, the applicable distribution period for the participant is the distribution period for age 70 under the Uniform Lifetime Table set forth in section 1.401(a)(9)-9 of the Treasury regulations plus the excess of 70 over the age of the participant as of the participant's birthday in the year that contains the annuity starting date. If the participant's spouse is the participant's sole designated beneficiary and the form of distribution is a period certain and no life annuity, the period certain may not exceed the longer of the participant's applicable distribution period, as determined under this section 4.2, or the joint life and last survivor expectancy of the participant and the participant's spouse as determined under the Joint and Last

Survivor Table set forth in section 1.401(a)(9)-9 of the Treasury regulations, using the participant's and spouse's attained ages as of the participant's and spouse's birthdays in the calendar year that contains the annuity starting date.

Section 5. Requirements For Minimum Distributions Where Participant Dies Before Date Distributions Begin.

5.1. Participant Survived by Designated Beneficiary. Except as provided in the Plan, if the participant dies before the date distribution of his or her interest begins and there is a designated beneficiary, the participant's entire interest will be distributed, beginning no later than the time described in section 2.2(a) or (b), over the life of the designated beneficiary or over a period certain not exceeding:

(a) unless the annuity starting date is before the first distribution calendar year, the life expectancy of the designated beneficiary determined using the beneficiary's age as of the beneficiary's birthday in the calendar year immediately following the calendar year of the participant's death; or

(b) if the annuity starting date is before the first distribution calendar year, the life expectancy of the designated beneficiary determined using the beneficiary's age as of the beneficiary's birthday in the calendar year that contains the annuity starting date.

5.2. No Designated Beneficiary. If the participant dies before the date distributions begin and there is no designated beneficiary as of September 30 of the year following the year of the participant's death, distribution of the participant's entire interest will be completed by December 31 of the calendar year containing the fifth anniversary of the participant's death.

5.3. Death of Surviving Spouse Before Distributions to Surviving Spouse Begin. If the participant dies before the date distribution of his or her interest begins, the participant's surviving spouse is the participant's sole designated beneficiary, and the surviving spouse dies before distributions to the surviving spouse begin, this section 5 will apply as if the surviving spouse were the participant, except that the time by which distributions must begin will be determined without regard to section 2.2(a).

Section 6. Definitions.

6.1. Designated beneficiary. The individual who is designated as the beneficiary under the plan and is the designated beneficiary under section 401(a)(9) of the Internal Revenue Code and section 1.401(a)(9)-4 of the Treasury regulations.

6.2. Distribution calendar year. A calendar year for which a minimum distribution is required. For distributions beginning before the participant's death, the first distribution calendar year is the calendar year immediately preceding the calendar year which contains the participant's required beginning date. For distributions beginning after the participant's death, the first distribution calendar year is the calendar year in which distributions are required to begin pursuant to section 2.2.

6.3 Life expectancy. Life expectancy as computed by use of the Single Life Table in section 1.401(a)(9)-9 of the Treasury regulations.

6.4. Required beginning date. The date specified in Article VII of the plan.

7.8 ***Commencement of Benefits***. Unless the Participant elects otherwise, distribution of benefits will begin no later than the 60th day after the latest of the close of the Plan Year in which:

(a) the Participant attains age 65,

(b) occurs the 10th anniversary of the year in which the Participant commenced participation in the Plan; or,

(c) the Participant terminates service with the Institution.

Notwithstanding the foregoing, the failure of a Participant and spouse to consent to a distribution while a benefit is immediately distributable shall be deemed to be an election to defer commencement of payment of any benefit sufficient to satisfy this section.

A Participant who elects to defer receipt of benefits may not do so to the extent that he or she is creating a death benefit that is more than incidental.

7.9 ***Joint and Survivor Annuity Requirements.*** The provisions of this section shall apply to any Participant who is credited with one Hour of Service at the Institution on or after August 23, 1984. However, any Participant in this Plan not receiving benefits as of August 23, 1984 may elect to have benefits paid in a manner described herein.

Pre-retirement Spousal Entitlement. Unless a Qualified Election is made, if a married Participant dies before the date benefits commence, the Participant's vested Accumulation Account shall be applied toward the purchase of a Qualified Pre-retirement Survivor Annuity. The surviving spouse may elect to have such annuity distributed within a reasonable period after the Participant's death.

Notification of Pre-retirement Spousal Entitlement. In the case of a Qualified Pre-retirement Survivor Annuity, The Institution shall provide each Participant, within the applicable period for such Participant, a written explanation of the Qualified Pre-retirement Survivor Annuity in such terms and in such manner as would be comparable to the explanation provided for meeting the requirements for notification of a Qualified Joint and Survivor Annuity.

The applicable period for a Participant is whichever of the following periods ends last: (a) the period beginning with the first day of the Plan Year in which the Participant attains age 32 and ending with the close of the Plan Year preceding the Plan Year in which the Participant attains age 35; (b) a reasonable period after an Eligible Employee becomes a Participant; or (c) a reasonable period ending after this section first applies to the Participant. Notwithstanding the foregoing, notice must be provided within a reasonable period ending after separation of service in the case of a Participant who separates from service before attaining age 35.

For applying the preceding paragraph, a reasonable period ending after the enumerated events is the end of the two-year period beginning one year before the date the applicable event occurs, and ending one year after that date. For a Participant who separates from service before the Plan Year in which age 35 is attained, notice should be provided within the two-year period beginning one year before separation and ending one year after separation. If such a Participant thereafter returns to employment with the Institution, the applicable period for such Participant shall be redetermined.

Post-retirement Spousal Entitlement. Unless a Qualified Election is made within the 90-day period ending on the date benefits commence, a married Participant's vested Accumulation Account will be paid in the form of a Qualified Joint and Survivor Annuity and an unmarried Participant's vested Accumulation Account will be paid in the form of a single life annuity.

Notification of Post-retirement Spousal Entitlement. In the case of a Qualified Joint and Survivor Annuity, The Institution shall no less than 30 days and no more than 90 days before the date benefits commence provide each Participant a written explanation of: (a) the terms and conditions of a Qualified Joint and Survivor Annuity; (b) the Participant's right to make and the effect of an election to waive the Qualified Joint and Survivor Annuity form of benefit; (c) the rights of a Participant's spouse; and (d) the right to waive a Qualified Joint and Survivor Annuity. A Participant may elect with spousal consent to waive any requirement that the written explanation be provided at least 30 days prior to the annuity starting date if the distribution commences more than 7 days after such explanation is provided.

If the Participant, after receiving the explanation, elects a form of benefit and the spouse consents to the benefit (if necessary), the Plan will not fail to satisfy the requirements of this paragraph merely because the annuity starting date is less than 30 days after the written explanation is given to the Participant provided (1) the explanation is provided prior to the annuity starting date; (2) the distribution does not commence before the expiration of the 7-day period that begins the day after the explanation is provided to the Participant; and (3) prior to the expiration of the 7-day period, or the annuity starting date, if later, the Participant may revoke the distribution election

7.10 ***Repurchase.*** A Participant's accumulations in TIAA-CREF Retirement Annuities may be received in a single sum through "repurchase" if certain conditions are met. If a Participant in this Plan terminates employment with the Institution and requests that TIAA-CREF repurchase his or her Retirement Annuities, the Institution will approve such repurchase if, at the time of the request, all of the following conditions apply:

1. The total TIAA Traditional Annuity accumulation in all Retirement Annuities owned by the Participant is not over $2,000.

2. The Participant does not have a TIAA Transfer Payout Annuity (TPA) in effect.

Amounts paid to the Participant on repurchase will be in full satisfaction of the Participant's and his or her spouse's rights to retirement or survivor benefits from TIAA-CREF attributable to such amounts.

7.11 ***Loans.*** Subject to the terms of the Funding Vehicles, loans are available to Participants before the commencement of benefit payments.

Effective for plan loans made after December 31, 2001, plan provisions prohibiting loans to any owner-employee or shareholder-employee shall cease to apply.

7.12 ***Direct Rollovers.*** This section applies to distributions made on or after January 1, 1993. Notwithstanding any provision of the Plan to the contrary that would otherwise limit a distributee's election under this section, a distributee may elect, at the time and in the manner prescribed by the plan administrator, to have any portion of an eligible rollover distribution paid directly to an eligible retirement plan specified by the distributee in a direct rollover.

For this section, the following definitions apply:

1) Eligible rollover distribution: An eligible rollover distribution is any distribution of all or any portion of the balance to the credit of the distributee, except that an eligible rollover distribution does not include: any distribution that is one of a series of substantially equal periodic payments (not less frequently than annually) made for the life (or life expectancy) of the distributee or the joint lives (or joint life expectancies) of the distributee and the distributee's designated beneficiary, or for a specified period of ten years or more; any distribution to the extent such distribution is required under Code Section 401(a)(9); and the portion of any distribution that is not includable in gross income (determined without regard to the exclusion for net unrealized appreciation with respect to employer

securities) ; and, for any distributions after December 31, 1999, any hardship distributions described in Code Section 401(k)(2)(B)(i)(IV).

2) Eligible retirement plan: An eligible retirement plan is an individual retirement account described in Code Section 408(a), an individual retirement annuity described in section 408(b) of the Code, or a tax-sheltered annuity plan described in Code Section 403(b), that accepts the distributee's eligible rollover distribution. However, in the case of an eligible rollover distribution to the surviving spouse, an eligible retirement plan is an individual retirement account or individual retirement annuity.

3) Distributee: A distributee includes an employee or former employee. In addition, the employee's or former employee's surviving spouse and the employee's or former employee's spouse or former spouse who is the alternate payee under a qualified domestic relations order, as defined in section 414(p) of the Code, are distributees with regard to the interest of the spouse or former spouse.

4) Direct rollover: A direct rollover is a payment by the Plan to the eligible retirement plan specified by the distributee.

Effective Date. This section shall apply to distributions made after December 31, 2001.

Modification of Definition of Eligible Retirement Plan. For purposes of the direct rollover provisions of the plan, if applicable, an eligible retirement plan shall also mean an annuity contract described in section 403(b) of the Code and an eligible plan under section 457(b) of the Code which is maintained by a state, political subdivision of a state, or any agency or instrumentality of a state or political subdivision of a state and which agrees to separately account for amounts transferred into such plan from this plan. The definition of eligible retirement plan shall also apply in the case of a distribution to a surviving spouse, or to a spouse or former spouse who is the alternate payee under a qualified domestic relations order, as defined in section 414(p) of the Code.

Modification of definition of eligible rollover distribution to exclude hardship distributions. For purposes of the direct rollover provisions in the Plan, any amount that is distributed on account of hardship shall not be an eligible rollover distribution and the distributee may not elect to have any portion of such a distribution paid directly to an eligible retirement plan.

Modification of Definition of Eligible Rollover Distribution to Include After-Tax Employee Contributions. For purposes of the direct rollover provisions in the plan, if applicable, a portion of a distribution shall not fail to be an eligible rollover distribution merely because the portion consists of after-tax employee contributions which are not includible in gross income. However, such portion may be paid only to an individual retirement account or annuity described in section 408(a) or (b) of the Code, or to a qualified defined contribution plan described in section 401(a) or 403(a) of the Code that agrees to separately account for amounts so transferred, including separately accounting for the portion of such distribution which is includible in gross income and the portion of such distribution which is not so includible.

7.13 ***Distribution Upon Severance From Employment.***

1. Effective Date. This section shall apply for distributions and severances from employment occurring after December 31, 2001.

2. New Distributable Event. A participant's elective deferrals, qualified nonelective contributions, qualified matching contributions, and earnings attributable to these contributions shall be distributed on account of the participant's severance from employment. However, such a distribution shall be subject to the other provisions of the plan regarding distributions, other than provisions that require a separation from service before such amounts may be distributed.

Article VIII: Administration

8.1 ***Plan Administrator.*** The Institution, located at 201 Charles St., Providence, RI 02904, is the administrator of this Plan and has designated the Chief Financial Officer to be responsible for the operation of the Plan.

8.2 ***Authority of the Institution.*** The Institution has all the powers and authority expressly conferred upon it herein and further shall have discretionary and final authority to determine all questions concerning eligibility and contributions under the Plan, to interpret and construe all terms of the Plan, including any uncertain terms, and to determine any disputes arising under and all questions concerning administration of the Plan. Any determination made by the Institution shall be given deference, if it is subject to judicial review, and shall be overturned only if it is arbitrary or capricious. In exercising these powers and authority, the Institution will always exercise good faith, apply standards of uniform application, and refrain from arbitrary action. The Institution may employ attorneys, agents, and accountants as it finds necessary or advisable to assist it in carrying out its duties. The Institution will be a "named fiduciary" as that term is defined in section 402(a)(2) of the Employee Retirement Income Security Act for determining eligibility and computing and making Plan Contributions. The Institution, by action of its Board, may designate a person or persons other than the Institution to carry out any of its powers, authority, or responsibilities. Any delegation will be set forth in writing.

8.3 ***Action of the Institution.*** Any act authorized, permitted, or required to be taken by the Institution under the Plan, which has not been delegated in accordance with the "Authority of the Institution" section of Article VIII, may be taken by a majority of the members of the Board, either by vote at a meeting, or in writing without a meeting. All notices, advice, directions, certifications, approvals, and instructions required or authorized to be given by the Institution under the Plan will be in writing and signed by either (i) a majority of the members of the Board, or by any member or members as may be designated by an instrument in writing, signed by all members, as having authority to execute the documents on its behalf, or ii) a person who becomes authorized to act for the Institution in accordance with the provisions of the "Authority of the Institution" section of Article VIII. Any action taken by the Institution that is authorized, permitted, or required under the Plan and is in accordance with Funding Vehicles contractual obligations are final and binding upon the Institution, and all persons who have or who claim an interest under the Plan, and all third parties dealing with the Institution.

8.4 ***Indemnification.*** The Institution will satisfy any liability actually and reasonably incurred by any members of the Board or any person to whom any power, authority or responsibility of the Institution is delegated pursuant to the "Authority of the Institution" section of Article VIII (other than the Fund Sponsors). These liabilities include expenses, attorney's fees, judgments, fines, and amounts paid in connection with any threatened, pending or completed action suit or proceeding related to the exercise (or failure to exercise) of this authority. This is in addition to whatever rights of indemnification exist under the articles of incorporation, regulations or by-laws of the Institution, under any provision of law, or under any other agreement.

8.5 ***Investment Manager.*** To the extent that Participants allocate contributions to the TIAA Real Estate Account, TIAA will be the investment manager (within the meaning of Section 3(38) of ERISA) with respect to the account balance in the TIAA Real Estate Account. TIAA acknowledges that it is a fiduciary with respect to such assets.

8.6 ***No Reversion.*** Under no circumstances or conditions will any Plan Contributions of the Institution revert to, be paid to, or inure to the benefit of, directly or indirectly, the Institution. However, if Plan

Contributions are made by the Institution by mistake of fact, these amounts may be returned to the Institution within one year of the date that they were made.

8.7 ***Statements.*** The Institution will determine the total amount of contributions to be made for each Participant from time to time on the basis of its records and in accordance with the provisions of this Article. When each contribution payment is made by the Institution, the Institution will prepare a statement showing the name of each Participant and the portion of the payment that is made for him or her, and will deliver the statement to the appropriate Fund Sponsors with the contributions payment. Any determination by the Institution, evidenced by a statement delivered to the Fund Sponsors, is final and binding on all Participants, their Beneficiaries or contingent annuitants, or any other person or persons claiming an interest in or derived from the contribution's payment.

8.8 ***Reporting.*** Records for each Participant under this Plan are maintained on the basis of the Plan Year. At least once a year the Fund Sponsors will send each Participant a report summarizing the status of his or her Accumulation Account(s) as of December 31 each year. Similar reports or illustrations may be obtained by a Participant upon termination of employment or at any other time by writing directly to the Fund Sponsors.

8.9 ***Calendar Year Election.*** For purposes of determining the highly compensated employees for the Plan Year, the Institution may make a calendar year election in accordance with the provisions of the Code and regulations issued thereunder.

Article IX: Amendment and Termination

9.1 ***Amendment and Termination.*** While it is expected that this Plan will continue indefinitely, the Institution reserves the right to amend, otherwise modify, or terminate the Plan, or to discontinue any further contributions or payments under the Plan, by resolution of its Board. In the event of a termination of the Plan or complete discontinuance of Plan Contributions, the Institution will notify all Participants of the termination. As of the date of complete or partial termination, all Accumulation Accounts will become nonforfeitable to the extent that benefits are accrued.

9.2 ***Limitation.*** Notwithstanding the provisions of the "Amendment and Termination" section of Article IX, the following conditions and limitations apply:

(a) No amendment will be made which will operate to recapture for the Institution any contributions previously made under this Plan. However, Plan Contributions made based on a mistake of fact may be returned to the Institution within one year of the date on which the Plan Contribution was made.

(b) No amendment will deprive, take away, or alter any then accrued right of any Participant insofar as Plan Contributions are concerned.

Article X: Miscellaneous

10.1 ***Plan Non-Contractual.*** Nothing in this Plan will be construed as a commitment or agreement on the part of any person to continue his or her employment with the Institution, and nothing in this Plan will be construed as a commitment on the part of the Institution to continue the employment or the rate of compensation of any person for any period, and all employees of the Institution will remain subject to discharge to the same extent as if the Plan had never been put into effect.

10.2 ***Claims of Other Persons.*** The provisions of the Plan will not be construed as giving any Participant or any other person, firm, or corporation, any legal or equitable right against the Institution, its officers, employees, or directors, except the rights as specifically provided for in this Plan or created in accordance with the terms and provisions of this Plan.

10.3 ***Merger, Consolidation, or Transfers of Plan Assets.*** In the event of a merger or consolidation with, or transfer of assets to, another plan, each Participant will receive immediately after such action a benefit under the plan that is equal to or greater than the benefit he or she would have received immediately before a merger, consolidation, or transfer of assets or liabilities.

10.4 ***Contracts - Incorporation by Reference.*** The terms of each Funding Vehicle issued to a Participant in accordance with the provisions of Article V are a part of the Plan as if fully set forth in the plan document and the provisions of each are incorporated by reference into the Plan. The terms of the Funding Vehicle control in any case where there is any inconsistency or ambiguity between the terms of the Plan and the terms of the Funding Vehicle.

10.5 ***Non-Alienation of Retirement Rights or Benefits.*** No benefit under the Plan may, at any time, be subject in any manner to alienation, encumbrance, the claims of creditors or legal process to the fullest extent permitted by law. No person will have power in any manner to transfer, assign, alienate, or in any way encumber his or her benefits under the Plan, or any part thereof, and any attempt to do so will be void and of no effect. However, this Plan will comply with any judgment, decree or order which establishes the rights of another person to all or a portion of a Participant's benefit under this Plan to the extent that it is a "qualified domestic relations order" under section 414(p) of the Code.

10.6 ***Claims Review.***

Effective Date. This section shall be effective as of January 1, 2002.

(a) All claims for benefits under the Plan shall be filed in writing with the Plan Administrator.

(b) If the claim is wholly or partially denied, the Plan Administrator shall furnish the claimant written notice of its decision within ninety (90) days after receipt of the claim by the Plan Administrator. The notice of denial shall set forth in a manner calculated to be understood by the claimant:

(i) The specific reason or reasons for the denial;

(ii) Specific references to pertinent Plan provisions on which the denial is based;

(iii) A description of any additional material or information necessary for the claimant to perfect a claim and an explanation of why such material or information is necessary; and

(iv) An explanation of the Plan's claims review procedure.

(c) If the Plan Administrator determines that an extension of time will be necessary to process the claim, written notice of the extension shall be provided to the claimant prior to the expiration of the ninety-day period. The length of the extension shall not exceed ninety days.

The extension notice shall specify the circumstances requiring the extension and the anticipated date for which the Plan Administrator wishes to render a decision. The claimant shall have at least forty-five days within which to provide the specific information. If the Plan Administrator files an extension due to a claimant's failure to submit information necessary to decide a claim, the period for making the determination shall be tolled from the date the extension notice is sent to the claimant until the date the claimant responds to the request for the additional information.

(d) Within sixty (60) days after the receipt of a notice of denial, the claimant may file with the Plan Administrator a written request for a full review of the Plan Administrator's decision. The review on appeal shall not afford deference to the initial adverse benefit determination and shall be conducted by the appropriate named fiduciary who is neither the individual who made the adverse benefit determination nor the subordinate of such individual.

The claimant shall have the opportunity to submit written comments, documents, records and other information relating to the claim for benefits. Upon request of the claimant and free of charge, reasonable access to, and copies of, all documents, records and other information relevant to the claim shall be made available to the claimant. The review shall take into account all comments, documents, records and other information submitted without regard to whether such information was submitted or considered in the initial benefit determination.

If the benefit application is denied upon review, the named fiduciary shall provide a written explanation of its adverse determination explaining the specific reason(s) for the adverse determination, specific references to the Plan provisions on which the denial is based, a statement that the claimant is entitled to receive documents relevant to your claim, upon request and free of charge, and a statement describing any voluntary appeal procedures offered by the Plan and the right to receive information about those procedures, and a statement of the claimant's right to bring an action under Section 502(a) of ERISA.

(e) The decision of the review shall be made within a reasonable period of time, and not later than sixty (60) days after the receipt of the request for review, unless special circumstances require an extension of time for processing. If an extension is required, the claimant shall be provided a notice of the extension prior to the expiration of the sixty-day period, of which such notice shall satisfy the requirements outlined in Section 10.6(c) above.

Article XI: Top Heavy Rules

11.01 *Modification of Top-Heavy Rules*

1. Effective Date. This section shall apply for purposes of determining whether the plan is a top-heavy plan under section 416(g) of the Code for plan years beginning after December 31, 2001, and whether the plan satisfies the minimum benefits requirements of section 416(c) of the Code for such years.

2. Determination of Top-Heavy Status.

2.1 Key Employee. Key employee means any employee or former employee (including any deceased employee) who at any time during the plan year that includes the determination date was an officer of the employer having annual compensation greater than $130,000 (as adjusted under section 416(i)(1) of the Code for plan years beginning after December 31, 2002), a 5-percent owner of the employer, or a 1-percent owner of the employer having annual compensation of more than $150,000. For this purpose, annual compensation means compensation within the meaning of section 415(c)(3) of the Code. The determination of who is a key employee will be made in accordance with section

416(i)(1) of the Code and the applicable regulations and other guidance of general applicability issued thereunder.

2.2 Determination of Present Values and Amounts. This section 2.2 shall apply for purposes of determining the present values of accrued benefits and the amounts of account balances of employees as of the determination date.

2.2.1 Distributions During Year Ending on the Determination Date. The present values of accrued benefits and the amounts of account balances of an employee as of the determination date shall be increased by the distributions made with respect to the employee under the plan and any plan aggregated with the plan under section 416(g)(2) of the Code during the 1-year period ending on the determination date. The preceding sentence shall also apply to distributions under a terminated plan which, had it not been terminated, would have been aggregated with the plan under section 416(g)(2)(A)(i) of the Code. In the case of a distribution made for a reason other than severance from employment, death, or disability, this provision shall be applied by substituting 5-year period for 1-year period.

2.2.2 Employees not Performing Services During Year Ending on the Determination Date. The accrued benefits and accounts of any individual who has not performed services for the employer during the 1-year period ending on the determination date shall not be taken into account.

3. Minimum Benefits. For purposes of satisfying the minimum benefit requirements of section 416(c)(1) of the Code and the plan, in determining years of service with the employer, any service with the employer shall be disregarded to the extent that such service occurs during a plan year when the plan benefits (within the meaning of section 410(b) of the Code) no key employee or former key employee.

Employer Identification Number: 05-0264797
Plan Number: 002

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(Signature of Plan Administrator)

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Date

#1009615

American Mathematical Society
Committee on Education Meeting
October 23-24, 2009
Washington DC

Summary Report

The Committee discussed a number of issues related to mathematics education. Guests of the Committee included representatives from the National Science Foundation, U.S. Department of Education, Intel Foundation, Council of Chief State School Officers, Mathematical Association of America, National Science Board, and the Conference Board of Mathematical Sciences. The meeting was well attended, with over 60 participants, including 30 chairs and representatives of mathematical sciences department.

Mathematicians + Teachers = Intel Math
Wendy Hawkins (Executive Director, Intel Foundation) gave a brief history of Intel and its Education Initiative. Since its founding forty years ago, Intel has worked to: improve teaching and learning; advance math, science and engineering education and research; and advocate for educational excellence worldwide. It does this through programs that : provide professional development to teachers and technology access to underserved youth; recognize K-12 schools for implementing innovative math and science programs; and recognize the work of talented students through fairs and competitions.

Hawkins discussed Intel's latest project created with the help of Dr. Ken Gross (University of Vermont) and funded by the U.S. Department of Education's Math Science Partnership. This 80 hour professional development course for elementary and middle school teachers is called *Intel Math*. The program focuses on teacher content knowledge (90% versus 10% on pedagogy) and emphasizes deepening their conceptual understanding of mathematics.

The program is designed to be co-taught by a mathematician and a teacher. In order to encourage teachers to participate, the program works with state or district departments of education to provide compensation. Since 2007, the program has trained 720 teachers in Massachusetts, California, New Jersey and Arizona.

National Science Board's STEM Innovators
Matthew Wilson (AAAS Science & Technology Fellow, National Science Board) provided background information on the National Science Board, including its statutory obligations of being the policy making body for the National Science Foundation and serving as a body of advisors to both the President and to Congress on broad, national policy issues related to science and engineering research and education.

In 2007, the National Science Board released its *National Action Plan for Addressing the Critical Needs of the U.S. Science, Technology, Engineering and Mathematics (STEM) Education System*. This action plan examined teacher and workforce issues and focused on creating a coherent STEM education system, but it did not address the needs of future STEM innovators. Wilson presented statistics on the lack of development opportunities for talented STEM students in the U.S. With this in mind, the Board has launched a project entitled "Preparing the Next Generation of STEM Innovators: Identifying and Developing our Nation's Human Capitol." The goal of the project is to develop recommendations for the NSF and the federal government on identifying and developing highly talented and motivated students.

A panel of experts was convened in August 2009 to begin work on this project. Wilson highlighted a number of emerging themes that came out of the two-day panel discussion and summarized their findings. The Board will present the panel's findings and their recommendations in a report to be published in spring 2010.

Mathematics Initiatives at the U.S. Department of Education

The Mathematics and Science Partnership (MSP) program is charged with increasing student performance in math and science by enhancing the content knowledge and teaching skills of classroom teachers. Pat Johnson (Team Leader, Mathematics and Science Partnership, U.S. Department of Education) summarized MSP project participation and funding levels, and discussed their characteristics and evaluation designs.

Johnson then discussed the Administration's new "Race to the Top" competition for states to win $4.35 billion in grants to support education reform and innovation. Additional grants will also be available through other programs for a total of some $10 billion for states and districts making real, comprehensive reform in math and science education.

Two rounds of awards for the "Race to the Top" competition will begin in November 2009 with applications that must address four central areas of reform: 1) development of rigorous college and career-ready standards and high quality assessments that are valid and reliable for all students; 2) establishment of preK-college and career systems that track progress and foster improvement; 3) improvement of teacher effectiveness and the equitable distribution of high quality teachers; and 4) intensive support for lowest performing schools.

Role of Professional Societies in Achieving Widespread Implementation of Good Classroom Practice

Linda Slakey (Director, Division of Undergraduate Education, National Science Foundation) shared her sense of the challenges in undergraduate STEM education. She then talked about the research available on how students learn and what constitutes an effective teaching model. In particular, she discussed the 'student centered practice' of teaching. She also discussed how learning differs from field to field and how many faculty are unaware of new approaches to teaching or are resistant to using new methods.

Slakey went on to discuss 'student centered practice' in more detail and asked for perspectives from attendees on the need to move from passive to engaged pedagogy, on the state of their local environments and on the status of mathematics as a field. She engaged the audience to discuss these questions so that she would have an idea from their perspective of where NSF-DUE can help move student learning along the spectrum. She also talked about how professional societies are a critical leverage point in getting their members involved in the shift to engaged pedagogy.

Common Core Standards Initiative: Ensuring All Students are College and Career Ready

Scott Montgomery (Deputy Executive Director, Council of Chief State School Officers--CCSSO) described the importance of the Common Core State Standards Initiative, how common standards will impact students and states, and what the process will be to produce them.

The Initiative seeks to have states collectively develop and adopt a core set of academic standards in mathematics and English language arts. Currently, every state has its own set of standards, which means that public education students are learning to different levels in each state. This initiative has enlisted 48 states and 3 territories (AK and TX have not signed on) in the effort to prepare U.S. students to compete with their American peers, as well as with students from around the world.

This Initiative is being led by the CCSSO and the National Governors Association in partnership with ACT, the College Board and Achieve. A draft of the college and career ready standards is to be finalized in October 2009 and a draft of the standards for grades K-12 is to be finalized in January 2010. Adoption of the common core state standards is voluntary for states. Those choosing adoption agree that the common core will represent 85% of the state's standards in mathematics and English language arts.

What do Students Really Learn in a Mathematics Class?

Harvey Keynes (Education Director, Geometry Center at the University of Minnesota) and Brian Lindaman (Montana State University) explained their study to determine student understanding of sequences and series and how their understanding was affected by the instruction given. The study originated from a desire to measure the effectiveness of instruction in the University of Minnesota Talented Youth Math Program (UMTYMP).

Keynes and Lindaman described the UMTYMP program in terms of its students and the subject matter covered. They then presented their observations and conclusions from the survey, which included a broad determination that instructional focus on conceptual problem-solving and group work aided students' understanding more than lecture-based approaches.

The Klein Project

William McCallum (Director, Institute for Mathematics and Education, University of Arizona) began his presentation by talking about Felix Klein and his book *Elementary Mathematics from an Advanced Standpoint*, which was intended to provide encouragement for mathematics teachers. In celebration of the 100th anniversary of the publication of Klein's book, The Klein Project will produce a book about mathematics, a Wiki website and a DVD resource for teachers worldwide.

The design team for the project met in June 2009 and agreed to focus initially on the book portion of the project. The project is expected to last four years and the team is currently looking for contributions and ideas on the book's structure, chapter names, etc. They are looking to hold conferences all over the world to get wide input on the book, which will be published internationally and translated into many languages.

McCallum encouraged attendees to contribute to the project and stressed that feedback is welcomed at any stage. The project hopes to receive short written briefs that describe inspiring examples of important ideas or moments in recent mathematical history. The next meeting of the design team will be in April 2010.

Inquiry Based Learning

Michael Starbird (University of Texas at Austin) and Katherine Socha (St. Mary's College of Maryland) explained that inquiry based learning (IBL) is very much a guided effort to help students develop a particular skill or learn a particular concept. IBL mathematics classes are participatory and as such create an atmosphere that allows for a more thorough understanding of the subject. However, they cautioned that not all mathematics classes lend themselves to be taught in this manner.

Starbird and Socha provided information to attendees on the Academy for Inquiry Based Learning and on resources and activities involving IBL, including workshops, mentoring programs and course notes.

AMS Survey of Online Testing

Alan Tucker (SUNY at Stony Brook) presented an overview, along with the methodology and findings, of the AMS Homework Software Survey, which was funded by NSF-DUE. Departments of mathematics and statistics were invited to participate. Highlights of the survey include: 1) the highest number of users of homework software were in Ph.D. departments -- with only 30% of M.S. departments and 13% of B.S. departments using software; and, 2) courses that most frequently used software were College Algebra and below (87%), Calculus for Scientists (60%) and Precalculus (55%) and when homework software was used in these classes, MyMathLab was chosen 50% of the time followed by WebAssign at 25% of the time.

Most departments experienced some initial faculty resistance to using homework software -- with students and non-tenure track faculty being more receptive to the software and TAs being most receptive. The acceptance of a particular software was also dependent on the type of department—Ph.D., M.A. or B.S., private or public.

Other Discussion

Larry Gray opened the floor for discussion during the meeting and called on Jerry Dancis (University of Maryland) to present a public letter written by some in the mathematics community to U.S. Secretary of Education Arne Duncan that outlines recommendations on improving teacher quality by focusing on teacher preparation and professional development.

Additionally, the Committee itself discussed other areas in which it might work to further mathematics education. One suggestion was to create a resource for talented mathematics students that would inform them of opportunities including summer and academic year programs, math circles, conferences, etc – Deborah Hughes Hallett will spearhead this effort. Also, because of the importance of math content to teacher development and training in K-12 (particularly K-8), a suggestion was made to have the Committee encourage AMS members to get involved in this issue. Larry Gray will lead this effort and will begin by collecting information on work that has already been and is being done in this area, eventually perhaps crafting a statement on the importance of content knowledge to teacher education and development.

COE Activities at San Francisco, CA Joint Mathematics Meetings, January 2010

Larry Gray reported that the AMS Committee on Education will host a panel discussion at the Joint Meetings in San Diego, CA in January 2010 entitled “The Common Core State Standards: will they become our national K-12 math curriculum?” Panelists will include Scott Baldridge (Louisiana State University) and William McCallum (University of Arizona), among others. The panel discussion will be held on Saturday, January 16th from 8:30 am to 10:00 am.

Date of Next Meeting

The committee chose October 29-30, 2010 as the date for the next meeting of the AMS Committee on Education. The meeting will be held in Washington, DC.

Submitted by Anita Benjamin
American Mathematical Society
November 11, 2009