

IT

1. Description and Purpose The purpose of the IT budget is to reliably and efficiently provide the ability to:

- maintain accurate and useful information about the Association's members and their primary activities and generate accurate reports;
- provide web and e-mail services to MSBA members, committees, sections, and programs;
- maintain individual prospect contact data for recruitment purposes;
- invoice and track dues and subscription payments;
- give members the option to register and pay for events online;
- provide a variety of means of communicating and sharing information with members and others;
- easily retrieve and access data and documents onsite; and
- provide computer support to staff for providing member services or furthering the MSBA's mission, ranging from accounting to magazine publication.

The MSBA does not need cutting-edge technology; but it does need technology sufficient to meet members' needs and reasonable expectations.

2. Historical Information In 1988-89 the MSBA paid \$130,000 for custom network membership software and WANG hardware. The MSBA used those and standalone PCs until 1995, when it networked its PCs and printers (LAN), bought new membership software, and retired the software and hardware from 1988. Between 1999 and 2001, the MSBA invested approximately \$500,000 in hardware and software to install new membership software (iMIS), which offered better tracking and exporting of member and prospect data. In 2005, the MSBA offered members the ability to register and pay for CLE seminars and events online.

The MSBA's LAN currently has four "internal" servers: a Windows 2003 server running Exchange Server 2003 for e-mail and related uses; a Windows 2003 server for file (document) storage and print services, a Windows 2003 server running SQL 2000 for storage and retrieval of iMIS membership data, and a Windows 2003 server running SQL 2005 and Microsoft Dynamics SL for accounting data.

In addition, a fifth server running ColdFusion on Windows 2003 gives members the ability to register and pay for meetings online; these registrations and payments are automatically entered into iMIS. This server also authenticates members so they can use members-only services such as Fastcase legal research and practicelaw.org. All these servers and the network are protected by a Watchguard firewall appliance. A sixth computer runs a program named Lyris on Windows XP, to provide e-mail list services for members. It is protected by a seventh PC that has been repurposed as a gateway appliance.

The MSBA's non-server network includes 45 PCs running Windows XP, Microsoft Office 2003, iMIS, and usually fax software, plus ten networked printers and a fax appliance. A high-capacity copier/scanner is also networked. In addition, the MSBA has two Macs with QuarkXpress to produce *Bench & Bar* and promotional materials. Some employees use other software. For instance, some use Dreamweaver to maintain web pages and Hotdocs is used to create forms and assemble e-newsletters.

The membership software (iMIS) contains over 31,124 active individual records (members and prospects) and over 6,767 active company records. For every individual, iMIS provides the ability to track multiple mail and e-mail addresses; multiple telephone and fax numbers; district, section,

and committee memberships; bar admission dates; and other member contact and historical data.

The iMIS software also provides the ability to accurately bill and track state, district, and section memberships as well as contributions to foundations. In addition to tracking member contact and dues data, iMIS is used to track a variety of events and member activities, e.g. section and committee CLE seminars; members' leadership roles as district or section officers, Assembly members, committee chairs, and mock trial judges.

For web-related internal services, IT staff provide support and design work for section, committee, and program websites. In calendar 2009, IT staff continued design and navigation enhancements at mnbar.org, the MSBA's main website serving both members and the public. IT staff also worked with Section staff on a new design, and revamped websites for several programs, including Certification and the Bar Foundation.

3. Personnel There are 1.85 FTE positions allocated to this program.

4. Report on 2009-2010 Performance Standards

The IT budget items provide the MSBA with the ability to know who its active and prospect members are and to track their key activities with the MSBA. IT staff also coordinate with other staff groups to facilitate unified log-in capabilities and usage reports for members-only services and provide website design and maintenance. They also allow the MSBA to efficiently, reliably exchange information with members. These items are accomplished by:

A. Providing for the exchange of data with members in any format commonly used by members. This will generally mean not receiving more than ten files from members that cannot be opened and read by the MSBA staff after assistance from a member of the HR/Operations Group.

This performance standard was met. One hundred percent (100%) of the employees who responded to the survey indicated they were able to open and read files received from members; 91% did not encounter any problems during the past year opening an attachment received from members; the remaining 9% of the respondents indicated they were able to open attachments after assistance from other staff.

B. Having servers and server-related hardware that are operational and accessible. With the exception of scheduled maintenance and scheduled upgrades, a server will not be down for more than 15 hours per year.

This performance standard was met. Down time for scheduled maintenance or to reboot servers after expected patches never exceeded two hours in the former case or half an hour in the latter; and the maximum total down time for any single server was under three hours at any one time and fifteen hours for the year even including scheduled or expected time

C. Having the ability to extract necessary data from the membership database by having at least three intermediate to advanced Access users.

This performance standard was met. There are currently two Intermediate Access users and one Advanced user on staff.

D. Providing employees with a full range of options to send information to members (mail, e-mail, fax). This includes having the ability to communicate with 90% of attorney members via e-mail and 80% of attorney members via fax.

This performance standard was partially met. As of December 2009, the MSBA had the ability to communicate with 92.6% of members via e-mail and 77.9% of members via fax. We are not able to communicate with 80% of our members via fax. However, we are able

to communicate via fax or e-mail with 100% of section councils and Assembly and committee members. We do not have e-mail addresses for 9 of the 1,119 members in these three member groups; but we do have fax numbers for them.

E. Providing redundant data storage, sufficient for recovery of all SQL and file server data within 48 hours and with no more than one week of lost data additions or corrections.

This performance standard was met. Assigned staff continue to follow the backup schedules, which include performing daily backups, taking appropriate backup tapes offsite weekly, and keeping the three most recent monthly backup tapes for the file servers offsite. The Lyris database and core ColdFusion server files are backed up monthly to CDs, which are kept offsite. In some disasters, recovery would involve needing to purchase a replacement server before the data can be restored to working use. The server's purchase and setup could take more than 48 hours, as could obtaining and configuring workstations to access the available data.

F. Restoring membership data and files from backup tapes on an annual basis to test restore capabilities.

This performance standard was met. The Director of Technology restores files from backup tapes periodically throughout the year on an as-needed basis (typically to correct inadvertent deletions). These restores thus are required from essentially randomly chosen tapes. The Director also performs a test restore of the SQL membership database from a backup tape annually. Every attempted restore of each kind (the two backups are on different machines and to different kinds of tapes) has succeeded.

G. Replacing network hardware on a rotating, scheduled basis as determined by budget and need. This generally means replacing printers, computers, monitors, and servers every five to seven years. The oldest networked printer was purchased in 2000. Date servers were purchased: Lyris: 2004; SQL2000: 2005; Web (ColdFusion): 2005; Exchange: 2006; Accounting SQL: 2007; File: 2008.

This performance standard was met as the budget allowed. The oldest networked PC being used by staff dates from 2000, but most were purchased no earlier than 2003. The oldest server now dates from 2004. Printers are replaced as the budget allows and if there is a reason to replace them (e.g., parts replacement is no longer a good option).

H. Upgrading or installing network software on a scheduled basis (generally no more than two versions behind the current version) or in response to needs for increased efficiencies and to ensure commonly used formats.

This performance standard was met. The MSBA uses Windows XP, which is currently two versions behind Windows 7. The MSBA uses Office 2003, which is one version behind Office 2007, and will be two versions behind when Office 2010 is released this summer. In the next fiscal year, the MSBA will need to decide when it will upgrade to Office 2010 and budget accordingly.

I. Implementing at least three expanded uses of iMIS or improvements of iMIS procedures.

This performance standard was met. The following are examples of expanded uses of iMIS: (1) In the past, forms containing contact data were mailed to members when specific types of contact data were changed in their member records. We now e-mail forms to members for whom we have e-mail addresses and only mail to members in Minnesota for whom we do not have e-mail addresses. We continue to mail forms to members who are not Minnesota residents. (2) Civic Education programs have unique scheduling needs. At the Civic Education Manager's request, forms and reports were designed to meet these unique needs. As an example of a report, the Civic Education Manager can run a report to determine dates, times, and schools that need member

volunteer speakers. (3) At the request of Section Liaisons, CLE profiles were created for Section CLE seminars. Sections have access to a variety of information about the attendees of their meetings, e.g. member types, practice settings, and prospects. In addition, if a prospect attends a CLE seminar, the Section Liaisons forward this information to the Outreach Membership Manager, who contacts the individuals to join the MSBA.

J. Scanning all live mnb.org web pages biannually for broken links; correcting as needed; holding rate of broken live links at less than 2% of total links following each scan.

This performance standard was met. All live pages were scanned twice in calendar 2009 using Web Link Validator. This commercial software generates more comprehensive reports than the free services employed by IT staff in prior years. During the May-June 2009 scanning cycle, we identified a broken link rate of 1.76%; in November-December, the broken link rate was 0.85%. All broken links were corrected during the scan cycles.

K. Meeting with Group Leaders and program staff responsible for three websites within mnb.org; developing review and maintenance standards for each site; maintaining written records from non-IT staff confirming that they have reviewed and approved content.

This performance standard was not met, in large part because of increased responsibilities of IT staff assigned to practicelaw.org. To facilitate a complete redesign of that site in 2009, IT staff, together with Resource Group staff, reviewed all practicelaw postings, purged outdated materials and reposted current files, and developed written review and maintenance standards -- the same components outlined above for mnb.org. At the time of this writing, IT staff had commenced a similar procedure in connection with redesigns of Bar Foundation, Certification, and Section web pages, but did not complete the full review for three sites as specified above. Next year's report will document our success in meeting this standard for the 34 separate "mini websites" devoted to MSBA sections, as well as at least two other areas within the mnb domain.

L. Providing training in web authoring software for non-IT staff who maintain web pages; providing ongoing support to ensure that non-IT staff possess skills sufficient to post and maintain web pages assigned to them.

This performance standard was met. IT staff continue to provide support on several levels, demonstrating basic functions of web authoring software and providing follow-up support to enable non-IT staff to maintain web pages assigned to them. These areas include web pages devoted to sections, committees, governance, convention, and mock trial.

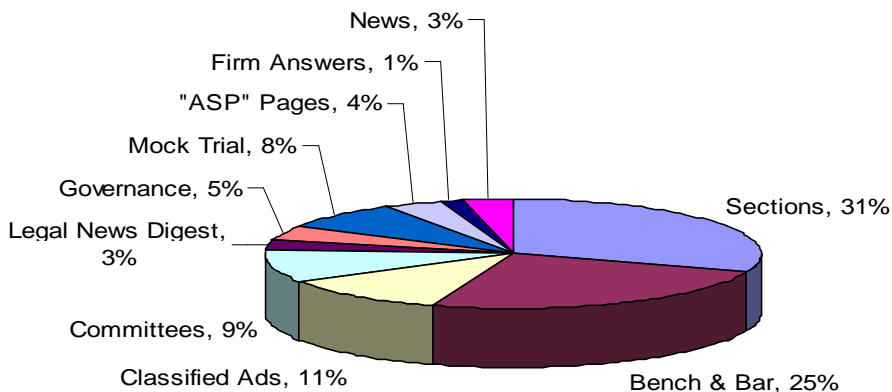
M. Providing support for the MSBA's Unified Log-In; responding to questions from members by the end of the next business day.

This performance standard was met. Most questions relate to user names and passwords; IT staff respond to e-mail and phone inquiries by the end of each business day. All Help Desk e-mail inquiries are routed to three IT staff members, with one individual assigned to respond directly or to assign questions to other MSBA staff. This duty is reassigned as needed to cover vacations or other office absences.

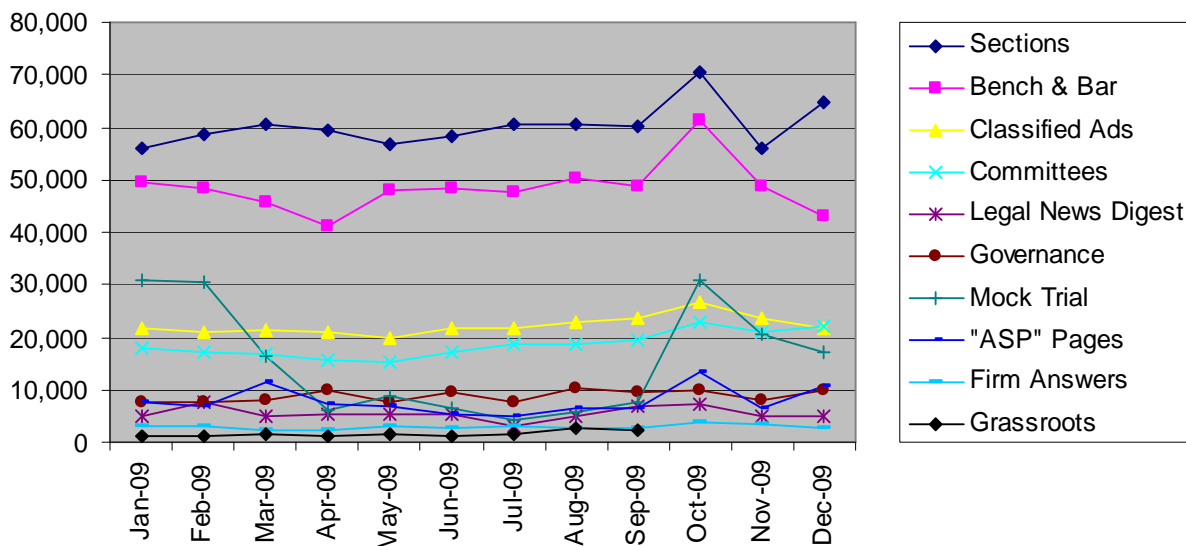
N. Tracking member usage of mnb.org.

This performance standard was met. In addition to the raw numbers for mnb, we also track the top areas of the site. These numbers may provide a more reliable measure of market penetration. In each year from 2006-2008, 10 key areas at mnb represented the bulk of traffic (in calendar 2009, the figure was just over 90%). Each of the other categories represented less than 2% of overall traffic. While the raw numbers comprise traffic by the public and members alike, these tracked categories represent services of immediate value to members. See charts below.

Breakdown of 2009 Traffic at Top Areas of Site
 (>90% of Traffic; all other individual areas <2%)



2009 "Page Views" at Top Areas of Site
 (>90% of Traffic; all other individual areas <2%)



5. Three-Year Plan Performance Standards

The IT budget items provide the MSBA with the ability to know who its active and prospect members are and to track their key activities with the MSBA. They also allow the MSBA to efficiently, reliably exchange information with members. These items are accomplished by:

- A. Providing for the exchange of data with members in any format commonly used by members. This will generally mean not receiving more than ten files from members that cannot be opened and read by the MSBA staff after assistance from a member of the HR/Operations Group.

- B. Having servers and server-related hardware that are operational and accessible. With the exception of scheduled maintenance and scheduled upgrades, a server will not be down for more than 15 hours per year.
- C. Having the ability to extract necessary data from the membership database by having at least three intermediate to advanced Access users.
- D. Providing employees with a full range of options to send information to members (mail, e-mail, fax). This includes having the ability to communicate with 90% of attorney members via e-mail and 80% of attorney members via fax.
- E. Providing redundant data storage, sufficient for recovery of all SQL and file server data within 48 hours and with no more than one week of lost data additions or corrections.
- F. Restoring membership data and files from backup tapes on an annual basis to test restore capabilities.
- G. Replacing network hardware on a rotating, scheduled basis as determined by budget and need. This generally means replacing printers, computers, monitors, and servers every five to seven years. The oldest networked printer was purchased in 2000. Date servers were purchased: Lyris: 2004; SQL2000: 2005; Web (ColdFusion): 2005; Exchange: 2006; Accounting SQL: 2007; File: 2008.
- H. Upgrading or installing network software on a scheduled basis (generally no more than two versions behind the current version) or in response to needs for increased efficiencies and to ensure commonly used formats.
- I. Implementing at least three expanded uses of iMIS or improvements of iMIS procedures.
- J. Scanning all live mnbar.org web pages biannually for broken links; correcting as needed; holding rate of broken live links at less than 2% of total links following each scan.
- K. Meeting with Group Leaders and program staff responsible for three websites within mnbar.org; developing review and maintenance standards for each site; maintaining written records from non-IT staff confirming that they have reviewed and approved content.
- L. Providing training in web authoring software for non-IT staff who maintain web pages; providing ongoing support to ensure that non-IT staff possess skills sufficient to post and maintain web pages assigned to them.
- M. Providing support for the MSBA's Unified Log-In; responding to questions from members by the end of the next business day.
- N. Tracking member usage of mnbar.org.

6. Report on 2009-10 User Satisfaction

After September 2009, PayPal will be incompatible with the MSBA's current version of iMIS, which is Ver. 10.5. The MSBA is planning to upgrade in March or April 2009 to Ver. 10.6, which has a patch necessary for iMIS to continue to be compatible with PayPal. In order for members to continue to register for meetings and pay online, this change is necessary.

Because of the MSBA's unified login, upgrades to the membership software need to be carefully managed to minimize adverse impacts on members seeking to use online members only services.

Although a member satisfaction survey is not planned, with pre-planning and notification, we should be able to minimize negative impact the upgrade downtime has on members trying to access members only services. We will provide contact information for members to use who have complaints or login issues.

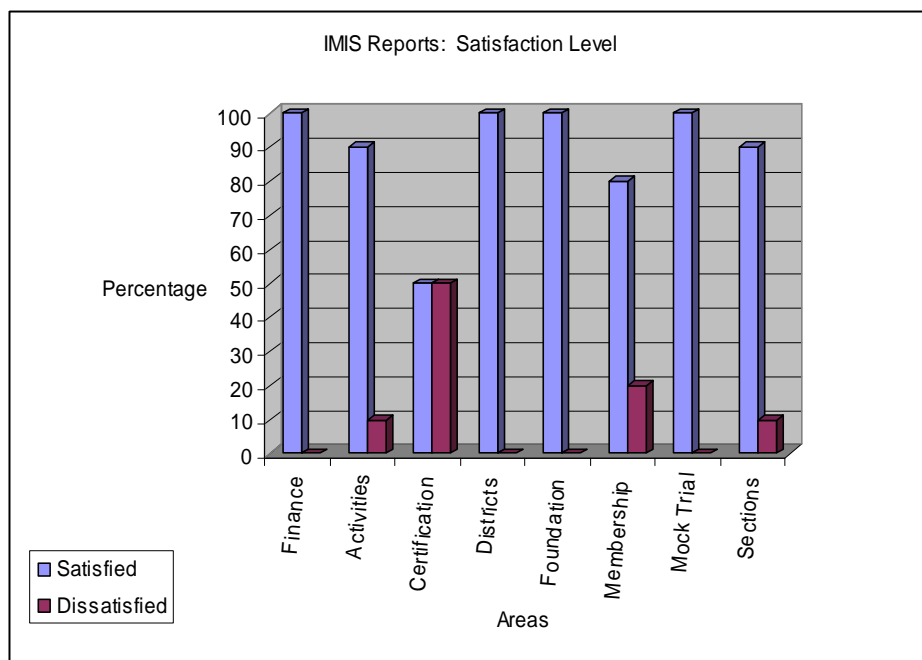
Because members could not access the online services during the iMIS upgrade, we were concerned about members' reaction to not being able to register for meetings and access practicelaw.org and Fastcase. A staff team determined that as the date of the upgrade approached members would be informed via Legal News Digest, the members-only login webpage, and practicelaw.org web pages exactly when they would not be able to access online services. In addition, members who have used practicelaw.org were notified via e-mail of the date and time that practicelaw.org would not be available. The staff team's plan was very effective. No member complaints were received. Only one member called on the day of the upgrade to ask if the login time had been changed. He was aware of the upgrade and wanted an update.

Employees

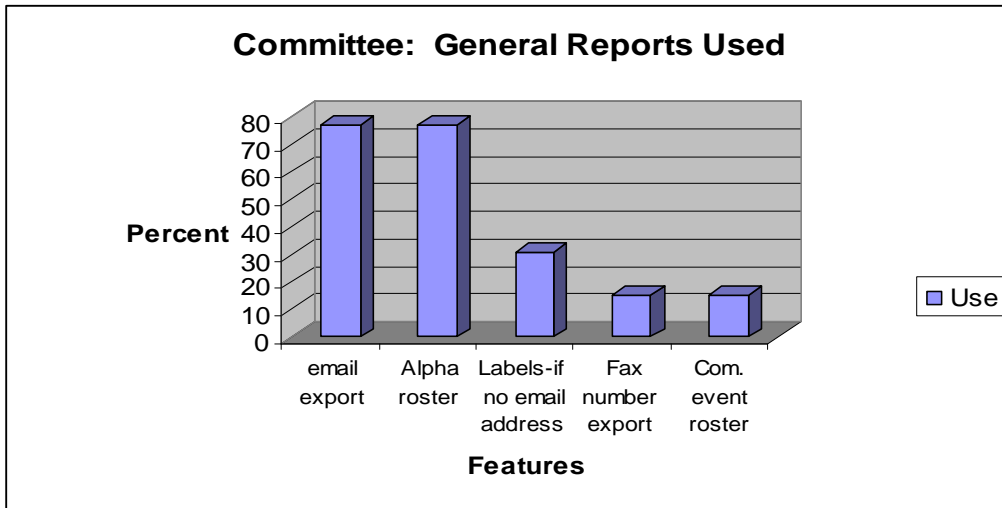
We will survey staff to determine their satisfaction with the labels, exports, and reports available in iMIS Reports. In addition to measuring satisfaction with the options available, the survey results should help raise employees' awareness of the available reports as well as indicate which reports are no longer necessary.

iMIS Reports is a central reports area where any employee may go to view, export, or print any of the reports. Any reports or exports that need to be run more than once may be stored in iMIS Reports. iMIS Reports is a very convenient way to store and access reports and exports. Seventy-four percent of employees responded to the survey designed to measure employees' satisfaction levels with the more common areas of iMIS Reports.

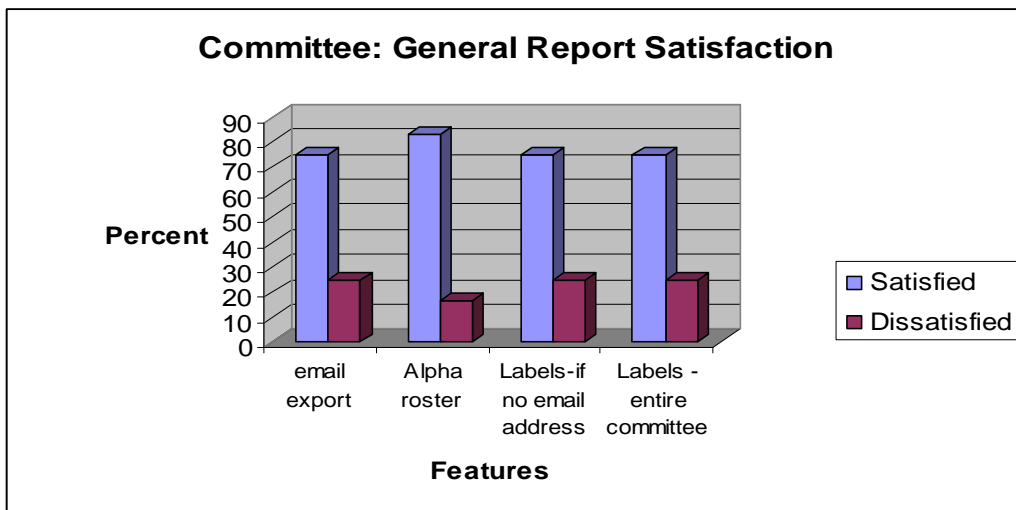
The following areas are used primarily by employees who have responsibilities in these areas; however, they may be accessed by all employees. Although the majority of staff are satisfied with the reports and exports in the following areas, we will follow up with employees to determine if satisfaction in Certification and Membership can be improved.



iMIS is not a custom Association Management Software package. The iMIS Committee Module, for instance, is a module the MSBA uses to track members' terms. It is used to track terms of Assembly members, District officers, Section councils, and Committee members, etc. Almost 57% of the staff who responded to the survey access this module to use the following features. The chart below shows the level of use of the features noted.



The following chart shows the level of satisfaction with key features of the general reports in the Committee area of iMIS Reports. In the near future, we will determine why a few staff are dissatisfied. One survey comment indicated that s/he was dissatisfied because the system did not default to the committee s/he used previously. We are not able to update the system to offer this feature. Where possible, we will try to increase the levels of satisfaction.



7. 2010-11 User Satisfaction

Member Satisfaction

Members can access online help via a Help Desk e-mail address that is staffed by specific MSBA employees. The online Help Desk staff responds to a variety of inquiries from members. The quality of the information provided and the timeliness of the Help Desk responses are very important. During two one-month periods in 2010, we will survey members who were assisted by the Help Desk staff during that time to determine their level of satisfaction with the usefulness and timeliness of the responses.

Employee Satisfaction

IT staff work closely with other MSBA staff groups to ensure that mnbar.org presents current, accurate information to members. In 2010, we will survey all MSBA staff to measure satisfaction in three areas:

- Site review/maintenance standards and procedures identified under Performance Standard K;
- Training and technical support provided by IT staff to facilitate web authoring skills as described under Performance Standard L; and
- General satisfaction with services provided by IT staff for all postings at mnbar.org. We will measure satisfaction with turnaround time and responsiveness to questions, and will allow staff to submit written comments.

8. Market Penetration

Not applicable.

9. Current Issues and Challenges

Ongoing demands to serve members more efficiently have sparked a review of the MSBA's current software tools to manage member records and an assessment of competing commercial products to meet our needs.

Because the MSBA's current membership software has a significant annual maintenance fee and upgrading to the existing program's ASP.NET version would be expensive, a staff team is reviewing the features, fees, and services of other Web-based Association Management Software (AMS) providers and contacting several bar associations to determine their level of satisfaction with their current providers.

The MSBA could realize greater efficiencies if it had Web-based Association Management Software (AMS). For instance, members can currently pay dues online; however, their individual records are not immediately and automatically updated; the information is entered manually. Prospect attorneys who complete the online application and pay cannot access online members-only services until the information is entered manually. Employees are currently exploring how the MSBA would benefit if it upgraded to a Web-based AMS. A staff group will present this information to the full Operations Committee in April 2010.

Employees will explore the benefits of integrating a variety of applications with the membership database. For instance, listserv data in Lyris is not connected with data in iMIS, the MSBA's membership database application. This can cause problems for members who change e-mail addresses and are on some e-mail lists, because they need to remember to change their e-mail addresses both places, and many lawyers are unfamiliar with how e-mail lists work. Similarly, the process to remove suspended members from the benefits of e-mail list services entails manual steps and depends on previous manual data entries of cross-referencing keys.

It can be a challenge to protect a network from computer viruses and other security threats. Current virus protection is provided by the firewall and by scanning (with Trend Micro software) at both server and desktop levels. No virus has activated on the network to infect other computers for several years, but with increased use of notebooks outside the network protections and removable media like pocket drives, there is a continuing risk. Some of the risk can only be addressed by user education, absent a significant change in standard user permissions.

The MSBA does not currently offer remote access to its network files. Staff are able to access e-mail and calendars offsite, but not files. If needed, we may create a VPN through the firewall or

use an old computer as a remote application server to let staff access files remotely, while restricting avenues for malicious access to the network. One staff group is experimenting with using "cloud" services to store documents, handle calendar appointments and scheduling, and communicate with each other, but there are no plans for any other MSBA staff to follow suit, and opinions about the services' usability is mixed even within the experimenting group, so they still require all "traditional" internal server functions.

Needs change, so the MSBA has to stay flexible. The Director of Technology may have to implement unanticipated or ad hoc hardware or software solutions from time to time. For example, we recently turned an old desktop PC into an effective spam-blocking firewall for the Lyris server, at no cost, so as to keep that server from becoming blacklisted and impairing its usefulness to members due to backscattering. (About four out of five e-mails hitting the server were attempts to spam members or compromise it; and commercial appliances were expensive, outside this year's budget constraints.) Similarly, instead of having both a Mac and a PC for one employee whose duties required using both, we now run a virtual PC inside the Mac through "Parallels" software. The licensing needs are the same, but that stretches the MSBA's hardware purchases further.

Managing the volume of e-mail messages is challenging both from a hardware standpoint and administration standpoint. We continue to work with staff who use Outlook to store a high volume of messages and information, to encourage them to reduce the volume.

There are tens of thousands of files on the network. It can be difficult occasionally for current staff to locate files created by past employees, and reliance on Windows Explorer has risks of accidental deletion. (Indeed, such accidents are one source of occasions to test whether files can be restored from the backups.) A document management application such as Worldox would be an efficient way for employees to locate files. But to date, the cost and training that would be needed has weighed against implementing such a system, so reliance on staff to organize files in sensible ways continues.

As mnbar.org expands, we anticipate heightened demands from staff and volunteers to introduce new features and services. We must find ways to respond to these requests while maintaining current content and commitments. This challenge may be more visible in 2010 as IT staff assigned to mnbar.org devote increased time to mndocs and other Resource Group initiatives. To address this challenge, we will continue to train and support other MSBA staff groups to maintain web content, and will strive to anticipate and implement efficient processes to fulfill all critical demands from Bar leadership.

Most of the postings at mnbar.org are maintained using Dreamweaver web authoring software. This product remains as an industry standard for web development, but there are also alternative approaches that may meet our needs in the long term. IT staff will continue to work with Resource Group staff on different approaches to web development, and will consider implementation of some of the approaches now employed at practicelaw.org and other Resource Group sites.

Technology is a changing area that needs constant attention.

10. Financial: Explanation of Budget Categories

Revenue:

A data fee (\$.04/name) is charged to sections (excluding New Lawyers Section), districts, certification programs, and MIPLA. The MSBA does not charge in-house groups (e.g. *Bench & Bar*, committees, convention, mock trial, MCLE) for data use.

Expenses:

iMIS License Renewal Fee -- is charged by Advanced Solutions, Inc. and is an annual fee, which generally is increased 3.5% annually.

Equipment maintenance -- currently represents the expenses to maintain printers.

Capital computer equipment is depreciated on a three-year schedule.

Software programs -- represents the cost of various non-capital software programs, such as Dreamweaver, Adobe Acrobat, and web-related software.

Computer Service Support -- primarily represents the cost of contracting with outside vendors to provide upgrades, correct issues, provide iMIS training, and assist the Director of Technology as well as firewall-, backup-, and spam-related maintenance fees.

Internet T1 -- connects the file, SQL, and web servers to the Internet. The current contract expires in July 2011.

Non-capital equipment -- includes equipment that costs less than \$1,000, e.g. computer, monitor, CD-ROM drive, RAM, mouse, keyboard, and power supply. If a computer, monitor, and keyboard are purchased together and the cost is \$1000 or greater, the purchase is a capital expense. The following information is the number of the oldest PCs and the years they were purchased: 1 PC: 2000; 2 PCs: 2002; 5 PCs: 2003; 9 PCs: 2004; and 1 PC: 2005.