Appendix A

Description of the Proposed MOBIUS Assessment Model
for Fiscal Years 2009-10 through 2011-12
MOBIUS Task Force on Financial Planning, September 2008

The accompanying spreadsheet (Appendix B) distributes MOBIUS expenses among the entire membership and participants of MOBIUS, using data supplied by institutions and the MOBIUS office. In general, a successful assessment model should be equitable, transparent, understandable, repeatable and reliable, and derived from data which is reasonably easy to acquire. The Task Force believes that this model meets all of these requirements.

Structure of the Assessment Model

The new assessment model is based on four data elements. These are not charges for specific services, but simply the best descriptive number available to represent fair and equitable relationships between libraries. Those parts of the model which do not apply to the four institutions with separate non-MOBIUS servers are highlighted in yellow in this document and on the attached spreadsheet.

1. **Membership and Administrative Costs:** a base cost, equal for all full member libraries, currently estimated at $10,000 per library. This amount includes, but is not limited to, basic costs for training, the marginal cost for a courier stop, and administrative overhead to cover Council membership and Council meetings. This amount is loosely based on the current cost of training (approximately $3,000 per institution if the costs are divided evenly), one courier stop (approximately $3,000), and half of the administrative overhead of the system. Training appears to be dis-proportionately used by those who need it most yet might be least likely to use it if there were an additional cost. However, the net providers of training receive large benefits in having an accurate joint catalog and efficient ILL staff at other institutions in the system. All members of the system receive the benefits of training availability as a sort of insurance, even when they are not consuming training. Therefore, a basic level of training is a fixed part of the charges.

The remainder of the administrative overhead, the cost of running the servers, the help desk, and the Innovative software are distributed among the libraries proportionally, using the following numbers:

2. **Static size of the library**. Support of the MOBIUS system should be somewhat proportional to the size of the library. After examining patron records and bib records, it was decided that a count of item records was the most efficient and most representative number to use in determining the proportion of the MOBIUS system supporting each library.
   Items (MCO servers) : This ratio represents the administrative costs of maintaining a collection on the MCO central servers.
   Items (Cluster servers): This ratio represents the administrative costs of maintaining a collection on the cluster servers.

3. **Dynamic Use of the ILS system.** Even libraries of exactly the same size use the system in varying amounts, depending on staffing, type of collection, and mission of the institution.
   Total Circulation Activity: All of the libraries use the circulation system. Total circulation activity in the previous year yields a number which can represent how much the library in question uses the ILS system, compared to other MOBIUS libraries. Other representative numbers (such as the number of acquisitions records or serials records) might give a different picture, but this number was selected in the interests of a simple design.
   Licenses: The only number which was used in the previous formula is being retained as an estimate of staff use of the ILS system. There are still problems with this number (antiquated contracts, efficiencies of staff, etc.) but keeping this number in the mix lends some continuity to the transition.
4. **Borrowing / Lending Transactions.** One of the core purposes of MOBIUS is providing efficient cost-effective sharing of resources. Use of this function varies significantly between libraries. It is agreed that the overhead costs involved should be borne primarily by the borrowing institution. Because this number has the potential for being volatile and difficult to manage, all borrowing and lending data will be expressed as a three-year moving average.
   In-Cluster Borrowing: This ratio indicates a given library's percentage of the total in-cluster borrowing done in the system.
   InnReach Borrowing: This ratio expresses a given library's portion of the total InnReach (between cluster) borrowing done in the system.
   Total Lending: This figure is a credit for lending institutions, expressed as a percentage of the budget, in which each library's portion of the total lending is subtracted from its assessment.

Format of the Assessment Model

The attached spreadsheet (Appendix B) prints out on legal size paper and has three sections.

Budget

The first is a single page with a brief description and a sample of the three years of revenue requirements needed to support MOBIUS. On the spreadsheet, each year's budget is 6% higher than the previous year. This inflation factor is simply an approximation derived from looking at the national CPI and the CPI for the urban Midwest over the previous several months. The actual budget will be determined by the Executive Board and the Council, depending on the necessary services and staffing for that year. After the fixed memberships are subtracted from the total budget, each of the six above numerical proportions supports 20% of the remaining budget. This amounts to a total of 120%, which is offset by the negative 20%, which is a credit given to the lending libraries as a compensation for their greater risk and effort.

Data

The second section is two pages entitled Data. This spreadsheet lists the current institutions of MOBIUS and their item count as of April 2008, listed twice to represent their size within the entire MOBIUS consortium and their size within the MOBIUS clusters. These are followed by the Total Circulation Activity for 2006-2007, as taken

from the web management reports in April 2008 and the number of staff licenses (previously ports or terminals) purchased by the institution. All of these numbers should reflect the status at the end of the most recent fiscal year.

The remainder of the Data section concerns borrowing and lending statistics for the institutions. There is a column for lending within the cluster and one for borrowing within the cluster, then an INN Reach (between clusters) lending and borrowing number and finally a total lending number, which is formed by adding the two lending figures together. Obviously, for the four stand-alone systems the "Total lending" and the "INNReach lending" will be the same. All of these numbers reflect a three-year average of borrowing and lending, from 2005-2006 through 2007-2008, as demonstrated on the attached spreadsheet, Appendix C. As this model is actually implemented, this three year average will "move", always being an average of the three most recent years.

For the purpose of illustrating the model, the same initial data section has been used for all three years. When this model is implemented, this data will be gathered by MCO staff and will vary from year to year. While some variance is expected over time, the relationships between libraries are not expected to change dramatically.

Assessments

The final section comprises six pages, two for each budgetary year, and demonstrates how the budget and data information are combined to compute each institution's assessment. The Fixed column contains the $10,000 fixed membership amount as computed above. The two "partnership" public library systems do not have an amount in this column, because they are not currently paying membership. (This status will no doubt change as the model is adjusted to accommodate additional types of libraries.) The Items (MCO) column reflects the institution's percentage of the total items available on the MCO servers multiplied times the amount on the budget spreadsheet which represents 20% of the budget for Items (MCO).

The next four columns represent figures which are not charged to the four stand-alone systems, since they operate their own local servers. The Items (Local) column reflects the institution's percentage of the total items available on all local cluster servers multiplied times the 20% of the budget designated for Item records on Cluster servers. It should be noted that, while these two "item-related" charges produce the same amount of money (20% of the proportional budget each) and are derived from the identical number of items, the Items (Local) amount is significantly higher because the stand-alone system items have been removed from the calculation, causing each library within clusters to pay somewhat more for the local records. This is reasonable, since the local systems derive benefits (such as local collection inventory and record keeping) which are greater than those of just searching and circulating. The Total Circulation Activity column is derived from the institution's percentage of all local cluster circulation activity multiplied times the part of the budget (20%) designated for Total Circulation Activity (MOBIUS servers). The Licenses column consists of the institution's proportion of the total licenses in the cluster system multiplied times the 20% of the budget labeled "User ports/licenses". The "IntraCluster" column represents the proportion of in-cluster borrowing done by

this institution compared to all of the in-cluster borrowing in the system and multiplied times the 20% of the budget which is labeled In-cluster borrowing (MOBIUS servers).

The final two columns of charges involve INNReach borrowing and total lending for each institution. The INNReach column is derived from the institution's proportion of all INNReach (outside of clusters) borrowing multiplied times the final positive 20% of the budget. The Lending column represents the percentage of the total lending (both intra-cluster and INNReach) which the library has done, multiplied by the Total Lending line of the budget. Note that, because the 20% of the budget for lending is expressed as a negative percentage, the total lending column will always be a number subtracted from the rest of the charges.

If all of the charges (from Dues through Lending) are added together for each institution, this forms the Target column. This is the assessment figure which the proposed model produces.

Phase-In Over Three Years

Since this assessment is a large change for many institutions, it is recommended that the model be gradually phased in, one third of the amount each year until the target assessment becomes the actual assessment in 2011-12.

On the spreadsheet, the column immediately after the Target column holds the assessment for the previous year. On the 2009-10 Assessments spreadsheet, this column is labeled 2008-09. The next column is labeled "Plus 6%". As already indicated, this is just a guess for demonstration purposes only. All that is certain is that the total of the figures in this column should match the total in the Target column and also the total in the new Assessment column, as well as the overall annual budget figure from the first page of the model.

The final two columns show the actual assessment, which is one third of the way between the Target budget assessment and the old-style budget represented in the Plus 6% column. The %change column shows the percentage of change up or down from the previous year's assessment. Please note that even those libraries which might expect a reduction in charges based on the Target may find themselves with an increase once the increased size of the overall budget is factored in. The only consolation is that the increase will be a smaller increase than it would have been without the new system.

For the 2010-11 spreadsheets, all of the numbers are slightly (6%) higher reflecting the larger size of the total budget. In actual implementation there would be more variable factors, such as shifting sizes of the collection or gradually changing borrowing and lending patterns. The only changes here are that the previous year's assessment is now labeled 2009-2010 and the Assessment column represents two-thirds of the way to the target.

For the 2011-12 spreadsheets, the previous year column is labeled 2010-11 and the Target column has become the Assessment for 2011-12, since at that point the phase-in is complete.

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