An ACRL White Paper: Open Access and the ACRL Serial Publishing Program

DRAFT

June 2004

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Executive Summary

The Open Access Movement
The open access movement is a direct response to today’s serials crisis in which rising serial subscription costs have chronically outstripped increases in academic library material budgets, resulting in widespread cancellations and an inability to maintain collections at existing levels.

- One of the seminal documents of the open access movement is the Budapest Open Access Initiative (BOAI), which has now been endorsed by over 3,400 signatories including ACRL.
- ACRL’s “Principles and Strategies for the Reform of Scholarly Communication” further declares ACRL’s support for “the development of peer-reviewed open access journals.”
- As defined in the BOAI, open access is an online publishing model for the peer-reviewed literature that involves the replacement of subscription fees (user tolls) by other sources of funding—most commonly author payments—and the free and unrestricted (“open”) distribution of all materials so published via the Web. The BOAI also calls for authors to utilize copyright “to ensure open access to all the articles they publish,” either by retaining the appropriate publishing rights or transferring them to a publisher willing to honor this goal.
- As with most reform movements, open access is controversial. Much of the controversy centers on a basic question, “Will it work?” In the absence of significant empirical evidence, the current debate is to a large extent theoretical. Critics are skeptical of many of the assumptions underlying the arguments advanced by open access proponents. Open access supporters are equally critical of the status quo.

ACRL Publications and Open Access
ACRL has a robust publishing program that includes four quite different serials, *College & Research Libraries* (C&RL), *College & Research Libraries News* (C&RL News), *RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage* (RBM), and *Choice*. *RBM* and *Choice* are both available only via paid subscription. ACRL members currently receive complimentary print subscriptions to *C&RL* and *C&RL News*. Members can also access full-text electronic versions of *C&RL* (in PDF) and *C&RL News* (in HTML format) by logging into the ACRL Web site with their member ID and password.

- Converting *C&RL* and/or *C&RL News* to open access, in addition to affecting the budgets directly related to these projects, is also likely to have an impact on ACRL membership.
- To analyze the potential impact of open access on ACRL, we have developed three scenarios, which in the interest of completeness we then apply to all four ACRL serials.
- In Scenario 1, the print edition continues, the online edition becomes open access, and paid print subscriptions decline by 20 percent.
- In Scenario 2, the print edition continues, the online edition becomes open access, and paid print subscriptions decline by 40 percent.
In Scenario 3, the print edition is discontinued and the online edition becomes open access.

Under each scenario, the net effect of open access is a significant decline in net revenues. This effect holds for all four serials. Scenario 3 (in which print is discontinued) is the most costly scenario for RBM and Choice. In the case of the two membership serials, C&RL and C&RL News, the most costly scenario is Scenario 2 in which print continues but paid subscriptions decline by 40 percent.

Based on our analysis, the amount of new revenues needed to fund open access ranges from as little as $5,000 to $10,000 annually—for RBM—to as much as $905,000 in the case of Choice. The total amount of replacement revenues needed to fund conversion of all four ACRL serials is in excess of $1 million.

In light of the above, we present two case studies, one of C&RL and one of Choice.

Funding the conversion of C&RL to open access via author payments would require fees ranging from $1,480 to $2,260 per accepted article.

Another alternative would be to charge a submission fee for all articles submitted for consideration. As there are more articles submitted than published; this would result in a lower charge—from $470 to $715—that would be imposed on all authors who submit articles.

A combination of submission and acceptance fees would result in submission fees ranging from $250 to $370 accompanied by publication fees of $770 to $1,160. Authors whose articles are rejected would pay only the submission fee. Authors whose articles are accepted would pay both.

Author fees do not appear to be a practical means of funding for Choice. Choice’s most likely alternative funding sources appear to be voluntary contributions, an endowment campaign, and a new value-added publishing program.

Next Steps

ACRL’s next step is to determine which, if any, of its serials it wishes to convert to open access and develop an appropriate business model for each.

We conclude with a brief checklist of key steps in that process.
The Open Access Movement: Context & Background

The open access movement is a direct outgrowth of the scholarly communication crisis, which has garnered much attention in recent years. This crisis is characterized by rapidly increasing journal subscription prices, which have jeopardized the ability of the research community, particularly libraries, to maintain serials collections necessary for research. In addition, with most libraries relying heavily on the licensing of electronic journals from aggregators, collections are further endangered by the fact that libraries do not own copies of the journals that they do supply, but are merely licensing the content. This puts libraries at risk of losing access to materials altogether if escalating costs force them to cancel subscriptions.

The Association of Research Libraries’ (ARL) “Framing the Issue: Open Access” reports that between 1986 and 2001, expenditures for serials by research libraries increased by 210 percent (compared to a 61 percent rise in the consumer price index). This resulted in a typical library spending three times as much on five percent fewer titles. Create Change, cosponsored by ACRL, ARL, and SPARC, provides further insight into the crisis, tracing its beginnings back to the 1960s and 1970s, when growth in higher education and research funding led to publication output outstripping the ability of scholarly societies to publish it. This opened the door for commercial publishing, which provided increased venues for publication by faculty, while contributing to the transformation of information into a commodity. The growth in journal publishing also provided a means for nonprofits to expand their publishing operations to generate revenue. However, by the mid-1980s, many libraries began cutting back journal subscriptions and other resources. This led to the creation of the cycle that higher education is still experiencing, in which cancellations result in higher prices, which, in turn, result in more cancellations.

Based on the assumption that journal prices for a typical research library will continue to increase by 9 percent per year, while the library budget increases by 7.9 percent, and using 1986 as the base year, Create Change estimates that by 2012 a typical research library journal budget will be $11.02 million, while a library will require $14.28 million to maintain serials acquisitions at the 1986 level. It is estimated that between 1999 and 2012, the average journal collection size will drop from 15,259 to 12,356 subscriptions, with the cumulative decline since 1986 at 24.3 percent. The serials pricing crisis has placed libraries at risk of being unable to provide access to the information required by the researchers who use them. The projections provided by Create Change and other venues illustrate the need for alternative methods of disseminating scholarly information.

Open access has emerged as a solution to the scholarly communication crisis that provides no-cost access to research while returning control of that research to its creators by allowing them to maintain copyright. “Framing the Issue: Open Access” describes open access works as those “that are created with no expectation of direct monetary return and made available at no cost to the reader on the public Internet for purposes of education and research.... Open access does not apply to materials for which the authors expect to generate revenue.”

In December 2001, the Open Society Institute held a meeting in Budapest, which resulted in the creation of the Budapest Open Access Initiative (see Appendix A). This initiative was the result of an attempt to “accelerate progress in the international effort to make research articles in all academic fields freely available on the internet.” In February 2002, representatives from 16 organizations signed the initiative, which defines open access literature as being freely available on the public Internet:

… permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited.

Since its inception, an additional 3,488 signatures have been added to the initiative; ACRL added its signature to the initiative in June 2002.

The Budapest Open Access Initiative (BOAI), the “IFLA Statement on Open Access to Scholarly Literature and Research Documentation,” and the Open Society Institute’s “Guide to Business Planning for Converting a Subscription-based Journal to Open Access” all focus on scholarly publishing as the arena for open access. In general, the focus of the open access movement has been on scientific literature, as this area is most prominently affected by the scholarly communication crisis.

There are two principal methods for providing open access to scholarly publishing: open access archives and open access journals. The former provides a method by which

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3 Association of Research Libraries, Office of Scholarly Communication, “Framing the Issue: Open Access.” [http://www.arl.org/scomm/open_access/Framing_Issue_May03.pdf](http://www.arl.org/scomm/open_access/Framing_Issue_May03.pdf)

4 Budapest Open Access Initiative, [http://www.soros.org/openaccess/read.shtml](http://www.soros.org/openaccess/read.shtml)

5 Ibid.


researchers can self-archive their work by depositing their articles in an open electronic archive. The Open Archives Initiative\(^8\) has developed guidelines and protocols for the creation of open access archives and provides links to tools that can be used to create an open access archive. For open access archives to truly provide access to scholars, the scholarly community must be made aware of new archives as they come into existence.

Open access journals are peer-reviewed, online journals, in which the journal creators allow authors to maintain copyright to their works. The journals are freely available to all on the Internet, with no subscriptions or membership required to access the content. Alternative forms of cost-recovery are employed to cover production costs of the journals. These methods are still in a testing stage, and many current open access journals are being subsidized by the institutions that created them. Alternative funding methods are addressed in detail in the “Open Access: A Working Definition” and “Outstanding Issues” sections of this paper; they include collecting fees from authors for inclusion of their work and through institutional membership (which is not required to access articles, but is a method for organizations to show their support for open access publishing).

The Directory of Open Access Journals\(^9\), created to increase visibility and use of open access scholarly publishing, currently lists 838 open access journals. While the majority focus on technology and the sciences, also represented are the arts and architecture, business and economics, history and archeology, languages and literatures, law and political science, mathematics and statistics, and the social sciences.

Although welcomed by many, the open access movement has generated controversy. It has also stimulated alternative proposals for resolving the scholarly communication crisis. Concerned that open access would have potentially adverse financial implications for their publishing programs, in March 2004 a group of 48 not-for-profit publishers of scientific, technical, and medical journals released the “Washington D.C. Principles for Free Access to Science: A Statement from Not-for-Profit Publishers”\(^{10}\) (see Appendix B). Responding to claims that their practices hinder the public’s ability to access published scientific research, the signatories of the “D.C. Principles” attempted to occupy “a ‘middle ground’ in the increasingly heated debate between advocates of open access and supporters of the current STM journal system.”\(^{11}\) The “D.C. Principles” articulate the signatories’ commitment to work in partnership with scholarly communities to promote the wide dissemination of published research, and they outline the “forms of free access” already supported by these publishers.

In a similar vein, the Association of Learned and Professional Society Publishers, a UK-based international association of not-for-profit scholarly publishers, recently released

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“ALPSP Principles of Scholarship-Friendly Journal Publishing Practice”\(^{12}\) (see Appendix C). The ALPSP principles support the maximization of access to an author’s work and are supportive of open access goals. However, they stop short of endorsing open access as the only or even the best possible solution to the problem, noting simply that “Making journals completely free to readers everywhere in the world is an appealing idea and one which is in tune with the mission of many learned societies…. Not all publishers will feel able to take this route, but all will be interested to learn from the findings of the pioneers.”\(^{13}\)

**Open Access: A Working Definition**

As a work in progress, open access comes in a variety of flavors. Although a bit short on detail, the BOAI “definition” effectively defines open access as equaling the “free and unrestricted online availability…of the peer-reviewed journal literature.” The BOAI envisions that the open access movement will give rise to a new type of journal, the open access journal. These new journals “will no longer invoke copyright to restrict access to and use of the material they publish. Instead they will use copyright and other tools to ensure permanent open access to all the articles they publish. Because price is a barrier to access, these new journals will not charge subscription or access fees, and will turn to other methods for covering their expenses.”\(^{14}\) Accordingly, we offer the following working definition of open access:

*Open Access* is an *online* publishing model for the peer-reviewed journal literature that is characterized by a) the elimination of subscription fees (access tolls); b) their replacement by alternative revenue sources; c) the free and unrestricted (“open”) distribution via the Web of all materials so published, and d) the use of copyright by authors “to ensure permanent open access to all the articles they publish.”

The last element of our definition, “the use of copyright by authors to ensure permanent open access to all the articles they publish,” has been a source of some controversy. Some proponents have argued that “ensuring permanent open access” implies the adoption of new and different copyright standards, e.g., the Creative Commons approach.\(^{15}\) Such arguments, however, tend to confirm the worst fears of those critics who see open access as simply the latest manifestation of the “information wants to be free” school of thought.

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\(^{13}\) Ibid.


\(^{15}\) See, for example, Jason M. Griffey, “The Perils of Strong Copyright: The American Library Association and Free Culture,” A Master’s paper submitted to the faculty of the School of Information and Library Science of the University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, April 2004.
Two important points need to be made here. First, the BOAI guidelines do not require authors to forsake traditional copyright protection. On the contrary, BOAI documents repeatedly note that authors “may find it important” to seek copyright protection in order to retain “control over the integrity of their work and the right to be properly acknowledged and cited.”16 The BOAI FAQ also declares that open access is “completely” compatible with current copyright law, and notes that “The BOAI does not advocate open access for copyrighted literature against the will of the copyright holder or in violation of copyright law. Nor does it advocate any change in copyright law. [Italics added.] It seeks to maximize open access within existing copyright law, in accordance with the wishes of the copyright holders."17

Second, the BOAI does not necessarily require that copyright be retained by the author. What it does require is that the copyright holder, whoever that may be, waive copyright-based limitations on distribution and access. It is perfectly permissible under BOAI guidelines for publishers to retain copyright provided they “will consent to open access.”18 As the BOAI FAQ notes, “copyright law gives the copyright holder the right to make access open or restricted, and the BOAI seeks to put copyright in the hands of authors or institutions that will consent to make access open.”19

Although “free distribution” is undoubtedly one of open access’s more appealing features, the open access model does not assume publishers will simply forgo all of their current revenues while somehow continuing with business as usual. Rather, it assumes that publishers can and will be able to eliminate subscription charges—“user tolls”—by replacing them with alternative revenue streams. As the BOAI notes, “Any funding model that does not charge readers or their institutions for access can work here. That means no subscription fees, no licensing fees, no pay-per-view [italics added].”20

Where else could the money come from? As the BOAI puts it, “[t]here are many alternative sources of funds for this purpose.” The non-exhaustive list of potential funding sources mentioned by BOAI includes:

- Monies from foundations and governments that fund research. (The most commonly mentioned variation on this theme is the notion of a “publication grant” to be included in the project funding.)
- Institutional support from the universities and laboratories that employ researchers (authors).

18 Ibid.
19 Ibid.
20 Ibid.
• Endowment monies.
• Monies from the sale of publications containing enhanced versions of open access content.
• Funds freed up by the demise or cancellation of journals charging traditional subscription or access fees.
• Voluntary contributions from friends and supporters of the open access cause.

The BOAI goes on to say, “There is no need to favor one of these solutions over the others for all disciplines or nations, and no need to stop looking for other, creative alternatives.”21 Interestingly, the list of “solutions” proffered by BOAI includes revenues from print publications. As the BOAI notes, “Open access is online access [italics added], but it does not exclude print access to the same works. Open access is free of charge to readers, but it does not exclude priced access to print versions of the same works. (Because print editions are expensive to produce, they tend to be priced rather than free.) … For some publishers, print will exclude open access, but the reverse need never occur.”22

This is an important qualification. The open access model is an online publishing model. It does not assume open or free access to print. Rather, it assumes that “priced” print publications will continue to coexist with “free” online publications. There are actually two underlying assumptions here. The first is that “free” access to print is economically unfeasible, an assumption whose validity is self-evident. The second is that “priced print” can successfully coexist with freely accessible online versions of the same or very similar content. For publishers, the plausibility of this second assumption is the proverbial $64,000 question.

Nonetheless, the open access model, if feasible, promises many benefits. Chief among these are the benefit of truly open access to the continually expanding body of knowledge that comprises today’s scholarly literature. If feasible, open access clearly has the potential to revolutionize scholarly publishing in a way that will benefit society writ large. On these grounds alone, it deserves serious consideration.

**Outstanding Issues**

In the end, much of the debate over open access comes down to a single question: “Will it work?” Proponents argue that it will, while critics focus on potential problems. As new participants are drawn into this debate, new issues arise, making for a moving target. Because there is relatively little in the way of empirical evidence, the current debate is to a large extent theoretical in nature.

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21 Ibid.
22 Ibid.
In general, open access critics question the assumptions of open access proponents, with particular emphasis on the following issues:

- The feasibility of the various alternative funding sources suggested by open access (OA) proponents.
- The applicability of the OA model to fields with limited research funding, e.g., the humanities and social sciences.
- The potentially inequitable impact of some of these funding sources, e.g., author payments.
- The impact on print of freely available OA electronic journals.
- The compatibility of open access copyright recommendations and the generation of alternative publishing revenues.
- The impact of OA on society and other nonprofit publishers.
- The magnitude of the cost savings to be realized from OA.
- The potential impact of OA on value-added, online, content distribution and reference products currently produced by commercial aggregators and vendors.
- The general scalability and sustainability of the OA model.

The debate over open access has already generated an extensive literature, which continues to expand on a daily basis. Rather than attempt a comprehensive summary, which would be all but impossible in any case, we will focus here on a few key issues.

**Funding**

If the future of open access hinges on any single proposition, it is the feasibility of finding alternative sources of funding to replace subscriptions (“user tolls”). The basic goal of open access is to find a way to pay the full costs of publication up front, thus eliminating the need for subscription fees. As noted elsewhere in this paper, open access proponents argue there are many alternative revenue sources that can be tapped for this purpose. However, the two most frequently mentioned alternatives to date are author payments and institutional memberships. Both of these are currently used by the two best-known and most visible open access publishers, Public Library of Science and BioMed Central. Critics have raised questions about both alternatives.

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Author Payments

Author payments are arguably the most popular method of funding open access, so much so that open access is sometimes referred to as the “author pays” model. Open access author payments are analogous to the page charges already levied by many scholarly journals, especially those in medicine and the sciences. This fee is typically assessed on acceptance of the author’s article with payment required before publication. However, whereas page charges are typically set at a level sufficient to recover the costs of physical publication, open access author fees are intended to recover all publishing costs. Thus, under ideal conditions, open access author fees would cover the full costs of publication, thus eliminating the need for subscription fees. This in turn implies open access author fees that will be higher than today’s author page charges.

Critics have been quick to point out a number of potential pitfalls in this scenario. Objections cited to date include:

- **Ethical objections:** Some critics have objected in principle to the concept of expecting authors to shoulder all—or even more—of the costs of publication given that they already bear the full costs of authorship with little, if any, hope of direct financial return. Proponents tend to reject this argument, noting that authors realize many indirect benefits from publication of their scholarly work.

- **Equity objections:** Critics have also objected to author payments on the grounds that they will inevitably discriminate against authors with limited financial resources, e.g., junior faculty, authors in fields with limited research funding, Third World authors, et al. Proponents generally acknowledge the validity of this criticism but believe there are solutions, e.g., a provision for the waiving of fees for authors who are legitimately unable to pay.

- **Feasibility objections:** Critics have also objected on the grounds that attempting to recover the full costs of publication from authors will inevitably result in fees that will rise to wholly impractical and exorbitant levels, e.g., thousands of dollars per article. This has in turn triggered an extensive debate concerning actual costs of publication under open access. In general, open access proponents believe that open access author fees can be kept to a reasonable level.

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24 See, for example, “Costs and Business Models in Scientific Research Publishing: A Report Commissioned by the Wellcome Trust.” Compiled by SQW Limited, April 2004, Histon, Cambridgeshire, UK. Also available at [http://www.wellcome.ac.uk/en/images/costs_business_7955.pdf](http://www.wellcome.ac.uk/en/images/costs_business_7955.pdf). This report, released in late April, is also an interesting comparative analysis of the relative costs of the “author pays” and the “subscriber pays” model. The report concludes that the “author pays” model is less expensive due to lower variable costs. However, this conclusion, which was predictably controversial, has been challenged by, among others, the author of the study from which the report authors drew many of their figures. See the May 18, 2004 post from Alastair Dryburgh, “Costs of open access publishing—the Wellcome Trust report,” ssp@lists.sspnet.org. (SSP is the Society for Scholarly Publishing.) This same post was also submitted to the Liblicense list.
Institutional Memberships

Open access institutional membership fees are similar to subscription fees in that they are paid by the institution. They differ, however, in several crucial respects. They are not subscription fees in the conventional sense for the simple reason that open access publications are by definition freely available to everyone without payment, members and nonmembers alike. Thus the institutional membership fee does not represent an access fee.

Instead, it represents an institutional alternative to author payments. In return for payment of an institutional fee from University X, open access publication Y agrees not to charge publication fees to any University X authors whose articles are accepted during some specified time period. In short, authors whose institutions are willing and able to pay an annual membership fee will not have to pay author charges. The source of the payment is different, but the goal is the same—to avoid the necessity of charging subscription fees so that the publication involved can be made freely accessible.

By definition, the viability of institutional membership fees as defined here depends on the viability of author payments. If an association or journal publisher determines that author fees are impractical, inappropriate, or simply not feasible, this is apt to rule out institutional memberships as well. Institutional memberships become a difficult sell if there are no author fees to be waived. There is, of course, nothing to prevent institutions from providing financial support to open access journals simply because they wish to do so, but in such cases they will be making a voluntary contribution.

Again, critics have raised a number of potential issues about such fees. Among those publicly voiced to date are the following:

- Such fees are bound to escalate over time, resulting in little if any substantive reduction in the total cost of scholarly communications.

- If membership fees are scaled in proportion to the number of articles originating from each institution, the net effect will be to shift the lion’s share of publishing costs to a small number of institutions who have the most authors, e.g., the ARL institutions. These institutions may not be able or willing to shoulder the resulting burden. However, if membership fees are not scaled, larger institutions will effectively be subsidized by smaller ones.

- Membership fees will discriminate against authors whose institutions cannot or will not pay.

- Membership fees will simply shift expenses from the library materials budget to some other as yet unspecified institutional budget line.

- In view of the above concerns, membership fees do nothing to address the basic problem of continually increasing costs that outstrip institutional budgets and may, in fact, only make the problem worse.

Proponents of open access tend to reject or deflect most of these criticisms by arguing either that they are unproven or that solutions will be found in due course. In their view, the potential risks of open access are far outweighed by the known issues associated with the current crisis in scholarly communication. Accordingly, they see now as a time to
experiment, and they remain optimistic as a group about the potential benefits and feasibility of open access.

**OA Cost Savings**

Fewer issues have generated more heated controversy than the debate of open access’s potential to reduce publishing costs. Proponents argue—often quite strongly—that the open access model will generate significant savings in the total costs of publication. These savings, they suggest, will in turn help eliminate the need for subscription fees. BOAI, for example, notes that “Open-access journals will realize significant savings by publishing online-only, rather than in print, and by dispensing with the costs of managing subscriptions and the expensive apparatus for distinguishing authorized users from unauthorized users and blocking access to the unauthorized. Moreover, there is now free and affordable software to automate nearly every operation of an online journal except the exercise of judgment by editors and referees.” Similarly, a more recent piece by Leo Waaijers, Platform manager ICT and Research, SURF, asserts that “Open Access has none of the costs of access control, so it must be inherently cheaper than its subscription counterpart in any comparable business model.”

In short, proponents tend to argue that open access will be less expensive than the current publishing model. In their view, significant savings can and will be realized from a) the switch from print to electronic publishing, and b) the elimination of certain expenses that will no longer be necessary under open access. Among these are the costs associated with access control and subscription processing.

Critics point out that if publishers are to realize the cost savings associated with electronic publishing, they must eliminate print. But if they do so, how can they realize any of the revenues from print products that are simultaneously cited by open access proponents as one of the alternatives to subscription revenues? These two arguments, they suggest, do not compute.

Furthermore, critics note that most scholarly publishers already offer electronic versions of their content. For these publishers, there are no potential savings to be realized from a switch to electronic publishing. Instead they are currently saddled with the most expensive of all publishing scenarios, one in which they must simultaneously support both print and electronic. These publishers face a conundrum. In order to realize the potential savings associated with a switch to electronic-only publication, they must forgo their current print revenues. However, if they find this impractical or unaffordable, they

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27 See, for example, the Wellcome Trust report cited earlier.
must continue to support both modes of publication. In that case, they will be unable to realize the potential savings associated with an online-only publishing model. 28

Finally, critics argue that the other potential areas of cost savings cited by open access proponents are generally insignificant. Access control, for example, is a trivial expense for most publishers, while subscription processing is more significant but still relatively minor. And, they note, open access is likely to increase costs in Web hosting and bandwidth expenses and will require continuing investment in costly areas like online development, investments which they believe are greatly underestimated by many open access proponents. As a result, they see little if any potential for cost savings from open access. 29

It is fair to say that neither side has thus far convinced the other on this issue. As a result, the debate is likely to continue until more empirical evidence becomes available that is based on actual experience with the open access model.

Copyright-Related Issues

One of the challenges facing open access proponents is how to ensure the widest possible distribution of peer-reviewed material. Copyright-related issues play a central role here. While not all open access proponents agree on such matters, the original BOAI argued that current copyright law is compatible with open access principles, provided that authors and publishers are willing and able to agree on certain modifications in current practice. The BOAI suggests that journals should “let authors retain the copyright to their works and only ask for the right of first print and/or electronic publication.” 30 Similarly authors should, whether publishing in an open access journal or not, “ask to retain the

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28 It is commonly argued that because electronic distribution costs are lower than print distribution costs, which is true, that electronic publication costs must be lower than print publication costs. Unfortunately, this is a dicey conclusion. Distribution expenses are but a single category of publishing expense, and seldom, if ever, the largest one. That honor usually goes to editorial and layout expense, a highly labor-intensive effort, and a type of expense whose costs for any given publication remain constant regardless of the number of copies distributed or the method thereof. Hence, its alternate name, first copy cost. As our scenarios assume, first copy costs are unaffected by format and will, therefore, be identical in both the print and electronic environments. Finally, production-related expenses for electronic publishing are not necessarily any lower than for print. At the very least, they are most certainly not “free.” On the contrary, things like focus groups, Web developers, and technical support represent significant new expense categories. As a result, while some open access proponents disagree, many publishers now believe that the only substantive savings to be realized from electronic publication are in the area of distribution.

29 For one of the very few empirical studies of open access, see John Haynes, “Can Open Access be viable? The Institute of Physics’ experience, Nature Web Focus: Access to the Literature: The Debate Continues, http://www.nature.com/nature/focus/accessdebate/20.html. Based on IOP’s experience with its New Journal of Physics—an open access publication launched in 1998, Haynes, who is Assistant Director of Journals Business Development for IOP, concludes that “a wholesale change to Open Access would be unsustainable financially”.

Copyright to your work and offer in its place the right of first print and electronic publication.\textsuperscript{31} Other open access proponents have gone further. Jan Velterop of BioMed Central, for example, argues that one of the conditions for “real open access” is that “the publisher or copyright owner irrevocably grants to any third party, in advance and in perpetuity, the right to use, copy or disseminate the article in its entirety or in part, or to make derivative works, in any format or medium, for any purposes, provided that correct citation details are given.”\textsuperscript{32}

Again, critics have pointed out that however well-intentioned, such proposals are potentially incompatible with any effort on the part of the publisher to fund open access from licensing revenues or the sale of other, derivative, non-open access products. Publishers who do not also obtain licensing or derivative rights from authors, they argue, will effectively be eliminating one of their more tenable alternative revenue sources.

How this debate will play out over time remains to be seen. One can, for example, readily imagine a scenario in which publishers of open access journals will ultimately require authors to continue to transfer all rights, save for copyright and the right to republish electronically or authorize online republication by others. Under such circumstances, the publisher would retain the lion’s share of the publishing rights, but the publication involved would, so far as we can tell, still meet BOAI open access requirements.

The $64,000 question, of course, is whether there is a middle ground on copyright practice that will ultimately prove acceptable to both authors and open access proponents, and viable for publishers. This remains to be seen. However, our guess is that there will be at least some experimentation along the lines suggested above, and that such initiatives are not excluded under the BOAI.

In the interim, ACRL has already taken steps to make its own author agreements more compatible with open access. Effective in fiscal year 2004, the author agreements for College & Research Libraries News, College and Research Libraries, and RBM assign copyright to the author, thus enabling ACRL authors to post their articles in an open access environment.

**Impact on Scholarly Societies**

Finally, there has been considerable debate about the impact of open access on nonprofit publishers in general and scholarly societies in particular. As most open access advocates acknowledge, many scholarly societies currently depend on surplus revenues from their publishing programs to fund other association programs. ACRL is, in this respect, quite typical. Over the past five years, the three Chicago-based ACRL serials—College & Research Libraries News, College & Research Libraries, and RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage—have generated an average of $178,666 per

\textsuperscript{31} Ibid.

year in net revenues (see Appendix L). These monies have been used to fund member services and other association expenses. Critics argue that open access will jeopardize these surpluses and thus constitute a potential threat to—or at the very least a hardship for—scholarly societies. Furthermore, they argue, there is no justification for subjecting societies to a challenge of this type. With few exceptions, scholarly societies and other nonprofit publishers have worked diligently to hold subscription rates to reasonable levels. As parties who have behaved ethically and responsibly, they deserve better treatment.

As noted earlier, it was the increasing concern by many nonprofit publishers about the implications of open access that gave rise to the recent signing of the “D.C. Principles” by 48 society and nonprofit publishers. That document was incorrectly interpreted by some as an endorsement of open access, which it is not. Instead, it is a manifesto of the signatories’ belief in the validity of their current publishing practices and philosophy, which include the maintenance of high quality standards, “affordable” pricing, as much free access as possible, and a wholehearted commitment to scholarly values.

The Debate Continues

As of this writing, the debate over open access seems destined to continue. Critics will continue to point out flaws in the operating assumptions and information base of open access proponents. See, for example, Rick Anderson, “Open Access in the Real World: Confronting Economic and Legal Reality”33 (Appendix D), recently published in C&RL News. As this piece suggests, there is a healthy debate within ACRL regarding the merits of open access. Proponents, on the other hand, will continue to argue that such concerns are largely theoretical, that the stakes are too high and it is too early in the game to rule out, a priori, possible alternatives to the current model. In effect, they say, the proof of the pudding is in the eating. If the goal is see whether the recipe works, the only way to find out is to try it.

The reader interested in keeping up with this rapidly moving debate will find no shortage of resources to consult. Among these, we particularly suggest the following:

  [http://www.earlham.edu/~peters/fos/fosblog.html](http://www.earlham.edu/~peters/fos/fosblog.html)
  [http://www.nature.com/nature/focus/accessdebate/](http://www.nature.com/nature/focus/accessdebate/)
- The BioMed Central Web site.  
  [http://www.biomedcentral.com/](http://www.biomedcentral.com/)

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**ACRL Serials: The Context**

ACRL has a robust publishing program that offers a variety of formats to serve different needs. The program provides a forum for scholarly publishing, a means of communication among members, a venue for sharing best practices, and an opportunity to share information about ACRL’s many meetings, conferences, and workshops. Along with newsletters and monographs, ACRL publishes four serials: *College & Research Libraries* (*C&RL*), *College & Research Libraries News* (*C&RL News*), *Choice*, and *RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage*. *C&RL News* and *C&RL* are currently distributed free to members, but also have a modest number of additional paid subscriptions. ACRL members can also access full-text electronic versions of *C&RL* (in PDF) and *C&RL News* (in HTML format) by logging on to the ACRL Web site and supplying their member ID and password. *Choice* and *RBM*, on the other hand, rely exclusively on paid subscriptions.

*C&RL News* serves as ACRL’s publication of record. It publishes standards and guidelines, activities of the Board of Directors, information on awards, ACRL national conference information, articles on the latest trends and practices affecting academic and research librarians, and other news of the association and the academic and research library community. It is also an important source for job opportunities. It is distributed eleven times per year to all ACRL members as a perquisite of membership. *C&RL News's* primary revenue sources currently include product advertising, classified advertising, and a small number—approximately 1,050—of paid subscriptions. In FY 2003, the last full year for which data is available, the *News's* total circulation was approximately 12,630—11,580 members plus 1,050 paid subscriptions.

*C&RL* is a refereed scholarly journal that publishes results of research in the field of academic librarianship. Highly selective, it has a reputation as one of the premier journals in the field. Revenues are currently derived from product advertising and a number—approximately 1,600—of paid subscriptions. It is distributed six times per year as a perquisite of membership. In FY 2003, *C&RL*’s total circulation was approximately 13,180—11,580 members plus 1,600 paid subscriptions.

The last of the Chicago-based journals is *RBM*, a scholarly journal whose primary audience consists of special collections librarians, museum curators, and rare book dealers. Distributed twice a year, it is not, strictly speaking, a peer-reviewed journal as articles are not currently refereed but are instead accepted at the discretion of the *RBM* editor or editors. (Many are invited articles.) *RBM* is not a perquisite of membership, and its circulation consists entirely of paid subscribers. Its primary revenue sources are subscriptions and product advertising. Total circulation was approximately 580 in 2003; it has declined to roughly 540 in 2004.

*Choice*, published 12 times per year including the August special issue, is based in Middletown, Connecticut. One of the premier scholarly review serials, it publishes approximately 6,800 reviews of new books and electronic resources annually along with
a variety of additional features including approximately ten bibliographic essays. (In 2004, it will publish nearly 7,000 reviews.) Primarily used by collection development librarians and to a lesser extent faculty, it is available in several formats. Choice’s revenues are derived primarily from subscriptions, product advertising, and licensing. Choice’s total circulation—all formats combined—is approximately 4,750, almost all of which are institutions. Choice print circulation is currently declining at an average rate of 2 to 3 percent a year. Its electronic circulation, on the other hand, is increasing, and at a roughly comparable rate.

As is true for many scholarly associations, the ACRL serials program has historically generated surplus revenues that have been used to support other programs and member services. As the table below indicates, during the 5-year period from 1999-2003, the three Chicago-based ACRL serials accounted for approximately 30 percent of ACRL’s total revenues and over half of ACRL’s net revenues. Together, C&RL, C&RL News and RBM generated an average of $178,666 per year in net revenues for ACRL, for a 5-year total of $893,330. The 5-year total is greater than that for any other ACRL program, including the National Conference. It is, in fact, greater than that of all other ACRL programs combined.

**Average ACRL Revenues and Expenses 1999-2003**

<table>
<thead>
<tr>
<th></th>
<th>ACRL Totals</th>
<th>ACRL Serials (Excluding Choice)</th>
<th>ACRL Serials %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Revenues</td>
<td>$2,449,351</td>
<td>$741,252</td>
<td>30.26%</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>$2,105,055</td>
<td>$562,585</td>
<td>26.73%</td>
</tr>
<tr>
<td>Net Revenues</td>
<td>$344,296</td>
<td>$178,666</td>
<td>51.89%</td>
</tr>
</tbody>
</table>

Accordingly, any change in the business model that significantly reduces ACRL serial revenues has the potential to affect not only the publications program but other ACRL programs and services. In addition, changes in distribution and access arrangements for the two membership publications—C&RL News and C&RL—have the potential to reduce membership and thus dues revenues.

**Membership Implications of Open Access**

As noted earlier, any change that affects the distribution of the two member benefit journals—C&RL News and C&RL—also has the potential to affect ACRL membership. Membership surveys over the past 13 years show that, on average, 48 percent of the respondents consider access to ACRL periodicals a “very important factor” in their decision to renew. In the 2000 membership survey, 45.2 percent of the respondents indicated that “access to ACRL publications” was a “very important” factor in their renewal decision, a significant increase over the 33.9 percent who rated “access to ACRL publications” as the most important reason for keeping their ACRL membership in 1997. Similarly, the 1993 membership survey found that “receiving a subscription to C&RL News” was a “very important reason for becoming a member of ACRL” for 45.6 percent of the respondents; and a subscription to C&RL was rated “very important” by 44.6
percent of the respondents. The 1991 membership survey found that 66.3 percent of the respondents joined ACRL “to receive periodicals.” Historically then, complimentary subscriptions to C&RL News and C&RL have been among the most highly valued member benefits provided by ACRL.

The latest available membership survey data suggests little recent change in member attitudes in this area. Some 54 percent of respondents to the 2003 ACRL Membership Survey rated “access to ACRL publications” as “very important.” This Web-based survey was sent to approximately 6,600 ACRL members with working and current e-mail addresses. The response rate was 21 percent (1,403) of those surveyed and 12.5 percent of the total ACRL personal members as of August 2003.

What then might be the impact of open access on ACRL membership? Here a great deal would depend on the method of implementation. If, for example, open access is implemented in such a way that members continue to receive complimentary print subscriptions to C&RL News and C&RL, this would probably have a smaller impact on membership than if print is discontinued altogether. However, such a strategy would also minimize ACRL’s cost savings as there would be little reduction in print manufacturing costs.

If, on the other hand, open access involves the elimination of print subscriptions as a member benefit, it seems reasonable to assume this would have a negative impact on membership. Determining how large an impact is impossible to say at this point. Institutional membership in ACRL, for example, has declined by 21 percent since 1991, a trend that seems likely to continue in the immediate future independent of ACRL’s decision on open access. About all we can say at this point is that the elimination of a highly popular member benefit is likely to affect membership in a negative fashion. The table below calculates the potential revenue impact for a range of possibilities.

<table>
<thead>
<tr>
<th>Magnitude of Decline</th>
<th>Personal Dues Lost (@ $35)</th>
<th>Institutional Dues Lost (@ $90)</th>
<th>Total Dues Revenue Lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 percent</td>
<td>$19,700</td>
<td>$3,970</td>
<td>$23,670</td>
</tr>
<tr>
<td>10 percent</td>
<td>$39,405</td>
<td>$7,940</td>
<td>$47,345</td>
</tr>
<tr>
<td>15 percent</td>
<td>$59,110</td>
<td>$11,905</td>
<td>$71,015</td>
</tr>
<tr>
<td>20 percent</td>
<td>$78,815</td>
<td>$15,875</td>
<td>$94,690</td>
</tr>
</tbody>
</table>

Of the four ACRL serials, the two leading candidates for open access are C&RL and RBM, both of which are scholarly journals. And of these two, arguably only C&RL meets the BOAI definition of a “peer-reviewed” journal. However, in light of ACRL’s role within the academic library community and its commitment to open access, we have chosen to analyze all four ACRL serials, thus providing a more complete picture of the potential impact of open access on ACRL. Accordingly, our analysis includes not only C&RL and RBM, but also C&RL News and Choice. We begin our analysis with C&RL.
College & Research Libraries

A year after its creation in 1938, ACRL established an official journal called College & Research Libraries (C&RL). The first issue of the new quarterly publication appeared in December 1939. It was at one and the same time a professional journal, an official organ of ACRL, and a vehicle for the exchange of news about libraries and librarians. In the years since its founding, C&RL has established itself as a premier scholarly journal for the publication of empirical research in academic librarianship and helped to build a body of knowledge and intellectual technique for the academic library profession. In 1951, the ACRL Board of Directors decided to make C&RL a membership benefit so that all members would receive the journal without charge. This decision made it possible for C&RL to play a key role in unifying the association and the profession. In light of the growing quantity and quality of research about academic librarianship, the association decided in 1956 to publish C&RL on a bimonthly rather than a quarterly basis, i.e., six times a year.

Financially, although C&RL has a nominal claim to membership dues for support, it is expected, as a minimum, to operate at breakeven. C&RL’s primary revenue sources are advertisements and paid subscriptions, of which currently there are approximately 1,600. A small amount of revenue is also generated from licensing (royalties) and single copy sales—primarily back issues.

Analysis of Open Access

To analyze the possible ramifications of making C&RL an open access publication, we have developed three scenarios, all of which use 2003 actual financial data as a baseline. The first two scenarios assume continuation of print, but with a decline in paid subscriptions of 20 percent and 40 percent respectively, with C&RL continuing to be a perquisite of ACRL membership. The third scenario assumes the complete elimination of print. For a detailed financial analysis, refer to Appendix E.

Scenario 1 (Appendix E)

The full text of all materials published in C&RL is put online in an area that is freely accessible to any user. The print run is continued, but a 20 percent decline in paid subscriptions is assumed, because of the free availability of online content. A 25 percent reduction in ad revenue is also assumed.

A. Impact on Revenues

- Paid print subscriptions decline from 1,602 to 1,282.
- Subscription revenues decline from $98,458 to $78,767, a reduction of $19,692 (20%).
- In the absence of an online advertising capability—not available in the current online version of C&RL—advertising revenues decline from $42,328 to $31,746, a reduction of $10,582 (25%).
- Total revenues decline from $145,093 to $114,819, a reduction of $30,274 (20.9%).
B. Impact on Expenses

- Print run declines slightly from 13,294 to 13,000.
- Publication-related expenses decline from $73,096 to $71,659 as a result of lower printing expense, a reduction of $1,437 (2.0%).
- Operating expenses decline from $31,813 to $31,099 as a result of slightly lower postage expenses, a reduction of $714 (2.2%).
- IUT expenses decline from $23,072 to $20,414 as a result of lower fulfillment expenses, a reduction of $2,658 (11.5%).\(^{34}\)
- Overhead expenses decline from $9,697 to $7,719 as a result of lower revenues, a reduction of $1,978 (20.4%).
- No impact on payroll and outside services; they represent editorial and production requirements that are not affected by the print run.
- Total expenses decline from $172,370 to $165,583, a reduction of $6,787 (3.9%).

C. Impact on Net Revenues

- Net revenues decline from ($27,277) to ($50,764), a decrease of $23,487 (86.1%).

D. Impact on Membership

- To be determined, but presumably negative, especially for those members whose primary motivation for joining is a subscription to C&RL and find an open access online edition a satisfactory substitute for their current print subscription.
- As noted earlier, a 5 percent decrease in membership would cost ACRL approximately $23,670 in annual dues revenue. A 20 percent decrease would result in a loss of $94,690. While our analysis does not include dues revenue, we assume Scenario 1 would have some impact on membership, presumably toward the lower end of the above range.

Scenario 2 (Appendix E)

The full text of all materials published in C&RL is put online in an area that is freely accessible to any user and the print run is continued, but the decline in paid subscriptions

\(^{34}\) IUT stands for Inter-Unit Transfer. IUT expenses represent internal payments from one ALA unit to another, e.g. from ACRL to Choice. ACRL currently reimburses Choice for fulfillment expenses, which Choice incurs on behalf of ACRL as a result of handling fulfillment of paid subscriptions for all three Chicago-based ACRL serials, i.e., C&RL, C&RL News, and RBM. Lower paid circulation will translate into lower IUT (fulfillment) expenses for ACRL, but at the cost of lower revenues.
is assumed to be 40 percent; the decline in ad revenue is assumed to be 50 percent due to lower print runs.

A. Impact on Revenues

- Paid print subscriptions decline from 1,602 to 961.
- Subscription revenues decline from $98,458 to $59,075, a reduction of $39,383 (40%).
- Ad revenues decline from $42,328 to $21,164, a reduction of $21,164 (50%).
- Total revenues decline from $145,093 to $84,546, a reduction of $60,574 (41.7%).

B. Impact on Expenses

- Print run declines from 13,294 to 12,750.
- Publication-related expenses decline from $73,096 to $70,437 as a result of lower printing expense, a reduction of $2,659 (3.6%).
- Operating expenses decline from $31,813 to $30,386 as a result of lower postage expenses, a reduction of $1,427 (4.5%).
- IUT expenses decline from $23,072 to $17,756 as a result of lower fulfillment expenses, a reduction of $5,316 (23.0%).
- Overhead expenses decline from $9,697 to $5,789 as a result of lower revenues, a reduction of $3,908 (40.3%).
- No impact on payroll and outside services.
- Total expenses decline from $172,370 to $159,060, a reduction of $13,310 (7.7%).

C. Impact on Net Revenue

- Net revenues decline from ($27,277) to ($74,514), a decrease of $47,237 (173.2%).

D. Impact on Membership

- To be determined, but presumably negative, especially for those members whose primary motivation for joining is a subscription to C&RL and find an open access online edition a satisfactory substitute for their current print subscription.
- As noted earlier, a 5 percent decrease in membership would cost ACRL approximately $23,670 in annual dues revenue. A 20 percent decrease would result in a loss of $94,690. While our analysis does not include dues revenue, we assume Scenario 2 would have some impact on membership, presumably toward the lower end of the above range.
Scenario 3 (Appendix E)

Full text of all printed material for C&RL is put online in an area that is freely accessible to any user and print run is eliminated.

A. Impact on Revenues

- With the elimination of print and an open access online edition, subscription revenues decline from $98,458 to zero, a 100% reduction.
- In the absence of an online advertising capability—not available in the current online version of C&RL—advertising revenues decline from $42,328 to zero, a 100% reduction.\(^{35}\)
- Total revenues decline from $145,093 to $4,307, a reduction of $140,786 (97%). The remaining revenues are from licensing (royalties) and sales of back issues of the journal. Under this scenario, the latter will decline over time due to the elimination of print.

B. Impact on Expenses

- Print run declines from 13,294 to zero.
- Publication-related expenses decline from $73,096 to $8,108 as a result of the elimination of printing expense, a reduction of $64,988 (88.9%).
- Operating expenses decline from $31,813 to $2,443 as a result of the elimination of postage expenses, a reduction of $29,370 (92.3%).
- IUT expenses decline from $23,072 to $9,782 as a result of the elimination of fulfillment expenses, a reduction of $13,290 (57.6%).
- ALA overhead expenses decline from $9,697 to $422 as a result of lower revenues, a reduction of $9,275 (95.6%).
- Payroll and related expenses would decline from $23,753 to $21,378, a reduction of $2,375 (10%). With the elimination of the print edition, there would be some reduction in staff time needed to perform tasks directly related to print production. This would result in slightly lower payroll and benefit costs. However, formatting, proofreading, copyediting, and uploading of the online version would still require staff time.
- Total expenses decline from $172,370 to $53,072, a reduction of $119,298 (69.2%).

\(^{35}\) While it is technically possible to develop an advertising program for the online edition of C&RL, there are a variety of ways in which this might be done, each with its own set of potential costs and revenues. Accordingly, we have not included estimates for online ad revenues—or expenses—in this analysis.
C. Impact on Net Revenue
   ▪ Net revenues decline from ($27,277) to ($48,765) a decrease of $21,488 (78%).

D. Impact on Membership
   ▪ To be determined, but presumably negative, as this scenario takes away a highly valued membership benefit, a complimentary print subscription to CR&L.
   ▪ As noted earlier, a 5 percent decrease in membership would cost ACRL approximately $23,670 in annual dues revenue. A 20 percent decrease would result in a loss of $94,690. While our analysis does not include dues revenue, we assume Scenario 3 would have some impact on membership, possibly toward the higher end of the above range.

**College & Research Libraries News**

In 1967 the personalities and news portions of C&RL were spun off as a separate publication, allowing C&RL to focus on its role as a research journal. Since 1967 C&RL News has served as ACRL’s official magazine of record and as a clearinghouse for news about academic libraries, librarians, and higher education. In 1993, C&RL News became the first ALA Internet publication through its electronic contents service. Although C&RL News is a perquisite of membership, it realizes healthy positive revenue that supports its own publication as well as supporting other ACRL programs and activities. The primary revenue stream for C&RL News is product and classified advertising. An additional revenue source for C&RL News is the sale of paid subscriptions to nonmembers, of which there were approximately 1,050 in FY 2003. Licensing (royalties) and single copy sales—primarily of back issues—also generate a small amount of revenues.

Currently the full content of C&RL News is available online for ACRL members, with limited content freely available to the general public.

**Analysis of Open Access**

While we have, in the interest of completeness, chosen to examine the implications of open access for C&RL News, we should note here that C&RL News is not a research journal. As such it falls outside the BOAI’s definition of journals that are prime candidates for open access. Serials like C&RL News generally fall under the heading of “Other Publications.” The Open Society Institute’s “Guide to Business Planning for Converting a Subscription-based Journal to Open Access” views revenues from the sale of such publications as a legitimate means of funding the conversion of a society’s research journals to open access. From this perspective, therefore, C&RL News is not an obvious candidate for conversion to open access. On the other hand, it is arguably the single most visible periodical published by ACRL. For this reason, therefore, we elected to analyze the impact of open access on C&RL News.

As with C&RL, our analysis of the impact of open access on C&RL News involves three scenarios, which use 2003 actual financial data as a baseline. The first two scenarios
assume continuation of print, but with a decline in subscriptions by 20 percent and 40 percent, respectively, with *C&RL News* continuing to be a perquisite of ACRL membership. The third scenario assumes the complete elimination of print. For detailed financial analysis, refer to Appendix F.

**Scenario 1** (Appendix F)

This scenario assumes that the online edition of *C&RL News* becomes open access and that members continue to receive a complimentary subscription to the print edition of the magazine. This scenario assumes a 20 percent reduction in print subscriptions to *C&RL News* and a 25 percent reduction in product advertising revenue. We assume no change in classified advertising revenues.

A. Impact on Revenues

- Paid print subscriptions decline from 1,056 to 845, a reduction of 211 subscriptions (20%).
- Subscription revenues decline from $43,193 to $34,544, a reduction of $8,639 (20%).
- Product ad revenue declines from $130,750 to $98,062, a reduction of $32,687 (25%).
- Classified advertising revenues are unchanged.
- Total revenues decline from $463,101 to $394,775, a reduction of $41,326 (9.5%).

B. Impact on Expenses

- Print run declines from 13,161 to 13,000.
- Publication-related expenses decline from $130,372 to $128,960 as a result of lower printing costs, a reduction of $1,412 (1.1%).
- Operating expenses decline from $68,957 to $68,058 as a result of lower postage expenses, a reduction of $898 (1.3%).
- IUT expenses decline from $29,479 to $27,596 as a result of lower fulfillment costs, a reduction of $1,883 (6.4%).
- All other expense categories are unchanged.
- Total expenses decline from $344,127 to $339,043, a reduction of $5,083 (1.5%).

C. Impact on Net Revenue

- Net revenues decline from $91,974 to $55,732, a decrease of $36,242 (39.4%).

D. Impact on Membership

- To be determined, but presumably negative, especially for those members whose primary motivation for joining is a subscription to *C&RL News* and
find an open access online edition a satisfactory substitute for their current print subscription.

- As noted earlier, a 5 percent decrease in membership would cost ACRL approximately $23,670 in annual dues revenue. A 20 percent decrease would result in a loss of $94,690. While our analysis does not include dues revenue, we assume Scenario 1 would have some impact on membership, presumably toward the lower end of the above range.

While this scenario assumes that classified advertising revenue will remain unchanged from Fiscal 2003, it should be noted that actual FY2004 revenues in this areas have been well below those of FY2003 and are currently under budget. In addition, to remain competitive within the marketplace and in anticipation of a new ALA Online Career Center (currently under development), we will likely shift to a flat-fee pricing model for online-only ads, which make up a significant portion of the classified advertising revenue. Additional declines in classified advertising revenue would alter the net revenues given here.

**Scenario 2 (Appendix F)**

Like scenario 1, this scenario assumes that the online edition of *C&RL News* becomes open access, while members continue to receive a complimentary subscription to the print edition of the publication. However the impact on paid subscriptions under this scenario is assumed to be 40 percent. This scenario also assumes a 50 percent reduction in product advertising revenue; and a 10 percent decline in classified advertising revenue.

**A. Impact on Revenues**

- Paid print subscriptions decline from 1,056 to 634, a reduction of 422 subscriptions (40%).
- Subscription revenue declines from $43,193 to $25,916, a reduction of $17,277 (40%).
- Product ad revenue declines from $130,750 to $65,375, a reduction of $65,375 (50%).
- Classified advertising revenues decline from $259,526 to $233,573, a reduction of $25,953 (10%).
- Total revenues decline from $463,101 to $327,497, a reduction of $108,604 (24.9%).

**B. Impact on Expenses**

- Print run declines from 13,161 to 12,750.
- Publication-related expenses decline from $130,372 to $126,768 as a result of lower printing costs, a reduction of $3,604 (2.8%).
- Operating expenses decline from $68,957 to $67,160 as a result of lower postage expenses, a reduction of $1,797 (2.6%).
- IUT expenses decline from $29,479 to $25,714 as a result of lower fulfillment costs, a reduction of $3,765 (12.8%).
All other expense categories are unchanged.
Total expenses decline from $344,127 to $333,224, a reduction of $10,903 (3.2%).

C. Impact on Net Revenue
- Net revenues decline from $91,974 to ($5,727), a decrease of $97,701 (106.2%).

D. Impact on Membership
- To be determined, but presumably negative, especially for those members whose primary motivation for joining is a subscription to *C&RL News* and find an open access online edition a satisfactory substitute for their current print subscription.
- As noted earlier, a 5 percent decrease in membership would cost ACRL approximately $23,670 in annual dues revenue. A 20 percent decrease would result in a loss of $94,690. While our analysis does not include dues revenue, we assume Scenario 2 would have some impact on membership, presumably toward the lower end of the above range.

While this scenario assumes a decline in classified advertising revenue of 10 percent, it is likely that these revenues will decrease more than projected here, further increasing the budget deficit projected above.

**Scenario 3** (Appendix F)
This scenario assumes the online edition of *C&RL News* becomes open access and that the print edition is discontinued.

A. Impact on Revenues
- Paid print subscriptions decline from 1,056 to zero, a 100% reduction.
- Subscription revenues decline from $43,193 to zero, a 100% reduction.
- Product ad revenues decline from $130,750 to zero, a reduction of $130,750 (100%).
- Classified ad revenues decline from $259,526 to $144,000, a reduction of $115,526 (44.5%). This scenario assumes ACRL would continue to offer classified advertising in an online format and maintain the approximately 24 online-only ads per month placed in FY2003, but would lose half of the 33 print ads per month placed in the magazine. The result would be 40 online ads per month at a lower online rate of $300.

36 As with *C&RL*, it will be technically possible to design and implement an online advertising capability for the *News*. As this requires further analysis, and expense, we have omitted it from this discussion.
• Total revenues decline from $436,101 to $146,409, a reduction of $289,692 (66.4%).

B. Impact on Expenses
• Print run declines from 13,161 to zero.
• Publication-related expenses decline from $130,372 to $14,975 as a result of elimination of the print magazine, a reduction of $115,396 (88.5%).
• Operating expenses decline from $68,957 to $15,185 as a result of the elimination of postage expenses, a reduction of $53,772 (78%).
• IUT expenses decline from $29,479 to $20,066 as a result of the elimination of fulfillment expenses, a reduction of $9,414 (31.9%).
• Operating expenses decline from $294 to $59, a reduction of $235 (80.0%).
• Payroll and related expenses decline from $110,748 to $99,673, a reduction of $11,075 (10.0%) as a result of the elimination of make-ready work for the print edition. However, formatting, proofreading, copyediting, and uploading of the online version would still require staff time.
• Total expenses decline from $344,127 to $149,958, a reduction of $194,169 (56.4%).

C. Impact on Net Revenue
• Net revenues decline from $91,974 to ($3,549), a decrease of $95,523 (103.9%).

D. Impact on Membership
• To be determined but presumably negative as this scenario takes away a highly valued membership benefit, a complimentary print subscription to CR&L News.
• As noted earlier, a 5 percent decrease in membership would cost ACRL approximately $23,670 in annual dues revenue. A 20 percent decrease would result in a loss of $94,690. While our analysis does not include dues revenue, we assume Scenario 3 would have some impact on membership, possibly toward the higher end of the above range.

Without a print edition, and with the online edition open free of charge, we would expect to experience a decline in membership. See the “Membership Implications of Open Access” section of this paper for further discussion of this issue.

**RBM: A Journal of Rare Books, Manuscripts, and Cultural Heritage**

*RBM,* a semiannual publication, was launched on a trial basis in the spring of 1986 as *Rare Books and Manuscripts Librarianship (RBML)* under the leadership of the Rare Books and Manuscripts Section. The journal was incorporated into the ACRL publishing program in 1988. In 2000, it underwent a major revision, including a new name and a new graphic treatment. The editorial focus was broadened to include all types of special
collections in a variety of media in order to address the broad range of issues and concerns of special collections professionals.

Unlike *C&RL News* and *C&RL*, *RBM* is not a perquisite of membership and has no claim on the resources from membership dues. Although it has recorded deficits in two of the last five years, it has been largely self-supporting since its inception. Its primary revenue sources are ad sales and subscriptions. A small amount of additional revenue is generated by single copy sales, primarily of back issues.

**Analysis of Open Access**

As with *C&RL News* and *C&RL*, our analysis of the impact of open access on *RBM* takes the form of three scenarios, which are based on actual 2003 financial data. The first two scenarios assume continuation of print, but with a decline in subscriptions of 20 percent and 40 percent respectively. The third scenario assumes the complete elimination of print. For detailed financial analysis, refer to Appendix G.

If *RBM* were freely accessible, print subscriptions would likely decline as neither individual nor institutional subscribers would have an incentive to pay for a product that is freely available. As with other scholarly journals, some institutions might continue subscribing for archiving purposes, but many likely would use the opportunity to reduce their serial expenses.

**Scenario 1** (Appendix G)

The full text of all materials published in *RBM* is put online in an area that is freely accessible to any user. The print run is continued but a 20 percent decline in subscriptions is assumed, as is a 25 percent decline in product advertising because of lower print runs.

**A. Impact on Revenues**

- Subscriptions decline from 580 to 464, a reduction of 116 (20%).
- Subscription revenues decline from $18,860 to $15,088, a reduction of $3,772 (20%).
- Ad revenues decline from $11,450 to $8,587, a reduction of $2,862 (25%).
- Total revenues decline from $30,830 to $24,196, a reduction of $6,634 (21.5%).

**B. Impact on Expenses**

- Print run declines from 775 to 620.
- Publication-related expenses decline from $12,719 to $10,786 as a result of lower printing expenses, a reduction of $1,932 (15.2%).
- Operating expenses decline from $1,836 to $1,601 as a result of lower postage costs, a reduction of $235 (12.8%).
- IUT expenses decline from $8,229 to $7,232 as a result of lower fulfillment charges, a reduction of $997 (12.1%).
- ALA overhead charges decline from $3,021 to $2,371 as a result of lower revenues, a reduction of $650 (21.5%).
- There is no impact on payroll and outside services. These are fixed expenses that are not a function of the print run.
- Total expenses decline from $32,755 to $28,941, a reduction of $3,815 (11.6%).

C. Impact on Net Revenue
- Net revenues decline from ($1,925) to ($4,745), a decrease of $2,820 (146.5%).

D. Impact on Membership
- None expected.

Scenario 2 (Appendix G)
The full text of all materials published in *RBM* is put online in an area that is freely accessible to any user and the print run is continued, but the decline in subscriptions is assumed to be 40 percent, and the reduction in product advertising 50 percent due to lower print runs.

A. Impact on Revenues
- Subscriptions decline from the current average of 580 to 348.
- Subscription revenues decline from $18,860 to $11,316, a reduction of $7,544 (40%).
- Product ad revenues decline from $11,450 to $5,725, a reduction of $5,725 (50%).
- Total revenues decline from $30,830 to $17,561, a reduction of $13,269 (43%).

B. Impact on Expenses
- Print run declines from 775 to 465.
- Publication-related expenses decline from $12,719 to $8,854 as a result of lower printing expenses, a reduction of $3,865 (30.4%).
- Operating expenses decline from $1,836 to $1,365 as a result of lower postage costs, a reduction of $471 (25.6%).
- IUT expenses decline from $8,229 to $6,236 as a result of lower fulfillment charges, a reduction of $1,993 (24.2%).
- ALA overhead charges decline from $3,021 to $1,721 as a result of lower revenues, a reduction of $1,300 (43.0%).
- There is no impact on payroll and outside services. These are fixed expenses that are not a function of the print run.
- Total expenses decline from $32,755 to $25,126, a reduction of $7,629 (23.3%).
C. Impact on Net Revenue
   - Net revenues decline from (1,925) to ($7,565), a decrease of $5,640 (292.9%).

D. Impact on Membership
   - None expected.

Scenario 3 (Appendix G)
Full text of all printed material for RBM is put online in an area that is freely accessible to any user, and the print run is eliminated.

A. Impact on Revenues
   - Subscription revenues decline from $18,600 to zero, a 100% reduction.
   - Product advertising revenues decline from $11,450 to zero, a 100% reduction. 37
   - Total revenues decline from $30,830 to $520, a reduction of $30,310 (98.3%). The remaining revenues are primarily from single copy sales, which will decline over time due to the elimination of print.

B. Impact on Expenses
   - Print run declines from 750 to zero.
   - Publication-related expenses decline from $12,719 to $3,057 as a result of the elimination of the print edition, a reduction of $9,661 (76%).
   - Operating expenses decline from $1,836 to $659 due to the elimination of postage, a reduction of $1,177 (64.1%).
   - ALA overhead expenses decline from $3,021 to $51 as a result of lower revenues, a reduction of $2,970 (98.3%).
   - Payroll and related expenses decline from $6,815 to $6,134 due to the elimination of print layout and make-ready tasks, a reduction of $682 (10.0%). However, formatting, proofreading, copyediting, and uploading of the online version would still require staff time.
   - Total expenses decline from $32,755 to $13,281, a reduction of $19,474 (59.5%).

C. Impact on Net Revenues
   - Net revenues decline from ($1,925) to ($12,761), a reduction of $10,836 (562.8%).

37 As with the News and C&RL, it is technically possible to develop an online advertising capability for RBM, but we have omitted it from this discussion as it requires further analysis.
D. Impact on Membership
- None expected.

**Choice**

*Choice* was launched in March 1964 courtesy of a $150,000 grant from the Council on Library Resources (CLR) to ALA, which in due course transferred the project to ACRL—its logical home. The initial grant was used to hire staff, rent office space, purchase supplies, pay utility and phone bills, and to cover all of the myriad other expenses involved in starting a small publishing operation including, of course, editorial and publishing costs. Having identified the need for a college review serial, CLR committed itself to ensuring the success of its progeny and did not hesitate to provide additional funding on several occasions during the start-up phase.

From the beginning, however, it was both CLR and ACRL’s intent that *Choice* would ultimately be financially self-sustaining. Their hope and expectation was that *Choice* would be able to generate sufficient revenues to cover operational and publishing costs, eliminating the need for continuing subsidies. Accordingly, *Choice* proceeded to generate revenues in conventional publishing fashion by selling subscriptions, primarily to libraries, and advertising space—primarily to publishers. Together these two revenue streams quickly proved sufficient to the task at hand, making *Choice* self-supporting within a few years of launch.

Subscriptions were and remain *Choice*’s single, most important revenue source. While *Choice*’s popularity with advertisers exceeded initial expectations, advertising has always ranked second to subscriptions as a revenue source. Even today with the emergence of new revenue streams such as licensing, subscriptions continue to be *Choice*’s single largest source of revenue.

In retrospect, *Choice*’s early subscription rates seem laughably low by today’s standards. The cost of an annual subscription was initially set at $20.00. And there it remained until March 1974, a full decade later, when it was increased to $25.00. Today that same subscription costs $270.00 although—to be fair—it buys a bit more content and consumer prices are significantly higher than in 1964. Even so, it is clear that viewed over time *Choice* subscription rates, like those of most scholarly journals, have increased faster than the rate of inflation.\(^{38}\)

*Choice*’s subscription rate increases have occurred in the context of a larger pattern of even greater across-the-board increases in the costs of scholarly serials. Between 1986 and 2003, the average unit cost of serials purchased by ARL libraries increased by 215 percent, far in excess of the 64 percent increase in the CPI\(^{39}\) (see Appendix H). By

\(^{38}\) According to the Bureau of Labor Statistics, $20.00 in 1964 is equivalent to $120.13 today, or less than one-half of *Choice*’s current subscription rate.

comparison Choice’s subscription rates increased by 100 percent during this interval, greater than the CPI but significantly less than the average ARL serial. And it is this larger pattern of continuing, greater-than-inflation increases in serials prices far in excess of the growth in library materials budgets, which has given rise to today’s “serials crisis” and has in turn spawned the open access movement.

Two major factors explain this all too common trend—declining circulation and rising expenses. Despite Choice’s continued popularity as a collection development tool, its circulation has declined steadily for many years as academic libraries, the primary customer base, have—for a variety of reasons—found it necessary to economize. In Choice’s early days, many libraries took out multiple subscriptions. Today, almost none do. This factor alone explains much of the decline in Choice’s print circulation over the years from a peak of roughly 6,000 to today’s 3,250. Other contributing factors include increased competition in the form of new selection tools, the availability of the Choice online product, and a general reduction in academic library book purchases.

The decline in print circulation has to some extent been offset by a combination of licensing and subscription revenues from ChoiceReviews.online (CRO) whose total circulation is now approaching 650. Licensing revenues in particular grew extremely rapidly in the period 1998-2002, but have been essentially flat since. Similarly, while CRO has helped offset Choice’s declining print circulation, it has also contributed to that decline. Today, total circulation is well below the peak realized during Choice’s early years.

Unfortunately, as circulation has declined, Choice’s annual operating expenses have increased. In 1990 Choice’s total expenses were a little over $1.4 million. Some 14 years later, in 2004, they are $2.4 million, the single largest component of which is payroll and benefits. And while some will undoubtedly argue this simply means that Choice spends too much, this seems unlikely. Choice’s office facilities are modest; it competitively bids all of its major publication-related projects; and its salary levels, which are determined by ALA, are hardly exorbitant. The reality is that Choice is currently supporting two publishing programs—one print and one electronic—where formerly it supported one, and covering the substantial development costs of the new electronic program out-of-pocket.

In this respect, Choice is hardly unique. It finds itself in a situation similar to that of many small, nonprofit publishers whose resources are often stretched to the limit as they attempt to stay current with today’s rapidly changing electronic publishing environment while continuing to deliver good value to their customers. The good news is that Choice
Analysis of Open Access

To analyze the possible impact of open access on *Choice*, we have employed the same three scenarios used in the preceding analyses of *C&RL News*, *C&RL*, and *RBM*. The first two scenarios assume the continuation of *Choice’s* print publishing programs. In scenario 3, we assume the elimination of the print publishing program. All three scenarios assume that *Choice’s* electronic publishing program becomes open access. For a detailed financial analysis, refer to Appendix I.

**Scenario 1 (Appendix I)**

In this scenario, *ChoiceReviews.online* becomes open access while the Magazine and *Reviews on Cards* (ROC) continue as priced publications. This scenario assumes a 20 percent decline in Magazine and *Reviews on Cards* circulation—and thus subscription revenues—as a result of the free availability of the online product. It assumes no loss of advertising or licensing revenues.

A. Impact on Revenues

- Magazine circulation declines from 3,300 to 2,640; ROC circulation declines from 675 to 540.
- Print subscription revenues decline from $1,038,637 to $830,910, a reduction of $207,727 (20%).
- Electronic subscription revenues decline from $215,219 to zero, a 100% reduction.
- All other revenue lines are unchanged.
- Total revenues decline from $2,456,010 to $2,033,064, a reduction of $422,946 (17.2%).

B. Impact on Expenses

- Magazine print run declines from 4,750 to 3,500; ROC print run declines from 950 to 760.
- Magazine unit printing cost increases from $2.58 to $3.50; ROC unit printing cost increases from $9.80 to $10.00.
- Total printing, binding, fulfillment, and postage expenses decline from $179,125 to $139,716, a reduction of $39,409 (22%).
- Payroll and related expenses decline by $34,375 (3.3%) as a result of elimination of one administrative assistant position in Customer Service.
- Overhead declines by $41,449 (17.2%) due to reduced revenues.
- All other expense lines unchanged.
C. Impact on Net Revenues
   ▪ Net revenues decline from $148,095 to ($159,619), a decrease of $307,714 (207.8%).

D. Impact on Membership
   ▪ None expected.

**Scenario 2 (Appendix I)**

In this scenario, *ChoiceReviews.online* becomes open access while the Magazine and *Reviews on Cards* continue as priced publications. This scenario assumes a 40 percent decline in Magazine and *Reviews on Cards* circulation—and thus subscription revenues—as a result of the free availability of the online product. It assumes no loss of advertising or licensing revenues.

A. Impact on Revenues
   ▪ Magazine circulation declines from 3,300 to 1,980; ROC circulation declines from 675 to 405.
   ▪ Print subscription revenues decline from $1,038,637 to $623,182, a reduction of $415,455 (40%).
   ▪ Electronic subscription revenues decline from $215,219 to zero, a 100% reduction.
   ▪ All other revenue lines are unchanged.
   ▪ Total revenues decline from $2,456,010 to $1,825,336, a reduction of $630,674 (25.7%).

B. Impact on Expenses
   ▪ Magazine print run declines from 4,750 to 2,850; ROC print run declines from 950 to 570.
   ▪ Magazine unit printing cost increases from $2.58 to $4.00; ROC unit printing cost increases from $9.80 to $11.25.
   ▪ Total printing, binding, fulfillment, and postage expenses decline from $179,125 to $113,337, a reduction of $65,788 (36.7%).
   ▪ Payroll and related expenses decline by $34,375 (3.3%) as a result of elimination of one administrative assistant position in Customer Service.
   ▪ Overhead declines by $61,806 (25.7%) due to reduced revenues.
   ▪ All other expense lines unchanged.

C. Impact on Net Revenues
   ▪ Net revenues decline from $148,095 to ($320,619), a decrease of $468,705 (316.5%).

D. Impact on Membership
   ▪ None expected.
**Scenario 3** (Appendix I)

In this scenario, *Choice* discontinues print while *ChoiceReviews.online* becomes open access. This scenario assumes the complete elimination of paid circulation, and thus subscription revenues. It assumes no loss of advertising or licensing revenues.

A. Impact on Revenues

- Magazine circulation declines from 3,300 to zero; ROC circulation declines from 675 to zero.
- Print subscription revenues decline from $1,038,637 to zero, a 100% reduction.
- Electronic subscription revenues decline from $215,219 to zero, a 100% reduction.
- All other revenue lines are unchanged.
- Total revenues decline from $2,456,010 to $1,202,154, a reduction of $1,253,856 (51.1%).

B. Impact on Expenses

- Magazine print run declines from 4,750 to zero; the ROC print run declines from 950 to zero.
- Total printing, binding, fulfillment, and postage expenses decline from $179,125 to zero, a 100% reduction.
- Payroll and related expenses decline by $34,375 (3.3%) as a result of elimination of one administrative assistant position in Customer Service.
- Overhead declines by $122,878 (51.1%) due to reduced revenues.
- UBIT assessment declines from $34,997 to zero, a 100% reduction.
- All other expense lines unchanged.

C. Impact on Net Revenues

- Net revenues decline from $148,095 to ($757,634), a decrease of $905,729 (611.6%).

D. Impact on Membership

- None expected.

**Assessing the Results**

As a signatory of the BOAI, ACRL has publicly declared its support for open access in a variety of settings. One of the supported strategies in ACRL’s “Principles and Strategies for the Reform of Scholarly Communication” (see Appendix J) for example, is “the
development of peer-reviewed open access journals, which follow business models that obviate the need for subscriptions or other economic restrictions on access.\textsuperscript{40} The challenge facing ACRL at this point is to determine whether and how to implement open access, a process that, as has been noted, “may be difficult for ACRL to resolve because of the close ties between the journals, membership, and revenue”\textsuperscript{41} (see Appendix K). As both a leading academic library association and a scholarly publisher, ACRL is in a unique position with respect to open access.

Historically, the ACRL publishing program has generated a substantial surplus. Over the past five years, for example, \textit{C&RL News}, \textit{C&RL}, and \textit{RBM} have together generated average net revenues of just under $180,000 per year (see Appendix L), with \textit{C&RL News} contributing the lion’s share. The availability of these monies has helped to finance ACRL’s activities on behalf of academic libraries and the library profession. In effect, ACRL’s publishing program has subsidized member services. The success of the ACRL publishing program has been a contributing factor, for example, in ACRL’s ability to forego a dues increase during the past decade.

As the preceding analyses suggest, the adoption of the open access model for any or all of ACRL’s serials will have significant financial consequences for ACRL. In the absence of new revenue sources to replace foregone subscription monies, publishing revenues will decrease more rapidly than expenses. The net result will be either significantly lower net publishing revenues or a deficit.

The magnitude of the revenue problem will depend on the number of serials to be converted to open access and the strategies followed. The amount of new funding needed ranges from as little as $5,000 to $10,000—to convert \textit{RBM} to open access—to over a million dollars—to convert all four serials to open access while discontinuing print.

Any estimate of the magnitude of the funding needed for open access at this point is, of course, just that, an estimate. The bottom line is that open access will cost money. This is implicit in the model, and is no reason, in and of itself, to forgo further exploration. On the other hand, some understanding of the landscape, however rough, is always useful at the beginning of the journey.

\textbf{Learning by Example: Two Preliminary Case Studies}

How then, might ACRL decide how, and whether, to proceed with the conversion of one or more of its journals to open access? We offer here two very preliminary analyses of two very different serials—\textit{C&RL} and \textit{Choice}.

\textsuperscript{40}Association of College & Research Libraries, Scholarly Communications Committee, “Principles and Strategies for the Reform of Scholarly Communication,” \url{http://www.ala.org/ala/acrl/acrlpubs/whitepapers/principlesstrategies.htm}.

\textsuperscript{41}Ray English, “Houses, order of” SCHOLCOMM postdated April 8, 2003.
C&RL

C&RL is perhaps the most likely candidate for conversion to open access among ACRL’s current stable of serials. A highly regarded peer-reviewed journal, it most closely approximates the type of publication viewed as a prime candidate for open access by the BOAI. Leaving aside for the moment any membership implications, let us take a quick look at the level of author payments that would be required to support an open access version of C&RL.

Based on our analysis in Scenarios 1, 2, and 3, we already know roughly how much money would be required to replace revenues lost as a result of conversion to open access. In the case of C&RL, the monies needed range from $50,558 (Scenario 3) to $76,307 (Scenario 2). Note that in the case of the two membership serials, of which C&RL is one, Scenario 3—which calls for elimination of print—is actually our least expensive option. However, also note that this scenario involves as yet undetermined costs in the form of a negative impact on membership.

Next, we need to know something about the number of authors who submit and publish articles in C&RL. For the period June 2002 to June 2003, the numbers are as follows:

- Manuscripts received 104
- Articles accepted 33
- Rejection rate 68.3%

With these numbers in hand, we can now quickly estimate the level of the fees that would be necessary to generate our desired range of revenues—$50,550 to $76,300. And the answer—several possible answers really—is:

- Option 1. Charge a fee only to those authors whose articles are accepted. This option would require a charge of $1,480 to $2,260 to authors whose articles are accepted for publication in C&RL.

- Option 2. Charge all authors who submit articles a processing fee. Because there are more of these authors—104 instead of 33—this option would require a lower fee, ranging in amount from $470 to $715.

- Option 3. Charge both a submission fee and a publication fee so designed that each will generate approximately 50 percent of the necessary revenues. In this case, the necessary submission fees would range from $250 to $370 and author fees from $770 to $1,160.

The next question, which undoubtedly requires further investigation, is whether any or all of the above fee schedules seem feasible for C&RL. If not, that is not necessarily the end of the story as there is nothing to prevent us from combining author fees with other forms of alternative funding, e.g., institutional memberships. Our goal here is simply to demonstrate the kind of analysis needed to determine the feasibility of converting a serial like C&RL to open access.
As we might expect, the magnitude of funding needed to convert a publication like *Choice* to open access is considerably greater than for a typical research journal. As our scenarios suggest, under open access *Choice*’s revenues will decline more rapidly than expenses, resulting in a deficit under all three scenarios. This is not unexpected. The point of open access, after all, is to identify and implement new revenue streams that can replace current subscription revenues. What our three scenarios do is help estimate the amount of funding needed from alternative sources if *Choice* is to become an open access publication.

How much money are we talking about then? This varies by scenario. Under Scenario 1, *Choice* would incur an operating deficit of approximately $160,000. It would, therefore, need to raise an additional $160,000 from other sources in order to break even. In order to restore the status quo ante, it would need to raise an additional $150,000 above and beyond the initial $160,000 for a total of $310,000. The comparable figures for Scenarios 2 and 3 are:

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<th>Scenario 2</th>
<th>Scenario 3</th>
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<tbody>
<tr>
<td>Monies needed to break even</td>
<td>$320,000</td>
<td>$760,000</td>
</tr>
<tr>
<td>Monies needed to equal projected 2004 results</td>
<td>$470,000</td>
<td>$905,000</td>
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Accordingly, *Choice*’s total alternative revenue needs under Scenarios 1, 2, and 3 range from $160,000 to $905,000. The amount needed depends on the scenario selected and the level of funding deemed sufficient under that scenario.

Our next step is to identify feasible alternative revenue sources. Among the options suggested by BOAI are:

- Research grants
- Author payments
- Institutional memberships
- Endowment monies
- The sale of enhanced, value-added products
- Savings resulting from the conversion to electronic publication
- Voluntary contributions

Several of these options—research grants, author payments, institutional memberships, and savings from conversion to electronic—seem unlikely to apply to *Choice*. There simply is no significant research funding available for authors of reviews or bibliographic essays, nor is there likely to be.

Similarly, author payments are an unlikely solution. When *Choice* was launched in 1964, one of the unanswered questions was whether it would be possible to recruit qualified reviewers without offering payment for their services. As we now know, the answer was yes. This was quite fortunate, and probably essential to *Choice*’s long-term survival, for
even the most minimal of payments—say $50—would currently add several hundred thousand dollars a year to *Choice*’s operating expenses. However, it seems highly unlikely that even *Choice*’s most loyal reviewers would be willing and able to pay *Choice* for the “privilege” of publication.

Unfortunately, the elimination of author payments also implies the removal of institutional memberships from our list of options. In the open access model, institutional memberships are seen as an alternative method of obtaining what amounts to author payments. In return for institution X’s membership payment, open access journal A agrees not to charge any author fees for articles accepted from institution X authors. However, if open access journal A does not charge author fees, then institution X has little incentive to take out an institutional membership. Instead, it might elect to contribute to open access journal A on a voluntary basis.

As for cost savings, our scenarios suggest, as does publishing logic, that any savings realized from a move to open access will be more than offset by the resulting revenue losses.

By process of elimination, therefore, we are left with three possible alternative revenue sources worth further exploration—voluntary contributions, endowment funding, and the sale of priced, value-added products. This is not the time or place to present a detailed business plan for any of these possibilities. Instead, we offer a brief thumbnail sketch of key parameters for each option.

**Option 1. Voluntary Contributions from Institutions**
- Minimum amount of funds needed: $160,000
- Maximum amount of funds needed: $905,000
- Target institutions: academic libraries
- Number of US academic libraries: 3,52742
- Target participation rate: 50%
- Minimum annual contribution needed: $90.00
- Maximum annual contribution needed: $515.00
- Current base subscription rates:
  - *Choice Magazine*: $270.00
  - Reviews on Cards: $360.00
  - *ChoiceReviews.online*: $300.00

Comment: Raising funds in this manner would require additional labor, and probably the retention of the full-time customer service position currently projected for elimination under Scenario 3.

Option 2. An Endowment Campaign

- Minimum amount of funds needed: $160,000
- Maximum amount of funds needed: $905,000
- Anticipated annual withdrawal rate: 5%
- Minimum endowment principal needed: $3,200,000
- Maximum endowment principal needed: $18,100,000
- Current value of Choice endowment: $500,000
- Minimum additional principal needed: $2,700,000
- Maximum additional principal needed: $17,600,000
- Comment: The maximum amounts needed to fund open access in this manner are almost certainly prohibitive.

Option 3. Value-Added Publishing Program

- Minimum amount of funds needed: $160,000
- Maximum amount of funds needed: $905,000
- Minimum sales needed @ $100/unit: 1,600
- Maximum sales needed @ $100/unit: 9,050
- Minimum sales needed @ $250/unit: 640
- Maximum sales needed @ $250/unit: 1,415
- Comment: Additional research and analysis would be required to determine whether there are new Choice products that would be attractive and saleable to academic libraries if Choice's current publications were available at no charge.

With these brief and incomplete analyses, we have clearly only scratched the surface. The next step is up to ACRL itself. What does ACRL wish to do about open access with respect to its own publishing program? That is the question, and here we come to what is, for now at least, the end of our portion of the journey. In closing, we offer a brief checklist of questions to be addressed en route.

**Open Access and ACRL: A Preliminary Checklist**

- **Step 1.** Determine which, if any, ACRL serials are most suitable for conversion to open access.

  **Suggestion:** Based on BOAI, classify the four ACRL serials as follows:

  - *C&RL:* As a peer-reviewed journal, ACRL’s leading candidate for open access.
**RBM:** As a scholarly journal which is not peer reviewed, a possible candidate for open access.

**C&RL News:** Neither a peer-reviewed nor a scholarly journal and a major contributor to ACRL’s net revenues; not a candidate for open access.

**Choice:** Also neither a peer-reviewed nor a scholarly journal in the traditional sense; not a candidate for open access.

### Step 2. Assess the feasibility of an open access business plan for the selected journals by an investigating of the following items:

- Determine the approximate magnitude of author fees required to replace subscriptions and other lost revenues for these serials.\(^{43}\)
- Given these numbers, determine the feasibility of an author-pays model by consulting with the journal editor, editorial board, and selected authors/members.
- If an author-pays model does not seem realistic, determine whether there are other feasible funding possibilities, e.g.:
  - Institutional memberships
  - Research monies
  - Endowment monies
  - The publication and sale of enhanced, value-added products
  - Savings resulting from the conversion to open access
  - Voluntary contributions
  - ACRL funding of the deficit from its other revenues
- Estimate the amount of funding likely to be obtainable from each of these sources.
- Assess the feasibility of developing a viable open access business plan for the selected journal or journals.\(^{44}\)

### Step 3. If open access seems a realistic possibility, proceed with the development of a formal business plan.

- Determine who will prepare the plan and what additional advice will be sought, e.g.:

43 See the preliminary case study of *C&RL* author fees in the section entitled “Learning by Example: Two Preliminary Case Studies.”

44 If this is the final outcome, consider whether to amend ACRL’s public positions on open access and whether to support alternative publishing models, e.g., the “D.C. Principles.”
- Legal advice re copyright-related decisions
- Membership advice and opinions
- Publishing advice
  - Establish key target dates.

- **Step 4.** Implement the plan.
Appendices

Appendix A: Budapest Open Access Initiative

http://www.soros.org/openaccess/read.shtml

In old tradition and a new technology have converged to make possible an unprecedented public good. The old tradition is the willingness of scientists and scholars to publish the fruits of their research in scholarly journals without payment, for the sake of inquiry and knowledge. The new technology is the internet. The public good they make possible is the world-wide electronic distribution of the peer-reviewed journal literature and completely free and unrestricted access to it by all scientists, scholars, teachers, students, and other curious minds. Removing access barriers to this literature will accelerate research, enrich education, share the learning of the rich with the poor and the poor with the rich, make this literature as useful as it can be, and lay the foundation for uniting humanity in a common intellectual conversation and quest for knowledge.

For various reasons, this kind of free and unrestricted online availability, which we will call open access, has so far been limited to small portions of the journal literature. But even in these limited collections, many different initiatives have shown that open access is economically feasible, that it gives readers extraordinary power to find and make use of relevant literature, and that it gives authors and their works vast and measurable new visibility, readership, and impact. To secure these benefits for all, we call on all interested institutions and individuals to help open up access to the rest of this literature and remove the barriers, especially the price barriers, that stand in the way. The more who join the effort to advance this cause, the sooner we will all enjoy the benefits of open access.

The literature that should be freely accessible online is that which scholars give to the world without expectation of payment. Primarily, this category encompasses their peer-reviewed journal articles, but it also includes any unreviewed preprints that they might wish to put online for comment or to alert colleagues to important research findings. There are many degrees and kinds of wider and easier access to this literature. By "open access" to this literature, we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited.

While the peer-reviewed journal literature should be accessible online without cost to readers, it is not costless to produce. However, experiments show that the overall costs of providing open access to this literature are far lower than the costs of traditional forms of dissemination. With such an opportunity to save money and expand the scope of dissemination at the same time, there is today a strong incentive for professional associations, universities, libraries, foundations, and others to embrace open access as a means of advancing their missions. Achieving open access will require new cost recovery models and financing mechanisms, but the significantly lower overall cost of
dissemination is a reason to be confident that the goal is attainable and not merely preferable or utopian.

To achieve open access to scholarly journal literature, we recommend two complementary strategies.

I. Self-Archiving: First, scholars need the tools and assistance to deposit their refereed journal articles in open electronic archives, a practice commonly called, self-archiving. When these archives conform to standards created by the Open Archives Initiative, then search engines and other tools can treat the separate archives as one. Users then need not know which archives exist or where they are located in order to find and make use of their contents.

II. Open-access Journals: Second, scholars need the means to launch a new generation of journals committed to open access, and to help existing journals that elect to make the transition to open access. Because journal articles should be disseminated as widely as possible, these new journals will no longer invoke copyright to restrict access to and use of the material they publish. Instead they will use copyright and other tools to ensure permanent open access to all the articles they publish. Because price is a barrier to access, these new journals will not charge subscription or access fees, and will turn to other methods for covering their expenses. There are many alternative sources of funds for this purpose, including the foundations and governments that fund research, the universities and laboratories that employ researchers, endowments set up by discipline or institution, friends of the cause of open access, profits from the sale of add-ons to the basic texts, funds freed up by the demise or cancellation of journals charging traditional subscription or access fees, or even contributions from the researchers themselves. There is no need to favor one of these solutions over the others for all disciplines or nations, and no need to stop looking for other, creative alternatives.

Open access to peer-reviewed journal literature is the goal. Self-archiving (I.) and a new generation of open-access journals (II.) are the ways to attain this goal. They are not only direct and effective means to this end, they are within the reach of scholars themselves, immediately, and need not wait on changes brought about by markets or legislation. While we endorse the two strategies just outlined, we also encourage experimentation with further ways to make the transition from the present methods of dissemination to open access. Flexibility, experimentation, and adaptation to local circumstances are the best ways to assure that progress in diverse settings will be rapid, secure, and long-lived.

The Open Society Institute, the foundation network founded by philanthropist George Soros, is committed to providing initial help and funding to realize this goal. It will use its resources and influence to extend and promote institutional self-archiving, to launch new open-access journals, and to help an open-access journal system become economically self-sustaining. While the Open Society Institute's commitment and resources are substantial, this initiative is very much in need of other organizations to lend their effort and resources.

We invite governments, universities, libraries, journal editors, publishers, foundations, learned societies, professional associations, and individual scholars who share our vision to join us in the task of removing the barriers to open access and building a future in
which research and education in every part of the world are that much more free to flourish.

February 14, 2002
Budapest, Hungary

Leslie Chan: Bioline International
Darius Cuplinskas: Director, Information Program, Open Society Institute
Michael Eisen: Public Library of Science
Fred Friend: Director Scholarly Communication, University College London
Yana Genova: Next Page Foundation
Jean-Claude Guédon: University of Montreal
Melissa Hagemann: Program Officer, Information Program, Open Society Institute
Stevan Harnad: Professor of Cognitive Science, University of Southampton, Université du Québec a Montréal
Rick Johnson: Director, Scholarly Publishing and Academic Resources Coalition (SPARC)
Rima Kupryte: Open Society Institute
Manfredi La Manna: Electronic Society for Social Scientists
István Rév: Open Society Institute, Open Society Archives
Monika Segbert: eIFL Project consultant
Sidnei de Souza: Informatics Director at CRIA, Bioline International
Peter Suber: Professor of Philosophy, Earlham College & The Free Online Scholarship Newsletter
Jan Velterop: Publisher, BioMed Central
Appendix B: Washington D.C. Principles For Free Access to Science: A Statement from Not-for-Profit Publishers

http://www.dcprinciples.org/statement.htm
http://www.dcprinciples.org/statement.pdf

(MARCH 16, 2004) - WASHINGTON, DC – As scholarly, not-for-profit publishers, we reaffirm our commitment to innovative and independent publishing practices and to promoting the wide dissemination of information in our journals. Not-for-profit scientific, technical, and medical publishers are an integral part of the broader scholarly communities supporting scientists, researchers, and clinicians. We work in partnership with scholarly communities to ensure that these communities are sustained and extended, science is advanced, research meets the highest standards, and patient care is enhanced with accurate and timely information.

We continue to support broad access to the scientific and medical literature through the following publishing principles and practices.

1. As not-for-profit publishers, we see it as our mission to maintain and enhance the independence, rigor, trust, and visibility that have established scholarly journals as reliable filters of information emanating from clinical and laboratory research.

2. As not-for-profit publishers, we reinvest all of the revenue from our journals in the direct support of science worldwide, including scholarships, scientific meetings, grants, educational outreach, advocacy for research funding, the free dissemination of information for the public, and improvements in scientific publishing.

3. As not-for-profit publishers, we have introduced and will continue to support the following forms of free access:

   Selected important articles of interest are free online from the time of publication;

   The full text of our journals is freely available to everyone worldwide either immediately or within months of publication, depending on each publisher’s business and publishing requirements;

   The content of our journals is available free to scientists working in many low-income nations;

   Articles are made available free online through reference linking between these journals;

   Our content is available for indexing by major search engines so that readers worldwide can easily locate information.

4. We will continue to work to develop long-term preservation solutions for online journals to ensure the ongoing availability of the scientific literature.

5. We will continue to work with authors, peer-reviewers, and editors for the development of robust online and electronic tools to improve efficiency of their important intellectual endeavors.

6. We strongly support the principle that publication fees should not be borne solely by researchers and their funding institutions, because the ability to publish in scientific
journals should be available equally to all scientists worldwide, no matter what their economic circumstances.

7. As not-for-profit publishers, we believe that a free society allows for the co-existence of many publishing models, and we will continue to work closely with our publishing colleagues to set high standards for the scholarly publishing enterprise.
Appendix C: ALPSP Principles of Scholarship-Friendly Journal Publishing Practice


The Association of Learned and Professional Society Publishers (www.alpsp.org) is the international trade association for not-for-profit publishers and those who work with them to disseminate scholarly and professional information in journals, books and other media.

This document results from a series of analyses which ALPSP has carried out of the needs of authors and readers, and of the practices of scholarly journal publishers. It is intended as a guide to those practices which may best serve the interests of scholarship, without damaging publishers’ ability to continue to provide the value which they add.

Scholarly journal publishers understand that authors are their life-blood, and that satisfying the needs of their authors is paramount; the needs of readers and institutions are also key, and, in fact, authors and readers are often the same people. In satisfying these needs, we believe that publishers add considerable value to scholarly information; however, adding that value costs money, and this has to be paid for at some point in the information chain if publishers are to continue to add that value. (In addition, learned societies in many cases need publishing surpluses in order to support their other community services, such as low membership dues, conferences, travel bursaries, research and other grants and public education.)

The needs of authors

Our own surveys\(^1,2\) have shown that two needs are of equally great importance to authors: maximum dissemination of their work, and publication in the most prestigious journal possible.

1) Dissemination

1.1 Dissemination by the author

It is in publishers’ as well as authors’ interest to maximize access to authors' work. There are many good examples of author agreements which enable authors to retain the rights which are particularly important to them:

1.1.1 Posting of preprints According to our own survey of 149 publishers, including all the leading players\(^4\), nearly 50% of publishers have no problem with authors posting a preprint or submission version of their article on one or more of their own, their institution’s or a disciplinary website or repository, although some impose certain conditions such as requiring a link to the published version\(^5\). So far, experience in those (relatively few) fields – such as high energy physics\(^6\) -where such repositories are active suggests that there is little or no damage to subscription or licensing income from the research journals.

1.1.2 Posting of final version
Our survey\(^7\) shows that over 60% of publishers allow authors to post the final, published version of their article on websites or repositories\(^8\), some even providing the PDF for this purpose. Although some speculate that increasing use of OAI-compliant metadata will ultimately enable such posting to undermine subscription and licence income, this does not seem to be the case so far.

1.1.3 Re-use for teaching purposes

The vast majority (over 70%) of publishers are happy to allow authors to re-use their material for educational purposes within their own institution; some explicitly allow the institution to retain this right if the author moves elsewhere. Authors are not usually required to seek permission for such use; this saves both author and publisher time.

1.1.1 Re-use in own publications

Over 40% of publishers also have no problem with authors re-using their work in subsequent publications or presentations, provided the source is properly acknowledged; most if not all will grant such permission free of charge on request, and many explicitly state that the author does not need to seek permission in advance.

1.1.5 Retention of copyright

The actual retention of copyright in itself does not appear to be a burning concern for authors and, provided the agreement with the publisher permits both author and publisher to do the things they need to do, the actual ownership of copyright may not matter. Indeed, there is a case for publishers holding copyright in order to act as speedily and forcefully as possible to defend both their and the author’s interest in cases of plagiarism\(^10\).

1.2 Dissemination by the publisher

Maximizing access to authors’ work is good for the publisher as well as the author, provided it does not undermine the publisher’s financial model. Most publishers are finding a variety of ways to make more content available to more people.

1.2.1 Marketing

Publishers will ensure that their journals are as widely known as possible throughout the world, including carrying out direct promotion to potential authors, readers and subscribers, and attending and exhibiting at relevant conferences. Publishers also ensure that references are linkable (i.e. correct) and are in fact linked, using a technology such as CrossRef, to the cited material; they also ensure maximum retrievability by establishing bi-directional links with the appropriate abstracting and indexing databases.

1.2.2 Licences

The majority of scholarly journals (75% in our recent study\(^11\)) are now online, and the publishers of many of the remainder expect to put them online in the near future – demand has been slower to build up in the arts and humanities, for a variety of reasons, than in science, technology and medicine. The growth of model licences, often developed
in close collaboration between publishers and libraries, has helped publishers to develop their own scholarship-friendly licences.

Publishers’ licences for their online journals commonly include a number of valuable rights which were not automatic, or not possible, with print journals:

- Off-site access for remote users
- The creation of course packs and electronic reserves without having to seek further permission
- Inter-library document supply using printed out and, in many cases, electronic copies

Larger publishers can offer ‘bundles’ of all their titles, thus offering access to previously unsubscribed content for a small additional charge (evidence shows that such content is often more heavily used than expected \(^\text{13,14}\)). Many publishers also offer licences to all the libraries in a consortium for little more than was previously spent on individual subscriptions, thus opening up access for many more people. Smaller publishers can participate in multi-publisher collections, such as the ALPSP Learned Journals Collection, BioOne, Project Muse or the American Institute of Physics, to sell more effectively to consortia and other large customers.

1.2.3 Access for less developed countries

There are a number of schemes \(^\text{16}\) which help publishers to provide free or very inexpensive access to their journals for users in the least prosperous countries of the world. Nearly 60% of publishers already participate in one or more of these. Online access is not, of course, always the best solution if hardware and/or adequate connections are not available; other schemes provide selected content on CD-ROM, or arrange low-priced local reprints. Provided there are adequate safeguards against ‘leakage’ into more prosperous markets, these schemes are extremely valuable and do not damage publishers’ business models.

1.2.4 Archival access

Publishers have a variety of models for providing access to their online back-files – some include access to some or all years in their current licence fee, some charge a separate fee, and some provide free access to all after a certain period. In our survey \(^\text{17}\) 3% of publishers made their backfiles freely available after a year or less and a further 6% after a longer period; the 66 small not-for-profit publishers in the survey stood out in this regard with 8% making backfile access free immediately, 6% after 6 months, 17% after a year, 6% in the next subscription year, and an additional 6% after a longer period. If the timing is carefully chosen (it may differ between disciplines), it appears that this need not undermine sales.

1.2.5 Digital archive

In addition to the electronic files which are a by-product of online publication, a number of publishers are digitising their complete back-runs. Even at the favourable prices which are on offer, this is an expensive operation; it is unlikely that publishers will be able to
make the resultant archive freely available unless the costs have been covered in some other way (e.g., by a grant). However, even if the access is not free of charge, the availability of the electronic archive is in itself a considerable benefit to users. Secondary publishers are also digitising their database archives in order to provide comprehensive and consistent subject indexes to the research literature, covering the output of many thousands of journal publishers.

1.2.6 Open Access journals

Making journals completely free to readers everywhere in the world is an appealing idea and one which is in tune with the mission of many learned societies, although it is of course necessary to assure that costs are adequately covered, for example by authors, institutions, or funding agencies; there is a growing number of Open Access journals, many of them experimental. Not all publishers will feel able to take this route, but all will be interested to learn from the findings of the pioneers.

2) Prestige

Authors wish to publish in the most prestigious journals in their field; publishers also want their journals to be as highly rated as possible, as this both attracts authors and increases the chances of subscriptions and retention.

2.1 Peer review

Peer review, for all its faults, is considered essential by authors and institutions; it should be carried out as speedily, efficiently and fairly as possible. If some papers in a journal are peer reviewed and others are not, it is helpful if the publisher makes this clear. Peer review not only establishes that a paper is soundly written and based on valid work; the referees also help the journal editor to select papers which are important, interesting, and relevant to the readership of a particular journal, as well as providing valuable professional feedback to the author. The process can result in significant improvements being made before an article is published.

Electronic systems can speed up submission and transmission of manuscripts, although the actual peer review process is still dependent on the scarce resource of referees’ time (a few publishers pay for a speedy response). It is good practice to:

- Ensure that a referee is available before sending a manuscript
- Provide referees with a standard checklist to aid consistency
- Make the process as anonymous as possible (though this is not always easy, particularly in specialist areas) unless author and/or referee have agreed that their names may be disclosed
- Ensure that referees’ comments are suitable for passing on to authors
- Provide authors with information about the progress of their papers
- Publicly acknowledge the help of referees, perhaps by publishing a list at the end of each volume
There are numerous variations on the form of peer review, although it is usual to use at least two external reviewers, with the journal editor having a casting vote if necessary. Authors usually, but not always, do not know the names of the referees. In some cases the author’s name is concealed from the referees (although references can make it impossible to anonymise a manuscript completely). Some online journals are experimenting with open online commentary either before or after formal publication.

2.2 Citation

The ISI Journal Citation Index, though a crude tool for evaluating the overall quality of whole journals, as opposed to individual articles, is very widely used by funding bodies and indeed libraries. It is therefore important for both authors and publishers that their journals are covered in the Index – something which takes hard work and persistence on the part of the publisher of a new journal; not all are successful, although the number of journals indexed is rising steadily. It is very helpful if publishers can publicise the Impact Factor of each journal and – more important – its ranking within its field. There is early evidence that widespread online access increases citations – thus it would seem to follow that Open Access journals might prove in time be the mostly highly cited of all. Appropriate inclusion of review articles – typically more highly cited than original research papers - can also help to boost a journal’s citation ranking.

As better tools develop for measuring usage and linking, as well as citation, it will be possible to provide richer analyses of the true value of individual articles.

2.3 Editing

Although the benefits may be invisible to readers, authors appreciate the value of editing carried out by publishers’ in-house or freelance staff; it improves the clarity and comprehensibility of their work. In the case of non-native speakers, it may be absolutely essential.

The needs of readers

Readers’ needs are not very different from those of authors:

3) Electronic access

Readers are very clear that they want access to information electronically (though the enthusiasm varies in different disciplines). They want that access to be free at the point of use, probably paid for by the library. They are keen to have access to back-files as well as current material. They value the flexibility of electronic journals, allowing them to access content at any time, at their desktop or even at home. They also value very highly the ability to navigate seamlessly from references to cited material through linking, and to supporting materials where they are available online; it is therefore important that publishers verify and link the references in their publications and prepare their content in a way to enable integration with other online resources where possible.

Browsing favourite journals and searching bibliographic databases of journals rank equally highly as a means of finding articles of interest; it is thus extremely important
that publishers ensure that their content is included in all the major abstracting and indexing databases which are used by their customers.

4) Peer review

Readers also rate the importance of peer review very highly indeed; it follows that they need to know that articles have in fact been peer reviewed. In an environment where the sheer quantity of information is growing inexorably, peer review (in its broadest sense) provides an increasingly valuable filtering function for the busy reader; a journal title offers a meaningful ‘envelope’ for the content most worth reading.

5) Additional features

Readers appreciate additional features such as review articles, comment and analysis. They seem relatively less interested in electronic ‘bells and whistles’.

6) New journals

From time to time, new research areas develop for which a dedicated journal may be of value, rather than continuing to add to the extent of an existing more general journal. Publishers’ expert staff (often subject specialists in their own right) carefully research the needs of authors, readers and libraries for new journals; they are well aware of the resistance to additional calls on library funds. However, if the need is clear they will invest considerable sums in creating and launching the new title; it is likely to make losses for the first few years of its life, and some never become viable – this is a risk which publishers accept.

The needs of institutions

ALPSP encourages publishers to adopt licensing and pricing models which as far as possible meet the known requirements of customers, and promotes discussion and collaboration with librarians to achieve this.

7) Licensing

7.1 Access

The types of licensing arrangement outlined above enable institutions to provide access to more content for more people for relatively little additional outlay; the average price paid per journal has thus decreased.

7.2 Licensing terms

7.2.1 Posting of authors’ preprints and/or published versions

As mentioned above, a growing number of publishers’ author agreements allow authors to deposit their articles in pre- or post-publication form in personal or institutional repositories. At present, this appears to present no threat to publishers’ cost recovery.

7.2.2 Use in authors’ institution

Many agreements allow authors to use their own work for educational purposes within their own institution; some extend this permission to other faculty within the institution, possibly even after the author has moved elsewhere.
7.2.3 Course packs and e-reserve
Many licences allow free use of material for course packs and e-reserve collections; provided institutions abide by the conditions of the licence and do not distribute the material outside the licenced population, it should not be necessary to seek permission for each such use.

7.2.4 Inter-library document supply
In a number of countries of the world, educational and other non-profit libraries are legally entitled to supply copies of documents to users of other such libraries for non-commercial purposes. It is increasingly rare for licences for electronic journals to forbid such use, and indeed some extend it, explicitly making it possible to send copies electronically. Publishers have had concerns that electronic versions could proliferate, thus denying them legitimate sales, but so far there is little evidence of this.

7.2.5 Other licensing issues
Institutions are also concerned about the definition of who is entitled to access (understandably, they would like this to be as wide as possible; in some states, they are obliged to provide public access). They want to be sure that they will continue to have access to what they have paid for, even if they should cease to subscribe in future. They want to be clear about the limits of their liability for any misdemeanours by their users. Some may be unable to sign a licence which is governed by a law other than their own.

7.2.6 Usage statistics
Publishers no longer need to fear that usage statistics are a weapon which will be used against them by libraries eager to cancel journals; rather, they are an invaluable source of information to publisher and customer alike. There is therefore no reason not to include provision of usage statistics as one of the licence terms. Participation in the COUNTER project is even more helpful, as it ensures that usage statistics from different sources are all comparable.

On all these issues, publishers can avoid time-consuming discussion by basing their licences on one of the existing models such as the PA/JISC model licence or the LibLicense one.

8) Pricing
Publishers recognise that library funding has not (and perhaps never could have) kept pace with research output, leading to increasing pressure on acquisition budgets. Many publishers (not only not-for-profits) price their journals extremely reasonably and aim to make fairly modest profits or surpluses.

Year-on-year increases are driven by a number of factors:

- Underlying cost increases – although publishers are seeking economies in all aspects of publication (including automation, and placing work offshore), some costs, such as paper, have been rising ahead of inflation; staff costs can contribute significantly (and staff with a high degree of IT expertise are particularly expensive)
• Increase in the number of articles published – the output of research is still growing, though not as steeply as in the recent past

• Decrease in the number of customers overall – a steady decline has been seen over many years

• Currency fluctuations

A number of publishers have made an explicit commitment to keep their annual percentage increases within single figures, irrespective of what happens to their costs.

Pricing and charging for electronic journal licences is still evolving; publishers welcome the collaboration of libraries and library organisations in developing and experimenting with new models. Models based on previous print expenditure, while a rational starting-point, are not sustainable in the longer term and better models, based on population numbers or usage, seem likely to take their place. Any new pricing models, however, are bound to have losers who end up paying more (e.g., very large institutions or very heavy users) as well as winners.

9) Preservation

The long-term preservation of electronic content is of great concern to libraries; they are often understandably unwilling to abandon print subscriptions without realistic assurances that the content they are buying will continue to be available, not only for their own patrons but for future generations. However, long-term preservation involves considerably more than just depositing PDF copies in national library or other archives; the material will need to be protected both against deterioration, and against future technological change – XML is now considered by many to be the most future-proof format. Depending on the publisher’s publication processes, this may entail additional cost to produce files in the right format; it will also entail potentially huge ongoing costs for archives, and it is by no means clear as yet who will pay for this.

Publishers are actively engaged in the exploration of permanent deposit of electronic publications, often in association with their national libraries, and encourage the careful development of appropriate legislation. Many are also involved in research, jointly with libraries, on the best preservation formats. This is an important issue and one on which publishers are spending a good deal of time and money; collaboration both with each other and with libraries is essential.

Conclusion

It is in publishers’ interest to satisfy the needs of their authors, readers and institutional customers to the best of their ability; this entails paying close attention to what these communities are saying, and collaborating with them to develop new approaches as need arises. Scholarship-friendly publishers maximise access to and use of content; they also maximise its quality and, thus, prestige. It goes without saying that – by one business model or another – publishers need to make enough money to cover their costs and stay in business; but they recognise that institutions’ funds are increasingly inadequate to
purchase all the information required by users, and they welcome collaboration with their customers to find new approaches which might solve this dilemma.

ALPSP January 2004

1 Alma Swan and Sheridan Brown, ‘What Authors Want: the ALPSP research study on the motivations and concerns of contributors to learned journals’, ALPSP, West Sussex, 1999

2 Alma Swan and Sheridan Brown, ‘Authors and Electronic Publishing: the ALPSP research study on authors’ and readers’ views of electronic research communication’, ALPSP, West Sussex, 2002

3 See the Zwolle Group site at http://www.surf.nl/copyright and Project RoMEO at http://www.lboro.ac.uk/departments/ls/disresearch/romeo/ for numerous examples

4 John Cox and Laura Cox, ‘Scholarly Publishing Practice: the ALPSP report on academic journal publishers’ policies and practices in online publishing’, ALPSP, West Sussex, 2003

5 27 (1/3) of the 80 publishers in the RoMEO survey permitted this

6 See http://arxiv.org/

7 John Cox and Laura Cox, ‘Scholarly Publishing Practice: the ALPSP report on academic journal publishers’ policies and practices in online publishing’, ALPSP, West Sussex, 2003

8 27 (1/3) of the 80 publishers in the RoMEO survey permitted this

9 See, for example, the ALPSP ‘Model Grant of Licence’ at http://www.alpsp.org/htp_grantli.htm


11 John Cox and Laura Cox, ‘Scholarly Publishing Practice: the ALPSP report on academic journal publishers’ policies and practices in online publishing’, ALPSP, West Sussex, 2003

12 See http://www.alpsp.org/htp_licens.htm


15 See http://www.alpsp-collection.org
See http://www.alpsp.org/htp_dev.htm

John Cox and Laura Cox, ‘Scholarly Publishing Practice: the ALPSP report on academic journal publishers’ policies and practices in online publishing’, ALPSP, West Sussex, 2003

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See http://www.project-counter.org

See http://www.ukoln.ac.uk/services/elib/papers/pa/licence/Pajisc21.html

See http://www.library.yale.edu/%7Ellicense/standlicagreement.html

See http://www.alpsp.org/htp_econ.htm

See http://www.palsgroup.org.uk and click on ‘Charging mechanisms’

See http://www.alpsp.org/htp_actx.htm

See http://www.alpsp.org/htp_arc.htm

See http://www.dpconline.org/
Open access to scholarly information is a hot-button issue that quickly triggers heated discussion—especially if the topic arises in a mixed group of librarians and publishers. Sometimes the discussion ends up generating useful ideas and practical solutions to real-world problems; too often, it leads to nothing more than facile phrasemaking or spluttering accusation.

Open access has become an increasingly important and potentially divisive issue in recent years as journal inflation rates have increased. For many librarians and scholars, journal price inflation is itself the central problem and open access is the solution. According to this view, the fact that libraries have to pay for access to some scholarly information is acceptable, but prices are too high and are increasing at an insupportable rate; the establishment of competitive open-access journals will force commercial publishers to moderate their profit-seeking behavior.1

Some believe that scholarly information is a public good and ought to be available to the public at little or no charge.2 Others believe that all information is inherently free and no one ought to have to pay for access to it.3 For still others, the primary problem lies in the fact that academics are producing most of the scholarly articles in the journal marketplace, and that those articles are then being sold back to the very institutions that produced them;4 according to this view, the problem is not that journals cost money, but that the institutions that provide the content are having to pay excessively for access to the very content that they created. Then there is the question of whether access to information that has been created with the support of public funds should be restricted at all.

These and other issues surrounding open access are important, and they deserve serious consideration. Serious consideration however, requires the recognition of certain legal and economic realities. While choices made by authors, publishers, and librarians do have an effect on the information marketplace, their choices and actions have little or no effect on the deeper economic reality in which that marketplace exists. That reality is determined in fundamental ways by two simple facts over which the human players in the information economy have little control, and a productive and intelligent conversation about open access must proceed from a recognition of these facts.

In addressing them here, it will seem to some readers that I am belaboring the obvious, and to them I apologize—but I think a careful treatment of these points is necessary, because while many in the library profession recognize them as self-evidently true, there are some who regard them as blasphemous.

The myth of free information

First, there is no such thing as free information. Most people (including most proponents of open access) understand this implicitly, but it might be worthwhile to discuss why this is so. Information is not the same thing as ideas or concepts. Ideas may be free, but they
do not become information until a person creates a symbolic representation of them. Doing so is a process of labor, and the creator who undertakes that labor is incurring a cost. The creator may then choose to distribute the information at no charge to others, but that does not mean that the information is free—it means that its creator has chosen to absorb the costs of creation and distribution rather than try to recover them. When information can be generated and distributed very cheaply, or when unrestricted distribution of it will benefit the creator in some way, he or she might choose to make it freely available to others, and, in fact, people do so every day (on the open Web, in casual conversation, via e-mail, etc.). But the costs of producing and distributing that information have not magically disappeared in these cases; they have been absorbed by the author.

Authors are less likely to give away information that requires a great deal of time and effort to create. One way or another they will usually try to recover their costs or even realize a profit, as will the middlemen who turn the raw information into a publishable product and then distribute that product. Freelance authors usually recoup their costs by trading copyright for money. Scholars (most of whom are paid a salary to create information) usually try to trade their copyrights for enhanced reputation or professional advancement by submitting their writings to prestigious publishing houses or journals. Either way, those who produce labor-intensive, high-quality information usually try to get something in return for their labor.

The cost of creating information, the cost of preparing it for publication, and the cost of distributing it are all quite distinct from each other, and each type of cost may rise or fall independent of the other. When information was published primarily in print format, distribution costs were very high; in the electronic realm, they are relatively low. But even in a publishing system increasingly characterized by online distribution, the cost of preparing information for distribution remains significant. In the case of many scholarly journals, it is true that editorial tasks are performed by contributors at no cost to the publisher. However, even when articles and editorial services are provided at no charge, the remaining costs of preparing information for publication are considerable. These include a publisher’s staffing and overhead costs, which are often substantial and may actually increase when a journal moves from print to online. Consider, for example, the added costs of robust and long-term archiving (which is integral to the open access concept and not an issue with which publishers typically concern themselves in the print realm), the cost of hiring a Web master and other content maintenance staff, and the costs of acquiring and maintaining servers. A journal publisher that employs its own editorial staff has even greater costs to recover.

One more complicating factor in the scholarly information economy is the fact that many journals, particularly those published by nonprofit societies, bear the weight of recovering other costs in addition to those incidental to their own creation and distribution. Often subscription revenues support legitimate organizational activities that have nothing to do with the journals themselves, such as annual conferences or member services. For-profit publishers have legitimate costs that must be met as well, though in some cases they could lower their prices significantly and still recover those costs with revenues to spare. (What kinds of activities nonprofit societies ought to be funding from subscription revenues and to what degree commercial publishers should be allowed to
seek profit in the scholarly-information marketplace are contentious topics best suited to another essay.)

**The myth of information as a public good**

There is a second basic reality of the information economy that bears on the open-access question, and this one is more controversial than the first: *Information is not a public good.* Too often, commentators on the economics of scholarly information seem to confuse the concept of “a public good” (meaning something that is owned by the public) with “the public good” (meaning the general welfare). The fact that something is good for people, or the fact that its broad distribution would be beneficial to the general public, does not make it a public good. What makes something a public good is legal public ownership. A municipal park is one example of a public good; it is paid for and maintained with public funds, and belongs equally to all citizens. Most of the information in scholarly journals does not fit this definition.

Is it possible for information to be a public good? Yes, if it is created and owned by the public. The information contained in a government document is a public good, which is why government documents are exempt from copyright. Information produced by private individuals and organizations, however, is not a public good. Whatever its potential benefits to the world at large, however much the public might benefit from its free distribution, most information is nevertheless the intellectual property of those who create it. We can object to that fact if we wish, but it is still a legal fact.

This begs a question, of course, and it is one that bears heavily on the open access issue: What about information that is produced with government funding? If the public is underwriting the creative costs of that information, should it be freely available to the public, as some have argued?6 Like all “should” questions, this is one that has more than one possible answer. One reasonable answer is, “It depends on how much government funding was involved.” Information created at just about any university or college (public or private) can be said to have been supported to some degree by public funds—does it follow that every physics professor’s research article and every English instructor’s short story collection should pass immediately into the public domain? Perhaps a certain threshold of government funding should be set, such that information created with the substantial support of public funds becomes public property by definition (as Congressman Martin O. Sabo has proposed in H.R. 2613, the Public Access to Science Act, which is still in committee as of this writing). Until such a proposal becomes law, however, there is a legal reality within which we must work: most information created with the support of government funding is, in fact, copyrightable, and the copyright in most publicly funded information is held by the author.

**Implications for open access**

Both of these facts—that information is inherently costly, and that information is not usually a public good—pose challenges for the idea of open access. For information to be made freely and permanently available to the public, the costs of creation, publication, and distribution must be absorbed by someone other than those who wish to use it. The Internet eliminates most distribution costs, but not all of them, and does not affect creative costs or publication costs to any appreciable degree.
Do these inconvenient facts mean that open access is not desirable or that it cannot work? No. But they do define some limits to our options, and a recognition of those limits should lead us to have patience with publishers that are moving more slowly towards that model than we might like. Any proposal that is built on the premise that information is inherently free, or that online publication can be undertaken without significant cost, will not work in the real world because both of those premises are demonstrably incorrect. If we do not bear in mind the intrinsic costliness of information, we will have a very hard time discussing intelligently the intractable economic realities that govern its creation and distribution, let alone formulating pricing and distribution strategies that will provide maximum public benefit.

Nevertheless, the problems that have led to the current controversy over journal pricing and open access are real and need to be solved in some way. Clearly the status quo is insupportable; if the price of scholarly journals continues to rise at the present rate, research libraries will quickly lose the ability to meet the needs of their patrons. At the same time, it is not reasonable to expect all journal publishers (even nonprofit ones) to move immediately into an open-access model simply because the Internet has lowered the cost of distribution. We who are trying to act in the best interests of the public and maximize access to quality information must balance zeal with reason. Most journal publishers are operating in good faith and need our patience and support, as well as our exhortations, as they work through the difficult process of moving from the old information world into a new one.

Notes


About the Author

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Appendix E: Open Access Impact: *C&RL* Scenarios

**SCENARIO 1**

<table>
<thead>
<tr>
<th></th>
<th>2003 Actual</th>
<th>2003 Variance</th>
<th>2003 % Variance</th>
<th>5-Year Actual</th>
<th>5-Year % Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscriptions-Print</td>
<td>$98,458</td>
<td>$(19,692)</td>
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<td>$101,245</td>
<td>-22.2%</td>
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<td>Subscriptions-Electronic</td>
<td>$0</td>
<td>0</td>
<td>N.A.</td>
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<td>N.A.</td>
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<td>0</td>
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<td>$0</td>
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</tr>
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<td>0.0%</td>
<td>$4,554</td>
<td>-16.1%</td>
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<td>Other</td>
<td>$486</td>
<td>0</td>
<td>0.0%</td>
<td>$528</td>
<td>-8.0%</td>
</tr>
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<td><strong>Total Revenues</strong></td>
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<td>$169,231</td>
<td>-32.2%</td>
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<tr>
<td>Payroll &amp; Related Expenses</td>
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<td>0.0%</td>
<td>$29,453</td>
<td>-19.4%</td>
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<tr>
<td>Outside Services</td>
<td>$10,939</td>
<td>0</td>
<td>0.0%</td>
<td>$4,081</td>
<td>168.1%</td>
</tr>
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<td>N.A.</td>
<td>$728</td>
<td>-100.0%</td>
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<td>N.A.</td>
<td>$1,239</td>
<td>-100.0%</td>
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<td>Publication-Related Expenses</td>
<td>$73,096</td>
<td>$(1,437)</td>
<td>-2.0%</td>
<td>$75,087</td>
<td>-4.6%</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>$31,813</td>
<td>$(714)</td>
<td>-2.2%</td>
<td>$29,786</td>
<td>4.4%</td>
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<td>$17,394</td>
<td>17.4%</td>
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<td>-16.6%</td>
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<td>Unrelated Business Income Tax (UBIT)</td>
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<td>$409</td>
<td>-100.0%</td>
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<td><strong>Total Expenses</strong></td>
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<td>$(6,787)</td>
<td>-3.9%</td>
<td>$167,438</td>
<td>-1.1%</td>
</tr>
<tr>
<td><strong>Net Revenues</strong></td>
<td>($27,277)</td>
<td>($23,487)</td>
<td>86.1%</td>
<td>$1,793</td>
<td>($52,557)</td>
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<tr>
<td><strong>Additional $ Required for Breakeven</strong></td>
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<td>$50,764</td>
<td>$23,487</td>
<td>$0</td>
<td>$52,557</td>
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</table>

**Revenue Assumptions**
- 20% decline in print subscription
- No impact on electronic subscription
- 25% decline in product advertising
- No impact on licensing revenues
- No impact on other revenues

**Results**
- 20.9% decline in total revenues
- 3.9% decline in total expenses
- 86.1% decline in net revenues

**Expense Assumptions**
- No impact on payroll
- No impact on outside services
- 2.0% decline in Operating Expense
- Reduced postage expense
- Reduced fulfillment expense
- Reduced print run mailing costs
- *Reduced print sub revenues
- No impact on UBIT assessment
- No impact on UBIT assessment
Appendix E: Open Access Impact: C&RL Scenarios

### Scenario 2: 2003 Variance

<table>
<thead>
<tr>
<th></th>
<th>2003 Actual</th>
<th>2003 Variance</th>
<th>2003 Variance %</th>
<th>5-Year Actual</th>
<th>5-Year Variance</th>
<th>5-Year Variance %</th>
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<td>Subscriptions-Print</td>
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<td>($39,383)</td>
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<td>Subscriptions-Electronic</td>
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<td>$0</td>
<td>$0</td>
<td>N.A.</td>
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<td>$0</td>
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<td>Product Advertising</td>
<td>$42,328</td>
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<td>($41,739)</td>
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<td>N.A.</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Licensing</td>
<td>$3,821</td>
<td>$3,821</td>
<td>$0</td>
<td>0.0%</td>
<td>$4,554</td>
<td>($734)</td>
</tr>
<tr>
<td>Other</td>
<td>$486</td>
<td>$486</td>
<td>$0</td>
<td>0.0%</td>
<td>$528</td>
<td>($42)</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>$145,093</td>
<td>$84,546</td>
<td>($60,547)</td>
<td>41.7%</td>
<td>$169,231</td>
<td>($84,685)</td>
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<td>Payroll &amp; Related Expenses</td>
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<td>$23,753</td>
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<td>0.0%</td>
<td>$29,453</td>
<td>($5,700)</td>
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<tr>
<td>Outside Services</td>
<td>$10,939</td>
<td>$10,939</td>
<td>$0</td>
<td>0.0%</td>
<td>$4,081</td>
<td>$6,858</td>
</tr>
<tr>
<td>Travel &amp; Related Expenses</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$728</td>
<td>($728)</td>
</tr>
<tr>
<td>Meetings &amp; Conferences</td>
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<td>$0</td>
<td>$0</td>
<td>N.A.</td>
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<td>($1,239)</td>
</tr>
<tr>
<td>Publication-Related Expenses</td>
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<td>($2,659)</td>
<td>-3.6%</td>
<td>$75,087</td>
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<td>Operating Expenses</td>
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<td>-4.5%</td>
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<td>$600</td>
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<td>N.A.</td>
<td>$409</td>
<td>($409)</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
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<td>$159,060</td>
<td>($13,310)</td>
<td>-7.7%</td>
<td>$167,438</td>
<td>($8,378)</td>
</tr>
<tr>
<td><strong>Net Revenues</strong></td>
<td>($27,277)</td>
<td>($74,514)</td>
<td>($47,237)</td>
<td>173.2%</td>
<td>($1,793)</td>
<td>($76,307)</td>
</tr>
</tbody>
</table>

**Additional $ Required for Breakeven**

- **Revenue Assumptions**
  - 40% decline in print subscription $
  - No impact on electronic subscription $
  - 50% decline in product advertising
  - No impact on licensing revenues
  - No impact on other revenues

- **Results**
  - 41.7% decline in total revenues
  - 7.7% decline in total expenses
  - 173.2% decline in net revenues

- **Expense Assumptions**
  - No impact on payroll
  - No impact on outside services
  - 3.6% decline in Pub-Related Expense
    - *Reduced print run/mailing costs
  - 4.5% decline in Operating Expense
    - *Reduced postage expense
  - 23.0% decline in IUT’s
    - *Reduced fulfillment expense
  - 40.3% decline in overhead
    - *Reduced print sub revenues
  - No impact on UBIT assessment

---

*Reduced print run/mailing costs
*Reduced fulfillment expense
### Appendix E: Open Access Impact: C&RL Scenarios

#### SCENARIO 3

<table>
<thead>
<tr>
<th></th>
<th>2003 Actual</th>
<th>Scenario 3 Print Discontinued</th>
<th>2003 Variance</th>
<th>% Variance</th>
<th>5-Year Actual</th>
<th>5-Year Variance</th>
<th>% Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscriptions-Print</td>
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<td>$0</td>
<td>($98,458)</td>
<td>-100.0%</td>
<td>$101,245</td>
<td>($101,245)</td>
<td>-100.0%</td>
</tr>
<tr>
<td>Subscriptions-Electronic</td>
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<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Product Advertising</td>
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<td>$0</td>
<td>($42,328)</td>
<td>-100.0%</td>
<td>$62,903</td>
<td>($62,903)</td>
<td>-100.0%</td>
</tr>
<tr>
<td>Classified Advertising</td>
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<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Licensing</td>
<td>$3,821</td>
<td>$3,821</td>
<td>$0</td>
<td>0.0%</td>
<td>$4,554</td>
<td>($734)</td>
<td>-16.1%</td>
</tr>
<tr>
<td>Other</td>
<td>$486</td>
<td>$486</td>
<td>$0</td>
<td>0.0%</td>
<td>$528</td>
<td>($42)</td>
<td>-8.0%</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>$145,093</td>
<td>$4,307</td>
<td>($140,786)</td>
<td>-97.0%</td>
<td>$169,231</td>
<td>($164,924)</td>
<td>-97.5%</td>
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<td>Payroll &amp; Related Expenses</td>
<td>$23,753</td>
<td>$21,378</td>
<td>($2,375)</td>
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<td>$29,453</td>
<td>($8,075)</td>
<td>-27.4%</td>
</tr>
<tr>
<td>Outside Services</td>
<td>$10,939</td>
<td>$10,939</td>
<td>$0</td>
<td>0.0%</td>
<td>$4,081</td>
<td>$6,858</td>
<td>168.1%</td>
</tr>
<tr>
<td>Travel &amp; Related Expenses</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$728</td>
<td>($728)</td>
<td>-100.0%</td>
</tr>
<tr>
<td>Meetings &amp; Conferences</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$1,239</td>
<td>($1,239)</td>
<td>-100.0%</td>
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<tr>
<td>Publication-Related Expenses</td>
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<td>($64,988)</td>
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<td>$75,087</td>
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<td>$0</td>
<td>N.A.</td>
<td>$409</td>
<td>($409)</td>
<td>-100.0%</td>
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<td>78.8%</td>
<td>$1,793</td>
<td>($50,558)</td>
<td>-2819.5%</td>
</tr>
<tr>
<td><strong>Additional S Required for Breakeven</strong></td>
<td>$27,277</td>
<td>$48,765</td>
<td>$21,488</td>
<td>$0</td>
<td>$50,558</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Revenue Assumptions
- 100% decline in print subscription
- No impact on electronic subscription
- 100% decline in product advertising
- No impact on licensing revenues
- No impact on other revenues

#### Results
- 97.0% decline in total revenues
- 69.5% decline in total expenses
- 77.2% decline in net revenues

#### Expense Assumptions
- 10.0% decline in payroll
- No impact on outside services
- 88.9% decline in Pub-Related Expense
  *Reduced print run/mailing costs
- 92.3% decline in Operating Expense
  *Reduced postage expense
- 57.6% decline in IUT's
  *Reduced fulfillment expense
- 95.6% decline in overhead
  *Reduced print sub revenues
- No impact on UBIT assessment
## Appendix F: Open Access Impact: C&RL News Scenarios

### Scenario 1

<table>
<thead>
<tr>
<th>SCENARIO 1</th>
<th>2003 Actual</th>
<th>2003 Variance</th>
<th>% Variance</th>
<th>5-Year Actual</th>
<th>5-Year Variance</th>
<th>% Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscriptions-Print</td>
<td>$43,193</td>
<td>($8,639)</td>
<td>-20.0%</td>
<td>$45,998</td>
<td>($11,444)</td>
<td>-24.9%</td>
</tr>
<tr>
<td>Subscriptions-Electronic</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Product Advertising</td>
<td>$130,750</td>
<td>$98,062</td>
<td>($32,687)</td>
<td>-25.0%</td>
<td>$158,291</td>
<td>($60,229)</td>
</tr>
<tr>
<td>Classified Advertising</td>
<td>$259,526</td>
<td>$259,526</td>
<td>$0</td>
<td>0.0%</td>
<td>$335,661</td>
<td>($76,135)</td>
</tr>
<tr>
<td>Licensing</td>
<td>$2,184</td>
<td>$2,184</td>
<td>$0</td>
<td>0.0%</td>
<td>$978</td>
<td>$1,207</td>
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<tr>
<td>Other</td>
<td>$449</td>
<td>$449</td>
<td>$0</td>
<td>0.0%</td>
<td>$415</td>
<td>$34</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>$436,101</td>
<td>$394,775</td>
<td>($41,326)</td>
<td>-9.5%</td>
<td>$541,344</td>
<td>($146,568)</td>
</tr>
<tr>
<td>Payroll &amp; Related Expenses</td>
<td>$110,748</td>
<td>$110,748</td>
<td>$0</td>
<td>0.0%</td>
<td>$114,334</td>
<td>($3,586)</td>
</tr>
<tr>
<td>Outside Services</td>
<td>$294</td>
<td>$294</td>
<td>$0</td>
<td>0.0%</td>
<td>$147</td>
<td>$147</td>
</tr>
<tr>
<td>Travel &amp; Related Expenses</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Meetings &amp; Conferences</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Publication Related Expenses</td>
<td>$130,372</td>
<td>$128,960</td>
<td>($1,412)</td>
<td>-1.1%</td>
<td>$138,149</td>
<td>($9,188)</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>$68,957</td>
<td>$68,058</td>
<td>($898)</td>
<td>-1.3%</td>
<td>$63,740</td>
<td>$4,319</td>
</tr>
<tr>
<td>IUTs</td>
<td>$29,479</td>
<td>$27,596</td>
<td>($1,883)</td>
<td>-6.4%</td>
<td>$26,666</td>
<td>$931</td>
</tr>
<tr>
<td>Overhead</td>
<td>$4,277</td>
<td>$3,386</td>
<td>($891)</td>
<td>20.8%</td>
<td>$4,246</td>
<td>($859)</td>
</tr>
<tr>
<td>Unrelated Business Income Tax (UBIT)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$17,373</td>
<td>($17,373)</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>$344,127</td>
<td>$339,043</td>
<td>($5,083)</td>
<td>-1.5%</td>
<td>$364,653</td>
<td>($25,610)</td>
</tr>
<tr>
<td><strong>Net Revenues</strong></td>
<td>$91,974</td>
<td>$55,732</td>
<td>($36,242)</td>
<td>-39.4%</td>
<td>$176,691</td>
<td>($120,959)</td>
</tr>
<tr>
<td><strong>Additional $ Required for Breakeven</strong></td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
</tbody>
</table>

### Revenue Assumptions

- 20% decline in print subscription
- No impact on electronic subscription
- 25% decline in product advertising
- No impact on classified advertising
- No impact on licensing revenues
- No impact on other revenues

### Results

- 9.5% decline in total revenues
- 1.5% decline in total expenses
- 39.4% decline in net revenues

### Expense Assumptions

- No impact on payroll
- No impact on outside services
- 1.1% decline in Pub-Related Expense
  - Reduced print run/mailing costs
- 1.3% decline in Operating Expense
  - Reduced postage expense
- 6.4% decline in IUT’s (Fulfillment)
  - Reduced fulfillment expense
- 20.8% decline in overhead
  - Reduced print sub revenues
- No impact on UBIT assessment
## Appendix F: Open Access Impact: C&RL News Scenarios

### SCENARIO 2

<table>
<thead>
<tr>
<th>Revenue Category</th>
<th>2003 Actual</th>
<th>2003 Variance</th>
<th>% Variance</th>
<th>5-Year Actual</th>
<th>5-Year Variance</th>
<th>% Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscriptions-Print</td>
<td>$43,193</td>
<td>($17,277)</td>
<td>-40.0%</td>
<td>$45,998</td>
<td>($20,083)</td>
<td>-43.7%</td>
</tr>
<tr>
<td>Subscriptions-Electronic</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Product Advertising</td>
<td>$130,750</td>
<td>($65,375)</td>
<td>-50.0%</td>
<td>$158,291</td>
<td>($92,917)</td>
<td>-58.7%</td>
</tr>
<tr>
<td>Classified Advertising</td>
<td>$259,526</td>
<td>($25,953)</td>
<td>-10.0%</td>
<td>$335,661</td>
<td>($102,088)</td>
<td>-30.4%</td>
</tr>
<tr>
<td>Licensing</td>
<td>$2,184</td>
<td>$0</td>
<td>0.0%</td>
<td>$978</td>
<td>$1,207</td>
<td>123.4%</td>
</tr>
<tr>
<td>Other</td>
<td>$449</td>
<td>$0</td>
<td>0.0%</td>
<td>$415</td>
<td>$34</td>
<td>8.1%</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>$436,101</td>
<td>($108,604)</td>
<td>-24.9%</td>
<td>$541,344</td>
<td>($213,847)</td>
<td>-39.5%</td>
</tr>
<tr>
<td>Payroll &amp; Related Expenses</td>
<td>$110,748</td>
<td>$0</td>
<td>0.0%</td>
<td>$114,334</td>
<td>($3,586)</td>
<td>-3.1%</td>
</tr>
<tr>
<td>Outside Services</td>
<td>$294</td>
<td>$0</td>
<td>0.0%</td>
<td>$147</td>
<td>$147</td>
<td>100.3%</td>
</tr>
<tr>
<td>Travel &amp; Related Expenses</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Meetings &amp; Conferences</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Publication Related Expenses</td>
<td>$130,372</td>
<td>($3,604)</td>
<td>-2.8%</td>
<td>$138,149</td>
<td>($11,380)</td>
<td>-8.2%</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>$68,957</td>
<td>($1,797)</td>
<td>-2.6%</td>
<td>$63,740</td>
<td>$3,420</td>
<td>5.4%</td>
</tr>
<tr>
<td>IUTs</td>
<td>$29,479</td>
<td>($3,765)</td>
<td>-12.8%</td>
<td>$26,666</td>
<td>($952)</td>
<td>-3.6%</td>
</tr>
<tr>
<td>Overhead</td>
<td>$4,277</td>
<td>($1,737)</td>
<td>-40.6%</td>
<td>$4,246</td>
<td>($1,706)</td>
<td>-40.2%</td>
</tr>
<tr>
<td>Unrelated Business Income Tax (UBIT)</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>$344,127</td>
<td>($10,903)</td>
<td>-3.2%</td>
<td>$364,653</td>
<td>($31,430)</td>
<td>-8.6%</td>
</tr>
<tr>
<td><strong>Net Revenues</strong></td>
<td>$91,974</td>
<td>($5,727)</td>
<td>-106.2%</td>
<td>$176,691</td>
<td>($182,417)</td>
<td>-103.2%</td>
</tr>
</tbody>
</table>

### Revenue Assumptions
- 40% decline in print subscription
- No impact on electronic subscription
- 50% decline in product advertising
- 10% decline in classified advertising
- No impact on licensing revenues
- No impact on other revenues

### Results
- 24.9% decline in total revenues
- 3.2% decline in total expenses
- 106.2% decline in net revenues

### Expense Assumptions
- No impact on payroll
- No impact on outside services
- 2.8% decline in Pub-Related Expense
  - *Reduced print run/mailing costs
- 2.6% decline in Operating Expense
  - *Reduced postage expense
- 12.8% decline in IUT's (Fulfillment)
  - *Reduced fulfillment expense
- 40.6% decline in overhead
  - *Reduced print sub revenues
- No impact on UBIT assessment

### Additional $ Required for Breakeven

<table>
<thead>
<tr>
<th>Revenue Assumptions</th>
<th>Results</th>
<th>Expense Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>40% decline in print subscription</td>
<td>24.9% decline in total revenues</td>
<td>No impact on payroll</td>
</tr>
<tr>
<td>No impact on electronic subscription</td>
<td>3.2% decline in total expenses</td>
<td>No impact on outside services</td>
</tr>
<tr>
<td>50% decline in product advertising</td>
<td>106.2% decline in net revenues</td>
<td>2.8% decline in Pub-Related Expense</td>
</tr>
<tr>
<td>10% decline in classified advertising</td>
<td></td>
<td>*Reduced print run/mailing costs</td>
</tr>
<tr>
<td>No impact on licensing revenues</td>
<td></td>
<td>2.6% decline in Operating Expense</td>
</tr>
<tr>
<td>No impact on other revenues</td>
<td></td>
<td>*Reduced postage expense</td>
</tr>
<tr>
<td></td>
<td></td>
<td>12.8% decline in IUT's (Fulfillment)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Reduced fulfillment expense</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40.6% decline in overhead</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*Reduced print sub revenues</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No impact on UBIT assessment</td>
</tr>
</tbody>
</table>
Appendix F: Open Access Impact: C&RL News Scenarios

### SCENARIO 3

<table>
<thead>
<tr>
<th></th>
<th>2003 Actual</th>
<th>Print Discontinued</th>
<th>2003 Variance</th>
<th>5-Year Actual</th>
<th>5-Year Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscriptions-Print</td>
<td>$43,193</td>
<td>$0</td>
<td>($43,193)</td>
<td>$45,998</td>
<td>($45,998)</td>
</tr>
<tr>
<td>Subscriptions-Electronic</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Product Advertising</td>
<td>$130,750</td>
<td>$0</td>
<td>($130,750)</td>
<td>$158,291</td>
<td>($158,291)</td>
</tr>
<tr>
<td>Classified Advertising</td>
<td>$259,526</td>
<td>$144,000</td>
<td>($115,526)</td>
<td>$335,661</td>
<td>($191,661)</td>
</tr>
<tr>
<td>Licensing</td>
<td>$2,184</td>
<td>$2,184</td>
<td>$0</td>
<td>$978</td>
<td>$1,207</td>
</tr>
<tr>
<td>Other</td>
<td>$449</td>
<td>$225</td>
<td>($225)</td>
<td>$415</td>
<td>($191)</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>$436,101</td>
<td>$146,409</td>
<td>($289,692)</td>
<td>$541,344</td>
<td>($394,935)</td>
</tr>
<tr>
<td>Payroll &amp; Related Expenses</td>
<td>$110,748</td>
<td>$99,673</td>
<td>($11,075)</td>
<td>$114,334</td>
<td>($14,661)</td>
</tr>
<tr>
<td>Outside Services</td>
<td>$294</td>
<td>$59</td>
<td>($235)</td>
<td>$147</td>
<td>($88)</td>
</tr>
<tr>
<td>Travel &amp; Related Expenses</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Meetings &amp; Conferences</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Publication Related Expenses</td>
<td>$130,372</td>
<td>$14,975</td>
<td>($115,396)</td>
<td>$138,149</td>
<td>($123,173)</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>$68,957</td>
<td>$15,185</td>
<td>($53,772)</td>
<td>$63,740</td>
<td>($48,555)</td>
</tr>
<tr>
<td>IUTs</td>
<td>$29,479</td>
<td>$20,066</td>
<td>($9,414)</td>
<td>$26,666</td>
<td>($6,600)</td>
</tr>
<tr>
<td>Overhead</td>
<td>$4,277</td>
<td>$0</td>
<td>($4,247)</td>
<td>$4,246</td>
<td>($4,246)</td>
</tr>
<tr>
<td>Unrelated Business Income Tax (UBIT)</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$17,373</td>
<td>($17,373)</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>$344,127</td>
<td>$149,958</td>
<td>($194,169)</td>
<td>$364,653</td>
<td>($214,696)</td>
</tr>
<tr>
<td><strong>Net Revenues</strong></td>
<td>$91,974</td>
<td>($3,549)</td>
<td>($95,523)</td>
<td>$176,691</td>
<td>($180,239)</td>
</tr>
<tr>
<td><strong>Additional $ Required for Breakeven</strong></td>
<td>$0</td>
<td>$3,549</td>
<td>$3,549</td>
<td>$0</td>
<td>$3,549</td>
</tr>
</tbody>
</table>

#### Revenue Assumptions
- 100% decline in print subscription
- No impact on electronic subscription
- 100% decline in product advertising
  - (Pending online ad plan)
- 44.5% decline in classified advertising
  - (40 ads/month @ online rate)
- No impact on licensing revenues
- No impact on other revenues

#### Results
- 66.4% decline in total revenues
- 56.4% decline in total expenses
- 103.9% decline in net revenues

#### Expense Assumptions
- 10.0% decline in payroll
- 80.0% decline in outside services
- 88.5% decline in Pub-Related Expense
  - *No layout/comp/printing costs*
- 78.0% decline in Operating Expense
  - *No issue mailing expenses*
- 31.9% decline in IUT’s
  - *No print fulfillment expense*
- 100.0% decline in overhead
  - *No print sub revenues*
- No impact on UBIT assessment
Appendix G: Open Access Impact: *RBM* Scenarios

<table>
<thead>
<tr>
<th>SCENARIO 1</th>
<th>2003 Actual</th>
<th>Scenario 1 Print Continues 20% Reduction Paid Print Subs</th>
<th>2003 Variance</th>
<th>% Variance</th>
<th>5-Year Actual</th>
<th>5-Year Variance</th>
<th>% Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscriptions-Print</td>
<td>$18,860</td>
<td>$15,088</td>
<td>($3,772)</td>
<td>-20.0%</td>
<td>$17,426</td>
<td>($2,338)</td>
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</tr>
<tr>
<td>Subscriptions-Electronic</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>N.A.</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Product Advertising</td>
<td>$11,450</td>
<td>$8,587</td>
<td>($2,862)</td>
<td>-25.0%</td>
<td>$12,188</td>
<td>($3,601)</td>
<td>-29.5%</td>
</tr>
<tr>
<td>Classified Advertising</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>N.A.</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Licensing</td>
<td>$253</td>
<td>$253</td>
<td>$0</td>
<td>0.0%</td>
<td>$798</td>
<td>($545)</td>
<td>-68.3%</td>
</tr>
<tr>
<td>Other</td>
<td>$268</td>
<td>$268</td>
<td>$0</td>
<td>0.0%</td>
<td>$265</td>
<td>$2</td>
<td>0.8%</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td><strong>$30,830</strong></td>
<td><strong>$24,196</strong></td>
<td><strong>($6,634)</strong></td>
<td><strong>-21.5%</strong></td>
<td><strong>$30,677</strong></td>
<td><strong>($6,482)</strong></td>
<td><strong>-21.1%</strong></td>
</tr>
<tr>
<td>Payroll &amp; Related Expenses</td>
<td>$6,815</td>
<td>$6,815</td>
<td>$0</td>
<td>0.0%</td>
<td>$8,188</td>
<td>($1,373)</td>
<td>-16.8%</td>
</tr>
<tr>
<td>Outside Services</td>
<td>$135</td>
<td>$135</td>
<td>$0</td>
<td>0.0%</td>
<td>$127</td>
<td>$8</td>
<td>6.0%</td>
</tr>
<tr>
<td>Travel &amp; Related Expenses</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>N.A.</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Meetings &amp; Conferences</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>N.A.</td>
<td>$53</td>
<td>($53)</td>
<td>-100.0%</td>
</tr>
<tr>
<td>Publication Related Expenses</td>
<td>$12,719</td>
<td>$10,786</td>
<td>($1,932)</td>
<td>-15.2%</td>
<td>$11,471</td>
<td>($684)</td>
<td>-6.0%</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>$1,836</td>
<td>$1,601</td>
<td>($235)</td>
<td>-12.8%</td>
<td>$1,877</td>
<td>($277)</td>
<td>-14.7%</td>
</tr>
<tr>
<td>IUTs</td>
<td>$8,229</td>
<td>$7,232</td>
<td>($997)</td>
<td>-12.1%</td>
<td>$5,850</td>
<td>$1,383</td>
<td>23.6%</td>
</tr>
<tr>
<td>Overhead</td>
<td>$3,021</td>
<td>$2,371</td>
<td>($650)</td>
<td>-21.5%</td>
<td>$2,820</td>
<td>($449)</td>
<td>-15.9%</td>
</tr>
<tr>
<td>Unrelated Business Income Tax (UBIT)</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>N.A.</td>
<td>$109</td>
<td>($109)</td>
<td>-100.0%</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>$32,755</strong></td>
<td><strong>$28,941</strong></td>
<td><strong>($3,815)</strong></td>
<td><strong>-11.6%</strong></td>
<td><strong>$30,495</strong></td>
<td><strong>($1,554)</strong></td>
<td><strong>-5.1%</strong></td>
</tr>
<tr>
<td><strong>Net Revenues</strong></td>
<td><strong>($1,925)</strong></td>
<td><strong>($4,745)</strong></td>
<td><strong>($2,820)</strong></td>
<td><strong>146.5%</strong></td>
<td><strong>$182</strong></td>
<td><strong>($4,928)</strong></td>
<td><strong>-2701.1%</strong></td>
</tr>
<tr>
<td><strong>Additional $ Required for Breakeven</strong></td>
<td><strong>$1,925</strong></td>
<td><strong>$4,745</strong></td>
<td><strong>$2,820</strong></td>
<td><strong>$0</strong></td>
<td><strong>$4,928</strong></td>
<td><strong>No impact on payroll</strong></td>
<td><strong>No impact on outside services</strong></td>
</tr>
</tbody>
</table>

**Revenue Assumptions**
- 20% decline in print subscription
- No impact on electronic subscription
- 25% decline in product advertising
- No impact on licensing revenues
- No impact on other revenues

**Expense Assumptions**
- No impact on payroll
- No impact on outside services
- 15.2% decline in Pub-Related Expense
  - *Reduced print run/mailing costs*
- 12.8% decline in Operating Expense
  - *Reduced postage expense*
- 12.1% decline in IUT’s
  - *Reduced fulfillment expense*
- 21.5% decline in overhead
  - *Reduced print sub revenues*
- No impact on UBIT assessment

<table>
<thead>
<tr>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.5% decline in total revenues</td>
</tr>
<tr>
<td>11.6% decline in total expenses</td>
</tr>
<tr>
<td>146.5% decline in net revenues</td>
</tr>
</tbody>
</table>
### Appendix G: Open Access Impact: *RBM* Scenarios

#### SCENARIO 2

<table>
<thead>
<tr>
<th></th>
<th>2003 Actual</th>
<th>2003 Variance</th>
<th>5-Year Actual</th>
<th>5-Year Variance</th>
<th>% Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40% Reduction Paid Print Subs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subscriptions-Print</td>
<td>$18,860</td>
<td>($7,544)</td>
<td>$17,426</td>
<td>($6,110)</td>
<td>-35.1%</td>
</tr>
<tr>
<td>Subscriptions-Electronic</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Product Advertising</td>
<td>$11,450</td>
<td>($5,725)</td>
<td>$12,188</td>
<td>($6,463)</td>
<td>-53.0%</td>
</tr>
<tr>
<td>Classified Advertising</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Licensing</td>
<td>$253</td>
<td>$0</td>
<td>$798</td>
<td>($545)</td>
<td>-68.3%</td>
</tr>
<tr>
<td>Other</td>
<td>$268</td>
<td>$0</td>
<td>$265</td>
<td>$2</td>
<td>0.8%</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td><strong>$30,830</strong></td>
<td><strong>($13,269)</strong></td>
<td><strong>$30,677</strong></td>
<td><strong>($13,116)</strong></td>
<td><strong>-42.8%</strong></td>
</tr>
<tr>
<td>Payroll &amp; Related Expenses</td>
<td>$6,815</td>
<td>$0</td>
<td>$8,188</td>
<td>($1,373)</td>
<td>-16.8%</td>
</tr>
<tr>
<td>Outside Services</td>
<td>$135</td>
<td>$0</td>
<td>$127</td>
<td>$8</td>
<td>6.0%</td>
</tr>
<tr>
<td>Travel &amp; Related Expenses</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Meetings &amp; Conferences</td>
<td>$0</td>
<td>$0</td>
<td>$53</td>
<td>($53)</td>
<td>-100.0%</td>
</tr>
<tr>
<td>Publication Related Expenses</td>
<td>$12,719</td>
<td>($3,865)</td>
<td>$11,471</td>
<td>($2,617)</td>
<td>-22.8%</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>$1,836</td>
<td>($471)</td>
<td>$1,877</td>
<td>($512)</td>
<td>-27.3%</td>
</tr>
<tr>
<td>IUTs</td>
<td>$8,229</td>
<td>($1,993)</td>
<td>$5,850</td>
<td>$386</td>
<td>6.6%</td>
</tr>
<tr>
<td>Overhead</td>
<td>$3,021</td>
<td>($1,300)</td>
<td>$2,820</td>
<td>($1,099)</td>
<td>-39.0%</td>
</tr>
<tr>
<td>Unrelated Business Income Tax (UBIT)</td>
<td>$0</td>
<td>$0</td>
<td>$109</td>
<td>($109)</td>
<td>-100.0%</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>$32,755</strong></td>
<td><strong>($7,629)</strong></td>
<td><strong>$30,495</strong></td>
<td><strong>($5,369)</strong></td>
<td><strong>-17.6%</strong></td>
</tr>
<tr>
<td><strong>Net Revenues</strong></td>
<td><strong>($1,925)</strong></td>
<td><strong>($7,565)</strong></td>
<td><strong>$182</strong></td>
<td><strong>($7,747)</strong></td>
<td><strong>-4246.8%</strong></td>
</tr>
<tr>
<td><strong>Additional $ Required for Breakeven</strong></td>
<td><strong>$1,925</strong></td>
<td><strong>$7,565</strong></td>
<td><strong>$5,640</strong></td>
<td><strong>$0</strong></td>
<td><strong>$7,747</strong></td>
</tr>
</tbody>
</table>

#### Revenue Assumptions

- 40% decline in print subscription
- No impact on electronic subscription
- 50% decline in product advertising
- No impact on licensing revenues
- No impact on other revenues

#### Results

- 43.0% decline in total revenues
- 23.3% decline in total expenses
- 292.9% decline in net revenues

#### Expense Assumptions

- No impact on payroll
- No impact on outside services
- 30.4% decline in Pub-Related Expense
  - *Reduced print run/mailing costs*
- 25.6% decline in Operating Expense
  - *Reduced postage expense*
- 24.2% decline in IUT's
  - *Reduced fulfillment expense*
- 43.0% decline in overhead
  - *Reduced print sub revenues*
- No impact on UBIT assessment
Appendix G: Open Access Impact: RBM Scenarios

<table>
<thead>
<tr>
<th>SCENARIO 3</th>
<th>2003 Actual</th>
<th>Scenario 3 Print Discontinued</th>
<th>2003 Variance</th>
<th>% Variance</th>
<th>5-Year Actual</th>
<th>5-Year Variance</th>
<th>% Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscriptions-Print</td>
<td>$18,860</td>
<td>$0</td>
<td>($18,860)</td>
<td>-100.0%</td>
<td>$17,426</td>
<td>($17,426)</td>
<td>-100.0%</td>
</tr>
<tr>
<td>Subscriptions-Electronic</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Product Advertising</td>
<td>$11,450</td>
<td>$0</td>
<td>($11,450)</td>
<td>-100.0%</td>
<td>$12,188</td>
<td>($12,188)</td>
<td>-100.0%</td>
</tr>
<tr>
<td>Classified Advertising</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Licensing</td>
<td>$253</td>
<td>$253</td>
<td>$0</td>
<td>0.0%</td>
<td>$798</td>
<td>($545)</td>
<td>-68.3%</td>
</tr>
<tr>
<td>Other</td>
<td>$268</td>
<td>$268</td>
<td>$0</td>
<td>0.0%</td>
<td>$265</td>
<td>$2</td>
<td>0.8%</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td><strong>$30,830</strong></td>
<td><strong>$520</strong></td>
<td><strong>($30,310)</strong></td>
<td><strong>-98.3%</strong></td>
<td><strong>$30,677</strong></td>
<td><strong>($30,157)</strong></td>
<td><strong>-98.3%</strong></td>
</tr>
<tr>
<td>Payroll &amp; Related Expenses</td>
<td>$6,815</td>
<td>$6,134</td>
<td>($682)</td>
<td>-10.0%</td>
<td>$8,188</td>
<td>($2,054)</td>
<td>-25.1%</td>
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<tr>
<td>Outside Services</td>
<td>$135</td>
<td>$135</td>
<td>$0</td>
<td>0.0%</td>
<td>$127</td>
<td>$8</td>
<td>6.0%</td>
</tr>
<tr>
<td>Travel &amp; Related Expenses</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Meetings &amp; Conferences</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$53</td>
<td>($53)</td>
<td>-100.0%</td>
</tr>
<tr>
<td>Publication Related Expenses</td>
<td>$12,719</td>
<td>$3,057</td>
<td>($9,661)</td>
<td>-76.0%</td>
<td>$11,471</td>
<td>($8,413)</td>
<td>-73.3%</td>
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<tr>
<td>Operating Expenses</td>
<td>$1,836</td>
<td>$659</td>
<td>($1,177)</td>
<td>-64.1%</td>
<td>$1,877</td>
<td>($1,218)</td>
<td>-64.9%</td>
</tr>
<tr>
<td>IUTs</td>
<td>$8,229</td>
<td>$3,245</td>
<td>($4,984)</td>
<td>-60.6%</td>
<td>$5,850</td>
<td>($2,604)</td>
<td>-44.5%</td>
</tr>
<tr>
<td>Overhead</td>
<td>$3,021</td>
<td>$51</td>
<td>($2,970)</td>
<td>-98.3%</td>
<td>$2,820</td>
<td>($2,769)</td>
<td>-98.2%</td>
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<tr>
<td>Unrelated Business Income Tax (UBIT)</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
<td>$109</td>
<td>($109)</td>
<td>-100.0%</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>$32,755</strong></td>
<td><strong>$13,281</strong></td>
<td><strong>($19,474)</strong></td>
<td><strong>-59.5%</strong></td>
<td><strong>$30,495</strong></td>
<td><strong>($17,213)</strong></td>
<td><strong>-56.4%</strong></td>
</tr>
<tr>
<td><strong>Net Revenues</strong></td>
<td>$(1,925)</td>
<td>$(12,761)</td>
<td>$(10,836)</td>
<td>562.8%</td>
<td>$182</td>
<td>$(12,943)</td>
<td>-7095.1%</td>
</tr>
<tr>
<td><strong>Additional $ Required for Breakeven</strong></td>
<td>$1,925</td>
<td>$12,761</td>
<td>$10,836</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Revenue Assumptions**
- 100% decline in print subscription $
- No impact on electronic subscription $
- 100% decline in product advertising
- No impact on licensing revenues
- No impact on other revenues

**Results**
- 98.3% decline in total revenues
- 59.5% decline in total expenses
- 562.8% decline in net revenues

**Expense Assumptions**
- 10.0% decline in payroll
- No impact on outside services
- 76.0% decline in Pub-Related Expense
  - *Reduced print run/mailing costs
- 64.1% decline in Operating Expense
  - *Reduced postage expense
- 60.6% decline in IUT’s
  - *Reduced fulfillment expense
- 98.3% decline in overhead
  - *Reduced print sub revenues
- No impact on UBIT assessment


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Appendix I: Open Access Impact: *Choice* Scenarios

<table>
<thead>
<tr>
<th>SCENARIO 1</th>
<th>2004 Projection</th>
<th>Scenario 1 20% Reduction</th>
<th>2004 Variance</th>
<th>% Variance</th>
<th>5-Year Actual</th>
<th>5-Year Variance</th>
<th>% Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscriptions-Print</td>
<td>$1,038,637</td>
<td>$830,910</td>
<td>($207,727)</td>
<td>-20.0%</td>
<td>$971,646</td>
<td>($140,736)</td>
<td>-14.5%</td>
</tr>
<tr>
<td>Subscriptions-Electronic</td>
<td>$215,219</td>
<td>0</td>
<td>($215,219)</td>
<td>-100.0%</td>
<td>$96,256</td>
<td>($96,256)</td>
<td>-100.0%</td>
</tr>
<tr>
<td>Product Advertising</td>
<td>$766,540</td>
<td>$766,540</td>
<td>0</td>
<td>0.0%</td>
<td>$822,169</td>
<td>($55,629)</td>
<td>-6.8%</td>
</tr>
<tr>
<td>Classified Advertising</td>
<td>0</td>
<td>0</td>
<td>N.A.</td>
<td>0</td>
<td>0</td>
<td>N.A.</td>
<td>0</td>
</tr>
<tr>
<td>Licensing</td>
<td>$386,113</td>
<td>$386,113</td>
<td>0</td>
<td>0.0%</td>
<td>$304,997</td>
<td>$81,116</td>
<td>26.6%</td>
</tr>
<tr>
<td>Other</td>
<td>$49,501</td>
<td>$49,501</td>
<td>0</td>
<td>0.0%</td>
<td>$74,409</td>
<td>($24,908)</td>
<td>-33.5%</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td><strong>$2,456,010</strong></td>
<td><strong>$2,033,064</strong></td>
<td><strong>($422,946)</strong></td>
<td>-17.2%</td>
<td><strong>$2,269,477</strong></td>
<td><strong>($236,413)</strong></td>
<td>-10.4%</td>
</tr>
<tr>
<td>Payroll &amp; Related Expenses</td>
<td>$1,051,333</td>
<td>$1,016,958</td>
<td>($34,375)</td>
<td>-3.3%</td>
<td>$1,034,568</td>
<td>($17,610)</td>
<td>-1.7%</td>
</tr>
<tr>
<td>Outside Services</td>
<td>$147,715</td>
<td>$147,715</td>
<td>0</td>
<td>0.0%</td>
<td>$147,380</td>
<td>335</td>
<td>0.2%</td>
</tr>
<tr>
<td>Travel &amp; Related Expenses</td>
<td>$23,329</td>
<td>$23,329</td>
<td>0</td>
<td>0.0%</td>
<td>$42,397</td>
<td>($19,068)</td>
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</tr>
<tr>
<td>Meetings &amp; Conferences</td>
<td>$4,250</td>
<td>$4,250</td>
<td>0</td>
<td>0.0%</td>
<td>$14,605</td>
<td>($10,355)</td>
<td>-70.9%</td>
</tr>
<tr>
<td>Publication Related Expenses</td>
<td>$473,678</td>
<td>$434,269</td>
<td>($39,409)</td>
<td>-8.3%</td>
<td>$444,503</td>
<td>($10,234)</td>
<td>-2.3%</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>$2,307,915</strong></td>
<td><strong>$2,192,682</strong></td>
<td><strong>($115,233)</strong></td>
<td>-5.0%</td>
<td><strong>$2,187,201</strong></td>
<td><strong>$5,482</strong></td>
<td>0.3%</td>
</tr>
<tr>
<td><strong>Net Revenues</strong></td>
<td><strong>$148,095</strong></td>
<td><strong>($159,619)</strong></td>
<td><strong>($307,714)</strong></td>
<td>-207.8%</td>
<td><strong>$82,276</strong></td>
<td><strong>($241,895)</strong></td>
<td>-294.0%</td>
</tr>
<tr>
<td><strong>Additional S Required for Breakeven</strong></td>
<td>$0</td>
<td><strong>$159,619</strong></td>
<td><strong>$159,619</strong></td>
<td><strong>$0</strong></td>
<td><strong>$159,619</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Revenue Assumptions**
- 20% decline in print subscription
- 100% decline in electronic subscription
- No impact on product advertising
- No impact on licensing revenues
- No impact on other revenues

**Results**
- 17.2% decline in total revenues
- 5.0% decline in total expenses
- 207.8% decline in net revenues

**Expense Assumptions**
- 3.3% decline in payroll
- No impact on outside services
- 8.3% decline Pub-Related Expense
- Reduced mfg/fulfillment costs
- No impact on Operating Expense
- No impact on IUT's
- 17.2% decline in overhead
- No impact on UBIT assessment
## Appendix I: Open Access Impact: Choice Scenarios

### SCENARIO 2

<table>
<thead>
<tr>
<th></th>
<th>2004 Projection</th>
<th>Scenario 2 Print Continues 40% Reduction</th>
<th>2004 Variance</th>
<th>% Variance</th>
<th>5-Year Actual</th>
<th>5-Year Variance</th>
<th>% Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscriptions-Print</td>
<td>$1,038,637</td>
<td>$623,182</td>
<td>($415,455)</td>
<td>-40.0%</td>
<td>$971,646</td>
<td>($348,464)</td>
<td>-35.9%</td>
</tr>
<tr>
<td>Subscriptions-Electronic</td>
<td>$215,219</td>
<td>0</td>
<td>($215,219)</td>
<td>-100.0%</td>
<td>$96,256</td>
<td>($96,256)</td>
<td>-100.0%</td>
</tr>
<tr>
<td>Product Advertising</td>
<td>$766,540</td>
<td>$766,540</td>
<td>0</td>
<td>0.0%</td>
<td>$822,169</td>
<td>($55,629)</td>
<td>-6.8%</td>
</tr>
<tr>
<td>Classified Advertising</td>
<td>0</td>
<td>0</td>
<td>N.A.</td>
<td>N.A.</td>
<td>0</td>
<td>0</td>
<td>N.A.</td>
</tr>
<tr>
<td>Licensing</td>
<td>$386,113</td>
<td>$386,113</td>
<td>0</td>
<td>0.0%</td>
<td>$304,997</td>
<td>$81,116</td>
<td>26.6%</td>
</tr>
<tr>
<td>Other</td>
<td>$49,501</td>
<td>$49,501</td>
<td>0</td>
<td>0.0%</td>
<td>$74,409</td>
<td>($24,908)</td>
<td>-33.5%</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>$2,456,010</td>
<td>$1,825,336</td>
<td>($630,674)</td>
<td>-25.7%</td>
<td>$2,269,477</td>
<td>($444,140)</td>
<td>-19.6%</td>
</tr>
<tr>
<td>Payroll &amp; Related Expenses</td>
<td>$1,051,333</td>
<td>$1,016,958</td>
<td>($34,375)</td>
<td>-3.3%</td>
<td>$1,034,568</td>
<td>($17,610)</td>
<td>-1.7%</td>
</tr>
<tr>
<td>Outside Services</td>
<td>$147,715</td>
<td>$147,715</td>
<td>0</td>
<td>0.0%</td>
<td>$147,380</td>
<td>$335</td>
<td>0.2%</td>
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<tr>
<td>Travel &amp; Related Expenses</td>
<td>$23,329</td>
<td>$23,329</td>
<td>0</td>
<td>0.0%</td>
<td>$42,397</td>
<td>($19,068)</td>
<td>-45.0%</td>
</tr>
<tr>
<td>Meetings &amp; Conferences</td>
<td>$4,250</td>
<td>$4,250</td>
<td>0</td>
<td>0.0%</td>
<td>$14,605</td>
<td>($10,355)</td>
<td>-70.9%</td>
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<tr>
<td>Publication Related Expenses</td>
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<td>$407,890</td>
<td>($65,788)</td>
<td>-13.9%</td>
<td>$444,503</td>
<td>($36,613)</td>
<td>-8.2%</td>
</tr>
<tr>
<td><strong>Mfg/Postage &amp; Fulfillment</strong></td>
<td>$179,125</td>
<td>$113,337</td>
<td>($65,788)</td>
<td>-36.7%</td>
<td>$311,483</td>
<td>$28,689</td>
<td>9.2%</td>
</tr>
<tr>
<td><strong>Other Pub-Related Expenses</strong></td>
<td>$294,553</td>
<td>$294,553</td>
<td>0</td>
<td>0.0%</td>
<td>$200,260</td>
<td>($100,293)</td>
<td>-50.0%</td>
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<td>Operating Expenses</td>
<td>$340,172</td>
<td>$340,172</td>
<td>0</td>
<td>0.0%</td>
<td>$311,483</td>
<td>$28,689</td>
<td>9.2%</td>
</tr>
<tr>
<td>IUTs (Inter-Unit Transfers)</td>
<td>($8,248)</td>
<td>($8,248)</td>
<td>0</td>
<td>0.0%</td>
<td>($20,637)</td>
<td>$12,389</td>
<td>-60.0%</td>
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<td>$200,260</td>
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<td>$34,997</td>
<td>0</td>
<td>0.0%</td>
<td>$12,642</td>
<td>$22,355</td>
<td>176.8%</td>
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<td><strong>Total Expenses</strong></td>
<td>$2,307,915</td>
<td>$2,145,946</td>
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<td>($41,255)</td>
<td>-1.9%</td>
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<td><strong>Net Revenues</strong></td>
<td>$148,095</td>
<td>($320,610)</td>
<td>($468,705)</td>
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<td>$82,276</td>
<td>($402,886)</td>
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<tr>
<td><strong>Additional $ Required for Breakeven</strong></td>
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<td>$320,610</td>
<td></td>
<td>$0</td>
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### Revenue Assumptions
- 40% decline in print subscription
- 100% decline in electronic subscription
- No impact on product advertising
- No impact on licensing revenues
- No impact on other revenues

### Results
- 25.7% decline in total revenues
- 7.0% decline in total expenses
- 316.5% decline in net revenues

### Expense Assumptions
- 3.3% decline in payroll
- No impact on outside services
- 13.9% decline in Pub-Related Expense
- Reduced mfg/fulfillment costs
- No impact on Operating Expense
- No impact on IUT's
- 25.7% decline in overhead
- No impact on UBIT assessment
## Appendix I: Open Access Impact: Choice Scenarios

<table>
<thead>
<tr>
<th>SCENARIO 3</th>
<th>2004 Projection</th>
<th>Scenario 3 Print Discontinued</th>
<th>2004 Variance</th>
<th>% Variance</th>
<th>5-Year Actual</th>
<th>5-Year Variance</th>
<th>% Variance</th>
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<tbody>
<tr>
<td>Subscriptions-Print</td>
<td>$1,038,637</td>
<td>$0</td>
<td>($1,038,637)</td>
<td>-100.0%</td>
<td>$971,646</td>
<td>($971,646)</td>
<td>-100.0%</td>
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<tr>
<td>Subscriptions-Electronic</td>
<td>$215,219</td>
<td>$0</td>
<td>($215,219)</td>
<td>-100.0%</td>
<td>$96,256</td>
<td>($96,256)</td>
<td>-100.0%</td>
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<tr>
<td>Product Advertising</td>
<td>$766,540</td>
<td>$766,540</td>
<td>$0</td>
<td>0.0%</td>
<td>$822,169</td>
<td>($55,629)</td>
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<tr>
<td>Classified Advertising</td>
<td>$0</td>
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<td>$0</td>
<td>N.A.</td>
<td>$0</td>
<td>$0</td>
<td>N.A.</td>
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<td>Licensing</td>
<td>$386,113</td>
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<td>0.0%</td>
<td>$304,997</td>
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<td>Other</td>
<td>$49,501</td>
<td>$49,501</td>
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<td>0.0%</td>
<td>$74,409</td>
<td>($24,908)</td>
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<tr>
<td><strong>Total Revenues</strong></td>
<td>$2,456,010</td>
<td>$1,202,154</td>
<td>($1,253,856)</td>
<td>-51.1%</td>
<td>$2,269,477</td>
<td>($1,067,323)</td>
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<td>Payroll &amp; Related Expenses</td>
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<td>$1,016,958</td>
<td>($34,375)</td>
<td>-3.3%</td>
<td>$1,034,568</td>
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<tr>
<td>Outside Services</td>
<td>$147,715</td>
<td>$147,715</td>
<td>$0</td>
<td>0.0%</td>
<td>$147,380</td>
<td>$335</td>
<td>0.2%</td>
</tr>
<tr>
<td>Travel &amp; Related Expenses</td>
<td>$23,329</td>
<td>$23,329</td>
<td>$0</td>
<td>0.0%</td>
<td>$42,397</td>
<td>($19,068)</td>
<td>-45.0%</td>
</tr>
<tr>
<td>Meetings &amp; Conferences</td>
<td>$4,250</td>
<td>$4,250</td>
<td>$0</td>
<td>0.0%</td>
<td>$14,605</td>
<td>($10,355)</td>
<td>-70.9%</td>
</tr>
<tr>
<td>Publication Related Expenses</td>
<td>$473,678</td>
<td>$294,553</td>
<td>($179,125)</td>
<td>-37.8%</td>
<td>$444,503</td>
<td>($149,950)</td>
<td>-33.7%</td>
</tr>
<tr>
<td>Mfg/Postage &amp; Fulfillment</td>
<td>$179,125</td>
<td>$0</td>
<td>($179,125)</td>
<td>-100.0%</td>
<td>$311,483</td>
<td>$28,689</td>
<td>9.2%</td>
</tr>
<tr>
<td>Other Pub-Related Expenses</td>
<td>$294,553</td>
<td>$294,553</td>
<td>$0</td>
<td>0.0%</td>
<td>$12,642</td>
<td>($12,642)</td>
<td>-100.0%</td>
</tr>
<tr>
<td>Operating Expenses</td>
<td>$340,172</td>
<td>$340,172</td>
<td>$0</td>
<td>0.0%</td>
<td>$311,483</td>
<td>$28,689</td>
<td>9.2%</td>
</tr>
<tr>
<td>IUTs (Inter-Unit Transfers)</td>
<td>($8,248)</td>
<td>$15,000</td>
<td>$23,248</td>
<td>-281.9%</td>
<td>($20,637)</td>
<td>$35,637</td>
<td>172.7%</td>
</tr>
<tr>
<td>Overhead</td>
<td>$240,689</td>
<td>$117,811</td>
<td>($122,878)</td>
<td>-51.1%</td>
<td>$200,260</td>
<td>($82,449)</td>
<td>-41.2%</td>
</tr>
<tr>
<td>Unrelated Business Income Tax (UBIT)</td>
<td>$34,997</td>
<td>$0</td>
<td>($34,997)</td>
<td>-100.0%</td>
<td>$12,642</td>
<td>($12,642)</td>
<td>-100.0%</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>$2,307,915</td>
<td>$1,959,788</td>
<td>($348,127)</td>
<td>-15.1%</td>
<td>$2,187,201</td>
<td>($227,413)</td>
<td>-10.4%</td>
</tr>
<tr>
<td><strong>Net Revenues</strong></td>
<td>$148,095</td>
<td>($757,634)</td>
<td>($905,729)</td>
<td>-611.6%</td>
<td>$82,276</td>
<td>($839,910)</td>
<td>-1020.8%</td>
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<tr>
<td><strong>Additional $ Required for Breakeven</strong></td>
<td>$0</td>
<td>$757,634</td>
<td>$757,634</td>
<td></td>
<td>$0</td>
<td>$757,634</td>
<td></td>
</tr>
</tbody>
</table>

### Revenue Assumptions
- 100% decline in print subscription
- 100% decline in electronic subscription
- No impact on product advertising
- No impact on licensing revenues
- No impact on other revenues

### Results
- 51.1% decline in total revenues
- 15.1% decline in total expenses
- 611.6% decline in net revenues

### Expense Assumptions
- 3.3% decline in payroll
- No impact on outside services
- 37.8% decline Pub-Related Expense
- Reduced mfg/fulfillment costs
- No impact on Operating Expense
- 281.9% decline in IUT's
- 51.1% decline in overhead
- No impact on UBIT assessment
- 100.0% decline in UBIT
Appendix J: Principles and Strategies for the Reform of Scholarly Communication
http://www.ala.org/ala/acrl/acrlpubs/whitepapers/principlesstrategies.htm

Principles and Strategies for the Reform of Scholarly Communication

Scholarly Communication Defined

Scholarly communication is the system through which research and other scholarly writings are created, evaluated for quality, disseminated to the scholarly community, and preserved for future use. The system includes both formal means of communication, such as publication in peer-reviewed journals, and informal channels, such as electronic listservs. This document addresses issues related primarily to the formal system of scholarly communication.

One of the fundamental characteristics of scholarly research is that it is created as a public good to facilitate inquiry and knowledge. A substantial portion of such research is publicly supported, either directly through federally-funded research projects or indirectly through state support of researchers at state higher-education institutions. In addition, the vast majority of scholars develop and disseminate their research with no expectation of direct financial reward.

Scholarly Communication in Crisis

The formal system of scholarly communication is showing numerous signs of stress and crisis. Throughout the second half of the 20th century commercial firms have assumed increasing control over the scholarly journals market, particularly in scientific, technical, and medical fields. The journal publishing industry has also become increasingly consolidated and is now dominated by a small number of international conglomerates. Prices for scholarly journals have risen at rates well above general inflation in the economy and also above the rate of increase of library budgets. Libraries have coped with price increases through a variety of strategies, including subscription cuts and reductions in monographic purchases. In addition, escalating prices have occurred at the same time that the quantity of scholarly information, including the number of scholarly journals, has increased substantially. The net effect of these changes has been a significant reduction in access to scholarship.

The economic challenges facing scholarly monograph publishers, particularly university presses, are another aspect of the growing crisis, one that illustrates its systemic nature. Faced with declining library markets and other economic pressures, university presses have substantially decreased the extent to which they produce specialized scholarly monographs. Such publications have been an important component of scholarly output, particularly in humanistic disciplines.

The recent transition to electronic publishing, though promising in many respects, presents numerous new challenges and threats to access. As journals move from print to
electronic form, the legal framework for their use changes from copyright law to contract law. The latter framework governs publisher licensing agreements, which often include undesirable limits on use, eliminating forms of access that would have been permitted in the print environment under principles of fair use. Individual libraries tend to have limited bargaining power in negotiating publisher licensing agreements that provide desired levels of access for users as well as rights for such services as interlibrary loan. Libraries also face loss of content in licensed aggregated journal databases when agreements between publishers and aggregators change.

The electronic environment also poses significant challenges for long-term preservation of, and access to, information. Since most libraries do not actually own and store the content of the journals they license in electronic form, new models for preservation must be developed. Changes in technology platforms pose other serious preservation challenges.

Access to scholarship is further threatened by various issues at the national policy level. Powerful commercial interests have successfully supported - and are continuing to advocate - changes in copyright law that limit the public domain and significantly reduce principles of fair use, particularly for information in digital form. Public policy establishes the legal environment in which publishers and aggregators negotiate licenses with libraries; it can seriously compromise the ability of libraries and library consortia to negotiate licensing terms on an equal footing. National policy has also failed to address consolidation in the journal publishing industry and the price rises that result from publisher mergers.

These issues and trends have reduced access to scholarship. While the severity of problems experienced has varied by both the type of institution involved and its particular circumstances, these issues touch all types of universities and colleges and their libraries. They will continue to adversely affect the system of scholarly communication, unless they are successfully addressed by the higher education community.

**The ACRL Scholarly Communications Initiative**

The purpose of the Association of College and Research Libraries’ scholarly communications initiative is to work in partnership with other library and higher education organizations to encourage reform in the system of scholarly communication and to broaden the engagement of academic libraries in scholarly communications issues. Goals of the initiative are to create a system of scholarly communication that is more responsive to the needs of the academy, reflecting the nature of scholarship and research as a public good.

**Principles Supported**

ACRL supports the following principles for reform in the system of scholarly communication:

- the broadest possible access to published research and other scholarly writings
increased control by scholars and the academy over the system of scholarly publishing

fair and reasonable prices for scholarly information

competitive markets for scholarly information

a diversified publishing industry

open access to scholarship

innovations in publishing that reduce distribution costs, speed delivery, and extend access to scholarly research

quality assurance in publishing through peer review

fair use of copyrighted information for educational and research purposes

extension of public domain information

preservation of scholarly information for long-term future use

the right to privacy in the use of scholarly information.

**Strategies Supported**

ACRL supports the following strategies for reform in the system of scholarly communication:

- the development of competitive journals, including the creation of low cost and open access journals that provide direct alternatives to high priced commercial titles

- increased control by editorial boards over the business practices of their journals, which may include negotiating reductions in subscription prices, converting to open access business models, or moving journals to nonprofit publishers, such as university presses, in instances where continued commercial publication does not serve the needs of their scholarly communities

- challenges to journal publisher mergers to prevent increased industry consolidation, especially among publishers of journals in scientific, technical and medical fields, where mergers have resulted in documented opportunistic price increases

- the development of peer-reviewed open access journals, which follow business models that obviate the need for subscriptions or other economic restrictions on access

- federal and private funding of authors’ fees for publishing in open access journals, incorporated as an integral part of the process through which research is funded

- federal legislation that will require that federally funded research published in subscription-based journals be made openly accessible within a specific period of time (e.g., six months) after publication
• the development of institutional repositories (defined as open access sites which capture the research output of a given institution) that are created either by single institutions or by groups of institutions working under a cooperative framework

• the development of disciplinary repositories (open access sites that archive research in a discipline according to principles of open access)

• self-archiving by scholars of their research and writings in open access repositories

• publishing and copyright agreements that allow authors to retain the right to self-archive their peer-reviewed publications in open access repositories

• maintenance of interoperability standards that facilitate efficient access to content in open repositories

• the development of new models and practices that will preserve scholarly information in electronic form for future use

• implementation of public policies that ensure fair use of scholarly information in electronic form

• implementation of public policies that protect the rights and capacities of libraries to provide acceptable terms of user access and reach reasonable economic terms in licensing electronic information

• licensing agreements by library consortia and other groups of libraries that maximize their collective buying and negotiating power

• use of innovative and cost-effective electronic information technologies in publishing, including publication of journals in electronic form and the creation of scholarly electronic communities that serve the needs of scholars in a discipline in flexible ways

• campus advocacy by librarians, faculty, and administrators to create greater awareness for the need for change in the system of scholarly communication

• vigorous national advocacy, in cooperation with other groups, in support of the public policy principles enumerated in this document.

Note:
1 This document, which was developed by the ACRL Scholarly Communications Committee, is intended to be a foundation statement that provides overall guidance the ACRL scholarly communications initiative. It was approved by the ACRL Board of Directors on June 24, 2003 at the ALA Annual Conference in Toronto.

From: Ray English <Ray.English@berlin.edu>
To: SCOLCOMM <SCOLCOMM@ala.org>
Date: 4/8/03 4:22PM
Subject: Houses, order of

The messages on this thread have raised a number of issues related both to
ACRL/ALA publications as well as scholarly communications issues generally.
I hope the following message can help to clarify some of the points that
have been raised, especially as they apply to ACRL and its publications.

Open access journals. The ACRL Board has endorsed the Budapest Open Access
initiative, and one key strategy of that initiative is to encourage
open access journals. The various business models that have been proposed
for open access journals assume that costs of publishing are covered up
front, through authors' fees, institutional sponsorship, or other
mechanism. Open access journals have great potential for bringing about
change in the overall system of scholarly communication. By definition
they create wide access at no cost to libraries or the end user—a real
contrast to costly commercial titles in terms of both price and access.
The potential is especially strong in scientific fields, where authors'
fees can often be supported through grant funds. ACRL staff are looking
into questions related to open access for ACRL journals and I hope that the
association will be able to move in this direction, at least with some
publications. However, the issues involved may be difficult for ACRL to
resolve because of the close ties between the journals, membership, and
revenue. Open access journals have to have a workable business model and
that's harder for journals that are closely tied to an association's
membership and revenue stream, as it is in the case of ACRL.

Self-Archiving. Another strategy related to open access and the BOAI
involves author self-archiving of articles, either through institutional or
disciplinary repositories. This strategy depends upon the author retaining
the right to post his/her article for open access. ALA (with ACRL
included) does have an agreement that allows an author to retain copyright
and self-archive. While I do think that both the author agreement and the
procedures involved can be improved, basically self-archiving right is
currently supported.

Electronic Access. One of the previous posts mentioned the desirability of
ACRL and ALA journals being available through subscribed electronic access
—as distinguished from open access generally. ACRL is looking at the
possibility of making their journals available electronically to
subscribers. This is likely to be less problematic for ACRL than making
all of their journals fully open access, at least from a revenue point of
view. It would provide an additional perk for membership and likely have
no negative consequences on overall membership levels. It's my sense that
the issues involved are primarily technical.

Reasonably Priced Journals. ACRL scholarly communications initiative,
SPARC, and other groups have strongly advocated journals that are
reasonably priced. One of the primary reasons of SPARC's effort to
establish non-profit journals that are direct competitors to commercial
titles is to show how unreasonable the prices of some commercial journals
are. As a recent post noted, ACRL and ALA journals look reasonable in this
regard. ACRL members receive both College & Research Libraries and College
& Research Library News as a part of their membership dues, which are
reasonable by any standard.

Ray English, Chair
ACRL Scholarly Communications Committee

CC: Helen Spalding <SpaldingH@umkc.edu>, Mary Ellen Davis
<nedavis@ala.org>
Appendix L: Open Access Impact: ACRL Serials

<table>
<thead>
<tr>
<th></th>
<th>5-Year Average</th>
<th>FY 2003 Actual</th>
<th>Scenario 1</th>
<th>Scenario 2</th>
<th>Scenario 3</th>
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<td>$0</td>
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<td>$0</td>
<td>$87,806</td>
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<tr>
<td>for Breakeven (Annually)</td>
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<td></td>
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<td>Additional $ Needed</td>
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<td>Equal 5-Year Average (Annually)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
Bibliography


LIBLICENSE.  http://www.library.yale.edu/~llicense/index.shtml.


