

**REPORT OF THE
TASK FORCE
ON
ELECTRONIC INFORMATION
DELIVERY**

THE BOND MARKET ASSOCIATION

February 20, 1998

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**REPORT OF THE
TASK FORCE ON ELECTRONIC INFORMATION DELIVERY
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EXECUTIVE SUMMARY

In 1994, the Securities and Exchange Commission ("SEC") adopted amendments to Rule 15c2-12 under the Securities Exchange Act of 1934 ("1934 Act"), mandating the creation of a system for the distribution of municipal disclosure documents. One of the principal elements of the amendments was to require underwriters of municipal securities to obtain from the issuers of those securities a contractual obligation to provide ongoing disclosure regarding certain matters relating to the securities so long as the securities remain outstanding. The ongoing disclosure includes annual financial information, updates of certain operating data, and notices of specified material events relating to the issuer and the securities. This ongoing disclosure is required to be provided to newly created nationally recognized municipal securities information repositories ("NRMSIRs") designated by the SEC and to state information depositories ("SIDs") in those states that have designated SIDs. Material event notices are required to be filed with the Municipal Securities Rulemaking Board ("MSRB") if not filed with each NRMSIR and any applicable SID.

Since early 1996 when the Rule 15c2-12 amendments became fully effective, there has been a virtual avalanche of paper filings with the NRMSIRs, SIDs, and the MSRB. The repositories have each developed their own system for storing and cataloguing the material, as well as devised the format and media in which they make the information available to end users.

The Task Force on Electronic Information Delivery was formed by The Bond Market Association (the "Association") in early 1996 with a goal of making a recommendation for a single computer format, or group of formats, in which issuers thereafter would be encouraged to make their filings electronically rather than in paper form.

After two years of research and discussion among representatives of all participants in the municipal disclosure system as well as vendors of software products created for the corporate market, the Task Force has determined to recommend that electronic filings be made in the most recent version (version 3.2) of Hyper-Text Markup Language ("HTML"). HTML is the language

¹ The Association, formerly known as PSA The Bond Market Association, is the bond market trade association, representing approximately 200 securities firms and banks that underwrite, trade and sell debt securities, both domestically and internationally. In 1996, the Association's members senior managed at least 92% of all new municipal market issues. More information about the Association is available on the Association's Internet home page at <http://www.bondmarkets.com>.

of the Internet. The considerations supporting this recommendation are set forth in this Report. The purpose of this Report is to solicit the reactions of all interested parties to this recommendation.

The Task Force has recognized that it can only make a recommendation, and that whether its recommendation will be embraced by the participants in the municipal disclosure system will depend upon whether it reflects broad industry consensus. It is in the hope of developing that consensus that industry comment is sought on the recommendation contained in this Report.

Anyone wishing to respond to the Task Force with respect to anything in this Report is requested to do so by April 30, 1998, in writing addressed to:

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THE MUNICIPAL MARKET DISCLOSURE SYSTEM

The 1994 amendments to Rule 15c2-12 put in place the first mandated nationwide system for ongoing disclosure applicable to the municipal market. Because the SEC does not have jurisdictional authority to directly require issuers to make certain disclosures (as it does with corporate issuers that have publicly traded securities outstanding), in Rule 15c2-12 the SEC requires an underwriter of municipal securities² to obtain from the issuer of those securities, and certain other obligated parties, a contractual undertaking to provide certain specified information on an ongoing basis so long as the securities remain outstanding. There is no requirement that the undertaking specify the form in which the filings will be made, and currently all but a very small number of such filings are made in paper format.

Filings of secondary disclosure made by issuers pursuant to their undertakings are submitted to each NRMSIR and any applicable SID and, in the case of material event notices,

² Municipal securities are securities whose interest is typically exempt from federal, state and local taxation. They are issued by state, local or municipal entities to finance projects which generally have been deemed to have a public purpose. Examples of such projects are schools, roads, bridges, water and sewage treatment facilities, hospitals, and courthouses. There are approximately 52,000 municipal entities which have issued municipal bonds. The size of the municipal market is estimated at \$1.3 trillion of debt outstanding as of December 31, 1997; approximately 1.4 million CUSIP numbers (unique identifiers) have been assigned to municipal securities. This is in contrast with a market size of \$2.3 trillion outstanding as of December 31, 1997, and approximately 300,000 CUSIP numbers, in the U.S. corporate debt market.

may also be submitted to the MSRB.³ The MSRB does not accept filings of financial statements. Issuers in states that have designated a SID must make their filings to that SID in addition to each NRMSIR. If the relevant state has secondary market disclosure requirements that go beyond those imposed pursuant to Rule 15c2-12, generally those filings are also made with the respective SIDs. As a result, SIDs will sometimes have information not available through the NRMSIRs and other sources.

In contrast with the SEC's Electronic Data Gathering and Retrieval system ("EDGAR"), the electronic filing system used by corporate issuers, the municipal disclosure system is highly decentralized and duplicative. This gives rise to a major drawback for those making filings: it increases the number of filings required in order for the filing entity to be in compliance with the undertaking. Where filings are made in paper format, this means the increased cost of multiple mailings. The cost of multiple mailings is magnified by the fact that filers must use a courier service, rather than ordinary mail, to ensure that they will have a receipt to prove that the filing was made on a timely basis. It also increases the possibility of filings being lost or delayed en route to the repositories. Most importantly, the cost of processing the documents -- indexing, storing, etc. -- is multiplied.

From the viewpoint of the user of the information, one of the most significant drawbacks of the municipal disclosure system is that because most filings are made in paper form, they are generally not available to users in a fully searchable, rapidly and inexpensively accessible electronic format. Although some NRMSIRs make some of the information available on-line, this information generally is comprised of only that information which has been manually extracted from the documents and used to populate secondary real-time databases. These databases typically contain limited information the knowledge of which is essential to effecting a transaction. They do not contain raw credit related data or detailed terms of the credit structure. An individual trying to locate, for example, data from a sampling of annual financial statements of water districts serving populations of a certain size would not be able to easily utilize a computer to extract, search, or compare such a sampling. The ability to utilize computers to compare credits would be facilitated if the primary documents were available in a standard full text format. Additionally, in a world where decisions are made in minutes, information that is not accessible in a timely fashion has limited value.

Municipal issuers are generally exempt from direct regulation by the SEC. Accordingly, the SEC could not compel issuers to make their filings to EDGAR or any other federally administered repository. Consequently, in Rule 15c2-12 the SEC provided for the establishment of a series of commercially operated repositories (the NRMSIRs) and for the SIDs. Since filing fees are not levied, the costs of using the disclosure available in the system falls to the user. This is in contrast with the SEC's EDGAR system, which is funded by filing fees, subsidized by the

³ NRMSIRs are information vendors that have met the SEC's criteria to obtain that designation; there are currently four NRMSIRs: Bloomberg, Thomson, J.J. Kenny/S&P, and DPC Data. Three other entities, Moody's, Donnelley and Disclosure Inc., were previously designated NRMSIRs but recently resigned that status. SIDs are entities designated by the SEC and the state in which they are located; four states currently have SIDs (Idaho, Michigan, Ohio and Texas). The MSRB is the self-regulatory organization vested with rulemaking authority to regulate dealers in the municipal market.

federal government and is accessible by the public at no charge on the SEC's website.⁴ The Task Force believes that electronic availability would help lower the costs that both issuers and users bear, by making the material more easily distributed by issuers and repositories, making it more flexibly accessible to users, and eliminating the costs of paper handling and distribution which are borne by all market participants.

Another significant advantage to availability of electronic versions of disclosure documents is the ability to use "push" technology, a web technology that can be used to broadcast documents to PCs. Push technology involves the electronic delivery of documents, or notifications as to the availability of documents, directly to that subscriber via the Internet. Push Technology utilizes HTML. For example, imagine an investor or issuer who wants to receive filings -- official statements, advance refunding documents, financial statements, updated operating data, and material event notices -- pertaining to all issuers of debt financing water and sewer projects, having them delivered to his or her PC. Imagine Official Statements delivered via the Internet to identified prospective investors. Imagine financial statements delivered to the PCs of a municipality's citizens. These are a few of the ways push technology might be utilized in conjunction with electronic documents to automate processes, improve the timeliness and accessibility of information, and reduce overall costs.

The disclosure system has, by any measure, substantially improved overall as a result of the 1994 amendments to Rule 15c2-12. The overall amount of information now available to the public, and the quality of that information, are both substantially improved over what they were prior to the amendments.⁵ However, it is apparent to a wide range of market participants, as evidenced by the membership of the Task Force, that there is room for improvement in efficiency and distribution.

THE TASK FORCE

The Task Force was assembled in early 1996, as an outgrowth of the Association's Municipal Credit Research Committee, which was then chaired by Joanne Mays Becker. Ms. Becker, a Vice President and municipal analyst with J.P. Morgan Securities Inc., is also Chair of the Task Force, which includes representatives of the Association's member and associate member firms as well as representatives of all the NRMSIRs and SIDs, the MSRB, GFOA, NABL and other market participants. A list of Task Force members is attached as Exhibit A to this Report.

The purpose of the Task Force is to make a recommendation for a universal computer format, or group of formats, that could be used by all market participants for transmitting, storing and using municipal primary and secondary disclosure documents. It is evident that electronic

⁴ The SEC's website is located at <http://www.sec.gov>.

⁵ See the summary of results of a survey conducted jointly by the Association and the National Federation of Municipal Analysts in April 1997 (Exhibit E hereto).

availability of documents is a necessity given the tsunami of disclosure documents, filed in paper format, that are to be filed in connection with the issuance of municipal obligations in a market of approximately 52,000 issuers. Furthermore, the Task Force determined that, given the decentralized nature of the disclosure system, the multiplicity of repositories, the multiplicity of formats used to author documents, and the inability of the regulators to mandate electronic filings, a coordinated industry-wide approach was required in order to effect such a metamorphosis.

Support of Task Force Recommendations by Individual Task Force Members

This Report has been reviewed by the Task Force members listed on Exhibit A. It has not been fully reviewed by the organizations with which those individuals are affiliated, and no reader of this Report should infer an endorsement by such organizations. One of the goals of the Task Force in issuing this Report and establishing the comment period is to enable these groups, and any other interested groups, to discuss and consider whether they are able to endorse these or any other recommendations that might be made by the Task Force.

Other Task Force Initiatives

In the course of its work, the Task Force has attempted to address related matters that its members have felt would also improve the municipal secondary market disclosure system. The Task Force recommends three such improvements, as described below.

Generic Cover Sheet. The Task Force has developed a cover sheet which gathers all the most important descriptive information about a filing, and is intended to be used with all material submitted by or on behalf of issuers to NRMSIRs, SIDs and the MSRB. The most critical pieces of information are the identity of the issuer and the CUSIP number(s) (unique identifiers) of the relevant securities. NRMSIRs report that this information is frequently omitted, or incorrectly or incompletely stated. Its omission is particularly critical with respect to material event notices, where market participants need to be able to react quickly to potentially significant market developments reported in such notices, but frequently cannot because it is not clear to what securities the notice relates. In the instances in which issuers make filings and fail to properly identify the securities in connection with which the filings are made, each receiving repository must research and identify the appropriate CUSIP numbers, thereby increasing the possibility of erroneous information. A copy of the generic cover sheet appears as Exhibit B to this Report.

“Agora” Index. Consideration of the drawbacks of the decentralized municipal disclosure system led the Task Force to focus on inevitable differences that arise among the various repositories’ databases. The differences may be a result of glitches in delivery, receipt or cataloguing of the material, inclusion of historical documents by some repositories, the fact that the MSRB does not accept filings of financial statements, or the requirement that some filings be made with the SIDs under their respective state laws but are not otherwise required to be filed with the other repositories. The end result of such differences is that someone seeking a

particular document may be unable to find it through one source, but able to find it elsewhere. The current system requires that person to check one repository after another until the material is found.⁶

One solution to this problem would be to implement an index of the material available through each of the repositories. It would not be a central repository, but only a central directory. The Task Force produced a description of such an index that appears as Exhibit C to this Report, in hopes that an information vendor would decide to develop it commercially. The Task Force has been approached by one information vendor which is working with some of the repositories to determine the feasibility and eventual scope of this project.⁷

The Task Force's only role in developing the index is to assist in forming the concept and in bringing the information repositories together with any entity that may seek to develop the concept commercially. The development and outcome of the project is completely out of the control of the Task Force and of the Association.

CUSIP Numbers on Official Statements. Most or all of the information held by the repositories can be retrieved by reference to CUSIP numbers. The Task Force believes that it would significantly simplify the process of locating information if the CUSIP number of each new issue appeared on the front cover of the related official statement. Since official statements can be obtained through the MSRB's Municipal Securities Information Library ("MSIL"),⁸ this simple change would make it easy to obtain the relevant CUSIP number, which in turn is the key to other issuer secondary market disclosure. The Task Force is working with market participants to encourage this practice.

ALTERNATIVES CONSIDERED BY THE TASK FORCE

In determining to make the recommendation contained in this Report, the Task Force considered many factors and alternatives. Some of these factors and alternatives are discussed below.

⁶ The cost of such a search can be prohibitive. Dealer firms typically have a subscription to only one or two NRMSIRs' services, so they incur high non-subscriber fees if they must turn to one of the other NRMSIRs for a particular document.

⁷ That vendor is Ambac Connect Inc., an affiliate of Ambac Financial Group. For more information about Ambac Connect's project, contact Barbara Haynes of Ambac Connect, at 214-599-8300.

⁸ Again, there is a cost to the user for obtaining copies of such disclosure documents (typically \$25 per document, plus postage or courier charges).

Specialized Language Approach

In the course of its research, Task Force members consulted with officials familiar with the SEC's EDGAR system, the electronic filing system which is now mandatory for use by publicly traded U.S. corporations. The SEC developed its own proprietary formatting structure.⁹ EDGAR documents are searchable and comparative data is available via the EDGAR database.

The Task Force did not give serious consideration to creating its own format for use with municipal market disclosure. The principal reason for this is resources: the resources necessary to create, promote, disseminate and maintain a new format were well beyond what is reasonably necessary to create a standard for electronic filings. Given the number of repositories and the coordination and cooperation a specialized language would entail, it did not appear to the Task Force to be a viable option. Furthermore, the EDGAR system was developed at a time when reasonable alternatives were not available, thus justifying the cost of creating a specialized language. There are currently several very viable alternatives available. As a result, the Task Force believes that there is no reason to create a specialized language to accomplish its goals.

Proprietary vs. Non-proprietary Languages

One of the basic issues addressed was whether the recommendation should include any proprietary software or formats.¹⁰ The drawback to utilizing proprietary software for this purpose is that the manufacturer would be free to change or discontinue the format at any time, leaving it unavailable for this use. A manufacturer might file for bankruptcy and exit the business. In that instance the product would no longer be supported and a filing system dependent upon that software would be difficult, if not impossible, to maintain. Examples of proprietary software are: Microsoft Word, Adobe Acrobat's Portable Document Format ("PDF"), Corel Wordperfect, Microsoft Excel, Lotus 123, and Aldus Pagemaker. In addition, software manufacturers revise their products frequently and the revision process is not subject to public input. Users dependent upon their products are limited to reacting to new versions.

Non-proprietary formats in the public domain include HTML, which is the formatting markup language used on the Internet. HTML, an "open standard", includes markup elements for headers, paragraphs, bolding, etc. HTML is a subset of SGML. Versions of HTML are developed by a voluntary consortium known as the World Wide Web Consortium ("W3C"). W3C was founded in 1994 to develop standards for the evolution of the world wide web. It is an industry consortium jointly run by the MIT Laboratory for Computer Science in the USA, the National Institute for Research in Computer Science and Control in France and Keio University

⁹ EDGAR's formatting structure is a combination of modified Standard Generalized Markup Language ("SGML") and ASCII. SGML is a format which was developed by the U.S. Defense Department. EDGAR also requires SGML headers and financial data schedules, which are typically created using software supplied by the SEC known as EDGAR Link.

¹⁰ This refers to a language developed and therefore owned by a commercial entity. An example would be the word processing package Microsoft Word, which is a product of Microsoft Corporation.

in Japan. Membership is open to any organization which signs a membership agreement. The Task Force believes that it would be possible to be involved in W3C's deliberations in the future, so as to be able to influence the direction of, or at least anticipate and react to, future changes in HTML. Additionally, in comparison with a proprietary standard, as it is an open standard maintained by a world wide voluntary consortium and the format for the World Wide Web, it is more likely to evolve than to be discontinued.

Perhaps the most significant concern regarding use of commercially available software packages is that the documents produced can be accompanied by attached macros or programs which are susceptible to infection with viruses. The viruses can easily spread to the user's computer when the material is downloaded. This raises major concerns for the security of both the repositories and the eventual users of the material. On the other hand, HTML files are effectively immune from infection with viruses.

Single vs. Multi-Format Approach

The Task Force, in considering whether it would be feasible to enable filers to use their choice of any one of several packages in making their electronic filings, met with a representative of the operator of Canada's System for Electronic Document Analysis and Retrieval ("SEDAR"). SEDAR is the mandatory electronic central filing system for all publicly traded corporate issuers in Canada. The SEDAR system permits filers to use any of three approved proprietary software packages, in conjunction with SEDAR software, to make their filings: Corel WordPerfect; Microsoft Word; or Adobe PDF.¹¹ Users of the documents must have access to one of these packages or an appropriate viewer in order to access all the documents.¹² SEDAR has a Web Site on which filed documents are posted, as the SEC does with corporate documents on EDGAR, for public accessibility.¹³ SEDAR is funded by filing fees, a source of funding unavailable to the U.S. municipal disclosure system. In addition, it has a substantial technical support infrastructure that maintains only one central repository. Given the number of repositories in the municipal disclosure system, it would be unrealistic to consider creating proprietary software and a system similar to SEDAR's in order to support the municipal market.

A multi-format approach would seem to grant the significant benefit that filers who create their documents in one of the approved software packages would not need to make any conversion prior to filing. However, the Task Force identified the following drawbacks to the multi-format approach:

¹¹ Only certain specified versions of such packages are acceptable in the SEDAR system. At this time, those versions are: WordPerfect for Windows or DOS versions 5.1, 5.2, 6.0 and 6.1; Microsoft Word for Windows versions 6.0 and 7.0; and Adobe PDF versions 2.x and 3.0.

¹² Alternatively, a user may convert files in WordPerfect or Microsoft Word to other software programs. Files in PDF are generally not able to be so converted. In cases where users make such conversions, they must take care to verify that the converted file is identical to the original.

¹³ SEDAR's Web Site address is: sedar.com.

- Since it is based on proprietary software packages, this approach includes all the drawbacks cited above to using such packages;
- Over time, as the software packages are upgraded by their developers, the repositories would have to accept filings in an increasing number of versions in each of the languages accepted by the system (in addition to accepting paper filings), thus rendering a multi-language system overly complicated and unwieldy;¹⁴
- In the event the user does not have access to the software package in which the document was authored, and the same version in some instances, the need for conversion would make the document's usage more difficult in each instance in which it is used, rendering a multi-format system inefficient;
- Users would be unable to search across the entire database unless specialized software were developed for this purpose;¹⁵
- Because the system would be more complicated, it would be more prone to errors and/or misunderstandings, for example, as to which formats are accepted by the system;
- Given that most disclosure documents are an assemblage of sections authored by issuers and their agents in a number of software programs,¹⁶ facilitating filings in a limited group of formats would not likely eliminate the need for initial conversion;
- The multi-language approach would afford no benefit over a single-format approach for filers that do not already use one of the selected formats or platforms; and
- Filers would not control the conversion process that would in virtually all cases occur further down the distribution chain, either when the repository posts it to its database or when a user converts it.

Given that a goal of the Task Force is to achieve as high a level of voluntary compliance - i.e. electronic filing -- as possible, it would be logical to assume that the simplest system may be the best. The Task Force also believes that the simplest approach is likely to be the most acceptable to the greatest number of filers and the most successful overall. Therefore, the multi-format approach was eliminated as a strong alternative in the Task Force's deliberations.

¹⁴ The SEDAR system currently accepts a total of eight versions of the three languages it has designated. Multiple versions can never be eliminated, since one must assume that any language will be upgraded and updated from time to time.

¹⁵ It should be noted here that even in the case of a collection of documents all in a common format such as HTML, the repository would need to create a database utility that would permit such searches. Such a utility is possible where all the documents are in one format, but the complexity and probable cost of creating such a utility which could handle searches of documents in more than one format makes it unlikely that it would be created.

¹⁶ See Exhibit D -Summary of Results of GFOA Financial Document Preparation Survey. One reason that a document would be authored in more than one format is that it may contain elements drafted by different parties: for example, an official statement might include sections drafted by the issuer as well as by bond counsel, underwriters' counsel, the issuer's accountants and others.

Image vs. Text

Some formats, such as Adobe Acrobat's PDF,¹⁷ store material in proprietary presentation encoded formats. In layman's terms, these files are like an image or a picture of the page. In contrast, text is a bitmap of the data or characters which together comprise the page.

The Task Force determined that text format is better suited for users of the filed material, since it allows searches and also allows users to extract data, for such purposes as to make data comparisons from one filing to another. Images can be displayed on a computer, but, in order for the data contained on the page to be extracted, the image needs to be converted first into machine readable text (for example, by the process of optical character recognition). Additionally, if one were to compare, for example, an official statement that had been authored utilizing a word processing program (and thus was in a text format) with its scanned image, one would find the image file to be much larger. It will typically consume more storage space on a disk and transmit much more slowly via the Internet. Not only is storage expensive, but transmission of image documents the size of, for example, municipal official statements or annual financial reports, is so unwieldy as to be unfeasible.¹⁸

Adobe PDF

The Task Force seriously considered the use of Adobe PDF as the basis for a single-format system. Adobe has a solid history of developing broadly accepted software tools. For example, its Postscript printer definition language is the standard in presentation quality printing, just as its Acrobat is the standard in presentation quality document display. Acrobat's PDF successfully converts word processing and desktop publishing documents to a display format which is visually precise to the author's original format. Since free readers are currently widely available, PDF files have become popular formats for both public and private sector files on the Internet.

However, the Task Force concluded that it would be unwise to build what is in essence a collective electronic municipal "database" wholly based and dependent upon a format or software controlled by a private entity. Aside from the issues of an inability to participate and directly influence the format or software program's development, and the risk of loss of "system" functionality in the event Adobe were either to exit the business or discontinue the product, there would also be concerns about the potential for monopolistic pricing. PDF is not readily convertible into other formats or software. All filers submitting electronically would need to purchase the software. It is difficult, if not impossible, for users to convert from PDF into other proprietary software programs. Extraction of data from a PDF file is laborious. While Adobe currently makes the browser software enabling a user to access (but not author) a document

¹⁷ PDF is a proprietary file format developed and marketed by Adobe. PDF is also capable of storing text. However, its predominant usage in the municipal market to date is in document handling of images.

¹⁸ RR Donnelly, a former NRMSIR, had previously offered scanned image documents via their web site. In addition, the MSRB scans Official Statements and Advance Refunding Documents and sells subscriptions to images of the documents stored on CD-ROMs. Two subscribers which are also NRMSIRs, DPC Data and Thomson, offer CD-ROM databases of the image based documents.

available at no charge, that situation could change in the future. Furthermore, given the lack of compliance monitoring performed by the repositories, there would be no reasonable way to exclude image based PDF. For those users wishing to extract data rather than simply view the documents, this would seriously limit the usefulness of the "database". Additionally, the impact of and risk in endorsing a monopoly for a market comprised of 52,000 issuers and their agents (including bond counsel, financial advisors, underwriters and accountants), as well as users of the information (including broker-dealers, retail and institutional investors, and other governmental entities) cannot be ignored. As a result of these considerations, the Task Force concluded that in comparison, HTML was the superior and less costly choice.

The Task Force also considered as an alternative the recommendation of both Adobe PDF and HTML as alternative formats.¹⁹ However, in addition to the applicable arguments against use of Adobe PDF as the single authorized format, the Task Force considered whether, if PDF were to be included, the anticipated incremental increase in the number of electronic filings would justify the perceived drawbacks:

- the incremental increase in costs to be incurred by all nine repositories in order to support PDF (if they would in fact agree to support it);
- the increase in expense to be incurred by all nine repositories required to facilitate database searches in and across two formats, or alternatively the loss of that functionality, i.e. loss of a common "database";
- incurrence of expenses by the repositories in order to monitor the exclusion of image-based PDF;
- an increase in the confusion factor to be experienced by filers; and
- hypothetical loss of future functionality as new technologies develop which are based on HTML precisely because it is an open standard in the public domain. A current example of such a loss would be the usage of push technology which is HTML based.

The Task Force concluded that the likely incremental increase in filings would not justify these drawbacks. Thus, it was concluded to exclude Adobe PDF and recommend and promote HTML as a single format.

COST CONSIDERATIONS

The Task Force is aware that its recommendation of HTML as the filing format may increase the costs incurred by some filers in making their filings. However, we believe that these costs can be mitigated by authoring documents originally in HTML, a practice currently in use by many issuers who post their documents on their own websites. Alternatively, most word

¹⁹ It should be reiterated that the two authorized electronic formats would be in addition to what is essentially the lowest common denominator type of filing: paper. The Task Force believes that paper will continue to be the predominant filing medium for the foreseeable future.

processing packages today contain the option to save documents in HTML, thus automatically converting them, and there are other no-cost ways to obtain the software for conversion to HTML.²⁰ Thus filers or their agents (including bond counsel, financial printers, financial advisors and underwriters) have the ability to convert to HTML without incurring an additional cost for software. However, changes to the format of the document as a result of the conversion will generally necessitate editing of the HTML document.

Additionally, there are filing agents currently operating in this market, principally with material event notices but potentially with other types of secondary market disclosure, that can handle the conversion from the format in which the document was authored into the appropriate electronic format in which the notices are then filed with the relevant repositories. For material event notices, this is currently being done for less than it would cost the filer to send the paper version by courier to all relevant repositories. Task Force members anticipate that as demand grows, these providers will be able to effect conversion filing of annual reports and other disclosure documents, at similar relative costs. Additionally, the Task Force believes that increases in costs resulting from authoring, converting or editing of the electronic documents will more than be offset by reductions in printing, handling and mailing of printed documents and other compensating benefits.

Although a multi-format approach might result in decreased costs for some issuers, the complexity of such a system would increase the costs for the repositories and, ultimately, all users of the information. Since one of the goals in creating an electronic filing system is to improve accessibility of the documents, a solution that increases the cost to gain access would be counterproductive.

Cost savings can be realized as a result of electronic filings with the increasing practice of incorporating material into filings by reference to other filings. This practice, which is commonly used in the corporate securities market, began to be used in the municipal market following enactment of the amendments to Rule 15c2-12. In a market in which paper filings are the norm, accessing the incorporated documents in a timely fashion is difficult if not impossible. In addition, investors must pay the additional charges to obtain the incorporated documents. In an electronic environment, the documents would be more easily obtained; investors and issuers may therefore feel more comfortable with the practice. This would result in a reduction of cost not only for issuers but also for users of the information.

SECURITY CONSIDERATIONS

Task Force members, including representatives of GFOA and NABL, have expressed concerns regarding the security of an electronic filing system. The concerns generally surround the issue of protecting the integrity of the issuer's document, throughout the processes of

²⁰ For example, Microsoft's Windows 95, the operating system which is included in the vast majority of computers shipped today, includes an HTML viewer and translator. Free utilities for this purpose are readily accessible from the Internet; for example, Internet Explorer can be obtained at no charge from Microsoft's Internet Site (<http://www.microsoft.com>).

transmission, conversion to another language (if necessary), storage, retrieval, and use. Security concerns must be addressed by examining each of the processes that create the concerns. For example, transmission of electronic information from an issuer to a repository can be accomplished in several ways. If sent via e-mail, there might be greater security concerns than if sent on a disk. Similarly, repositories wishing to make information electronically available will need to create systemic protections, such as firewalls, that will prevent accidental or malicious tampering.

The Task Force believes that its decision to recommend HTML, in and of itself, has neither a positive or negative impact on these issues. It is possible to alter both proprietary and HTML based documents. The Task Force acknowledges that it is more difficult, though not impossible, to alter image based documents as compared to text-based documents. The Federal government goes to great lengths to protect the integrity of our currency from counterfeiting, and yet is unable to do so completely. All market participants will need to consider to what length, and at what cost, the system should implement systemic processes and procedures to mitigate the security risks. Only in this fashion can a balance be achieved between functionality and the protection of the document from malicious alteration.

One of the benefits of a single format approach is that the issuer retains control of the conversion from the format in which the document was authored to the format in which it is filed with, and stored by, the repositories. Although this imposes costs on the issuers, the Task Force believes that those costs are offset by the comfort issuers will have with the accuracy of the version of the document being filed.

Security and authenticity concerns will clearly need to be addressed. The Task Force is dedicated to creating an electronic filing system that will be used with confidence. Therefore, although the Task Force does not believe it is in a position to directly address security concerns, it recognizes that it may need to work with all market participants to devise appropriate solutions to these concerns.

MODERNIZATION OF EDGAR

The SEC has determined to modernize EDGAR and recently announced that the official filing document structure will be HTML.²¹ The new EDGAR is expected to be developed and phased in between 1998 and 2002. Filers will be permitted to attach a separate file containing a "courtesy copy" of the submission in PDF format. It is the filer's responsibility to make sure that the PDF copy is equal to the official HTML copy. Because the PDF version has no official status, the SEC will make no attempt to examine or validate it in any way. However, the PDF version will be disseminated through both the EDGAR website and the EDGAR commercial dissemination data stream.

²¹ The SEC's Request for Proposal for the modernization of EDGAR can be found at the SEC's website (<http://www.sec.gov>).

It is interesting to note that the Task Force and the SEC, faced with similar goals, have independently reached similar conclusions. Given the direction of EDGAR, synergies will evolve and vendors and software developers will likely build applications for the corporate market that, with the selection of HTML as the filing format, will be equally useful in the municipal market.

TASK FORCE RECOMMENDATION

In view of all of the foregoing, after careful consideration, the Task Force has decided to promote the use of HTML 3.2 for use in filing municipal disclosure documents.

As discussed above, there are significant advantages to using one format rather than multiple formats. It will facilitate searches across an entire database; it will reduce the proliferation of multiple versions of the language in use from time to time; it eliminates confusion as to what formats the system will and will not accept. In addition, as discussed above, there are distinct advantages to using a non-proprietary language, the principal one being that the system is less subject to arbitrary decisions, including decisions to alter or terminate the availability of the program, made by parties outside the system. The Task Force believes that, absent a funded centralized repository, HTML is the most feasible alternative. In addition, it is already widely used for Internet and other electronic applications. Some of the larger issuers, which have already established websites on which they post information of interest to their constituents, including taxpayers, creditors and others, have already begun to author in, or convert their financial and other disclosure documents to, HTML. For them, establishing a system by which they can make their filings electronically should be a great benefit.

Finally, time is of the essence. A failure to endorse a global shared format will result in a chaotic environment in which different market participants begin to use different formats. The result would be like a company in which decentralized technology decisions have been made. Each department chooses the technology best suited to accomplishing its work. However, departments eventually experience frustration, difficulty and sometimes the inability to communicate with each other. In order for all municipal market participants to communicate most efficiently, the documents being entered electronically into the system need to be in a recognizable global shared format: the electronic equivalent of an official version, HTML.

In the municipal market, issuers and users can choose to utilize HTML as a native format, or they may choose to author in or use other native formats or software programs. We may all choose to speak other languages at home, but we need to agree to speak English in order that all might communicate freely.

REQUEST FOR COMMENT

The Task Force is extremely interested in your input into the matters discussed in this Report, including the recommendation of the Task Force. We strongly believe that an electronic filing system will only work in the municipal secondary market disclosure arena if it has widespread acceptance.

In addition to your reactions to any of the matters contained in the foregoing discussion of the Task Force's deliberations and recommendation, we ask that commenters consider addressing the following questions in their submissions:

- What do you see as the impacts, whether positive or negative, on the various market participants of the Task Force's recommendation?
- If you are a market participant, would you use electronic filing facilities if they were available? If not, why not? What would induce you to do so?
- If you are an issuer of municipal debt or other provider of disclosure, when might you be able to file in HTML?
- If you are an issuer who currently has a website, what program(s) do you use to author disclosure documents and/or to post them on your website? If you go through a conversion process, what problems or concerns has that caused for you?
- If you are an information repository, are you now able to receive documents submitted in HTML 3.2? If not, when do you believe you could be able to do so?
- What problems do you foresee with this system? Again, address this question from the viewpoint of any one or more market participants.
- Can you identify any significant security concerns for any market participants that have not been adequately taken into account by the Task Force? How do you believe they can be addressed?
- Would you recommend any additional restrictions or guidelines that are feasible and necessary to the system's function?

In order to ensure that the Task Force is fully able to consider your comments, we ask that you submit them in writing, by April 30, 1998, to:

Sarah M. Starkweather, Esq.
Vice President and Associate General Counsel
The Bond Market Association
40 Broad Street
New York, NY 10004
Fax: 212-440-5263
E-mail: sstarkweather@bondmarkets.com

Please include details as to how we may contact the individual submitting comments in the event we have any follow-up questions about your comments (preferably including an e-mail address and telephone number).

After April 30, 1998, the Task Force will review and consider carefully all comments received. The Task Force plans to release a final report, containing its final recommendation after considering all comments. It will then concentrate its efforts on working with all market participants to make the system operational.

Task Force on Electronic Information Delivery

Name	Firm
Joanne Mays Becker, <i>Task Force Chair</i>	J.P. Morgan Securities Inc.
Russell F. Comeau	AMBAC Indemnity Corporation
J Louis Matherne	American Institute of Certified Public Accountants
Joseph Kristie	AMERITECH
Peter Thompson	AMERITECH
Jeff Friend	Bloomberg Financial
Joanne E. Dunkelman	Bowne of New York City, Incorporated
John Penhollow	Bowne of New York City, Incorporated
Jeffrey M. Baker	Chase Securities Incorporated
Sandra Dinetz-Weisenfeld	The Depository Trust Company
Howard Spector	The Depository Trust Company
Scott A. Theis	Document Technologies, Incorporated
Charles D. Weeden	Document Technologies, Incorporated
Chris Campbell	Donaldson, Lufkin and Jenrette Corporation
Jamie Johnson	RR Donnelley Financial
Thomas P. Addison	DPC Data Incorporated
Peter J. Schmitt	DPC Data Incorporated
Bob Vincent	E-Muni
Laurence M. Landau	FGIC Corporation
Steve O'Leary	Fiduciary Communications
Larry Schneider	Goldman, Sachs & Co.
Betsy Dotson	Government Finance Officers Association
Betsy Parker	Greenwich Capital Markets Inc.
Renee Arakawa	Greenwich Partners, Incorporated
Lawrence J. Newman	Greenwich Partners, Incorporated
Janice Brennan	Griffin, Kubik, Stephens and Thompson, Inc.
Randy Burleyson	Griffin, Kubik, Stephens and Thompson, Inc.
Laura Steffler	Idaho State Information Department
Joseph Sensale	JJ Kenny/S&P
Robert Phelps	Louisiana Municipal Disclosure Service Bureau

Name	Firm
Kenneth Artin	NABL Representative (Lowndes Drosdick Doster Kantor and Reed, P.A.)
Pam Eccles	MBIA Insurance Corporation
Jeff Kostiw	MBIA Insurance Corporation
John A. Ladyzinski	Merrill Lynch & Co., Inc.
Jerry Paradine	Merrill Lynch and Co., Inc.
Patrick Arey	NABL Representative (Miles and Stockbridge)
Roger Stein	Moody's Investors Service
Timothy C. O'Connor, PE	Municipal Advisory Council of Michigan
Louis H. Schimmel, Jr.	Municipal Advisory Council of Michigan
Dan Black	Municipal Advisory Council Of Texas
Terrence P. Spencer	Municipal Advisory Council of Texas
Thomas Hutton	Municipal Securities Rulemaking Board
Amy Dunbar	National Association of Bond Lawyers
John Fitzgerald	NSCC
Ken Gurney	Ohio Municipal Advisory
James Derubertis	Participants Trust Company
Sorin Pleacoff	SBC Warburg Dillon Read Incorporated.
Robert VanKirk	Sector Inc.
Gerard Faulkner	Standard and Poor's Corporation
Cheryl Horowitz	Thomson Municipal Information Services
Alan Williams	Thomson Municipal Information Services

Staff Advisor to the Task Force: Sarah M. Starkweather, *The Bond Market Association*

MUNICIPAL SECONDARY MARKET DISCLOSURE
INFORMATION COVER SHEET

This cover sheet should be sent with all submissions made to the Municipal Securities Rulemaking Board, Nationally Recognized Municipal Securities Information Repositories, and any applicable State Information Depository pursuant to Securities and Exchange Commission rule 15c2-12 or any analogous state statute.

* * *

Issuer's and/or Other Obligated Person's Name: _____

CUSIP Numbers (attach additional sheet if necessary):

[] Nine-digit number(s) to which the information relates:

[] Information relates to all securities issued by the issuer having the following six-digit number(s):

* * *

Number of pages of attached information: _____

Description of Material Event Notice / Financial Information (Check One):

- 1. ___ Principal and interest payment delinquencies
2. ___ Non-payment related defaults
3. ___ Unscheduled draws on debt service reserves reflecting financial difficulties
4. ___ Unscheduled draws on credit enhancements reflecting financial difficulties
5. ___ Substitution of credit or liquidity providers, or their failure to perform
6. ___ Adverse tax opinions or events affecting the tax-exempt status of the security
7. ___ Modifications to rights of security holders
8. ___ Bond calls
9. ___ Defeasances
10. ___ Release, substitution, or sale of property securing repayment of the securities
11. ___ Rating changes
12. ___ Failure to provide annual financial information as required
13. ___ Other material event notice (specify) _____
*14. ___ Financial information: Please check all appropriate boxes:
[] CAFR: (a) [] includes [] does not include Annual Financial Information
(b) Audited? Yes [] No []
[] Annual Financial Information: Audited? Yes [] No []
[] Operating Data
Fiscal Period Covered: _____

*Financial information should not be filed with the MSRB.

* * *

I hereby represent that I am authorized by the issuer or its agent to distribute this information publicly:

Signature: _____

Name: _____ Title _____

Employer: _____

Address: _____

City, State, Zip Code: _____

Voice Telephone Number: _____

The "Agora Index"

PSA The Bond Market Trade Association ("PSA") represents the banks and securities firms that trade, sell and underwrite debt securities internationally and domestically. The debt instruments include U.S. Treasury and federal agency securities, corporate debt, money market instruments and repurchase agreements, municipal bonds, and mortgage and other asset backed securities. In 1996, PSA members senior managed at least 92% of all new municipal market issues.

In 1995 the United States Securities and Exchange Commission ("SEC") promulgated amendments to Rule 15c2-12 (the "Rule") that required underwriters of municipal securities to determine, prior to the purchase or sale of municipal securities issued on or after July 5, 1995, that issuers of municipal securities make a contractual obligation to agree to update certain financial and operating data regarding itself, and file what are referred to as "material event" notices, regarding defined events with respect to the securities, as prescribed by the Rule. Prior to the amendments to the Rule, no requirement existed to have issuers provide updated information regarding outstanding indebtedness to the secondary market. A decentralized information filing system was established pursuant to the Rule, under which the issuers would file such information with Nationally Recognized Municipal Securities Information Repositories ("NRMSIRs") designated by the SEC, as well as with a State Information Depository, if any, established by the state in which the issuer is located (a "SID").

It is noteworthy that while there are approximately 12,000 issuers in the corporate debt market, the universe of issuers in the municipal market is in excess of 52,000. Not surprisingly, given the number of municipal debt issuers and the volume of documents that are to be filed, the information filing system that has evolved under the Rule has been deluged by an avalanche of paper documents. A variety of primary and secondary disclosure documents are required by law to be filed with the various repositories: Official Statements, i.e. prospectuses for municipal bond issues, Advance Refunding Documents, Annual Financial Statements, Annual Operating Data, and Material Event Notices. Official Statements and Advance Refunding Documents are required to be filed by underwriters with the Municipal Securities Rulemaking Board ("MSRB") as primary disclosure. Currently, as a matter of practice, in addition to the MSRB, the self regulatory organization of the municipal securities industry, hard copies are sent by courier by the underwriters to the NRMSIRs. The secondary or annual disclosure is dealt with in a different manner. Material Event Notices are required to be filed with each NRMSIR or the MSRB, as well as the SID if one exists. Annual Operating Data and Financial Statements are required to be filed with each NRMSIR and with any applicable SID. All filings currently are made with paper documents.

There are currently six NRMSIRs: JJ Kenny/Standard & Poors; Moody's Investors Service; Bloomberg Municipal Repositories; RR Donnelley Financial's Municipal Securities Disclosure Archive; Thomson Municipal Services, Inc.; and Disclosure, Inc. The four SIDs are in the States of Texas, Michigan, Ohio and Idaho. An information vendor is in the process of applying for NRMSIR status and another SID may be established in the State of Louisiana. Yet another information vendor is a *de facto* SID and *de facto* NRMSIR although that vendor currently has no intention of applying for either formal status.

PSA established the Task Force on Electronic Information Delivery ("the Task Force") in January 1996 after the amendments to the Rule became effective. The Task Force was established with the goal of researching, determining, recommending and promoting the usage of a common format to facilitate the electronic filing of documents. Its members are representatives of PSA member firms, the MSRB, information distributors, bond insurers, securities clearing agencies, the National Association of Bond Lawyers, the Governmental Accounting Standards Board, the American Institute of Certified Public Accountants, the National Federation of Municipal Analysts, the Government Finance Officers Association ("GFOA") and all the repositories (NRMSIRs and SIDs). The Task Force is currently considering two electronic filing format options: HTML and a multi-program approach. It is expected that its assignment will be completed by 1997 year end. During the course of its research, the Task Force has made a number of recommendations to improve the efficiency of the extant disclosure filing system. The proposed Agora Index (the "Index"), a centralized index of municipal disclosure documents, is one of those recommendations.

Current users of the documents and subscribers to the repositories' products are institutions that invest in tax-exempt bonds -- principally funds, unit trusts and insurance companies -- as well as the dealer, issuer, and rating communities. One would be incorrect in assuming that the databases of the repositories are identical. There are several reasons for this. SIDs by definition are unique. Certain repositories contain libraries of documents acquired prior to the effective date of the Rule. Although some issuers and bond issues are exempted from the Rule, so that they are not required to make filings, some repositories actively seek out documents pertaining to those issuers in order to supplement their collections. Not the least of all, human error in filings which are not monitored for compliance accounts for some of the differentiation.

A centralized Index to documents filed as primary and secondary disclosure would be a solution to the numerous problems in the municipal market which have been created as a result of having multiple repositories. Users of documents frequently embark on a quest that entails multiple phone calls, database searches and web site checks which can be time-consuming, expensive, frustrating, and sometimes, fruitless. In the near future, when electronic filing becomes a reality and the cost of the information is reduced, the user group will expand. Once the Index serves to centrally locate the information, awareness of the availability of the data will increase as will its usage. Governments in need of benchmark performance measures and information pertaining to their peers will become more frequent consumers. When individual investors and citizens have on-line and timely access to the information, they will likely become more interested in the information as well.

The Index, in combination with the databases of all the repositories, could serve as the municipal markets' equivalent to the SEC's EDGAR database. The documents that are required to be filed under Federal and State securities laws are the municipal equivalents to 10K's, 10Q's, 8K's, etc. Ideally, the operator of the Index would maintain a web site based Index containing a listing and, as necessary, a brief description of all documents on file at the MSRB, at each of the NRMSIRs and SIDs, and perhaps with information vendors as well. The information used to populate the Index Database would have to be voluntarily supplied by the MSRB, NRMSIRs, SIDs and vendors as neither issuers nor repositories would be legally required to notify the operator of the Index as to all past and future filings.

The web site for the Index should have hot links to the web sites of all the repositories, or, in the event one lacks a web site, then a notice to that effect and a simple reference to the entity's address and phone number. In the event either a NRMSIR or SID does not participate, a notification would appear to the effect that the Index has not been supplied data by that entity. That repository would then be another source that must be referenced by the user, if the Index does not provide another source for the information.

One point to consider is how to index those documents, mainly financial statements, that are required to be filed with the SIDs but are not required to be filed under the Rule. Some entities that are required to file with their SIDs may not have any debt outstanding and consequently, lack CUSIP numbers. CUSIP numbers are assigned by the CUSIP Service Bureau, which is operated by Standard & Poor's for the American Bankers Association: they are nine-digit numbers for the primary purpose of uniquely identifying issuers and issues of securities and financial instruments within a standard framework. They are used throughout the financial community.

The Task Force has negotiated the format of a "Generic Cover Sheet" with the NRMSIRs, SIDs and the MSRB and is presently working with the GFOA to promote usage of the Generic Cover Sheet by issuers in connection with their disclosure filings. A copy has been attached as Appendix A. The Generic Cover Sheet could be used to populate the notification document by which repositories would supply information to the operator of the Index. It would be logical to utilize the same electronic standard eventually selected by the Task Force to author the notification documents. For example, in the event HTML is selected as the standard, issuers filing electronically would file an HTML Generic Cover Sheet which would simply be transmitted to the Operator of the Index as a Notification Document.

In summary, a centralized Index is a practical solution to the multiplicity of problems currently extant in the municipal market. Consumers of municipal information would use the Index as a matter of convenience. In addition to becoming the municipal equivalent of the EDGAR search engine, a web site based Index would likely become the locus of a municipal extranet for all consumers of municipal information -- in effect, an electronic agora. The key to its success is the participation of as many parties as possible. The traffic that the Index site should draw, as a retail mall of the MSRB, NRMSIRs SIDs, information vendors, dealers, issuers, and municipalities, should be an inducement to an entity to serve as the Index operator. An operator with the ability to let users know where disclosure

information may be found and thereby add value to the repositories' products has a greater chance of obtaining their participation. The Task Force would attempt to facilitate that participation.

May 1997

MEMORANDUM

TO: Joanne Mays Becker, Chair
Task Force on Electronic Information Delivery

FROM: Paul Zorn

RE: Results of the GFOA Survey on Financial Document Preparation

DATE: April 14, 1997

This memo is intended to summarize the results of the Financial Document Preparation Survey presented in the attached Survey Analysis. The survey was sent to 109 active and ex-officio members of GFOA's Standing Committees. Of these, 61 responded, for a response rate of 56 percent. Approximately two-thirds of the respondents represented city or county governments, 15 percent represented state governments, with the remainder representing authorities or special districts. The results of the survey are as follows:

OFFICIAL STATEMENT

Official statements are complex documents involving input from several groups of finance professionals, including internal staff, financial advisors, bond counsel, and underwriters (or underwriter's counsel). Often primary responsibility for coordinating development of the document and preparing the final text is given to one of these groups. For 36 percent of the respondents, internal staff were primarily responsible for preparing the final text. Others given primary responsibility were financial advisors (for 30 percent of the respondents), bond counsel (15 percent), and the underwriter or underwriter's counsel (13 percent).

For the most part, the text of official statements is prepared using one of two standard word processing software packages: WordPerfect (47 percent) or Word (43 percent). In 67 percent of the cases, other software (e.g., spreadsheet or business graphics software) is also used. For respondents using Word for document preparation, Excel is most often used to create the spreadsheets, while for respondents using WordPerfect, Lotus is sometimes used. Quattro Pro and Pagemaker are also used by several respondents.

Typically, those responsible for preparing the official statement are also responsible for sending it to the printer. In 82 percent of the cases, the document is sent as camera-ready copy printed from single or multiple files, often on one computer. For the remaining cases, the file is sent on diskette as either single or multiple files.

Eighty-five percent of the respondents currently submit or plan to submit their official statements to a NRMSIR. Twenty-six percent indicate they also submit, or plan to submit, their official statements to the MSRB and/or a SID. In almost all of these cases, the document is (or will be) submitted as a paper document using either the mail or a courier. In about half of the cases, the jurisdiction planned to submit the documents directly, and the remainder planned to use an

intermediary such as the financial advisor, bond counsel or the underwriter. A few indicated they planned to use disclosure counsel to submit the documents.

None of the respondents currently submit (or plan to submit) the official statement electronically. Only 13 percent indicated they would be prepared to transmit their official statements electronically within six months and only 35 percent indicated they would be prepared to do so within the next two years. Over half of the respondents did not know when they would be prepared to submit the documents electronically.

Only four of the respondents have uploaded their official statements to their jurisdiction's web site and one indicated that it was posted by a NRMSIR. In two of the cases, the document is posted in PDF format and in one case it is posted in ASCII format. No format was given for the document posted to the NRMSIR.

ANNUAL FINANCIAL REPORTS

Survey results related to publishing annual financial reports (AFRs) and comprehensive annual financial reports (CAFRs) were similar. WordPerfect or Word are typically used to prepare the text of the report, although several of the respondents use Pagemaker or Ami Pro. In addition, two-thirds of the respondents also use spreadsheet software (Lotus or Excel) and 11 percent use business graphics software. The vast majority of the respondents send the documents to the printer as camera-ready copy printed from files on one or more computers, however 11 percent of the respondents sent it the document on diskette in multiple files. None transmit the document electronically.

Three-fourths of the respondents either currently submit or plan to submit their reports to NRMSIRs, MSRB or SIDs, with the vast majority submitting to NRMSIRs. In all instances, submission is (or will be) done directly by the jurisdiction using mail or a courier service to convey paper documents. Only one of the respondents indicated that they planned to transmit the files electronically. Thirty-three percent indicated they would be prepared to transmit the documents electronically within the next two years, however, the majority did not know when they would be prepared to transmit the documents electronically.

Ten of the respondents (17 percent) post some or all of their AFR or CAFR to their jurisdiction's web site. Five of respondents post it in HTML format, three in PDF format, and one in a format called Digital Paper.

NOTICES OF MATERIAL EVENTS

Responses related to publication of Notices of Material Events are very similar to those related to publication of Annual Financial Reports.

GENERAL QUESTIONS

In 69 percent of the cases, the jurisdiction has designated a public information officer. The titles of the designated official varied greatly, but Finance Director and Treasurer were fairly frequently used. Other titles included: Financial Policies Manager, Director of Communications, and Debt Manager.

In 44 percent of the cases, the jurisdictions had formal processes for briefing the legislative body regarding the dissemination of information related to debt issuance and disclosure. Typically the process was done in conjunction with legislative authorization of the debt issue.

Of the listed incentives for motivating the respondents to begin disseminating financial information electronically, the those exerting the strongest motivation were:

- reduced interest rates resulting from improved marketability of issue,
- improved communication with bondholders, and
- reduced staff time spent disseminating information and answering questions.

the remaining motivational factors:

- reduced printing/mailling costs,
- improved on-line access to official documents for review,
- reduced use of paper, and
- enhanced stature of jurisdiction resulting from the use of cutting-edge technology.

were seen as less important by the respondents.

CONCLUSIONS

The financial documents in question are complex documents, written by several parties, often using more than one type of software. When transmitted to the printer or to an on-line document access service, the documents are sent as paper files, and not electronically transmitted. The majority of the respondents do not know when they would be ready to transmit the files as electronic documents.

Interestingly, several of the respondents have posted some or all of these documents to their jurisdiction's web sites in formats that differ from the format in which they were created. In addition, although the documents are complex and created using multiple types of software, the software falls into a small number of groups produced by a limited number of commercial firms.

Survey Analysis

4/14/97

TOTAL RESPONSES 61

Distribution by type of government

	Number	Percent
State	9	15%
County	13	21%
City	28	46%
Special District	3	5%
School District	0	0%
Other	8	13%

OFFICIAL STATEMENTS

1. In preparing your most recent Official Statement, who was primarily responsible for preparing the final text that was sent to the printer?

	Number	Percent
Internal staff	22	36%
Financial advisor	18	30%
Bond counsel	9	15%
Underwriter (or Underwriter's Counsel)	8	13%
Other	4	7%
No Response	0	0%

2. What word processing software was primarily used to prepare the final text of the Official Statement?

	Number	Percent
WordPerfect (DOS version)	8	13%
WordPerfect (Windows version)	21	34%
Ami Pro	0	0%
Microsoft Word (Windows version)	26	43%
Microsoft Word (Macintosh version)	0	0%
Adobe PageMaker	1	2%
Other	1	2%
No Response	4	7%

3. Were items included in the Official Statement that were created using other types of software? If so, what types of software were used?

	Number	Percent
No other software used	16	26%
Lotus spreadsheet software	12	20%
Business graphics software	7	11%
Excel spreadsheet software	27	44%
Other (Quattro Pro, PageMaker)	6	10%
No Response	4	7%

4. Who sent the final text of the Official Statement to the printer?

	Number	Percent
Internal staff	15	25%
Financial advisor	22	36%
Bond counsel	10	16%
Underwriter (or Underwriter's Counsel)	9	15%
Other (Disclosure Counsel, In-House Printer)	4	7%
No Response	1	2%

Survey Analysis

4/14/97

5. How was the document sent to the printer?

	Number	Percent
Camera-ready copy printed from a single file	23	38%
Camera-ready copy printed from multiple files on one computer	20	33%
Camera-ready copy printed from multiple files on multiple computers	7	11%
Diskette with single file	3	5%
Diskette(s) with multiple files	3	5%
Electronically transmitted as a single file	0	0%
Electronically transmitted as multiple files	0	0%
Other	1	2%
No Response	4	7%

6. In addition to printing your Official Statement, do you currently submit it or plan to submit it to MSRB, NRMSIRs and/or SIDs?

	Number	Percent
No plans to submit	6	10%
NRMSIRs	52	85%
MSRB	16	26%
SIDs	12	20%
Other	2	3%
Not Applicable	0	0%
No Response	0	0%

7. If you currently submit (or plan to submit) the Official Statement to MSRB, NRMSIRs, and/or SIDs, please respond to the following questions:

7a. Does the jurisdiction submit (or plan to submit) the Official Statement directly or through an intermediary?

	Number	Percent
Directly by Jurisdiction	30	49%
Through Bond Counsel	4	7%
Through Financial Advisor	9	15%
Through Underwriter	7	11%
Other (Disclosure Counsel, Local Commission)	3	5%
Not Applicable (No Plans to Submit)	6	10%
No Response	2	3%

7b. How is the document conveyed or planned to be conveyed?

	Number	Percent
Mail/courier paper document	53	87%
Mail/courier document on disk(s)	0	0%
Fax paper document	0	0%
Electronically transmit file(s)	0	0%
Other	0	0%
Not Applicable	6	10%
No Response	2	3%

7c. If the document is electronically transmitted, what file format is used (or planned to be used)?

	Number	Percent
WordPerfect	1	2%
Word	2	3%
HTML	1	2%
PDF	0	0%
ASCII	0	0%
Other	0	0%
Not Applicable	54	89%
No Response	3	5%

Survey Analysis

4/14/97

7d. If you do not currently transmit the document electronically, when in the future would you be prepared to do so?

	Number	Percent
1-6 months	8	13%
7-12 months	4	7%
1-2 years	9	15%
2+ years	0	0%
Don't know	34	56%
Not Applicable	6	10%
No Response	0	0%

8. Has some or all of your Official Statement been posted to a Web site? If so who was primarily responsible for uploading the statement to the site?

	Number	Percent
Statement not posted to Web site	54	89%
Uploaded by underwriter	0	0%
Uploaded by financial advisor	0	0%
Uploaded by jurisdiction	3	5%
Other	2	3%
Not Applicable	0	0%
No Response	2	3%

9. If some or all of the Official Statement was posted to a Web site, what file format was used?

	Number	Percent
WordPerfect	0	0%
Word	0	0%
HTML	0	0%
PDF	2	3%
ASCII	1	2%
Not Applicable	54	89%
No Response	4	7%

ANNUAL FINANCIAL REPORTS

11. What word processing software was primarily used to prepare the final text of the Annual Financial Report or Comprehensive Annual Financial Report?

	Number	Percent
WordPerfect (DOS version)	5	8%
WordPerfect (Windows version)	19	31%
Ami Pro	3	5%
Microsoft Word (Windows version)	23	38%
Microsoft Word (Macintosh version)	1	2%
Adobe Pagemaker	3	5%
Other	3	5%
No Response	4	7%

12. Were items included in the report that were created using other types of software?

	Number	Percent
No other software used	8	13%
Lotus spreadsheet software	19	31%
Business graphics software	7	11%
Excel spreadsheet software	22	36%
Other (Quattro Pro, Pagemaker, Harvard Graphics, Access)	15	25%
No Response	4	7%

Survey Analysis

4/14/97

13. How was the document sent to the printer?

	Number	Percent
Camera-ready copy printed from a single file	9	15%
Camera-ready copy printed from multiple files on one computer	22	36%
Camera-ready copy printed from multiple files on multiple computers	18	30%
Diskette with single file	0	0%
Diskette(s) with multiple files	7	11%
Electronically transmitted as a single file	0	0%
Electronically transmitted as multiple files	0	0%
Other	1	2%
No Response	4	7%

14. In addition to printing your AFR or CAFR, do you currently submit it or plan to submit it to MSRB, NRMSIRs and/or SIDs?

	Number	Percent
No plans to submit	12	20%
NRMSIRs	45	74%
MSRB	10	16%
SIDs	12	20%
Other	1	2%
Not Applicable	0	0%
No Response	3	5%

15. If you currently submit (or plan to submit) the AFR or CAFR to MSRB, NRMSIRs, and/or SIDs, please respond to the following questions:

15a. Does the jurisdiction submit (or plan to submit) the AFR or CAFR directly or through an intermediary?

	Number	Percent
Directly by Jurisdiction	38	62%
Through Bond Counsel	0	0%
Through Financial Advisor	4	7%
Through Underwriter	0	0%
Other	4	7%
Not Applicable (No plans to submit)	12	20%
No Response	3	5%

15b. How is the document conveyed or planned to be conveyed?

	Number	Percent
Mail/courier paper document	45	74%
Mail/courier document on disk(s)	0	0%
Fax paper document	0	0%
Electronically transmit file(s)	1	2%
Other	0	0%
Not Applicable	12	20%
No Response	3	5%

15c. If the document is electronically transmitted, what file format is used (or planned to be used)?

	Number	Percent
WordPerfect	1	2%
Word	2	3%
HTML	1	2%
PDF	1	2%
ASCII	0	0%
Other	0	0%
Not Applicable	52	85%
No Response	4	7%

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15d. If you do not currently transmit the document electronically, when in the future would you be prepared to do so?

	Number	Percent
1-6 months	5	8%
7-12 months	3	5%
1-2 years	12	20%
2+ years	0	0%
Don't know	25	41%
Not Applicable	10	16%
No Response	6	10%

16. Was some or all of your most recent AFR or CAFR posted to your jurisdiction's Web site? If so, what file format was used?

	Number	Percent
Jurisdiction does not have a Web site	14	23%
Report not posted to Web site	30	49%
Posted in HTML format	5	8%
Posted in PDF format	4	7%
Other (Digital Paper)	1	2%
Not Applicable	0	0%
No Response	7	11%

17. If you AFR or CAFR was posted to your jurisdiction's Web site, what is the address of the site?

NOTICES OF MATERIAL EVENTS

18. Who was or will be primarily responsible for preparing your Notices of Material events as required under SEC Rule 15c2-12?

	Number	Percent
Internal staff	51	84%
Financial advisor	4	7%
Bond counsel	4	7%
Other	1	2%
No Response	1	2%

19. What word processing software was (or will be) primarily used to prepare the final text of your Notices of Material Events?

	Number	Percent
WordPerfect (DOS version)	3	5%
WordPerfect (Windows version)	21	34%
Ami Pro	2	3%
Microsoft Word (Windows version)	30	49%
Microsoft Word (Macintosh version)	0	0%
Adobe Pagemaker	1	2%
Other	1	2%
No Response	3	5%

Survey Analysis

4/14/97

20. If you currently submit (or plan to submit) the Notices to MSRB, NRMSTRs, and/or SIDs, please respond to the following questions:

20a. Does the jurisdiction submit (or plan to submit) the document directly or through an intermediary?

	Number	Percent
Directly by Jurisdiction	41	67%
Through Bond Counsel	4	7%
Through Financial Advisor	9	15%
Through Underwriter	0	0%
Other	3	5%
Not Applicable	2	3%
No Response	2	3%

20b. How is the document conveyed or planned to be conveyed?

	Number	Percent
Mail/courier paper document	47	77%
Mail/courier document on disk(s)	0	0%
Fax paper document	4	7%
Electronically transmit file(s)	3	5%
Other	0	0%
Not Applicable	2	3%
No Response	5	8%

20c. If the document is electronically transmitted, what file format is used (or planned to be used)?

	Number	Percent
WordPerfect	3	5%
Word	2	3%
HTML	2	3%
PDF	0	0%
ASCII	1	2%
Other	0	0%
Not Applicable	48	79%
No Response	5	8%

20d. If you do not currently transmit the document electronically, when in the future would you be prepared to do so?

	Number	Percent
1-6 months	12	20%
7-12 months	3	5%
1-2 years	9	15%
2+ years	0	0%
Don't know	28	46%
Not Applicable	5	8%
No Response	4	7%

GENERAL QUESTIONS

21. Have you designated a public information officer to answer questions related to debt issuance?

YES	42	69%
NO	19	31%

Survey Analysis

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22. Do you have a formal process for briefing your legislative body regarding dissemination of information related to debt issuance and disclosure?

YES	27	44%
NO	34	56%

23. To what extent would each of the following incentives motivate you to disseminate financial information electronically? (0=Not motivating, 5=Strongly motivating)

	Not Motivating	Mildly Motivating	Moderately Motivating	Strongly Motivating	No Response	Mean
Reduced printing/ mailing costs	7	12	23	18	1	1.8
Reduced staff time spent disseminating information	4	5	21	30	1	2.2
Reduced interest rates by improving marketability of issue	4	4	5	47	1	2.5
Improved on-line access to official documents for review	5	13	27	15	1	1.8
Reduced use of paper	6	21	23	10	1	1.6
Enhanced stature of jurisdiction by using cutting-edge technology	6	18	22	14	1	1.7
Improved communication with bondholders	1	8	21	30	1	2.3

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NEWS RELEASE

Date: April 17, 1997

Contact: Pen Pendleton or Caroline Benn

NEW SECONDARY MUNICIPAL MARKET DISCLOSURE RULES HAVE RESULTED IN GREATER MATERIAL EVENT DATA AVAILABILITY, PSA/NFMA SURVEY SHOWS

Respondents Say Other Areas Need Improvement, Costs Have Increased

New York, NY – New disclosure rules for the secondary municipal market adopted in 1994 under SEC Rule 15c2-12 have improved the availability of material event disclosure information, according to 54.4% of respondents to a survey conducted recently by PSA The Bond Market Trade Association and the National Federation of Municipal Analysts. A large percentage of respondents (61%) said costs related to obtaining material event data have remained about the same or have decreased since the rules were implemented.

Material event disclosure aside, a large percentage said costs have increased as a result of the rules, particularly in obtaining annual financial statements (43%), updated operating data (34%) and incorporation by reference (37%). Furthermore, a significant fraction of respondents believe availability of information has worsened in certain areas.

“In evaluating the success of the new rules in cost/benefit terms, we believe it is important to identify ways to “convert” negatives into positives,” said PSA President Heather Ruth. She added that identifying and converting these negatives into positives was

-more-

the objective of a symposium and nationwide conference call-in hosted by PSA today at its New York City headquarters.

The survey, which included responses from members of PSA and NFMA, was conducted to assess the efficiency of the new rules. Results of the survey are preliminary. A full analysis of the survey will be forthcoming, PSA said.

PSA The Bond Market Trade Association represents securities firms and banks that underwrite, trade and sell; debt securities, both domestically and internationally.

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