

**ASSESSING THE IMPACT OF GASB STATEMENT NO. 34 ACROSS THE
MUNICIPAL BOND MARKET**

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A dissertation submitted to

Rutgers Business School - Newark

Rutgers, The State University of New Jersey

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

Graduate Program in Management

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January, 2014

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ABSTRACT OF THE DISSERTATION

Assessing the Impact of GASB Statement No. 34 Across the Municipal Bond Market

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The new disclosure requirements brought about by Governmental Accounting Standards Board (GASB) Statement 34 have provided new information for users of government financial reports. The first essay of this dissertation reports the results of a survey of users of government financial reporting, specifically members of the National Federation of Municipal Analysts, asking whether the new information provided by Statement 34 is valuable in their analyses, whether it has improved financial reporting by governments, and for suggestions for improving the information provided.

One of the new components of the Statement 34 reporting model is the requirement that municipalities include an MD&A as required supplementary information in their audited financial statements. In the previous essay of this dissertation, a high-level survey asking municipal bond analysts about how they use the Statement 34 information in their analyses, analysts indicated that they find the MD&A more valuable than any other Statement 34 reporting requirement.

The second essay explores the determinants of the cross-sectional variation in MD&A disclosure and reports that the size of the municipality is the most important variable in determining the level of municipal MD&A disclosure.

The third essay explores the impact of disclosure on contracting. It first reports on the association of MD&A disclosure with default, finding that disclosure is significantly and inversely associated with credit rating, even when accounting for other financial and socio-economic variables. This provides evidence that Statement 34 disclosure quality is incorporated by ratings analysts into their assessment of credit risk. It then further explores the relationship between this disclosure across another segment of the market by evaluating whether disclosure is associated with true interest costs. Results indicate that disclosure may be valued by smaller municipalities and may have been used by investors in the year when one of the largest bond insurers went bankrupt, signifying the virtual end of the market for municipal bond insurance. However, disclosure does not appear to be utilized by investors across the municipal bond market, as results were not significant when looking at the sample as a whole.

The fourth essay discusses overall conclusions and avenues for future research.

Acknowledgements

I would like to thank my advisor and dissertation chair, Dr. Dan Palmon, for his unwavering support throughout my doctoral studies. These last four years have been both very challenging and rewarding for the both of us, and Dan has been a role model for me as an academic, a colleague, a professional, and a friend. I am so lucky to have had the privilege to know and work with him.

Thanks to Dr. Divya Anantharaman and Dr. Helen Brown-Liburd for helping me develop my dissertation topic and for patiently working with me throughout this process, tirelessly answering my questions, and calming me whenever I panicked. Without your kindness and support I don't know how I would have made it through. In addition, I would like to thank Dr. Fred Sudit for taking the time to talk through ideas and to discuss and the pros and cons of the different dissertation topics that I pursued and for always giving me much to think about. I would like to thank Dr. Justin Marlowe for encouraging me to pursue a dissertation in governmental accounting, for agreeing to be a part of my dissertation committee and for taking the time on countless Skype calls and emails as I worked through my dissertation.

Thank you to Dr. Yaw Mensah for encouraging me to pursue a survey to find out how “real people” use accounting information provided by governments.

To my mom and dad, I would like to thank you for your unwavering love and support. You have been an exceptional support network and I could not have accomplished this without you. It definitely takes a village to raise a child, and it takes even more to raise three children while pursuing a doctorate and writing a dissertation.

You have both selflessly made yourselves available to help me throughout this process and I am so appreciative.

To my husband, Sol, I am so grateful for you. You have comforted, encouraged and believed in me throughout this process. I am so lucky to have a life partner who wholeheartedly supported my decision to pursue a doctorate, knowing that you would have to work harder and longer hours to support our family. You have sacrificed a lot of home-cooked meals and family weekends and vacations so that I could pursue this dream, and I look forward to doing all of those things together in the future. I love you so much.

To my three beautiful children, my loves, Evan, Lylah and Shayna: the desire to be with you and be my best self for you was my inspiration for deciding to pursue my doctorate. I hope that this accomplishment inspires you as you grow up to always pursue your dreams and that it helps to instill in you the importance of education and knowledge. I know you have missed a lot of time with me during your lives so far, and I look forward to much more family time in the future.

Thank you to everyone for believing in me. It has forever changed me.

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CHAPTER 1: Assessing the Impact of GASB 34: The usage of GASB 34 by municipal bond analysts

1.1 Introduction

In 1999, the Governmental Accounting Standards Board (GASB) issued GASB Statement No. 34, which dramatically changed the reporting requirements of state and local governments. According to GASB Chairman Tom L. Allen, Statement 34 is "the most significant change in the history of governmental accounting. It represents a dramatic shift in the way state and local governments present financial information to the public." Instead of just reporting fund financial statements, the statement added several new requirements to annual reports, including government-wide accrual basis financial statements, a management's discussion and analysis (MD&A), enhanced fund reporting for major funds, and enhanced budgetary reporting to include the initial adopted budget prior to any transfers. The goal was to provide users with more information about governments in an easier to understand format.

This change did not come without significant controversy (Foltin 2008). The exposure draft for GASB 34 received more than 400 comment letters, most containing negative feedback (Foltin 2008). Opposition to either part or all of GASB 34 came from organizations including the American Institute of Certified Public Accountants (AICPA), the Government Finance Officers Association (GFOA), International City/County Management Association (ICMA), Ernst & Young, KPMG, Deloitte & Touche, and the National Association of State Auditors, Comptrollers and Treasurers (NASACT), among others. The AICPA said, "The proposed dual-perspective ... tries to meet so many user

needs that it fails to be effective.” The GFOA said “Governments cannot be asked to incur significant costs to provide information of no demonstrative value.” NASACT said, “This new practice ... brings into question the relevance, reliability, and even integrity of financial reporting for governments.”

Rating agencies such as Moody’s Investor Service expected Statement 34 to provide clearer, more transparent information, but did not expect the reporting in and of itself to produce ratings changes (Hume 2003). In fact, Moody’s stated that while they hoped the new Statement of Net Assets would provide a clearer picture of government infrastructure, it would not likely be comparable across users, because the quality and methodologies used are not consistent (GFOA 2003). According to Douglas Benton, a vice president and manager of Moody's Dallas office, Moody's still planned to focus on a government's capital plan and fund balances at the individual major fund level despite the new information provided by Statement 34 (Hume 2003).

Fitch Ratings (2001) stated that the information provided by Statement 34 had the potential to be useful for credit analysts, and that although credit analysts and rating agencies were mostly concerned with short-term information provided by the traditional fund financial statements (particularly the general fund), they felt that the MD&A should highlight information important to analysts on a more widespread basis. In addition, according to Fitch, the reporting of infrastructure with depreciation could help analysts understand whether the government would face higher debt and lagging development because of decaying infrastructure. However, they felt that it would take a long time for the information to be widely used (Fitch 2001).

The GASB's reason for issuing Statement 34 was to improve the usefulness of governmental financial reports providing by providing more comprehensive, useful, and comparable financial information (GASB 1999). However, anecdotal evidence and research on Statement 34 post-implementation have shown inconsistent results. Vermeer et al (2011) find that the reporting of infrastructure by municipalities under Statement 34 is varied, and does not contain enough disclosure information to be as useful as possible. In a review of state credit reports, Johnson et al (2012) note that the reports do not mention or provide any indication that Statement 34 information is used in creditor raters' analyses. In addition, states such as California and Minnesota, widely known as governments that collect a significant amount of information for their municipalities, do not collect Statement 34 information, even though there are a large number of governmental entities in those states reporting in accordance with Statement 34.

Other literature post-implementation shows an association between default risk and the incremental information provided by Statement 34 government-wide financial statements over the fund statements (Plummer et al 2007, Johnson et al 2012, Pridgen and Wilder 2013), suggesting that Statement 34 provides new and potentially important information that may be incorporated into analyses.

Given the considerable controversy surrounding the development and issuance of Statement 34, inconsistent evidence in studies post-implementation, and anecdotal evidence suggesting that it may not be adequately utilized, it is worthwhile to obtain feedback directly from users of this financial statement information to determine whether this information is meeting the GASB's objectives, and in turn being utilized by

financial statement users. This study surveys members of the National Federation of Municipal Analysts to obtain this feedback. This is the first high-level study that I am aware of directly asking analysts about their use of the information provided by Statement 34. This survey is timely because it has been about a decade since the implementation of Statement 34 by all governments issuing financial statements in accordance with GAAP. Statement 34 was costly for governments to implement, so an evaluation of the standard is warranted to determine whether the new information it provides is being utilized in the municipal bond market. The results should be useful to the GASB in evaluating whether the Statement needs adjustment, to preparers in determining how the information they provide is being utilized by market participants, and to investors in understanding whether there is information provided by the statements that they can use to effectively make investment decisions.

1.2 Background

1.2.1 A History of the GASB and Statement 34

The Financial Accounting Foundation formed the GASB in 1984, and since 1986 it has been recognized by the AICPA as the primary source for setting generally accepted accounting principles (GAAP) for state and local governments. As of 2000, financial statements in accordance with GAAP set by the GASB were required by 15 states in the US with voluntary compliance by many other governments.

According to the GASB Concept Statements, the objective of financial reporting for governmental entities is to provide annual reports that allow users to assess the accountability of the government, by reporting information about finance-related laws, rules and regulations. Concept No. 1 identifies three primary groups of users of

government financial reports: citizens, legislative and oversight bodies, and investors and creditors.

Initially GASB required fund financial statements, which provided users with information about the governments activities for the current period, including resources allocated for those activities and how the resources were expended. The focus was on current financial resources with reporting on the modified accrual basis. These financial statements provided information likely to be useful to citizens, and somewhat useful to oversight bodies and to investors and creditors. See Appendix C for an example of fund-based financial statements.

In 1999 GASB issued GASB Statement No. 34, which dramatically changed the reporting requirements of state and local governments. Instead of just reporting fund financial statements, the statement added several new requirements to annual reports, including government-wide accrual basis financial statements, a management's discussion and analysis (MD&A), enhanced fund reporting for major funds, and enhanced budgetary reporting to include the initial adopted budget prior to any transfers.

The goal of Statement 34 was to enhance fiscal accountability as well as operational accountability. Fiscal accountability relates to the responsibility of the government to comply with laws and spending requirements over the short-term (i.e. the fiscal year). Operational accountability relates to the responsibility of government to meet their objectives efficiently and effectively and to be able to continue to meet them in the future.

The requirement for the MD&A was meant to provide users with an easily readable assessment on the financial results by the financial manager to help determine whether the financial condition improved or declined over the reporting period. The reporting of “major” funds, including the general fund, was to break out information that was previously reported in aggregate by fund type to provide better accountability to users. Requiring the original budget, prior to any transfers, was also for accountability to users. Where transfers from the original budget are not necessarily a concern, it could signal issues including the management of resources among other things. There are also users who may have used the original budget in making decisions, so they should be informed about changes.

Perhaps the most significant change to the government financial statements was the addition of government-wide accrual basis financial statements, including the reporting of depreciation on government assets and the reporting of long-term debts and capital assets in one place. These statements were to help users to better assess the governmental entity as a whole, more similarly to the way that corporations and nonprofits report their financial results. Users would be able to determine if the financial condition of the entity had improved or declined, how programs were financed, investments in infrastructure and condition of infrastructure, total costs of programs, and to more easily compare governmental entities.

Collectively, these changes were to align the financial statements with the goals of the GASB Concept Statements and to provide valuable information and enhanced

disclosure to legislative and oversight bodies, as well as to investors and creditors and citizens.

1.2.2 Municipal Analysts and the National Federation of Municipal Analysts

Although there are many potential users of government financial statement information including legislators, citizens, investors, and creditors, municipal bond analysts are arguably the most intensive users of this information. According to GASB Chairman Robert H. Attmore, “Analysts tend to be frequent users of governmental financial statements and they rely heavily on the reported financial information for decision-making or assessing accountability”.

Municipal analysts are employed by and provide important information to various market participants, including rating agencies, mutual funds, retail investors, hedge funds, credit enhancement firms, underwriters, and other market participants. Because analysts provide information to such a wide variety of market participants, the information they provide has the potential to impact municipal credit ratings, investment choices, interest costs, and yields. It is important to understand whether they are incorporating the new information provided by Statement 34 into their analyses.

It is important to note that although citizens of a municipality are theoretically primary users of financial statements, they are not generally studied as primary users. Citizens are thought to use financial statements relatively little, and lack incentive to require greater disclosure by government officials (Zimmerman 1977). Unlike liquid capital markets, where investors can unload or purchase stock based on information received, citizens do not have the same liquidity in the real estate market. Unfavorable disclosure and the future consequences of the actions of governmental officials would not

enable them to move without incurring significant transaction costs (Zimmerman 1977).

It is more relevant to understand whether analysts find that government reporting has improved under Statement 34 and whether the new financial information is being incorporated into their analyses and if not, what they believe are the impediments to its usefulness.

The National Federation of Municipal Analysts (NFMA) is a non-profit association with approximately 1,200 municipal analyst members, representing the major participants in the municipal market. These participants include institutional investors, bond rating agencies, bond insurance companies, portfolio managers, investment banking firms and financial advisors (NFMA website). Many of these companies act as intermediaries for the individuals who invest in municipal bonds.

The official position of the NFMA on the exposure draft of Statement 34 was supportive, which makes it more interesting to determine whether their membership finds the information useful now that implementation took place a decade ago. Members of the NFMA are arguably the most intensive users and the most sophisticated participants in the municipal markets, which is why they were chosen as the population targeted for participation in this survey.

1.2.3 Information Asymmetry in the Municipal Bond Market and Disclosure Incentives

The municipal bond market is not insignificant, with over \$3.7 trillion of outstanding debt as of the first quarter of 2013, compared to \$9.2 trillion in the corporate bond market. Participants in the bond market have the need for financial information from bond issuers to assist in making informed investment decisions. These participants

include underwriters, insurers, raters, financial advisors, brokers, accountants, and institutional and individual investors.

Unlike the corporate sector, the municipal sector was not subject to the disclosure requirements under the Securities Act of 1933 and The Securities and Exchange Act of 1934, with the exception of the anti-fraud provisions (MSRB 2000). It continued for many decades that little to no reporting requirements existed for the municipal bond sector. High profile defaults such as New York City in the 1970's called attention to the lack of municipal disclosure, and were ultimately followed by The Tower Amendment of 1975 (SEC 1993). This amended the Securities and Exchange act of 1934 and created the Municipal Securities Rulemaking Board (MSRB), a self-regulatory rule-making board, in a joint action of the US Congress, the SEC, and the securities industry (Lamb and Rappaport 1987). However, the amendment specifically prohibits the SEC and the MSRB from requiring information from the issuer of a municipal bond prior to the bond's issuance. The SEC can, however, regulate the dealers, brokers and banks that sell municipal bonds.

1.3 Research Questions

As of now, Statement 34 has been implemented by the largest cities for almost a decade. Analysts should have enough data to incorporate trends into their analyses. However, it is unclear whether the new information has improved disclosure and reduced information asymmetry by providing relevant information between governments and financial statement users. This leads to the following research questions:

RQ1. Is the new information provided by Statement 34 perceived as improving the quality of financial reporting by governments?

RQ2. Do analysts perceive the information provided by Statement 34 as providing more transparency in the financial reporting by governments?

RQ3. Do analysts perceive the information provided by Statement 34 to be value relevant?

RQ4. How has the new information provided by Statement 34 impacted the efficiency of analysts' analyses?

RQ5. Do analysts' rely on the new information provided by Statement 34 when making decisions?

Positive accounting theory assumes that managers, investors, creditors and others are rational, value maximizing individuals who will seek to lower contracting and monitoring costs to maximize firm value. Accordingly, questions asked in the framework of positive accounting theory try to get at understanding the costs and benefits of accounting standards and the effect of financial information on economic outcomes such as share price, cost of capital, and borrowing costs. Studies on disclosure in the corporate sector have found in general that disclosure provides benefits to firms because it reduces

the cost of obtaining private information (Verrecchia, 1982b, Diamond, 1985, Bushman, 1991; Indjejikian, 1991; Lundholm, 1991; Alles and Lundholm, 1993) and has been linked to a reduced cost of capital (Welker (1995), Botosan (1997), Healy et al. (1999), and Leuz and Verrecchia (2000)) even though an increase in disclosure may cause some individuals to exit the market (Diamond and Verrecchia 1991). Committing to greater disclosure reduces information asymmetry, which lowers the information asymmetry component of a firm's cost of capital (Verrecchia 2001).

In the municipal sector, studies prior to the implementation of Statement 34 have shown that reducing information asymmetry reduces borrowing costs (Baber and Gore 2008, Bensen et al 1991, Fairchild and Koch 1998) or that having the GFOA Certificate of Achievement and state imposed accounting requirements impacts yield and returns (Bensen et al 1984, 1986). Baber and Gore (2008) show that GAAP states have significantly lower borrowing costs than non-GAAP states, Bensen et al (1991) find that high disclosure states have significantly lower interest costs than low disclosure states, while Fairchild and Koch (1998) find is same result when evaluating unrated bonds. Soybel (1992) finds that in NYC, the market appears to be "efficient" in that it is not deceived by GAAP versus cash-basis accounting and that the market seems to adjust to GAAP accounting when establishing yields on new issues.

Other studies examine the extent of disclosure and its impact across different segments of the market. Wilson and Stewart (1990) find that the disclosure level of bond issuers impacts the numbers of bids received on a debt offering more for infrequent issuers. Feroz and Wilson (1992) find that if the bond issue is managed by a local or

regional underwriter, disclosure is significantly related to net interest costs, but not if the issue is managed by a national underwriter. Reeve and Herring (1986) find that there is a significant difference in net interest costs between small and large unrated bond issuers.

Secondary market studies such as Ingram and Copeland (1982) study the impact of state-level accounting disclosure requirements on yields. Ingram and Copeland (1986) and Ingram (1986) look at the impact of the quality of disclosure on bond risk, finding a negative relationship between disclosure quality and risk. Reck and Wilson (2006) study whether new required disclosures in the 1990s resulted in more transparency and improved pricing in the municipal bond secondary market. They specifically look at SEC Rule 15c2-12 which requires a certain level of disclosure by issuers. They find that bond prices impound information throughout the year rather than just adjusting to information disclosed along with new issues, however they are not able to directly show that the secondary market is reacting to the disclosures under SEC Rule 15c2-12.

If Statement 34 provides more comprehensive, useful, and comparable financial reports (GASB 1999), it would follow that bond issuers in the municipal sector would also benefit from increased or improved disclosure brought about by Statement 34, because the reduction in information asymmetry could reduce uncertainty, and improve the efficiency and accuracy of analyses.

However, much of the corporate and governmental literature cited above reflects the outcome of a quantitative analysis of various disclosure proxies to determine whether the market appears to react to variation in disclosure environments. Only Robbins and Simonsen (2010) actually ask municipal analysts, a group of major participants in the

municipal markets, about the quality and relevance of municipal disclosure, but they address overall disclosure and do not focus on Statement 34.

In a 2005 survey (five years after the issuance of GASB 34) of 250 financial statement users, the GASB found that many possible users had not yet integrated the Statement 34 information into their analyses. Municipal analysts who were interviewed said that they would require at least three and preferably five years of data into order to factor it into their credit analyses. As of 2005 even the largest cities and states had not used the GASB 34 model for three years. Interviewee's most frequently cited the MD&A as the most useful component, if it is not boilerplate.

1.4 Research Design

A survey was conducted using municipal analysts, recruited from members of the National Federation of Municipal Analysts (NFMA). See Appendix A for a copy of the survey. The survey was sent on March 20, 2013 to all current members as well as grace period members¹. The total population of current and grace period members was approximately 1,813 at the time the survey was initially sent. Of this population, approximately 188 emails failed as invalid, and an additional 106 do not accept mass emails. It was pre-arranged that once the survey was initially sent, two follow-up emails at pre-determined intervals would be sent, with the possibility of resending the survey request again after the two follow-up emails, depending upon the survey response.

¹ Grace period members are prior NFMA members who, for a variety of reasons, have let their membership lapse. In discussions with the NFMA Executive Director, it was decided that grace period members should be included in the survey because some may have knowledge of GASB Statement 34 (although it was indicated that most long-term members stay current on their membership).

After the initial survey follow-up was completed, it was decided that the survey request would be sent out again, this time with an incentive of two gift cards to be raffled off after the conclusion of the survey². There was one follow-up email sent after this second round survey request. A total of 114 survey responses were returned during the period from March 20 through May 31, when the survey ended³.

However, not all of the population of the NFMA is relevant to this survey. Members that are not municipal analysts were excluded (i.e. government employees, academics, standard setters, legal counsel). In addition, certain analysts were unlikely to reply based upon their area of expertise. Approximately 305 respondents fell into the above categories. Given the available information, the response rate of relevant respondents is in the range of 7.5-9.4%. This is in line with prior studies where response rates ranged from 3-9% (Graham et al 2005, Graham and Harvey 2001, Hodge 2003, CFA Institute 2009)⁴.

1.5 Sample

Survey respondents include municipal bond analysts who are members of the NFMA. The NFMA promotes improved disclosure in the municipal markets.

According to its website, the NFMA sets a goal to “further the skill level of members

² An independent sample t-test shows that there is no significant difference in the means of the before and after incentive groups, indicating that offering an incentive did not bias the results of the survey.

³ If the response rate were calculated on this figure without any consideration to the relevance of certain types of NFMA members, the response rate would be approximately 7.5%.

⁴ It is important to note that Robbins and Simonsen (2011) report a 29% response rate for relevant respondents in a survey of NFMA members about general disclosure. However, according to the NFMA Executive Director, the Robbins and Simonsen (2011) survey was not specifically addressing accounting information and it was administered when there was much less survey activity. In addition, at the time of that survey, the authors were able to negotiate with NFMA board members for access to member contact information for follow up, which was not available for the GASB Statement 34 survey.

and provide a platform by which analysts can exchange ideas”, to advocate for important issues in municipal finance and to “facilitate the flow of information among market participants, especially in terms of better issuer disclosure”. To qualify for membership in the NFMA, individuals must have at least one year of industry experience, and spend at least 25% of their job time on municipal research, legal analysis, portfolio management, or on the supervision of employees doing this type of work. If an individual’s job duties do not meet the requirements for regular membership, they may be able to join the NFMA as an associate member. Associate members include professionals in the municipal industry or related disciplines.

Survey respondents have an average of approximately 16.5 years of experience, with an average of almost 8 years with their current firm. Twenty-five percent of the survey respondents work for buy-side firms, while fourteen percent are employed by mutual funds. Twelve percent of respondents are employed by rating agencies, while eleven percent are employed by sell-side firms. Commercial banks employ nine percent of the respondents, and private wealth management companies employ eight percent. There are four percent employed each by bond insurance and public finance corporations. The remaining thirteen percent are employed by a variety of different companies, including insurance, outside agencies or independent research firms⁵. Therefore the analysts responding to the survey

⁵ Buy-side firms research potential investments and make recommendations to the money managers of the fund that employs them if the investment is in with the fund’s investment strategy. These recommendations are not for the public benefit as this can provide information to competitors. The goal is for a buy-side analyst to make profitable recommendations. Sell-side firms perform research and ultimately make recommendations to the public to buy or sell based on these recommendations.

have expertise that is varied across the municipal bond market. See Table 1 for details.

Respondents also have had a variety of additional work experience either with other firm types within the municipal finance sector or outside of the sector. Seven percent of the respondents have a CPA certification and almost twenty four percent have a CFA. Over seventy one percent of respondents have a degree beyond a bachelors, including a masters, an MBA, an MPA, a PhD or a combination of these degrees.

Approximately 70% of respondents said they were in the range of somewhat familiar to extremely familiar with the new information provided by Statement 34, while 4% of respondents were somewhere in the middle, and 26% of respondents said they were in the range of somewhat unfamiliar to extremely unfamiliar with the new information provided by Statement 34. Thus, the respondents have the required expertise to complete the survey.

The majority of the respondents (63%) had experience analyzing government financial statements prior to the implementation of Statement 34, while 31% of respondents did not evaluate financial statements prior to Statement 34. Six percent of the respondents indicated that they were not aware of Statement 34, and their surveys subsequently ended. This led to slight decrease to overall number of useable responses.

Type of firm where respondents are currently employed	
Firm type	%
Other Buy-side	25%
Mutual Fund	14%
Other	13%
Rating Agency	12%
Sell-side	11%
Commercial Bank	9%
Private Wealth Management	8%
Bond Insurance/Credit Enhancement	4%
Public Finance Advisor	4%
	100%

Table 1: Type of firm where respondents are currently employed

1.6 Survey Results

1.6.1 Analysts with experience both pre- and post- Statement 34

The majority of the respondents (63%) had experience analyzing government financial statements prior to the implementation of Statement 34, while 31% of respondents did not evaluate financial statements prior to Statement 34. Six percent of the respondents indicated that they were not aware of Statement 34, and their surveys subsequently ended.

Respondents with experience analyzing government financial statements prior to Statement 34 were asked a series of questions about changes between the pre-, post-Statement 34 time period. The responses are summarized in Table 2.

Level of relative uncertainty

Respondents were asked whether the information provided by Statement 34 changed their level of uncertainty surrounding the financial condition of the government they were evaluating. The majority of the respondents (approximately 51%) reported that it did not change the level of uncertainty, while 42% said that the information decreased the uncertainty, and 7% said the uncertainty about the financial condition of the government's financial condition actually increased as a result of the new information provided by Statement 34.

Those who indicated that the information provided by Statement 34 decreased uncertainty indicated that the extent of the decrease was 42%. Those who indicated that uncertainty increased indicated that the extent of the increase was approximately 42%.

Level of relative quality

Respondents were asked whether the Statement 34 has increased the quality of information provided by governments. The majority of respondents (68%) indicated that the level of quality of the information provided by governments has increased since the implementation of Statement 34, while 29% indicated no change in quality, and 3% indicated a decrease in quality. The level of quality increased by a mean of 47% according to respondents indicating that quality increased, while the level of decrease in quality was indicated at 25% according to respondents indicating that quality decreased.

Relative efficiency and the time spent evaluating governments and communicating with government officials

Seventy nine percent of respondents indicated that Statement 34 has improved the efficiency of their evaluation of a government, while 21% indicated that it has not improved the efficiency. For those respondents indicating that efficiency as improved, they reported that the improvement was an average of 56%, with a median of 60% and a mode of 70%.

Fifty seven percent of respondents indicated that having Statement 34 compliant financial statements has not changed the amount of time that it takes them to evaluate a government, while 32% indicated that it increased the amount of time that it takes, and 11% indicated that it decreased the amount of time.

Similarly, 60% of respondents indicated that there has been no change since Statement 34 in the amount of time they spend communicating with government officials as part of their evaluation of governments. Thirty two percent of respondents indicated a decrease in the time spent communicating, while 6% indicated an increase in the time spent communicating with government officials as part of their evaluation of governments.

Relative availability of information

Respondents were asked whether prior to governments reporting the new information required by Statement 34, they had access to this type of information. They were first asked about the information provided in the Statement of Net Assets (SONA)

portion of the government-wide financial statements. The majority, 46%, indicated that they were already able to obtain this information, while 28% indicated they were not able to obtain it, and 26% were unsure. However, 70% indicated that Statement 34 made the information easier to obtain, while 30% indicated that Statement 34 did not make the information provided in the SONA easier to obtain.

Respondents were also asked about the availability of the information provided in the Statement of Activities (SOA) portion of the government-wide financial statements. The majority, 52%, indicated that they were able to obtain the information reported on the SOA prior to Statement 34, while 20% indicated that they were not able to obtain this information and 28% were unsure. However, 64% reported that Statement 34 made the information easier to obtain, while 36% reported that Statement 34 did not make the information easier to obtain.

Respondents were evenly split when asked about the availability of the new budgetary information required by Statement 34, with 33% of respondents indicating that they did have access to this information prior to Statement 34, 31% indicating that they did not, and 36% indicating that they were unsure. However, 88% said that Statement 34 makes the information was easier to obtain, while 12% said that it Statement 34 did not make the information easier to obtain.

Respondents were also asked about the information provided in the Management's Discussion and Analysis (MD&A). Since the MD&A contains several different sections, respondents were asked about the relative availability of this

information for each of these individual sections. On average, 85% of the respondents indicated that Statement 34 made information provided via the MD&A easier to obtain.

However, the results were mixed when asked whether they had access to this information prior to Statement 34. More respondents than not indicated that prior to Statement 34 they did not have access to information about condensed government-wide financial statements (57%), analysis of overall financial position and results of operations (61%), analysis of individual funds (54%), analysis of significant budget variations (71%), and description of currently known facts (67%). More often than not respondents said that they already had access to information prior to Statement 34 that would comprise a brief discussion of the financial statements (60%), as well as significant capital asset and long-term debt activity (54%).

Relative ability to understand a government's finances

Respondents were asked how the implementation of Statement 34 has affected their ability to understand a government's finances. The mean response was 5.24, where 5.00 represents slightly improved my ability and 7.00 represents significantly improved my ability. The median response was 5.00, and the most common response was 5.00. The responses ranged from 2.00 (the midpoint between significantly diminished my ability and slightly diminished my ability) to 7.00 (significantly improved my ability).

Table of responses to questions about changes pre- to post- Statement 34															
Level description	% of respondents	Very insignificant										Very significant	Mean	Median	Mode
Response level		0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%			
You answered that Statement 34 decreased the uncertainty that you have about the financial condition of a government you are evaluating. Please indicate the extent that the uncertainty as decreased	30%	0%	3%	19%	23%	13%	10%	16%	13%	3%	0%	0%	42%	40%	30%
You answered that Statement 34 increased the uncertainty that you have about the financial condition of a government you are evaluating. Please indicate the extent that the uncertainty as increased	4.7%	0%	0%	20%	20%	0%	40%	20%	0%	0%	0%	0%	42%	50%	50%
You answered that Statement 34 increased the quality of the information provided by governments. Please indicate the extent that the quality of the information as increased	46.7%	0%	2%	12%	28%	10%	14%	10%	10%	10%	4%	0%	47%	40%	30%
You answered that Statement 34 decreased the quality of the information provided by governments. Please indicate the extent that the quality of the information as decreased	1.87%	0%	0%	50%	50%	0%	0%	0%	0%	0%	0%	0%	25%	25%	20%/30%
You answered that Statement 34 improved the efficiency of your evaluation of governments. Please indicate the extent that the efficiency of your evaluation has improved	53.3%	0%	2%	7%	12%	14%	12%	11%	19%	18%	4%	2%	56%	60%	70%

Additional responses to questions addressing pre- vs. post- Statement 34									
Level description	% of respondents	Significantly diminished my ability	Slightly diminished my ability		Slightly improved my ability	Significantly improved my ability	Mean	Median	Mode
Response level		1	2	3	4	5	6	7	
How has the implementation of Statement 34 affected your ability to understand a government's finances	67.3%	0%	1%	1%	17%	42%	31%	8%	5.24
									5

Table 2: Responses to questions addressing changes from pre- to post-Statement 34

Discussion of relative differences pre- and post- Statement 34

Although the majority of respondents (51%) indicated that uncertainty did not change, a significant percentage also indicated that uncertainty decreased (42%), and a large majority (68%) indicated that the quality of the information provided by governments has improved. A large majority (79%) of the respondents also indicated that Statement 34 has made their evaluation of governments more efficient, although a large majority also noted that it has not changed the amount of time that it takes them to evaluate a government, nor has it changed the time spent communicating with government officials as part of their evaluation of governments. In addition to the majority indicating that the quality of reporting has improved and that efficiency has

improved, respondents indicated, on average, that Statement 34 information has more than slightly improved their ability to understand a government's finances.

The majority of respondents indicated that they were already able to obtain information from the Statement of Net Assets and the Statement of Activities prior to the implementation of Statement 34. However, the vast majority of the respondents noted that it is easier to obtain this information since the implementation of Statement 34. This could explain why the government-wide financial statements were the lowest ranked in value of the three new components of Statement 34 financial reporting that were covered in the survey.

The large majority of the respondents indicated that Statement 34 made budgetary information easier to obtain, although respondents were relatively evenly split when asked whether they had access to this information prior to Statement 34.

With the exception of the MD&A sections containing capital and debt information, and the brief overview of the financial statements, the majority of the respondents indicated that they did not have access to the information in the remaining sections of the MD&A prior to Statement 34. In addition, the vast majority of the respondents indicated that the information provided in the MD&A was easier to obtain since Statement 34. This is in-line with the respondents ranking the MD&A with the highest relative value of the Statement 34 components addressed in the survey.

1.6.2 Analysts – Full Sample

Most important factors when analyzing a government's financial information

Respondents were asked to list the three factors that they consider most important when evaluating a government's financial information, in order of importance. Overall, the most popular response was information about a government's debt or long-term liabilities. The second most popular response was information about liquidity or how leveraged the government is. The third most popular response was information about the government's funds. Terms such as fund balance, fund financial statements, general fund balance, and other fund balances were reported.

When looking at the information most commonly reported as the most important item, the top three responses in order of importance were information about the government's funds, then information about the government's performance, followed by liquidity or leverage. When referring to performance, terms such as surplus, income statement, results, increase in net assets, and consistent positive results were reported.

When looking at the information most commonly reported as the second most important item, the top three responses were information about a government's debt, followed by liquidity or leverage, and then information about a government's sources or revenue. Respondents used terms such as revenue stability, revenue sources, and revenue flexibility.

When looking at the information most commonly reported as the third most important item, the top responses were information about debt, followed by overall disclosure, with respondents using terminology such as level of disclosure, transparency, level of detail, quality, clarity, accuracy, and consistency. This was followed by both liquidity and leverage information, and underlying information about the tax base. For tax base, respondents used terminology such as demographics, underlying economic base, and tax base.

See Table 3 below for a summary of responses to the most important factors.

Note that there is a wide range of responses and only the top responses were highlighted above.

Most important factors in evaluating a government's financial information				
Factor	Order of Importance			TOTAL
	I	II	III	
Debt info/long-term liabilities	7%	14%	15%	12%
Liquidity, coverage, leverage	11%	13%	9%	11%
Fund balance/Fund financial statements/Other fund balance sheet	18%	9%	4%	11%
Performance/Income St info/oper/results/surplus/incr in NA/unas	13%	10%	5%	9%
Disclosure levels (transparency)/footnotes/level of detail and cons	7%	9%	10%	8%
Revenue sources/flexibility/stability	5%	11%	7%	8%
Underlying economic base/tax base/demographics	1%	5%	9%	5%
Management/policies	2%	4%	6%	4%
Balance sheet	7%	4%	2%	4%
OPEB/pension management	3%	4%	4%	4%
MD&A	2%	1%	6%	3%
Timeliness	4%	1%	4%	3%
Cash flow/ ability to pay / willingness to pay	4%	3%	3%	3%
Balanced budget	4%	3%	1%	2%
Expenses and cost stability/expense growth pressure	0%	2%	4%	2%
Reserves	3%	3%	1%	2%
Other	11%	7%	10%	9%

Table 3: Important factors in evaluating a government's financial position

Level of value of government-wide financial statements

Respondents were asked a variety of questions about the value of Statement 34 compliant financial statements in their analyses. Responses are summarized in Tables 4

and 5. When asked about how valuable the information in the government-wide financial statements is for analysts in evaluating a government's finances, the mean response was 5.15 with a median of 5.00. A response of 5.00 indicates slightly valuable, while a response of 7.00 indicates extremely valuable. The most common response was 7.00 (extremely valuable), and responses ranged from 1 (extremely not valuable) to 7. See Figure 1 below for a bar chart highlighting the range of responses.

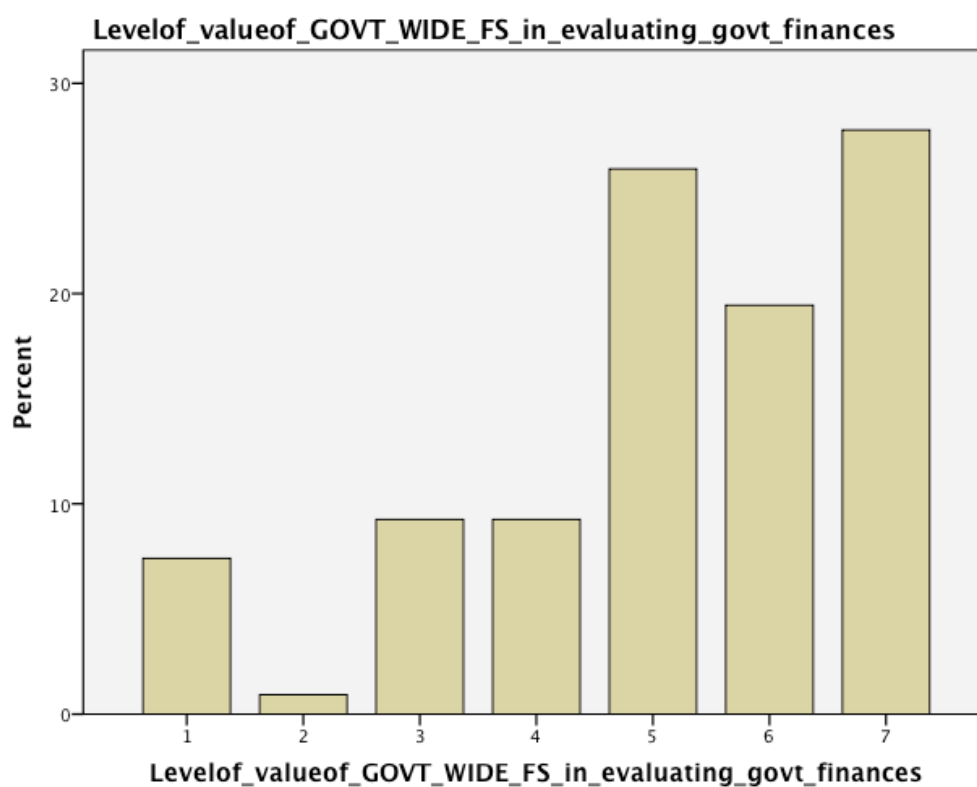


Figure 1: Bar chart of analysts' responses to the value of government-wide financial statements

Responses to questions addressing the level of value of new components of Statement 34 compliant financial reports											
Level description	% of respondents	Extremely not valuable		Slightly not valuable		Slightly valuable		Extremely valuable	Mean	Median	Mode
Response level		1	2	3	4	5	6	7			
How valuable to you is the information in the government-wide financial statements in evaluating a government's finances?	100%	7%	1%	9%	9%	26%	19%	28%	5.15	5.00	7.00
How valuable to you is the information in the budgetary comparison in evaluating a government's finances?	94.4%	0%	7%	6%	10%	24%	38%	16%	5.27	6.00	6.00
How valuable to you is the information in the MD&A in evaluating a government's finances?	100%	0%	2%	5%	9%	21%	34%	30%	5.69	6.00	6.00
Required components of the MD&A:											
Brief discussion of the basic financial statements , including the relationships of the statements to each other and the significant differences in the information they provide in evaluating a government's finances?	100%	9%	13%	10%	19%	29%	12%	7%	4.11	4.00	5.00
Condensed financial information derived from government-wide financial statements comparing the current year to the prior year in evaluating a government's finances?	100%	5%	4%	10%	13%	23%	30%	15%	4.96	5.00	6.00
Analysis of the government's overall financial position and results of operations to assist users in assessing whether financial position has improved or deteriorated as a result of the year's operations in evaluating a government's finances?	100%	1%	3%	7%	11%	23%	31%	24%	5.43	6.00	6.00
Analysis of balances and transactions of individual funds , including the reasons for significant changes in fund balances or net fund position and whether restrictions, commitments, or other limitations significantly affect the availability of fund resources for future use in evaluating a government's finances?	100%	0%	0%	5%	11%	16%	30%	38%	5.86	6.00	7.00
Analysis of significant variations between original and final budget amounts and between final budget amounts and actual budget results for the general fund, including any currently known reasons for the those variations that are expected to have a significant effect on future services or liquidity in evaluating a government's finances?	100%	0%	2%	5%	9%	21%	25%	37%	5.76	6.00	7.00
Description of significant capital asset and long-term debt activity during the year , including a discussion of commitments made for capital expenditures, changes in credit ratings, and debt limitations that may affect the financing of planned facilities or services in evaluating a government's finances?	100%	0%	2%	5%	7%	22%	30%	34%	5.75	6.00	7.00
Description of currently known facts, decisions, or conditions that are expected to have a significant effect on financial position or results of operations in evaluating a government's finances?	100%	0%	1%	1%	7%	16%	30%	46%	6.10	6.00	7.00

Table 4: Responses to the value of components of Statement 34

Responses to value of Statement 34 information				
	Mean	Median	Mode	Range
Government-wide financial statements	5.15	5.00	7.00	1.00-7.00
Budgetary comparisons	5.27	6.00	6.00	2.00-7.00
MD&A (overall)	5.69	6.00	6.00	2.00-7.00
Basic overview	4.11	4.00	5.00	1.00-7.00
Codensed GW financial information	4.96	5.00	6.00	1.00-7.00
Analysis of overall financial position	5.43	6.00	6.00	1.00-7.00
Analysis of individual funds	5.86	6.00	7.00	3.00-7.00
Analysis of budget variations	5.76	6.00	7.00	2.00-7.00
Capital asset and debt activity	5.75	6.00	7.00	2.00-7.00
Currently known facts	6.10	6.00	7.00	2.00-7.00

Table 5: Mean, median, mode and range of responses to the value of components of Statement 34

Most valuable information in the government-wide financial statements

Respondents were asked to provide, in order of importance, what they consider the most valuable information on Statement of Net Assets and the Statement of Activities, which are the components of the government-wide financial statements. Overall, information about net assets and availability or restrictions on net assets was listed as the most important on the Statement of Net Assets. The second most valuable information overall was information about cash and investments, including restrictions on cash. The third most valuable information overall on the Statement of Net Assets was long-term debt including bonds and other obligations.

When looking at the information most commonly reported as the most valuable item, respondents most commonly selected cash and investments and restrictions on cash, followed by net assets information including restrictions on those items. Three of the factors followed in a tie as the next commonly reported most valuable item. They include long-term debt information, information on fund balances, and not applicable because the respondent does not use the Statement of Net Assets. Since the Statement of Net Assets

does not report fund specific information, it appears that there was confusion by some of the respondents.

When looking at the information most commonly reported as the second most valuable item, respondents most commonly selected information about net assets and availability or restrictions on net assets information, followed by long-term debt information including bonds and other obligations, followed by information about cash and investments, including restrictions on cash.

When looking at the information most commonly reported as the third most valuable item, respondents most commonly selected information about net assets and availability or restrictions on net assets information, followed by long-term debt information including bonds and other obligations, followed by information about current assets and liabilities including receivables, other assets, accounts payable, and the current portion of long-term debt.

See Table 6 below for a summary of responses to the most valuable information on the Statement of Net Assets. Note that there is a wide range of responses and only the top responses were highlighted above.

Most important information on Statement of Net Assets				
Factor	Order of importance			TOTAL
	I	II	III	
Unrestricted net assets and other net asset info including breakdown				
UR/Restr/ net assets in general /equity in general/Restrictions and earmarks - availability/expedibility	19%	18%	21%	19%
Cash and/or investments - unrestricted cash	26%	17%	10%	18%
Long-term debt including bonds and other obligations	9%	18%	15%	14%
Current and other asset & liabilities including A/P and current portion of LTD, and receivables	4%	13%	17%	11%
n/a do not use statement/too broad an overview	9%	8%	7%	8%
Fund balance info and due from other funds/general fund info	9%	4%	8%	7%
Capital assets and depreciation	1%	5%	6%	4%
Consolidatd government financial position/Overall info/fiscal health	7%	2%	1%	3%
Change in net assets and details related to this	3%	3%	2%	3%
Liquidity	4%	0%	2%	2%
Pension info	0%	2%	3%	2%
Trends	3%	0%	2%	2%
Other	6%	9%	5%	7%

Table 6: Important information on Statement of Net Assets

Respondents ranked the most valuable information on the Statement of Activities, in order of importance. The most valuable information overall was reported to be the breakdown of revenue and expenses, including a breakdown between general and program, followed by the whether revenue is diverse and recurring, including trends with revenue. Three factors tied for the overall next most valuable information on the Statement of Activities, including net asset information and changes in net assets, operating income or loss, and not applicable because the SOA is too broad and overview, or because they don't have three items that they consider most valuable.

When looking at the information most commonly reported as the most valuable item in the Statement of Activities, respondents most commonly selected the breakdown of revenue and expenses, including a breakdown between general and program, followed by operating income or loss, and then whether revenue is diverse and recurring, including trends with revenue.

When looking at the information most commonly reported as the second most valuable item in the Statement of Activities, respondents most commonly selected the breakdown of revenue and expenses, including a breakdown between general and program, followed by whether revenue is diverse and recurring, including trends with revenue, and then information about debt service including the reporting of interest expense.

When looking at the information most commonly reported as the second most valuable item in the Statement of Activities, respondents most commonly selected the breakdown of revenue and expenses, including a breakdown between general and program, followed by whether revenue is diverse and recurring, including trends with revenue. Two factors followed in a tie as the next commonly reported third most valuable item. These factors included net asset information including the change in net assets, and extraordinary items including transfers.

See Table 7 below for a summary of responses to the most valuable information on the Statement of Activities. Note that there is a wide range of responses and only the top responses were highlighted above.

Most important information on Statement of Activities					
Factor	Order of importance				
	I	II	III	TOTAL	TOTAL
Revenue and/or expense breakdown incl program vs general	31%	39%	26%	94	32%
Revenue diversity/recurring sources andrev or expense trends/better view of recurring items	11%	16%	13%	40	14%
Change in net assets/ net assets info	9%	5%	9%	23	8%
n/a do not use - too broad an overview - don't have three things	10%	5%	8%	23	8%
surplus or deficit/operating income or loss	13%	2%	7%	22	8%
Debt service (including interest expense)	3%	7%	4%	14	5%
fund balance / general fund info	7%	2%	4%	14	5%
Extraordinary items/ transfers	0%	4%	9%	12	4%
Government activities breakout vs. business	3%	2%	2%	7	2%
All of it/ full accrual presentation / greater level of detail	3%	3%	1%	7	2%
Tax revenues	2%	2%	1%	5	2%
Other	7%	11%	15%		11%

Table 7: Important information on Statement of Activities

Reliance on government-wide versus fund financial statements

Respondents were asked whether they rely more on government-wide or fund financial statements in their analyses. The majority of respondents (56%) said they relied more on fund financial statements, while 32% indicated that they use them equally in their analyses, 10% indicated that they rely more on government-wide financial statements, and 2% were unsure.

Level of value of budgetary comparisons

Respondents were asked how valuable the information in the budgetary comparisons in evaluating a government's finances. The mean response was 5.27 with a median of 6.00. A response of 5.00 indicates slightly valuable, while a response of 7.00 indicates extremely valuable. The most common response was 6.00 (the midpoint between slightly valuable and extremely valuable), and responses ranged from 2.00 (the

midpoint between extremely not valuable and slightly not valuable) to 7.00. See Figure 2 below for a bar chart highlighting the range of responses.

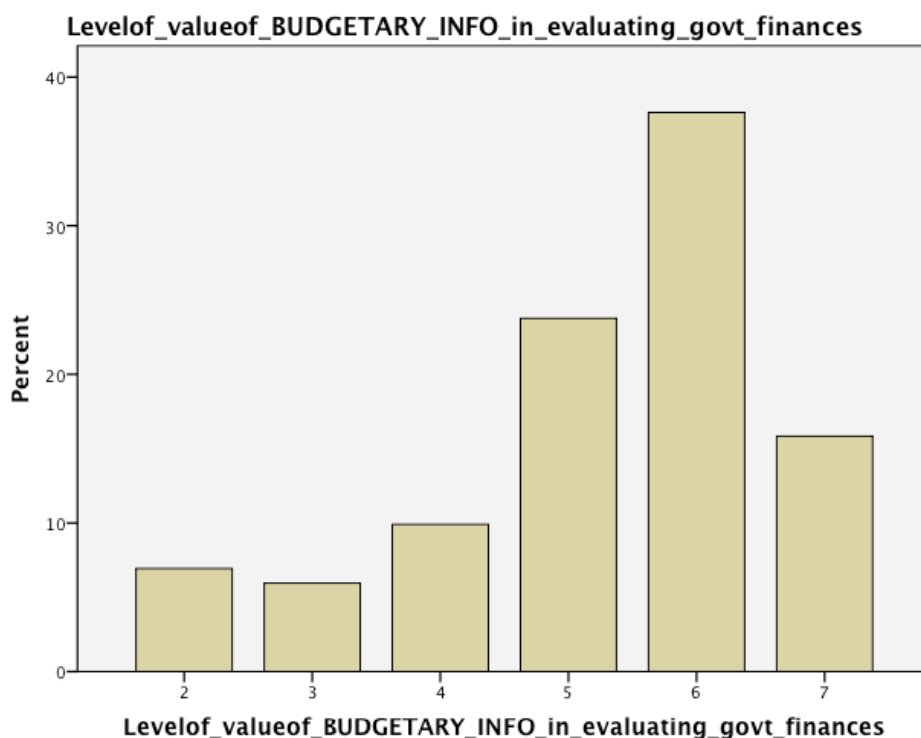


Figure 2: Bar chart of analysts' responses to the value of budgetary comparisons

Level of value of Management's Discussion and Analysis (MD&A)

Respondents were asked how valuable the information is in the MD&A when evaluating a government's finances. Respondents were first asked for the overall value of the MD&A and then asked about the individual components. The mean response to the overall value of the MD&A was 5.69 with a median of 6.00. A response of 5.00 indicates slightly valuable, while a response of 7.00 indicates extremely valuable. The most common response was 6.00 (the midpoint between slightly valuable and

extremely valuable), and responses ranged from 2.00 (the midpoint between extremely not valuable and slightly not valuable) to 7.00. See Figure 3 below for a bar chart highlighting the range of responses.

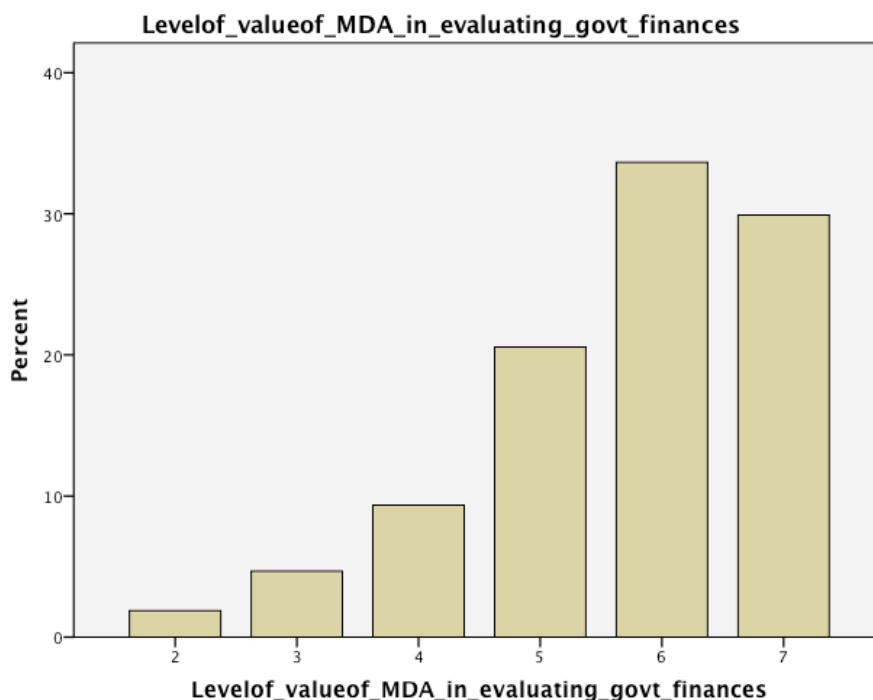


Figure 3: Bar chart of analysts' responses to the value of the MD&A

Respondents were then asked about the required components of the MD&A. For the first required component, a brief discussion of the basic financial statements, including the relationships of the statements to each other, and the significant differences in the information they provide, the mean response was 4.11 with a median of 4.00. A response of 3.00 indicates slightly not valuable, while a response of 5.00 indicates slightly valuable. The most common response was 5.00, and responses ranged from 1.00 (extremely not valuable) to 7.00. See Figure 4 below for a bar chart highlighting the range of responses.

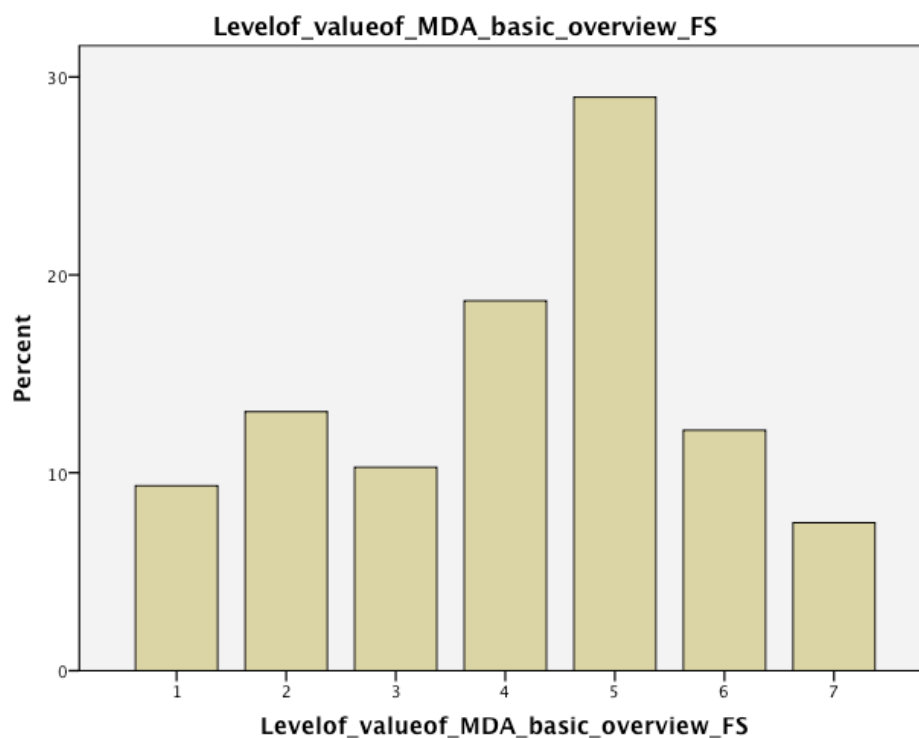


Figure 4: Bar chart of analysts' responses to the value of the MD&A – basic overview

For the second required component, condensed financial information derived from government-wide financial statements comparing current year to prior year, the mean response was 4.96 (5 indicates slightly valuable) with a median of 5.00. The most common response was 6.00, and responses ranged from 1.00 (extremely not valuable) to 7.00. See Figure 5 below for a bar chart highlighting the range of responses.

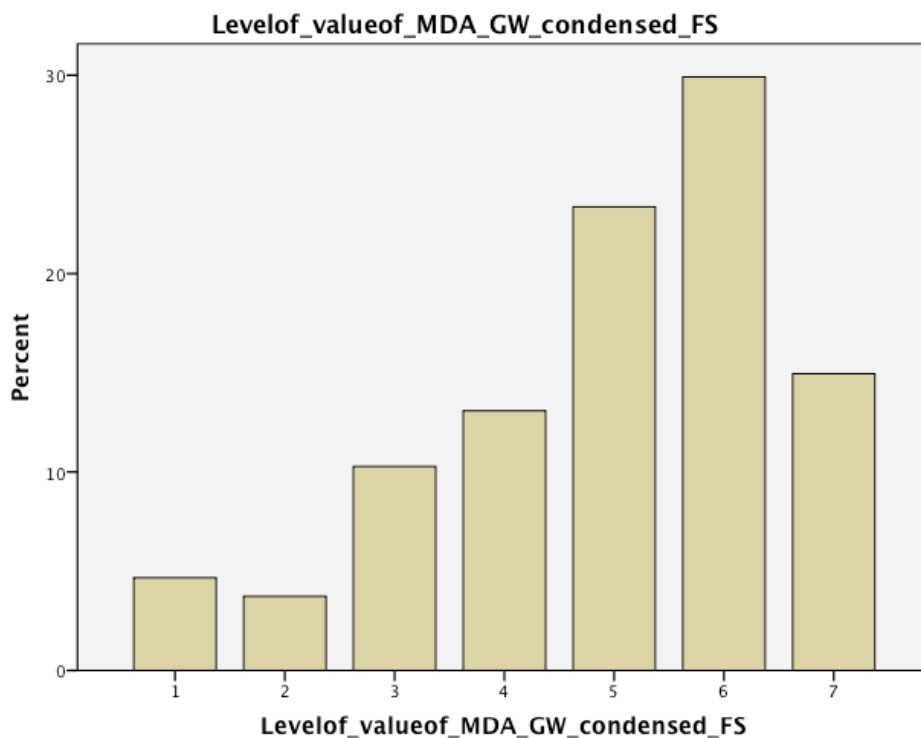


Figure 5: Bar chart of analysts' responses to the value of the MD&A – condensed financial statements

For the third required component, an analysis of the government's overall financial position and results of operations, meant to assist user in assessing whether financial position has improved or deteriorated as a result of the year's operations, the mean response was 5.43 with a median of 6.00 (5.00 indicates slightly valuable and 7.00 represents extremely valuable). The most common response was 6.00, and responses ranged from 1.00 (extremely not valuable) to 7.00. See Figure 6 below for a bar chart highlighting the range of responses.

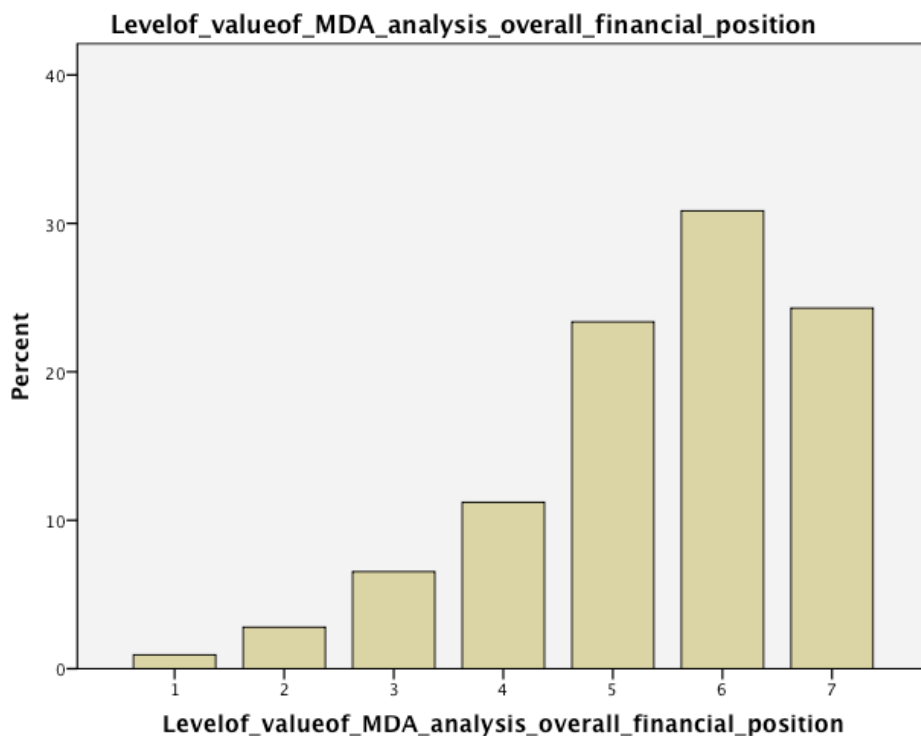


Figure 6: Bar chart of analysts' responses to the value of the MD&A – overall financial position

For the fourth required component, an analysis of balances and transactions of the individual funds, including reasons for significant changes in fund balances or net fund position, and whether restrictions, commitments, or other limitations significantly affect the availability of fund resources for future use, the mean response was 5.86 with a median of 6.00 (5.00 indicates slightly valuable and 7.00 represents extremely valuable). The most common response was 7.00, and responses ranged from 3.00 (slightly not valuable) to 7.00. See Figure 7 below for a bar chart highlighting the range of responses.

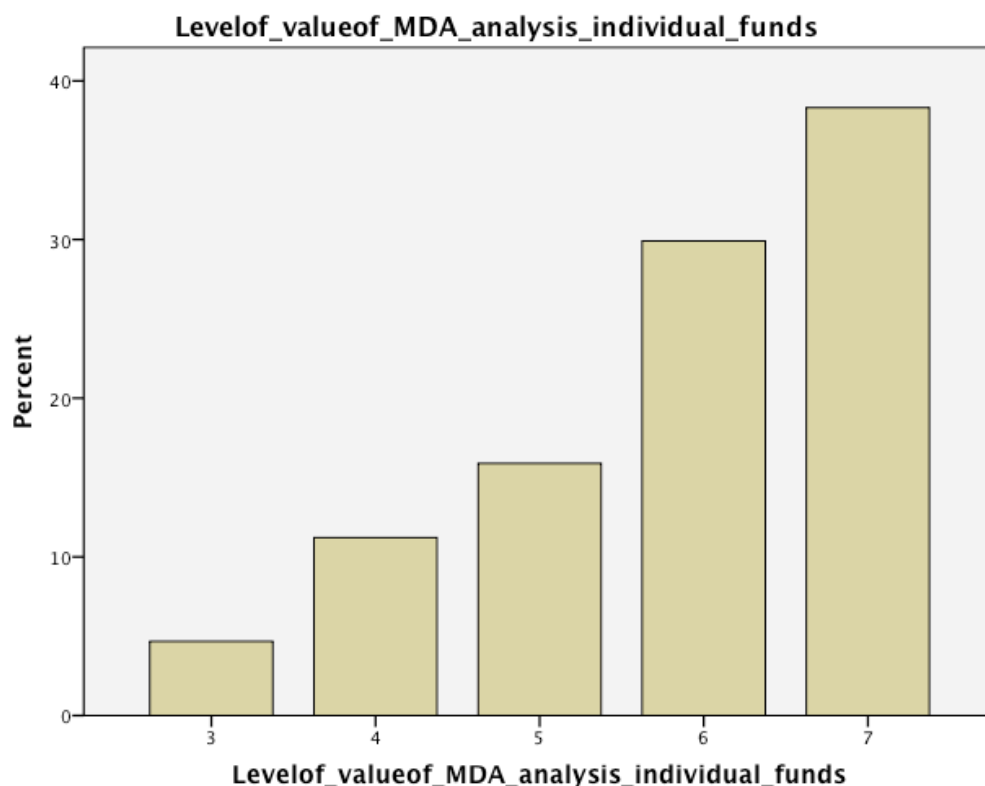


Figure 7: Bar chart of analysts' responses to the value of the MD&A – analysis of individual funds

For the fifth required component, an analysis of significant variations between the original and final budgeted amounts and between final budget amounts and actual budget results for the general fund, including currently known reasons for those variations that are expected to have a significant effect on future services or liquidity, the mean response was 5.76 with a median of 6.00 (5.00 indicates slightly valuable and 7.00 represents extremely valuable). The most common response was 7.00, and responses ranged from 2.00 (the midpoint between extremely not valuable and slightly not valuable) to 7.00. See Figure 8 below for a bar chart highlighting the range of responses.

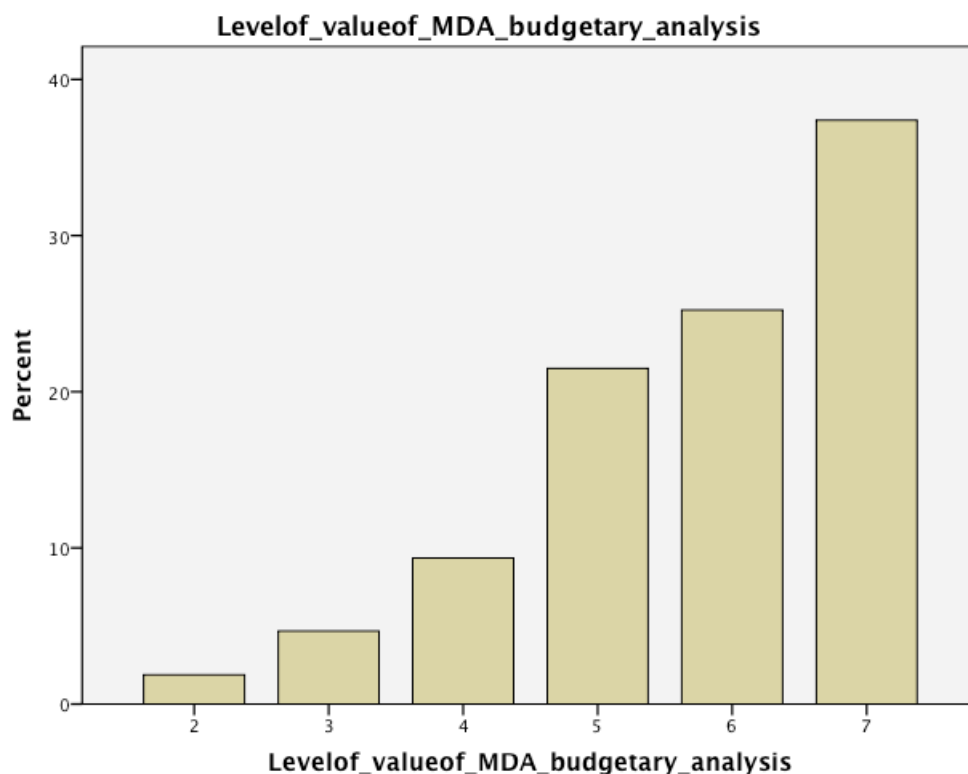


Figure 8: Bar chart of analysts' responses to the value of the MD&A – budgetary analysis

For the sixth required component, a description of significant capital asset and long-term debt activity during the year, including a discussion of commitments made for capital expenditures, changes in credit ratings, and debt limitations that may affect the financing of planned facilities or services, the mean response was 5.75 with a median of 6.00 (5.00 indicates slightly valuable and 7.00 represents extremely valuable). The most common response was 7.00, and responses ranged from 2.00 (the midpoint between extremely not valuable and slightly not valuable) to 7.00. See Figure 9 below for a bar chart highlighting the range of responses.

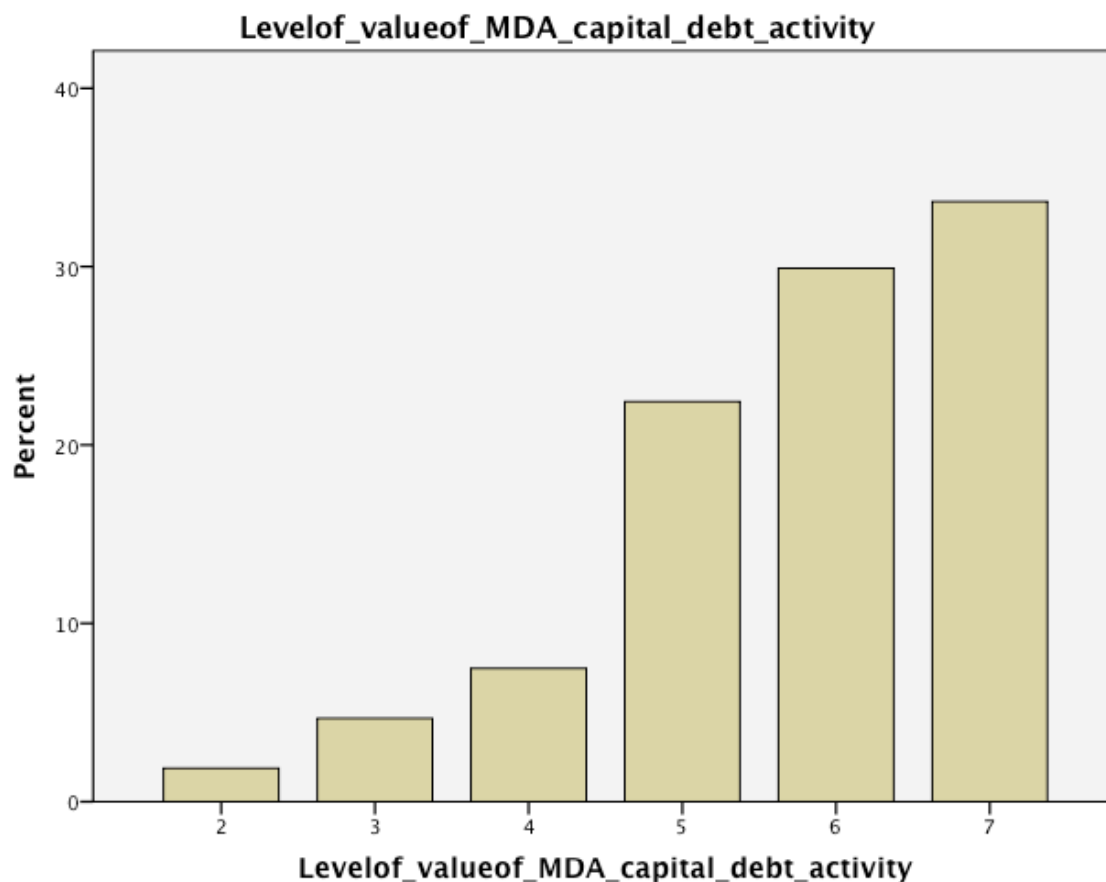


Figure 9: Bar chart of analysts' responses to the value of the MD&A – capital and debt activity

For the last required component, a description of currently known facts, decisions, or conditions that are expected to have a significant effect on financial position or results of operations, the mean response was 6.10 with a median of 6.00 (5.00 indicates slightly valuable and 7.00 represents extremely valuable). The most common response was 7.00, and responses ranged from 2.00 (the midpoint between extremely not valuable and slightly not valuable) to 7.00. See Figure 10 below for a bar chart highlighting the range of responses.

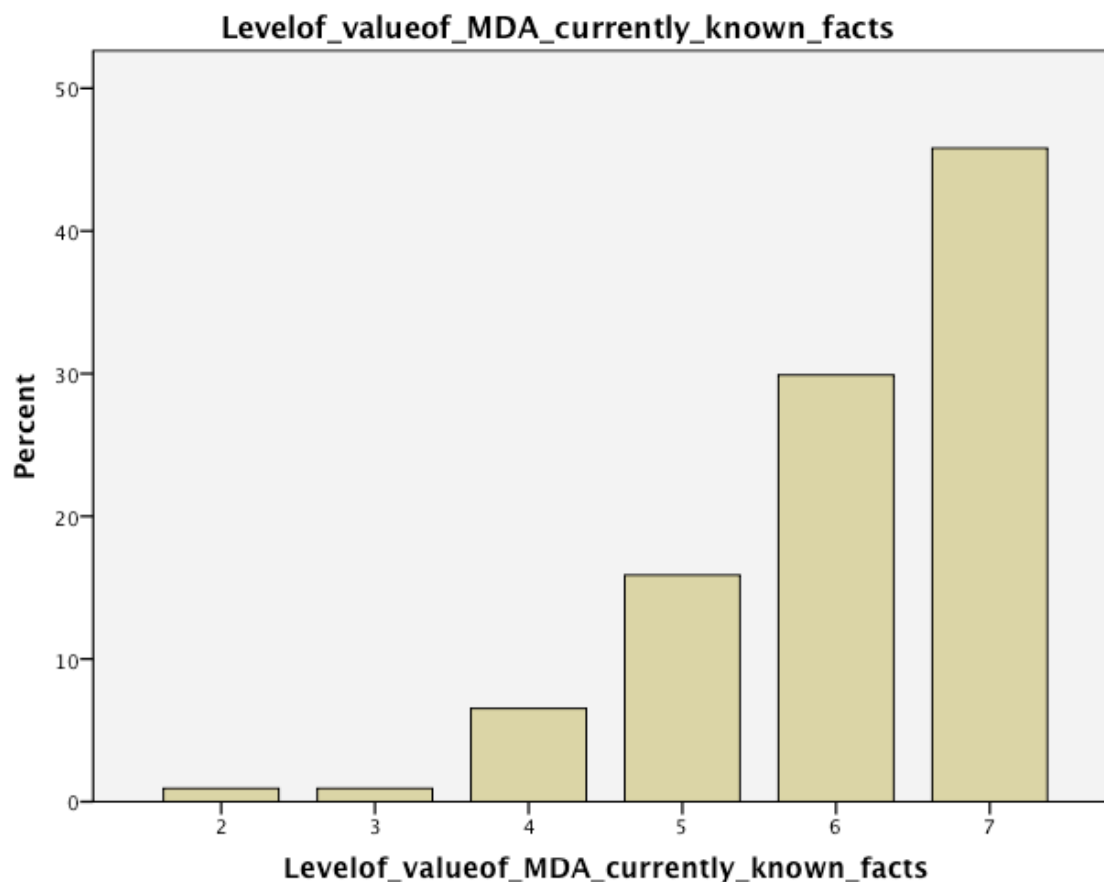


Figure 10: Bar charts of analysts' responses to the value of the MD&A – currently known facts

Discussion of responses to the value of the new information provided by Statement 34

The MD&A was rated by analysts as the most valuable component of the new information provided by Statement 34, followed by the budgetary comparisons and then the government-wide financial statements. However, all were rated over a 5.00 (slightly valuable), with government-wide and budgetary comparisons achieving a rating closer to a 5.00 and the MD&A achieving a rating closer to a 6.00 (the midpoint between slightly valuable and extremely valuable). This is in-line with findings in the corporate sector that the MD&A is the most important and widely used section of the financial

statements (Tavcar 1998) and that it is frequently relied on in analyst reports (Knutson 1993; Rogers and Grant 1997).

Within the MD&A, respondents rated the section on currently known facts bearing on the future as the most valuable, with a mean of 6.10, higher than the midpoint between slightly and extremely valuable. This section is an area where finance officials would discuss discernable, verifiable facts and circumstances that they are aware of at the time the financial statements are prepared and audited that may impact the government's finances in the future (Mead 2011). There was also a low variance of 1.11 in the responses. This is similar to findings in the corporate literature that the market values forward-looking information (Barron et al 1999).

The next most highly rated section in the MD&A was the financial analysis of the funds of the municipality, with a mean of 5.86, slightly lower than the midpoint between slightly and extremely valuable. It is not surprising that this section is considered one of the most valuable, given that the majority (56%) of respondents indicated that they relied more on the fund financial statements than the government-wide financial statements. In addition, respondents most frequently reported that information available on the fund financial statements was the most important when evaluating a government's financial information.

Analysis of budget variations and information about capital asset and debt activity were the next most highly rated with means of 5.76 and 5.75, respectively. These means are also slightly lower than the midpoint between slightly and extremely valuable.

All of these sections of the MD&A, as well as the section with an analysis of overall financial position, were rated higher by respondents than the budgetary comparisons and the government-wide financial statements. The only two sections of the MD&A ranked lower than both the budgetary comparisons and the government-wide financial statements were the basic overview of the financial statements and the condensed financial statement information. Since the basic overview section is meant to contain “conceptual information about a government’s financial statements”, including their function, the type of information they contain and how they relate to one another (Mead 2011), this section would be more likely geared towards an infrequent citizen user rather than a seasoned municipal bond analyst.

It is not surprising that the condensed government-wide financial statement information since only 10% of the respondents indicated that they rely more on government-wide financial statements, while 32% indicated that they use the fund financial statements and the government-wide financial statements equally in their analyses.

Market reliance on Statement 34 information, and the affect of Statement 34 information on analysts’ opinions

Respondents were asked to what degree they believe that analysts and other municipal market participants rely on Statements 34 information in making decisions. See Table 8 for a summary of responses. The mean response was 5.27, where a response

of 5.00 represents slightly reliable and a response of 7.00 represents completely reliable.

The median response as well as the most frequent response was 6.00.

Respondents were then asked whether based on their personal experience, they think that Statement 34 has affected the opinions of analysts and other municipal market participants. The majority of respondents (approximately 60%) believe that Statement 34 has affected the opinions of analysts and other market participants, while 10% believe it has not, and 30% were unsure.

Those who believe that Statement 34 has affected analysts' opinions were asked a series of follow-up questions about how this change in opinion may have impacted borrowing costs, bid-ask spreads, underwriter costs, and the timeliness of financial statements. The majority of respondents believe that the change in opinion has had no affect on borrowing costs (48%), bid-ask spread (47%) and underwriter costs (71%), while the majority believes that there has been a decrease in the timeliness of financial statements (43%).

The remaining respondents indicated that there has been a decrease in borrowing costs (36%), bid-ask spreads (42%) underwriter costs (18%), or an increase in borrowing costs (16%), bid-ask spreads (11%), and underwriter costs (22%). Approximately 35% of respondents believe there was no change in the timeliness of financial reports, while 22% believe timeliness has improved.

The fact that the majority of respondents indicated that they already had access to information contained in the government-wide financial statements could contribute to

the fact that the majority of respondents do not think that change in opinion has had an affect on borrowing costs, bid-ask spreads, and underwriter costs.

Responses to level of reliance on the information provided by Statement 34										
Level description	% of respondents	Completely unreliable		Slightly unreliable		Slightly reliable		Completely reliable		
Response level		1	2	3	4	5	6	7	Mean	Median
To what degree do you believe that analysts and other municipal market participants rely on Statement 34 information in making decisions?	100%	2%	1%	4%	16%	26%	42%	9%	5.27	6.00

Table 8: Responses to level of reliance on Statement 34 information

Municipalities issuing Statement 34 compliant financial statements

Respondents were asked to assess, based on their experience, the percentage of municipalities using the bond markets that issue financial statements in accordance with Statement 34. The mean response was 72%, while the median and mode was 70%. Responses ranged from 30% to 100%. See Table 9 below for details.

Responses to municipalities issuing financial statement in compliance with Statement 34														
Level description	% of respondents	None										All	Mean	Median
Response level		0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%		
Based on your experience, what percentage of municipalities using municipal bond markets issue financial statements in accordance with Statement 34?	100%	0%	0%	0%	7%	3%	7%	11%	25%	21%	22%	4%	72%	70%

Table 9: Responses to municipalities issuing Statement 34 compliant financial statements

1.6.3 Analysis of open-ended responses

Several of the closed-ended survey questions were followed by open-ended follow-up questions. These were incorporated into the survey to provide further depth

and insight into the responses. Open-ended questions are often useful in surveys when the not all possible answers are known, and when the question is exploratory in nature (Dillman 2000). As this is the first high-level study asking bond analysts to provide their assessment of the usefulness of Statement 34, it was important to obtain additional insights from analysts to better interpret their responses.

In order to analyze the open-ended responses, the researcher first read through the responses to each open-ended question to obtain an overview of responses for each question. The researcher then read through the responses a second time, and created coding categories to capture the themes in the responses. In addition, the researcher created a coding for the tone of the response where applicable so that the sentiment could be captured if the respondent used language that referred positively, negatively, or neutrally about the topic in their answer to the question.

Once the initial coding was created, the researcher then categorized each open-ended response into one or more relevant categories depending upon the response to determine whether there were major themes and trends in the responses. To corroborate the outcomes from the analysis of the open-ended questions, the open-ended survey responses were sent for analysis to an academic researcher with expertise in the area of governmental accounting and to an industry professional (“coders”). See Appendix B for an example of the coding worksheets that were used in the analysis. The coders categorized each response to the open-ended questions into one or more categories provided by the researcher and added relevant categories if they were not provided. They concluded by then describing the theme and major trends that they saw emerge in the

responses to each open-ended question. From the coded outcomes, various themes and trends emerged which were consistent between the researcher and the corroborating coders.

Reasons for the increase or decrease in uncertainty that respondents have about the financial condition of a government they are evaluating.

As mentioned previously, approximately 49% of the respondents indicated some type of change as a result of Statement 34 in the level uncertainty that they have about the financial condition of a government they are evaluating. The majority of these respondents (86%) indicated that uncertainty decreased, while a small percentage (14%) indicated an increase. All respondents selecting increase or decrease were asked a follow up question about the reason for that change in uncertainty.

The most common themes arising from the responses detailing why uncertainty has decreased were that there is more detailed information, improved disclosure and transparency, a better understanding of overall government health and performance, and that the MD&A provides a good overview about the government which helps to reduce uncertainty.

These themes were consistent between the researcher and coders, however, the most common response according to the researcher's coding was "improved disclosure and transparency", while one of the coders most frequently coded responses into the category "more detailed information". This is not surprising because disclosure refers to providing more information, which can also be interpreted as having more details.

A small number of respondents indicated that uncertainty has increased since the implementation of Statement 34. The reasons were varied, but included sentiment that it can create odd trends like deeply negative net assets, while leaving out important debt information because it is in a summary format. It was also noted that the new information has created a false sense of panic for non-municipal analysts who don't understand the nuances of the municipal sector.

Reasons that financial reporting under Statement 34 has increased or decreased the quality of information

As mentioned previously, 68% of the survey respondents indicated that the quality of the information provided by governments has improved since the implementation of Statement 34, 3% indicated that quality has decreased, and 29% indicated that quality has not changed. All respondents selecting increase or decrease were asked in a follow up question to explain to what they attribute this change in quality.

The most common themes arising from the responses detailing why quality has improved could either be categorized as improvements in overall transparency, or improvements brought about by information provided by one of the new components of Statement 34. For improvements in overall transparency, responses most often referenced that the improvement in quality is because there is more detail and overall a more big picture perspective, that the new information provides a window into management within the government, and that there is overall better information quality.

Several respondents referenced specific components of Statement 34 when describing why there was an increase in quality. The MD&A was the most commonly mentioned, followed by the government-wide financial statements.

Although there were very few respondents indicating a decrease in quality, the sentiment from these respondents was that the information provided is not useful for identifying pledged assets and the consolidated data has made it too difficult to identify the specific drivers of credit quality.

Reasons for relying more on either fund or government-wide financial statements in analyses

As discussed previously, 56% of respondents said they rely more on fund financial statements, while 10% indicated they rely more on government-wide financial statements. The remaining respondents indicated that they use them equally in their analyses (32%), or that they were unsure (2%). Those respondents indicating a preference for either the fund or government-wide were asked a follow-up question about why they rely on one more than the other.

For this open-ended question, both the tone and substance of the response was coded. Approximately 70% of the responses about why the respondent relies more on the fund financial statements were in a tone that spoke favorably about the fund financial statements. The most common themes arising from these responses were that the fund financial statements contain important information about the general fund and other funds that are better for analyses and metrics, and that the fund financial statements contain

important information about operations and the overall health of the entity.

Approximately 17% of the responses to why the analyst relies more heavily on the fund financial statements were in a tone that referred negatively to the government-wide financial statements, while approximately 13% of the responses were in a tone that referred to the government-wide financial statements in a neutral tone. The major themes from those responding negatively to government-wide were that the government-wide financial statements are too aggregated and the aggregated information can skew results.

There were a small percentage of respondents who indicated they use government-wide financial statements more than the fund financial statements. However, upon reading the responses to the open-ended question, an additional 2% of the responses appear to indicate a preference for the fund financial statements. The major themes among the remaining responses favoring the government-wide financial statements were that they are better for comparison among entities, more comprehensive and more understandable.

How information in the Statement of Net Assets is used

Respondents were asked for the items they find most valuable on the Statement of Net Assets. The responses were discussed previously. As a follow-up, respondents were asked how they use this information. The most common theme from the responses was that it is used for a variety of metrics, with the most common metrics related to liquidity, solvency, and leverage ratios, reserves or cash on hand, and trends. Other common themes were that it is used to evaluate the overall health of the entity, and that it is not

used.

How information in the Statement of Activities is used

Respondents were asked for items they find most valuable on the Statement of Activities. Those responses were discussed previously. As a follow-up, respondents were asked how they use this information. The most common recurring themes from the responses was that information on the Statement of Activities is used to determine if finances are improving or declining, to determine whether operations are balanced, as a gauge of the overall "health" of entity, and for analysis using ratios and trends. Other common themes were that the information is used for to determine the drivers of profits and whether there is revenue dependence.

Open-ended question follow up to the level of value respondents' assigned to budgetary comparisons

Respondents were asked how valuable the information in the budgetary comparisons is when evaluating a government's finances. Respondents indicating that is was slightly valuable or less (just under half of the total respondents) were asked a follow up question about what would make the information more valuable. Those who indicated it was more than slightly valuable were asked a follow up question about what makes it so valuable.

Just over half of the responses to what would make the budgetary information more valuable spoke negatively about the budgetary information, with respondents

indicating that they do not use it so nothing would make it more valuable, and that the information is unreliable. For those who did not refer negatively about this information, the major themes were that it would be more valuable if there were better overall explanations of assumptions and adjustments, and if they had the ability to evaluate whether initial budget was conservative or on target.

For those indicating that the budgetary information is more than slightly valuable, the major theme was that this information is a window into the quality and credibility of management and the way they manage the budget process. Other common themes were the reporting of the budget to actual data, trends with variances, the level or conservative versus accurate budgeting, the reporting of amendments because this information is not disseminated mid-year, and explanations for the variances.

Other valuable items reported in the MD&A

After responding to a series of questions about information commonly reported in the MD&A, respondents were asked what other items they have seen reported that they find valuable. Slightly less than a quarter of the responses referred negatively to the usefulness of the MD&A as it is normally presented.

Many of those respondents indicated that the MD&A is helpful when it is thorough and not boilerplate or that there was nothing else valuable reported in the MD&A.

Other major themes in the responses were that local economic factors, and discussions from management indicating management competence and understanding were valuable items reported through the MD&A. Smaller themes included debt

information and debt service calculations, forward-looking information, internal government changes, and any inconsistencies or restatements.

Why Statement 34 has increased or decreased the time spent communicating with government officials

Respondents were asked whether Statement 34 has impacted the time they spend communicating with government as part of their evaluation of governments. As previously discussed 60% of respondents indicated that there has been no change, 32% indicated a decrease in the time spent, and 6% indicated an increase in the time spent. Respondents indicating an increase or decrease were asked a follow-up question about why the time spent increased or decreased.

The major theme for those indicating a decrease in time spent communicating with government officials was that the overall financial report documents preemptively address issues, with many specifically addressing or alluding to a well-written MD&A preemptively addressing issues.

The major theme for those indicating an increase in time spent communicating with government officials was that there are new and more questions because more there is more information.

Parting thoughts

Respondents were asked whether they had any other comments about Statement 34 not specifically addressed in the survey questions. Approximately 34% of the

respondents provided additional comments.

The largest percentage of comments (approximately 40%) spoke positively about Statement 34. Approximately 33% of the responses were neutral when referring to Statement 34, while 27% spoke negatively about Statement 34. The themes of these comments were varied, with positive recurring themes including that the financial reports are good when used in combination with fund financials, and that overall disclosure has improved and information is easier to obtain. Negative themes including that the MD&A is too general, that there is a cost and benefit issue because Statement 34 is not a substantial improvement, that there are no useful metrics from 34 Statements, and that the reports are more complex so there is more work involved with analysis. Neutral themes were that the usefulness varies drastically depending upon the size of the municipality, that uniformity is needed and that the MD&A should be reviewed and critiqued.

Overall major themes from open-ended question responses

The overall major themes from the open-ended questions were that the new information provided by Statement 34 has improved overall disclosure and transparency, which provides information about the overall health of the entity and the quality and competence of management. A well-written MD&A provides valuable insight and can lead to more efficient analysis. The MD&A was commonly referred to in many of the open-ended questions, more so than any other component of the new information provided by Statement 34.

However, the new information is thought to be too aggregated and because of this can display information that is not useful and that is misleading. There is a need for management to better explain changes and variances, and MD&A's are often just "boilerplate" and do not provide useful insights; they are often just reiterating what is already in the financial statements. Overall, the respondents overwhelmingly preferred the fund-financial statements to the government-wide presentation.

1.6.4 Additional Analysis

Evaluating through the use of independent-sample t-tests whether there are significant differences between those indicating high versus low levels of familiarity with Statement

34

The data was further reviewed to determine whether there was a significant difference in the responses between those respondents who indicated that they were in the range of somewhat familiar and extremely familiar with Statement 34 (approximately 70% of respondents) and those who indicated that they were in the range of extremely unfamiliar to the midpoint between somewhat unfamiliar and somewhat familiar with Statement 34 (approximately 30% of respondents).

An independent-samples t-test was performed on these two groups for all survey questions that asked respondents about value of the new information provided by Statement 34. Results indicated that there is a significant difference in the means for these two groups in the level assigned to the value of the MD&A in evaluating a government's finances and the value of the MD&A in the evaluating a government's

funds. In both cases the groups indicating a higher level of familiarity with Statement 34 ranked the level of value significantly higher than the less familiar group. There was no other significant difference in the rankings between the two groups.

An independent sample t-test was also performed on the sub-group of respondents indicating slightly familiar to extremely familiar. No significant differences were noted when comparing the outcomes for this sub-sample to the sample set as a whole.

Evaluating whether there are correlations between professional background and survey responses

Responses were further analyzed to determine whether differences in professional and academic backgrounds impacted responses survey. Information about the respondents such as types of governments they evaluate, type of firm they currently work for and firms they have worked for previously, years of experience with current and prior firms, professional certifications, and information about academic degrees was collected at the start of the survey. Because there was variation in years of professional experience and in level of familiarity with Statement 34 (both were discussed above), both were included in the analysis. In addition, whether the respondent has a CPA was analyzed. Pearson correlations for the variables studied are reported in the table below.

Pearson Correlations											
	Years with current firm	Total years professional experience	CPA?	Level of Familiarity with St. 34 Info	Has St. 34 incr or decr quality of info	Level of value - Gov't-wide	Level of value - Budgetary data	Level of value - MD&A	Level of efficiency	Level that St. 34 helps understand gov't finances	Level of reliance on St. 34
Years with current firm	1	.563**	0.026	-0.156	0.139	-.210*	0.086	0.076	-0.043	0.039	-0.059
Total years professional experience	.563**	1	0.029	-0.147	0.066	-.250**	-0.110	0.062	-0.128	0.037	-0.052
CPA?	0.026	0.029	1	-0.001	-0.179	0.118	0.076	-0.102	0.228	-0.010	-0.035
Level of Familiarity with St. 34 Info	-0.156	-0.147	-0.001	1	.399**	0.157	0.023	0.123	0.192	.308**	.238*
Has St. 34 incr or decr quality of info	0.139	0.066	-0.179	.399**	1	.290*	.255*	.443**	0.250	.447**	.241*
Level of value - Gov't-wide	-.210*	-.250**	0.118	0.157	.290*	1	0.172	0.168	0.257	.450**	.513**
Level of value - Budgetary data	0.086	-0.110	0.076	0.023	.255*	0.172	1	0.175	.383**	0.150	0.159
Level of value - MD&A	0.076	0.062	-0.102	0.123	.443**	0.168	0.175	1	0.160	.413**	.372**
Level of efficiency	-0.043	-0.128	0.228	0.192	0.250	0.257	.383**	0.160	1	.586**	.273*
Level that St. 34 helps understand gov't finances	0.039	0.037	-0.010	.308**	.447**	.450**	0.150	.413**	.586**	1	.613**
Level of reliance on St. 34	-0.059	-0.052	-0.035	.238*	.241*	.513**	0.159	.372**	.273*	.613**	1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 10: Pearson Correlations

Correlations indicate that years of professional experience and years with current firm are negatively correlated and significantly impact the level of value placed on the government-wide financial statements. This means that the longer a respondent has worked as a bond analyst, the less value they place on the government-wide financial statements. It is unclear whether this is a result of experience, different training, habit, or some other reason.

Correlations also suggest that the more familiar respondents are with Statement 34, the more likely they are to find Statement 34 has increased the quality of financial statements and that it helps them to better understand a government's finances.

1.7 Conclusion

This study was designed to evaluate whether Statement 34 improved disclosure in the municipal markets and reduced information asymmetry between governments and financial statement users. More specifically, it obtained the views of municipal analysts about whether the new information provided by Statement 34 has improved the quality of financial reporting by governments and provided a clearer picture of the government financial position. In addition, it obtained analysts' views about the value of the new information in their analyses, and whether the new information has impacted the efficiency of their analyses, and whether they rely on this information in their analyses.

Overall, results of this study indicate that analysts feel favorably towards Statement 34 overall but that they still rely on fund financial statements more than government-wide financial statements. Analysts indicate that while the quality and transparency of financial reporting has improved, the change has not been substantial and that much of the most important information in their analyses continues to be provided by the fund financial statements. The majority of the respondents indicated that the new information provided by Statement 34 has improved quality, but it has not reduced uncertainty, nor has it impacted the time they spend communicating with government officials.

The most valued new component of Statement 34 as indicated by the responses is the MD&A. Evidence from the survey suggests that a well-written MD&A can provide important insight pertaining to the quality of management, and the financial condition of the government, but that many MD&A are too general to be effectively utilized.

Respondents most like the analysis of the fund information disclosed in the MD& A as well as the currently known facts that have the ability to impact municipality's financial position. Disclosure level and transparency rank as important factors for analysts when evaluating a government's financial information, but the highest ranking information is still information that can be found for the most part on the fund financial statements.

Negative sentiment about Statement 34 suggests that the government-wide financial information is of limited usefulness because it is in a summary format, with information combined from funds that are not able to actually mix. This limits the usefulness of the information provided, and many respondents indicated that they don't use this information or only use it in a limited manner.

A cursory review of the correlations between the demographic information of the respondents and the previewed value of the Statement 34 information suggests that the longer individuals have worked in the municipal bond sector, the less value they place on the government-wide financial statement information. Further research is needed to understand the reason for this. Among other reasons, it could be that these users have a better understanding of the information needed and therefore do not use this information, or alternatively, that users that are newer to the municipal market are being trained to use this information in ways that are not apparent to seasoned analysts.

Future research is also needed to evaluate whether the improved quality of the financial statements widely indicated by respondents has had any impact in the financial markets. Most notably, respondents indicated that the MD&A is the most valuable aspect of the new Statement 34 information, so further research is needed to understand whether

there are benefits in the markets to the information provided by the MD&A. This has not yet been studied, and it will be addressed further in the second essay of this dissertation.

CHAPTER 2 - Assessing the Impact of GASB 34: An exploratory study of the determinants of variation in MD&A disclosure in the post-GASB 34 regime.

2.1 Introduction

The GASB Statement 34 reporting model requires governments to report a Management's Discussion and Analysis (MD&A), government-wide accrual-basis financial statements including the reporting of long-term debt and capital assets, and original budget comparison information in addition to the fund financial statements and adjusted budget-to-actual results that were required under the old reporting model. The change in regulation from fund-based financial reporting to a comprehensive reporting model is considered the most significant change in financial reporting in the history of governmental accounting. The goal was to provide users with more information about governments in an easier to understand format.

Proponents of Statement 34 have argued that it improves accountability, transparency, comparability, and quality of financial reporting to better comply with the GASB financial reporting concepts (GASB 1987, 1999). In a letter responding to the exposure draft of Statement 34, The Chicago Municipal Analysts Society (CMAS) a member society of the NFMA notes:

“the proposed model will present a clearer overall picture of the...financial position for reporting governments. Current reporting by governments has not satisfactorily addressed several key elements of municipal credit analysis. The analytical community has adapted to these shortcomings...by de-emphasizing financial statement analysis and/or substituting economic or demographic proxies in their analytical work”.

Others have opposed all or parts of Statement 34, including the American Institute of Certified Public Accountants (AICPA), the Government Finance Officers Association (GFOA), the International City/County Management Association (ICMA), Ernst & Young, KPMG, Deloitte & Touche, the National Association of State Auditors, Comptrollers and Treasurers (NASACT), and National Association of State Budget Officers (NASBO). In response to the exposure draft, the AICPA said “The proposed dual-perspective ... tries to meet so many user needs that it fails to be effective.” The GFOA said “Governments cannot be asked to incur significant costs to provide information of no demonstrative value.” NASACT said, “This new practice ... brings into question the relevance, reliability, and even integrity of financial reporting for governments.” NASBO said, “In discussion with representatives of rating agencies, we have been assured that they currently receive appropriate financial information”.

The previous essay of this dissertation reports that in a 2013 survey of municipal bond analysts who are members of the National Federation of Municipal Analysts (NFMA), the majority of analysts believe that the quality of financial reporting by governments has improved under Statement 34, and that the information provided by Statement 34 has helped make their analyses more efficient. Analysts’ indicated that the MD&A is the most valuable new component of the Statement 34 reporting model, but reported that the quality of the MD&A varies greatly between municipalities. One analyst said, “I had really high hopes for the MD&A and by and large, it is an improvement and valuable for investors. But I think that entities don't really use it for what investors want to know... it usually lacks analysis and discussion... not always, but

often.” Another analyst said, “The level of value of the MD&A depends largely on the quality of the information reported...the information might be anywhere from not valuable to extremely valuable, depending on how thorough and informative the information provided by the preparer is.”

However, whereas other new components of the Statement 34 reporting model have been studied extensively, including the value relevance of the government-wide financial statements (Plummer et al 2007, Pridgen and Wilder 2013, Johnson et al 2012, Marlowe 2010), and the reporting of infrastructure (Vermeer et al 2011), there is only one known study that specifically address the MD&A reported by governments. Guo et al (2009) evaluate a small sample of Florida cities and determine that there is significant variation in the quality of the MD&A’s in the sample. However, they use a small, homogenous sample of large cities in Florida, and they do not study the potential causes of this variation, nor to they study whether the variation is associated with economic benefits in the capital markets. Given the feedback by analysts on the value of the MD&A in the prior essay, it warrants further evaluation.

In addition, the environment of bond insurance in the municipal sector has changed greatly over the last several years. Before the 2008 financial crisis, over 50% of new municipal bonds were insured (McGee 2009). Many of the municipal bond insurers incurred significant losses from insuring mortgage-backed securities and were repeatedly downgraded by the major rating agencies. As of 2008 the bond insurance industry went from nine major private insurers to one, and the remaining insurer was subsequently downgraded from AAA. In 2010 AMBAC, a major provider of bond insurance in the

municipal sector, filed for bankruptcy. As of 2012, only 3.6% of municipal bonds were insured.

To further explore the findings in the prior essay, this study will evaluate the period after the implementation of Statement 34 to determine empirically whether there is significant cross-sectional variation in the disclosure quality in the MD&A reported by municipalities. To more fully understand the variation in disclosure quality, it will further explore the potential determinants of the variation in MD&A disclosure quality, as well as any effects of this variation in the municipal capital markets. According to prior literature, timely and informative disclosures reduce the likelihood that unfavorable value-relevant information will be withheld, resulting in a lower risk premium (Sengupta 1998).

This study is an important contribution to the existing literature for several reasons. It is timely because Statement 34 was implemented a decade ago so enough time has passed for analysts to incorporate the new information provided into their analyses. It is important to study the MD&A component of the Statement 34 reporting model because analysts' have indicated that it is more valuable than any other new component of the Statement 34 reporting model yet only one known study addresses the MD&A. In addition, with the loss of bond insurance to protect municipal bond investors against potential losses, municipal disclosure has become much more important. Given that the requirements for MD&A disclosure are prescribed but intentionally vague, it is an area where municipalities can provide important information to investors. As studied by Guo et al (2009), there is indeed significant variation in this disclosure. Statement 34

is also highly controversial and its value is still uncertain so literature is needed in this area.

It is also important to study municipal disclosure practices and the potential effects of these practices because disclosure can be costly for municipalities, and the benefits are uncertain. In 2010 the major rating agencies recalibrated their ratings using a global ratings scale, acknowledging that state and local bonds have had a historically low default rate when compared to other classes of fixed income securities. This essentially provided a “face-lift” to municipal bond ratings. With the vast majority of municipal bond ratings at investment grade, it is unclear whether there is any significant benefit to providing good quality disclosure, particularly when considering that there are costs to supplying this disclosure.

This paper will proceed as follows: In the next section, I will review literature that studies determinants of municipal disclosure and develop hypotheses for the determinants of MD&A disclosure. In the sections following the review of literature, I will discuss disclosure index, the sample and finally the results and conclusions.

2.2 Determinants of Disclosure – An exploratory analysis

There have been many studies that look at the determinants of the extent of disclosure, with inconsistent results. Several studies have found that entity size is associated with the extent of disclosure (Gordon et al 2002, Chow and Wong-Boren 1987, Buzby 1975, Cerf 1961). Gordon et al (2002) use total gross assets as a proxy for entity size when studying colleges and universities.

In the governmental sector, Robbins and Austin (1986) find that city government form, long-term debt per capita, percentage of intergovernmental revenue and size of the

audit firm are significantly associated with measures of disclosure quality. However, Gordon et al (2002) do not find support for governance and leverage as predictors for disclosure.

Gore (2004) finds that regulation impacts disclosure, and studies the consequences of that variation in disclosure. Ingram and DeJong (1987) and Copley (1991) do not find that regulation significant impacts disclosure level.

However, none of the prior studies look at the period after the implementation of Statement 34 to evaluate the determinants of the variation in the extent of disclosure in the new information provided by Statement 34. Since analysts' indicated that the MD&A was the most valuable new component of the Statement 34 reporting model, and Guo et al (2009) document a significant variation in the quality of the disclosure in the MD&A, I will study a sample of MD&A disclosures for municipal bond issuers in Texas, a state that mandates GAAP disclosure, and evaluate the determinants of the cross-sectional variation in the disclosure.

Prior literature indicates that are many potential variables that may be associated with disclosure. Many of these studies begin by determining factors that would be likely to impact disclosure, commonly referencing Ingram (1984) and Zimmerman (1977), who indicate coalition of voters, administrative power, and management incentives are factors likely to impact disclosure. The studies then select constructs and proxy variables for these factors. These have included economic coalition for coalition of voters, with the proxy per capita income (Robbins and Austin 1986, Ingram 1984), appointive power for administrative power, with the proxy government form (Robbins and Austin 1986,

Ingram 1984), and reliance on debt, reliance on federal grants, city wealth, professionalism, and complexity for management incentives, with proxies including long-term debt per capita, intergovernmental revenue, own revenue, size of audit firm, and population. Others have used total assets as a proxy for complexity, or have focused on political incentives (Zimmerman 1977).

To make data collection feasible, this study focuses on the following variables: per capita income, long-term debt per capita, intergovernmental revenue, own revenue, population and total assets. In addition, the effect of bond insurance on disclosure choice will be studied. There was a significant drop in bond insurance after 2007 (McGee 2009), and bond insurance has been found to be a substitute for disclosure (Gore et al 2004).

Size

Many studies have found an association between size and the extent of disclosure (Wallace and Naser 1995, Fischer and Gordon 2008). Suggested reasons for this relationship are the economies of scale of producing information and to reduce the political costs that arise as a municipality's visibility increases (Foster 1986). Therefore, I propose the following hypotheses about the impact of size on the extent of disclosure in the MD&A:

H1: The extent of disclosure in the MD&A will increase as the size of population of the municipality increases.

H2: The extent of disclosure in the MD&A will increase as the size of the assets of the municipality increases.

Leverage

Highly leveraged municipalities are thought to disclose more readily because they access the municipal capital markets, and therefore are monitored by their investors and rating agencies (Jensen and Meckling, 1976, Daley and Vigeland 1983). Studies have found mixed results, with some reporting that leverage is positively associated with disclosure (Gordon and Fisher 2008, Zimmerman 1977, Robbins and Austin 1986), while others find no significant relationship between leverage and disclosure (Gordon et al 2002). I propose the following hypotheses about the impact of leverage on the extent of disclosure in the MD&A:

H3: The extent of disclosure in the MD&A will increase as the level of debt per capita of the municipality increases.

Wealth

The wealth of the municipalities has been posited to impact the level of disclosure because it can be used to cover accounting changes and may represent the need for additional information because of the larger resource base available.

Ingram (1984) finds wealth, measured by the municipality's own revenue per capita, to be positively associated with disclosure at the state level, but Robbins and

Austin (1986) do not find this to be a significant indicator of disclosure at the local government level. I propose the following hypotheses about the impact of wealth on the extent of disclosure in the MD&A:

H4: The extent of disclosure in the MD&A will increase as the own revenue per capita of the municipality increases.

In addition to the wealth of the municipality, the wealth of its citizens has been posited to impact disclosure choices. Citizens of greater wealth may be willing to pay more for disclosure. Results on this measure have been mixed as well with Ingram (1984) finding a significant positive correlation between per capita income and disclosure, while Robbins and Austin (1986) do not find a significant correlation. I will evaluate per capita income for an effect on disclosure in the MD&A with the following hypothesis:

H5: The extent of disclosure in the MD&A will increase as the per capita income of the municipality increases.

Intergovernmental Funds

Many municipalities receive grants and funding from other governments. A dependence on external funding sources can lead to an increase in disclosure requirements because more disclosure is required from the grantor. Prior literature has

found mixed results, with some support reported by Robbins and Austin (1986) and no support found by Ingram (1984). I propose the following hypothesis:

H6: The extent of disclosure in the MD&A will increase as the intergovernmental revenue of the municipality increases.

Insurance

Gore et al (2004) determined that bond insurance and disclosure are substitutes. I propose the following hypothesis:

H7: The extent of disclosure in a municipal MD&A will decrease in the presence of bond insurance.

2.3 Disclosure Index

To measure the extent of disclosure, an index of disclosure was developed for the sample using the MD&A reported in the official offering statement for each municipality as the disclosure medium. Each MD&A was reviewed in detail by section using the sections outlined in Statement 34 (GASB 1999) and an index of disclosure was developed based upon the actual disclosures provided in the sample set. See Figure 11 for a summary of the major sections in the disclosure index. A full list of the items included in the disclosure index can be found in Appendix D. The index was adjusted throughout the review process as new disclosures were discovered in the sample MD&A and then all prior MD&A were reviewed again to determine whether they contained those

additional disclosures. A point was given for each section included in the MD&A and then additional points for given for each item disclosed within that section. When the review of MD&A disclosure was complete, each municipality had a “raw score” of disclosure by section, and overall.

Next, the results of the survey in the prior essay were incorporated into “raw score” to weight the disclosures by importance. Analysts’ in the survey from the prior essay were asked to score each individual section of the MD&A based upon its value in their analyses. The mean score reported in the survey provided weights for the disclosure index. From this information, a final, overall weighted score was calculated. As noted in Table 11, disclosure scores were calculated from the MD&As of 75 Texas cities and scores ranges from a low of 7.16 to a high of 17.00. Descriptive statistics for the sample are below in Table 11. Additionally, descriptive statistics are provided in Table 12 for the smaller verses larger sized municipalities.

Summary of the Major Sections of Disclosure Index

- A. Brief discussion of the basic financial statements, including the relationships of the statements to each other, and the significant differences in the information they provide.
- B. Condensed financial information derived from government-wide financial statements comparing the current year to the prior year.
- C. Analysis of the government's overall financial position and results of operations to assist users in assessing whether financial position has improved or deteriorated as a result of the year's operations.
- D. Analysis of balances and transactions of individual funds, including the reasons for significant changes in fund balances or fund net position and whether restrictions, commitments, or other limitations significantly affect the availability of fund resources for future use.
- E. Analysis of significant variations between original and final budget amounts and between final budget amounts and actual budget results for the general fund, including any currently known reasons for those variations that are expected to have a significant effect on future services or liquidity.
- F. Description of significant capital asset and long-term debt activity during the year, including a discussion of commitments made for capital expenditures, changes in credit ratings, and debt limitations that may affect the financing of planned facilities or services.
- G. Description of currently known facts, decisions, or conditions that are expected to have a significant effect on financial position or results of operations.

Figure 11: Summary of the major sections of the disclosure index

Descriptive Statistics						
	N	RANGE	MIN	MAX	MEAN	STD DEV
DSCORE	74	9.84	7.16	17	12.3482	2.37011
DSOVER	75	2.06	2.06	4.11	3.0551	0.32595
DSGWEX	75	2.06	2.06	4.11	2.7491	0.28696
DSGWAN	75	2.69	0.39	3.08	1.5097	0.70454
DSFDAN	75	2.24	0.19	2.43	1.1437	0.52321
DSBUD	75	2.62	0	2.62	1.1511	0.64875
DSCPDT	75	2.17	0.37	2.54	1.3209	0.51038
DSECON	75	2.5	0.36	2.86	1.3378	0.58478
RAWSC	75	43	19	62	40.83	10.595
Valid N	74					

Table 11: Descriptive statistics for disclosure index – full sample

Descriptive Statistics							
SIZE		N	RANGE	MIN	MAX	MEAN	STD DEV
SMALL	DSCORE	34	8.45	7.16	15.61	11.1005	2.1068
	DSOVER	34	2.06	2.06	4.11	3.0523	0.39878
	DSGWEX	34	2.06	2.06	4.11	2.6997	0.33478
	DSGWAN	34	2.27	0.39	2.66	1.2706	0.59915
	DSFDAN	34	1.87	0.19	2.06	0.8415	0.47031
	DSBUD	34	2.24	0	2.24	0.9682	0.63036
	DSCPDT	34	1.89	0.37	2.26	1.0715	0.46541
	DSECON	34	1.79	0.54	2.32	1.0985	0.49602
	RAWSC	34	36	19	55	34.71	9.111
	Valid N	34					
LARGE	DSCORE	40	7.95	9.05	17	13.4087	2.06117
	DSOVER	41	1.03	2.57	3.6	3.0574	0.25562
	DSGWEX	41	1.37	2.74	4.11	2.7901	0.23681
	DSGWAN	41	2.47	0.62	3.08	1.708	0.73023
	DSFDAN	41	2.04	0.39	2.43	1.3943	0.42654
	DSBUD	41	2.62	0	2.62	1.3028	0.63149
	DSCPDT	41	1.61	0.93	2.54	1.5277	0.45439
	DSECON	41	2.5	0.36	2.86	1.5363	0.58358
	RAWSC	41	34	28	62	45.9	8.997
	Valid N	40					

Table 12: Descriptive statistics for disclosure index of municipalities by size

2.4 Sample

The sample is taken from Texas municipalities accessing the debt markets in during the time period from 2010 through the first half of 2012. The sample comprises municipalities from within one state because it increases the internal validity of the study and because Texas is generally known to provide good disclosure, so the sample data is more reliable. In addition, Texas reports on the GAAP basis of accounting and complies with Statement 34 reporting requirements so municipalities in Texas should provide MD&A disclosure as part of their reporting package. In Texas, the Permanent School

Fund provides bond insurance that backs many municipal bond issues. The municipalities selected in this study are cities, so they are not insured by this fund.

A list of the 244 general obligation bond issues in covering fiscal year 2011 and the first half of 2012 for cities in Texas was obtained from the Texas Bond Review Board website from the spreadsheet titled Details of Bond Issuance Costs in Fiscal Year Ending August 31, 2011 for Texas local governments and from data provided by Ipreo, Inc. and a stratified random sample of 118 municipalities is initially selected. Of those selected, 25 were private placements and no disclosure data was available on MSRB's EMMA database. This left 93 data points. Of those, 12 were duplicate municipalities, leaving 81 unique municipalities. Official offering statements were obtained for the 81 municipalities from the Electronic Municipal Market Access system (EMMA), the official central municipal disclosure repository created by the Municipal Securities Rulemaking Board (MSRB). This site provides free public access to disclosure and other information about municipal market participants and is recognized by the National Federation of Municipal Analysts.

Six of the official offering statements did not contain an MD&A and were subsequently removed from the sample, leaving 75 municipalities available for inclusion in the study. Although this could introduce a selection bias, the study is intended to review the MD&A for municipalities who have made this documentation readily available to the capital markets. Municipalities who do not make this information readily available fall into a different population and including them would create outliers in the

population being studied. A Cook's distance was run on the remaining data points and no significant outliers were noted.

Upon further review of the private placements, it was noted that 23 of the 25 municipalities fell in the lower half of the sample set in size of the debt issue. Of the 23 private placements, 19 fell in the first three deciles. Private placements can be a signal of a riskier or lower grade of bond or that the issuer does not have an established credit history (Kwan and Carleton 2010). When a bond issue is done through private placement, the bonds are usually sold directly to a small group of investors through an intermediary and information is disclosed only to those direct investors, rather than to the public. It is recognized that the sample selected is biased against finding effects of disclosure not because of anything introduced in the study, but rather because of the lack of available data on the private placement issues which are on the smaller end of the sample. See Table 13 for the descriptive statistics for the sample and Table 14 for Pearson correlations.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Total Assets	80	7775590	19376030000	735522161.01	2554230059.994
Population (2010 Census)	81	2472	2099451	94996.65	285484.152
Per Capita Income	81	11565	119252	28339.43	16036.920
Total Debt Outstanding Per Capita	81	441	7151	2365.00	1424.759
Intergovernmental Revenue/Total Revenue	81	.00000	.57342	.0779993	.09041594
Own Revenue Per Capita	81	357	5987	917.59	645.880
Disclosure Score	75	7.16	17.00	12.3517	2.35423
Average underlying (1 is highest)	78	1	7	3.90	1.345
Bond Insurance (1 if yes)	118	0	1	.23	.422
Deal Size or Par Amount	118	94000	123000000	10085626.75	19033464.696
Valid N (listwise)	72				

Table 13: Descriptive statistics for all variables

Pearson Correlations									
	Disclosure Score	Bond Insurance	Own Revenue per Capita	Intergovernmental Revenue %	Debt outstanding per capita	Per capita income	Population	Ln Total Assets	Total Assets binary
Disclosure Score	1	-.369**	0.06	0.2	.303**	-0.059	0.216	.593**	.539**
Bond Insurance	-.369**	1	-0.118	0.057	-.267*	-.246*	-0.178	.485**	.403**
Own Revenue per Capita	0.06	-0.118	1	-0.028	0.212	.255*	0.004	-0.011	-0.073
Intergovernmental Revenue %	0.2	0.057	-0.028	1	0.117	-0.056	0.18	.288**	0.218
Debt outstanding per capita	.303**	-.267*	0.212	0.117	1	0.125	.525**	.566**	.335**
Per capita income	-0.059	-.246*	.255*	-0.056	0.125	1	-0.06	-0.085	-0.054
Population	0.216	-0.178	0.004	0.18	.525**	-0.06	1	.639**	.298**
Ln Total Assets	.593**	-.485**	-0.011	.288**	.566**	-0.085	.639**	1	.768**
Total Assets binary	.539**	-.403**	-0.073	0.218	.335**	-0.054	.298**	.768**	1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 14: Pearson Correlations

2.5 Results

Table 15 below shows the results for the complete model of determinants of disclosure using ordinary least squares regression. This method is appropriate because there is a continuous dependent variable and independent variables are scaled to increase normality. The model has an adjusted R-square of .364 with the natural log of total assets and populations as the only significant variable in determining disclosure score. Results indicate support for H2, and significance for H1, but not in the expected direction. Results show that disclosure increases as total assets increase and the relationship is significant at $p < .001$ and total disclosure decreases as population increases. Results for total assets are consistent with prior studies finding a positive relationship between total assets and disclosure (Gordon et al 2002, Chow and Wong-Boren 1987, Buzby 1975, Cerf 1961). This could be the economies-of-scale for municipalities with a greater extent of assets to disclose, or that higher visibility leads to a higher expectation for accountability. It could also be that investors require a higher level of disclosure associated with a higher level of financial risk.

However, population has a negative association with disclosure. Although population and assets have both been used as proxies for disclosure, assets are not necessarily associated with population size. Population could be an indication of a complex political environment where there is more political risk, which can lead to a lower level of disclosure. For instance, a larger population may correlate with more interest groups and lower disclosure.

Other variables were not supported as determinants of disclosure when included in the full model, including population, debt outstanding per capita, own revenue per

capita, intergovernmental revenue as a percentage of total revenue, and a dummy variable for bond insurance, including deal size as a control variable. These variables have had mixed results in prior studies.

To further explore the determinants of disclosure and the effect that the variables have on each other, the variables were explored additively for their association with disclosure until the full model was built. See Table 15 for model significance and coefficients. Because total assets are the only significant variable in the full model, it was added last when the variables were explored additively. Beginning with bond insurance, the model is significant at $p < .001$ showing an inverse and significant ($p = .001$) relationship with disclosure score. This indicates that municipalities without bond insurance have better disclosure than those with bond insurance. This indicates that bond insurance may substitute for disclosure, a finding consistent with Gore et al (2004).

Next financial incentives for disclosure were added, starting with own revenue per capita. Results show that bond insurance is still significant at $p = .001$, but that own revenue per capita is not significant.

Next intergovernmental revenue as a percentage of total revenue is added. This is an indication of dependence on funds from other governments and is considered another possible variable that explains disclosure choices. Revenue obtained from other governments normally requires accountability so it may be associated with greater disclosure. Results show that intergovernmental revenue percentage is a significant indicator of disclosure ($p = .05$) while bond insurance continues significance at $p = .001$.

Next debt per capita is added. This financial incentive is thought to have a positive association with disclosure, as a greater extent of debt should create a demand for disclosure by investors. This variable is marginally significant ($p=.098$). Bond insurance continues to be significant ($p=.005$) and intergovernmental revenue continues to be significant ($p=.09$).

Next, per capita income is added to the model. This variable is not significant ($p=.13$). Bond insurance continues to be significant ($p<.003$) and debt outstanding per capita and intergovernmental revenue percentage are marginally significant.

Next population is added. This variable is not significant but the introduction of this variable causes per capita income and debt per capita to lose their significance. Bond insurance continues to be significant ($p<.002$).

Finally, total assets are added in their natural logarithmic form, and then as a binary variable set to 1 for the larger half of the sample. In the natural logarithmic form, total assets are significant ($p<.001$) and population is significant ($p=.03$), and all of the other variables are no longer significant.

When total assets are incorporated as a binary variable, results are significant ($p=.001$), bond insurance is marginally significant ($p=.11$), and population is not significant. This may be an indication that although investors consider disclosure to be a substitute for bond insurance (see Gore et al 2004), when there is substantial financial risk, the demand for disclosure exists regardless of whether or not a municipality has bond insurance, or a substantial amount of funding from other governments.

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7		Model 8	
	<u>B</u>	<u>t</u>	<u>B</u>	<u>t</u>	<u>B</u>	<u>t</u>	<u>B</u>	<u>t</u>	<u>B</u>	<u>t</u>	<u>B</u>	<u>t</u>	<u>B</u>	<u>t</u>	<u>B</u>	<u>t</u>
BINS	-1.92	-3.39 *	-1.913	-3.324 *	-1.951	-3.457 *	-1.694	-2.932 *	-1.891	-3.223 *	-1.89	-3.183 *	-0.174	-0.267	-0.987	-1.619
OWNREV			0.000	0.105	0.000	0.159	0.000	-0.119	0.000	0.838	0.000	0.204	0.000	0.876	0.000	0.79
INTREV					5.461	1.996 **	4.709	1.719 ***	4.554	1.677 ***	4.548	1.651 ***	0.794	0.307	2.365	0.373
DEBT							0.000	1.677 ***	0.000	1.712 ***	0.000	1.444	0.000	0.094	0.000	1.095
PCAPINC									0.000	-1.524	0.000	-1.495	0.000	-0.255	0.000	-1.016
POP											0.000	0.018	0.000	-2.212 **	0.000	-0.301
ASSETS													1.148	4.428 *		
BASSETS															1.922	3.456

*Significant at <=.01
**Significant at <=.05
***Significant at <=.10

Table 15: Results from additive OLS regression models

Components of the MD&A

The model was also tested using the components of the MD&A disclosure index to determine whether municipal characteristics as associated with disclosure differently among different sections of the MD&A. One model with interesting results is described in more detail.

See Table 16 below for the full model when the dependent variable was the disclosure score for the section of the disclosure index that focused on an analysis of the fund statements. Similarly to the model incorporating the full disclosure index, bond insurance was significant in the additive model until the size variables were incorporated into the model. In the full model, significant variables include population and total assets. However, own revenue per capita is also a significant indicator of the level of disclosure in the section analyzing fund-based information. This may be because municipalities with their own sources of revenue have a greater depth of discussion in the MD&A about the funds generating the revenue.

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	-4.077	1.072	-3.802	.000
	Bond_Insurance_1ifies	-.081	.141	-.070	.566
	Own_Revenue_Per_Capita	.000	.000	.206	.037
	Intergovtl_Revenue_to_Total_Revenue	-.411	.558	-.073	.463
	Per_Capita_Income	1.974E-006	.000	.062	.547
	Total_Debt_Outstanding_PER_CAPITA	-2.275E-005	.000	-.062	.610
	Population_2010_Census	-6.129E-007	.000	-.346	.009
	In_Total_Assets	.274	.056	.806	.000

a. Dependent Variable: DSCORE_Funds_Analysis

Table 16: Results for regression model when dependent variable is disclosure score for fund analysis

2.6 Conclusion

This is the first study that evaluates the determinants of disclosure in the MD&A portion of the Statement 34 reporting model. Prior studies have only indicated that significant variation exists in disclosure via this medium. The variation in the disclosure scores in the MD&As for the municipalities in this study further supports the notion that significant variation exists in the MD&A disclosure.

Overall, results indicate that although many factors may impact disclosure, the most important determinant of disclosure is the size of the municipality, as measured by the natural log of total assets and population. It is possible that the size of the municipality represents the complexity of that municipality or the overall access to resources. Municipalities with greater complexity may have more to disclose, and those with greater resources may find it less costly to disclose. Disclose may also be a function

of financial and political risk. Prior studies that have found size to be a significant indicator of disclosure speculate that this could be due to economies of scale or greater political costs (see, for example, Fischer and Gordon 2008).

In addition, the size of the municipality may be the strongest determination of whether or not the municipality will obtain bond insurance, and whether or not the municipality will obtain a significant amount of debt or depend upon other governments as a significant source of revenue.

Limitations of this study are that the sample consists of only one state, Texas, and only one type of municipality, cities. Although this may reduce the generalizability of the study, it increases the internal validity because the types of relevant disclosure are likely to be more consistent using similar types of municipalities and one geographic region.

CHAPTER 3 - Assessing the Impact of GASB 34: The impact of MD&A disclosure on credit rating and true interest costs – an analysis from the perspective of the rating agencies and the investors

3.1 Introduction

This essay is a continuation of the prior study evaluating the cross-sectional variation in disclosure of the new information provided by Statement 34. The prior essay focused on the determinants of the variation in disclosure, while this essay focuses on the effect of the variation in disclosure on default risk and true interest costs in the municipal bond market. This essay begins with a discussion of contracting and the effects of information asymmetry on contracting costs. It then continues with a discussion of prior literature on disclosure and Statement 34, disclosure via the MD&A and the impact of disclosure on borrowing costs. This discussion is followed by hypotheses, sample selection, and results.

3.2 Contracting

There are many possible uses of financial statement information. These uses include, but are not limited to, efficiently contracting, determining valuation, and monitoring stewardship over an entity's assets. The impact and usage of financial information in these areas have been extensively studied in the corporate literature, but has been studied little, particularly post-Statement 34, in governmental literature. In this study, I will focus how disclosure impacts default risk as well as the efficiency of contracting.

When new debt is issued, there are terms that are written and agreed to by the lender and the debtor. These debt covenants and other debt contract terms are often used as a way of contracting between a debt issuer and a lender to control agency conflicts (Smith and Warner 1979, Berlin and Mester 1992, Rajan and Winston 1995, Gorton and Kahn 2000, Garleanu and Zwiebel 2009). The covenants may make use of a variety of accounting information and ratios (Leftwich 1983, Dichev and Skinner 2002) as well as other information. For example, Demerjian (2011) finds that as accounting standards have focused more on the balance sheet (i.e. the use of accruals, etc.), balance sheet information has been used less in covenants and focused more on cash flows which are not as easily manipulated.

Prior studies have found that the larger the probability that an entity is withholding value-relevant information, the higher the risk premium they will likely be assessed (Sengupta 1998). To make this assessment, lenders and underwriters will likely look at the timeliness, the degree of detail and the clarity in prior disclosures and the availability of management among other things (Sengupta 1998). Entities consistently scoring high in these areas attach a lower probability that adverse information is being withheld and therefore charge a lower risk premium (Sengupta 1998). High quality disclosure provided by Statement 34 compliant financial statements could provide more efficient contract, leading to lower borrowing costs for the issuer providing the disclosure.

3.3 Prior literature and hypothesis development

Disclosure has been studied extensively in the corporate sector, with prior literature showing that higher quality reporting and disclosure reduce cost of capital (Diamond and Verrecchia 1991, Botosan 1997, Botosan and Plumlee 2002, Francis et al 2004, Hail and Leuz 2006), as well as estimation risk (Lambert et al 2007). Other studies show that accounting policies and disclosure have an association with proxies for liquidity and information asymmetry (Leuz and Verrecchia 2000, Healy et al 1999, Welker 1995).

Disclosure using qualitative information has also been studied extensively in the corporate sector. Several studies have found that quantitative measures alone do not explain stock prices and changes in stock prices (Roll 1988, Culter et al 1989, Lev and Thiagarajan 1993, Amir and Lev 1996). Gangolly and Wu (2000) note that text can be found in the databases of approximately 90% of large American companies. Tetlock et al (2008) finds that qualitative information provided by news outlets are useful and capture information about firms that is “hard to quantify”.

Prior literature on Statement 34 has focused on the government-wide financial statements, finding that they provide information incremental to fund financial statements in predicting default risk (Plummer et al 2007, Johnson et al 2012, Pridgen and Wilder 2013) or borrowing costs (Marlowe 2010). These studies evaluate whether the news provided by the accrual-basis financial statements helps to predict default risk. They do not study other new components of the Statement 34 reporting model. Post Statement 34, research is needed to better understand whether other Statement 34 disclosure is

associated with default risk, and true interest costs, which is a proxy for debt contracts terms in this study.

As indicated by the results of the survey in the prior essay, analysts' believe that the quality of the financial reports has improved under Statement 34 and the MD&A is the most valuable new component of the financial reporting package, rating it higher than the government-wide financial statements and the new budgetary data. However, Guo et al (2009) find that there is significant variation in the quality of the MD&A for a sample of Florida cities, but do not explore the potential reasons for this variation, nor to they explore whether this variation is associated with variation in default risk or borrowing costs in the municipal capital markets.

Anecdotal evidence suggests that there may be a relationship between default risk and disclosure. For example some of the major rating agencies have stated that they consider the quality of accounting information when establishing bond ratings (S&P 1982, Fitch 2013). In fact, Fitch (2013) notes that "management policies, practices, and actions can...afford strong ratings to entities with limited economic or financial resources, or weaker ratings to more diverse or affluent entities." Additionally, prior literature on disclosure indicates that disclosure may be related to measures of default risk in the debt markets (Fisher 1959, Jaffee 1975, Kidwell et al 1984, Fung and Rudd 1986, Sengupta 1998).

However, results have been inconsistent, especially when evaluating default risk as well as interest costs. Wilson and Howard (1984) found a positive correlation between disclosure and bond rating, but unrelated to interest costs. This may have been due to

collinearity in their model because they used both a disclosure index and a certificate of conformance to represent disclosure quality. Benson et al (1986) used only one measure of reporting quality and found a relationship between reporting quality and interest costs for bonds with a medium-grade rating, but not for highly rated bonds. Ingram (1984) did not find a correlation between reporting practices and yields when also including bond ratings and other financial information.

Prior literature on disclosure by governments has addressed governmental GAAP disclosure without specifically studying the period after the implementation of Statement 34, or has addressed overall disclosure by governments where financial reports are one component of disclosure. This study focuses specifically on Statement 34 disclosure via the MD&A and evaluates whether variation in this disclosure matters to rating agencies by studying default risk and to investors by studying true interest costs.

Baber and Gore (2008) and Fairchild and Koch (1998) look at mandatory GAAP compliance and find that states with governmental GAAP regulation have lower borrowing costs, or yields, respectively than states without regulation. These studies address whether or not governments have to comply with GAAP regulation, but do not address the content or the quality of the disclosure.

Benson et al (1991), find that more robust reporting practices at the state level are associated with lower interest costs on general obligation bonds in states with substantial short-term debt. Feroz and Wilson (1992) find that there is a significant association between the level of accounting disclosures and net interest costs if the municipal bond issue is managed by a local or regional underwriter. Cook (1982) and Lamb and

Rappaport (1987) note that information search costs are higher for smaller, less known issuers. Reeve and Herring (1986) find there is a significant difference in borrowing costs for small, unrated bond issuers and large, unrated bond issuers. These findings imply that the cost of information is higher for smaller issuers, so these issuers may benefit from increased disclosure.

In the MD&A, Frazier et al (1984) are the first to employ content analysis to management disclosures. This study “scores” the MD&A using content analysis software and find the score to be associated with future returns.

Clarkson et al (1999) investigate whether the MD&A plays any role in the corporate disclosure package. Through interviews, surveys and content analysis, they find that the MD&A is a source of incremental, new and useful information to sell-side analysts affiliated with the Toronto Stock Exchange. Barron et al (1999) find a negative association between forecast error and dispersion and MD&A compliance scores.

Schroeder and Gibson (1990) report on the readability (defined as writing which provides “quick and easy communication”) of the MD&A. Li (2008) finds that companies with low earnings often make disclosures that are more “difficult-to-read” when compared with companies with higher earnings. Additionally, this study finds that as a company’s earnings increase, its disclosures become more readable. Miller (2010) looks at the complexity of financial reports by focusing on the length and readability. The study finds that companies with more complex reports have lower trading volume, particularly with small investors. This indicates that complex reports are too costly for small investors to process in a short timeframe.

Li (2010) looks at the tone of the MD&A and finds that the tone of forward-looking statements in the MD&A are significantly associated with future liquidity and earnings.

Botosan (1997) uses a disclosure index to determine whether voluntary disclosure impacts costs of capital. The study finds that disclosure has a significant impact on cost of capital for firms with a low analyst following but not high analyst following.

Muslu et al (2013) examine forward-looking disclosures in the MD&A and find that these disclosures serve to mitigate poor information environments and high information asymmetry.

Statement 34 requires certain financial statements as well as required supplementary information (RSI), including an MD&A as well as other disclosures. The requirements in the MD&A are prescribed by section, but GASB suggests that the report avoid “boilerplate” discussion and note the possibility of including “additional analytic and descriptive data” (GASB 1999).

Following Zimmerman (1977), Watts and Zimmerman (1978), Gordon et al (2002), and Gore (2004), I use a positive theory analysis, because I am attempting to explain accounting and reporting practices and I assume that bond market interaction is the primary motivation for financial disclosure. If municipal managers can obtain lower costs of debt through disclosure in these markets, this can translate to a lower tax burden, which can translate to lower taxes and in turn more votes from citizens. At the same time, if the municipal bond market is competitive, then the disclosure choices of municipal bond issuers would impact the costs of debt. In line with this theory, studies

have shown that disclosure reduces the information asymmetry portion of the cost of capital in the corporate and governmental sectors, respectively (Sengupta 1998, Benson et al, 1991).

In summary, prior literature in both the governmental and corporate sectors indicates that disclosure is associated with lower default risk, borrowing costs and yields in the capital and debt markets. High disclosure results in lower uncertainty in assessing future cash flows, and as a result a lower uncertainty premium (risk premium) is added onto the users' assessment of the entity, therefore:

Based on prior literature, the following hypotheses are proposed:

H7: High disclosure results in better (i.e. lower) perceptions of default risk.

H8: High disclosure results in lower interest costs.

H9: High disclosure results in better (i.e. lower) perceptions of default risk to a greater extent for smaller municipalities

H10: High disclosure results in lower interest costs to a greater extent for smaller municipalities

H11: High disclosure results in less dispersion in bond ratings.

Prior literature indicates that the MD&A provides valuable information about firm performance in the corporate sector. Therefore, the MD&A will be the medium used to determine the level of disclosure.

3.2.1 Variable Definitions

The independent variable of interest is disclosure score, which is the index measuring the extent of disclosure in the MD&A for a cross-section of Texas cities discussed previously.

The dependent variables of interest are default risk, as measured by the underlying bond rating for each of the municipalities in the sample set, and true interest costs. I will first evaluate the hypotheses using default risk as the dependent variable. In the next section I will evaluate the hypotheses using interest costs as the dependent variable.

The bond rating information was obtained for each of the three major rating agencies (Moody's, Fitch, and S&P) from their websites or the official offering statements when data was not readily available on the websites. Municipalities ranged from having no underlying rating available to have a rating from all three major agencies. All municipalities with underlying bond ratings were coded and given a score of anywhere from 1 through 7, with 1 representing the highest possible rating and 7 representing the lowest possible rating. The default risk was then measured in two ways. First, the ratings were averaged across the available rating information for each municipality. Next, the lowest available underlying rating (or the rating which received

the highest coding for each municipality) was selected as the dependent variable. Testing was performed using both scenarios.

Consistent with prior literature, control variables will include financial and socioeconomic variables that have been shown to have a relationship with default risk. Default risk has been shown to increase at debt increases (Raman 1981, Wilson and Howard 1984) and to be lower for larger municipalities. Debt outstanding per capita will represent debt, and total assets and population will be used as proxies for size.

Default risk has been shown to be lower for municipalities who are more self-reliant (Raman 1981, Copeland and Ingram 1982, Lewis et al 1988) and higher for municipalities with population growth, likely because of the increase in services that they must provide (Wallace 1981, Wilson and Howard 1984). Own revenue per capita will represent self-reliance with higher own revenue representing more self-reliance and the change in population between 2010 and 2012 will represent population growth with a higher percentage representing larger population growth in the period.

Default risk has also been found to decrease as per capita income increases, likely due to a higher level of political stability as well as the higher tax base providing greater ability for debt repayment (Cantor and Packer 1996). Per capita income will be measured from available census data. The full model is shown below, along with variable definitions.

$$\text{BRATING} = \beta_0 + \beta_1 \text{DISCINDEX} + \beta_2 \text{BONDINS} + \beta_3 \text{OWNREV} + \beta_4 \text{INTERGOV} + \beta_5 \text{DEBT} + \beta_6 \text{PERCAPITA} + \beta_7 \text{POP} + \beta_8 \text{ASSETS}$$

Variable Definitions

BRATING: Average underlying bond rating among the three major rating agencies.

DSCORE: Disclosure score from weighted index of disclosure from the MD&A for the municipality.

BINSUR: 1 if the municipality has bond insurance, 0 otherwise

OWNREV: Revenue not from other governments (i.e. property tax, sales tax).

INTGOV: Revenue from other governments as reported on the Statement of Activities for the municipality

DEBT: Debt outstanding per capita

PCAPINC: Total per capita income

POP: Population (obtained from 2010 US Census)

ASSETS: Natural log of total assets (obtained from the Government-wide balance sheet for the municipality)

3.3 Sample

The sample incorporates the same Texas data (n=75) from the previous study.

However, while exploring the data, a Cook's Distance analysis revealed that for the model in the current study, there is one significant outlier with a distance greater than 1.

This data point was removed from the analysis, leaving a total n of 74.

3.4 Results

Ordinal logistic regression is used to analyze the relationship between disclosures and default risk when using the lowest rating as the dependent variable because the dependent variable, is ordinal and not a continuous ratio variable. When using the average underlying rating, results are reported using ordinary least squares. Pearson correlations are presented in Table 17 below.

PEARSON CORRELATIONS										
	BRATING	LBRATING	DSCORE	BINSUR	OWNREV	INTREV	DEBT	PCAPINC	POP	ASSETS
BRATING	1	.971**	-.531**	.740**	-0.154	-0.121	.374**	-.435**	.352**	.669**
LBRATING	.971**	1	-.502**	.736**	-0.116	-0.012	.357**	-.395**	.370**	.649**
DSCORE	-.531**	-.502**	1	-.369**	0.061	0.2	.312**	-0.059	.335**	.631**
BINSUR	.740**	.736**	-.369**	1	-0.133	0.037	-.275*	-.256*	-0.183	.509**
OWNREV	-0.154	-0.116	0.061	-0.133	1	-0.031	0.189	.242*	-0.006	-0.037
INTREV	-0.121	-0.012	0.2	0.037	-0.031	1	0.141	-0.049	0.181	.297**
DEBT	-.374**	-.357**	.312**	-.275*	0.189	0.141	1	0.108	.538**	.561**
PCAPINC	-.435**	-.395**	-0.059	-.256*	.242*	-0.049	0.108	1	-0.07	-0.11
POP	-.352**	-.370**	.335**	-0.183	-0.006	0.181	.538**	-0.07	1	.651**
ASSETS	-.669**	-.649**	.631**	-.509**	-0.037	.297**	.561**	-0.11	.651**	1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Table 17: Pearson Correlations

Average underlying rating

Results are significant at $p < .001$ showing that several of the independent variables are significant in explaining default risk. The overall model as an adjusted r-square of .843, indicating that a significant amount of the variation in default risk can be explained by the model. Coefficients and ANOVA table for the model are reported in Table 18.

Disclosure score is significant at the $p < .05$ level in the presence of the control variables with a $p = .022$. The relationship is significant and inverse, but the highest bond

rating is coded with a 1 and the lowest rating with a 7, so the interpretation of the results is that the higher the disclosure score, the lower the default risk.

Results also indicate that total assets, population, debt per capita, per capita income, and the bond insurance dummy variable are significant indicators. All variables except debt per capita are significant with $p \leq .001$. Larger municipalities with greater populations and total assets are associated with lower default risk, and a larger per capita income is also associated with lower default risk. Municipalities with bond insurance have higher default risk. These results are consistent with prior literature. Bond insurance has been shown to substitute for disclosure (Gore et al 2004) and larger municipalities with higher per capita income have been shown to be associated with a higher level of disclosure (Gordon et al 2002).

Total debt outstanding are significant ($p=.01$). Results indicate the higher the debt per capita or the size of the debt issue, the higher the default risk. This is also in line with results from prior studies

Overall, results indicate support for H7 that rating agencies do incorporate MD&A disclosure into their rating analyses when assigning underlying municipal bond ratings, in addition to incorporating other financial and socioeconomic variables.

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	109.711	8	13.714	49.928	.000 ^b
Residual	17.854	65	.275		
Total	127.565	73			

a. Dependent Variable: BRATING

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	12.297	1.438		8.551	.000
DSCORE	-.079	.034	-.142	-2.341	.022
OWNREV	-7.981E-005	.000	-.040	-.813	.419
INTREV	.079	.715	.006	.111	.912
DEBT	.000	.000	.152	2.550	.013
PCAPINC	-3.427E-005	.000	-.429	-8.196	.000
POP	-1.631E-006	.000	-.225	-3.442	.001
ASSETS	-.367	.083	-.402	-4.446	.000
BINSUR	1.035	.181	.355	5.724	.000

a. Dependent Variable: BRATING

Table 18: Results and ANOVA Table with bond rating dependent variable

Lowest Underlying Rating

Results are consistent whether the lowest underlying rating or the average underlying rating are used as the dependent variable, with disclosure still significant ($p=.039$). The most significant variables are total assets, per capita income, and the bond insurance dummy variable, with significance at $p\leq .001$. Additionally, debt outstanding per capita, population and intergovernmental revenue are significant ($p=.027$, $p=.023$ & $p=.028$, respectively). However, own revenue per capita is not significant.

		Estimate	Std. Error	Wald	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Thresho ld	LBRATING = 1.00	-41.516	8.389	24.490	.000	-57.959	-25.074
	LBRATING = 2.00	-36.299	7.995	20.614	.000	-51.969	-20.629
	LBRATING = 3.00	-32.414	7.759	17.451	.000	-47.622	-17.206
	LBRATING = 4.00	-28.834	7.484	14.844	.000	-43.503	-14.166
	LBRATING = 5.00	-24.506	7.084	11.967	.001	-38.390	-10.622
	LBRATING = 6.00	-21.137	6.961	9.221	.002	-34.781	-7.494
	LBRATING = 7.00	-20.123	6.982	8.307	.004	-33.807	-6.439
Locatio n	DSCORE	-.300	.145	4.279	.039	-.585	-.016
	ASSETS	-1.099	.411	7.145	.008	-1.905	-.293
	PCAPINC	.000	2.718E-005	22.163	.000	.000	-7.468E-005
	POP	-1.141E-005	5.028E-006	5.149	.023	-2.126E-005	-1.555E-006
	DEBT	.001	.000	4.897	.027	6.355E-005	.001
	INTREV	6.697	3.043	4.843	.028	.733	12.662
	OWNREV	1.684E-005	.000	.002	.967	-.001	.001
	BINSUR	-4.493	1.264	12.645	.000	-6.969	-2.017

Table 19: Results with lowest bond rating dependent variable

Smaller Municipalities

The sample is further examined to determine whether there is a difference in the importance of disclosure for smaller entities for determining bond ratings. Prior studies have found that disclosure may be more important for smaller entities that receive less attention because the cost of information is higher for smaller issuers. (Botosan 1997, Reeve and Herring 1986). To examine the effect of size, a sub-sample made up of the municipalities in the smaller half of the full sample is selected (n=39). The model shows that disclosure is highly significant ($p=.001$) for smaller municipalities in determining bond rating. The inverse sign of the coefficient indicates that higher disclosure is associated with higher bond rating (1 represents the *highest* bond rating). In addition, as expected, municipalities with bond insurance have a lower underlying rating. This makes sense as municipalities with bond insurance may substitute this for disclosure. In addition, similarly to the full sample, higher per capita income is associated with higher bond ratings. Size is not significant, which is not surprising, given that this sample focuses on smaller entities.

However, when the data is evaluated to determine whether or not there is a statistically significant difference between the smaller (n=33) and larger municipalities (n=39), the difference is not statistically significant. H9 is not supported.

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	7.628	2.966	2.572	.015
	Disclosure Score	-.138	.038	-.278	.001
	Bond Insurance (1 if yes)	1.144	.195	.495	.000
	Own Revenue Per Capita	-3.298E-005	.000	-.025	.729
	Intergovernmental Revenue/Total Revenue	-1.536	1.175	-.091	.201
	Total Debt Outstanding Per Capita	3.936E-005	.000	.038	.655
	Per Capita Income	-2.907E-005	.000	-.465	.000
	Population 2010 Census	-8.033E-006	.000	-.071	.511
	Ln Total Assets	-.060	.181	-.043	.742

n=39

Table 20: Results – Smaller municipalities

Dispersion

Since disclosure is thought to reduce information asymmetry (see previous discussion), the sample was then evaluated to determine whether higher levels of disclosure in the MD&A reduced the dispersion among the rating agencies if the municipality had ratings from multiple agencies. Independent sample t-tests are used to determine whether there is a difference between the disclosure score for municipalities with multiple bond ratings that agree (coded with a 0) and those municipalities with multiple disclosure score where at least one does not agree (coded with a 1). The test is run first using the 59 entities with more than one underlying bond rating. Results indicate that disclosure is inversely related to dispersion, but the relationship is not significant. The mean disclosure score is 12.45 for those with dispersion in the scores and 13.10 for those without. H11 is not supported.

3.5 True Interest Costs

To study H8 and H10, true interest cost (TIC) data was obtained for long-term debt issued between fiscal years 2009 and 2012 for the Texas municipalities for which an MD&A disclosure score had been calculated. True interest costs represent the issuer's cost of capital and has been used extensively as the measure of interest costs for studies using municipal bond market data. It is the discount rate that sets all future cash outflows on a new issue bond to an NPV equal to the proceeds of the sale. TIC in this study incorporates all issuance costs. See O'Hara's (SIFMA) *The Fundamentals of Municipal Bonds* (2011) for details on TIC. When a bond issue consists of multiple maturities, where the principal is paid gradually over time rather than at maturity, TIC is calculated as follows:

$$B = \sum_{n=e}^f \left(\sum_{t=1}^n \frac{C_t}{(1 + TIC)^t} + \frac{M}{(1 + TIC)^n} \right)$$

Data was obtained for tax-supported debt issued by Texas cities from 2009-2012 where complete data on the issue were available from the Texas Bond Review Board and from Ipreo, Inc. Debt issues for 74 different subject municipalities met the criteria and total of 190 debt issues were obtained for these municipalities. Complete data was available for 188 debt issues. Descriptive Statistics are reported in Table 21 below.

Even though the disclosure index was based on the MD&A for only one year, the sample spans a four-year period, as disclosure policies tend to be relatively stable over time (Botosan 1997, Francis et al 2008). In addition disclosure levels in annual reports are positively correlated with disclosure via other media (Lang and Lundholm 1993) and

the MD&A is part of the annual disclosure in the GAAP financial reports for governments.

Descriptive Statistics				
	MIN	MAX	MEAN	STD DEV
TIC	0.40667	7.14582	3.1639575	1.00681629
PAR	13.53447	20.30071	16.0840124	1.27557556
M2M	38	372	188.67	75.36
CALL	0	1	0.76	0.429
INSURED	0	1	0.19	0.393
COMP	0	1	0.24	0.429
TAXABLE	0	1	0.03	0.16
FA	0	1	0.24	0.429
REF	0	1	0.51	0.501
GOLTD	0	1	0.67	0.47
GOUNLTD	0	1	0.05	0.224
REV	0	1	0.23	0.423
AAA	0	1	0.07	0.253
AA	0	1	0.78	0.416
A	0	1	0.21	0.409
BBB	0	1	0.01	0.073
BB	0	0	0	0
NR	0	0	0	0
BQ	0	1	0.52	0.501
SINKFD	0	1	0.09	0.294
ST20IND	3.61	5.21	4.30665	0.364671
2009	0	1	0.22	0.412
2010	0	1	0.25	0.433
2011	0	1	0.26	0.439
2012	0	1	0.28	0.45
Valid N (listwise)	188			
TOTAL N	190			

Table 21: Descriptive Statistics – TIC dependent variable

Prior studies exploring the association between accounting attributes and interest costs have incorporated several variables as controls based on the prior explanatory power of these variables (Wallace 1981, Marlowe 2010, Baber and Gore 2008, Ingram and Copeland 1982 and Benson et al 1991, Fairchild and Koch 1998). Based on prior literature and the availability of data, the jurisdiction specific and bond-issue specific control variables used in the current study and are described.

Lenders may have differing levels of access to information for larger versus smaller municipalities, and reporting environments and reporting incentives may differ between smaller and larger municipalities. Therefore the size of the municipality as measured by the natural log of the total assets reported on the government-wide financial statements, is used as a proxy for size. The amount of locally controlled revenue is expected to be associated with lower interest costs because revenues tend to be more stable and predictable. Own revenue per capita represents locally controlled revenue. Debt is thought to be positively associated with interest costs as greater levels of debt can create competition for debt service resources. Debt outstanding per capita represents the level of municipal debt.

The 20-bond index for the State considers interest rate fluctuations for State debt issues. This index is calculated by Bloomberg and provides the prevailing market yield at the time of the issue for bonds issued in Texas. There are several qualitative variables related to each debt issue that have been found to have an association with interest costs. Among these variables are underwriter competition, where competitively bid debt issues have been associated with lower interest costs. General obligation debt issues backed all

or in part by the full faith and taxing power are found to be associated with lower interest costs than revenue bonds, which are backed by the specific revenue streams. Bank qualified debt issues refer to smaller issuers that have total debt issues of less than \$10 Million for the year. These debt issues receive favorable federal tax treatment and are associated with lower interest costs. Callable bonds refer to debt issues where the municipality has the option to redeem the bonds prior to the maturity rate. These typically are associated with higher interest costs because they are associated with greater risk to the investor that the bonds will be called, which will lead to unstable interest rates at some point in the future. Time to maturity for municipal debt issues is typically positively associated with interest costs. Bond ratings provide a control for credit risk, and higher credit ratings are typically associated with lower interest costs. Municipal debt issues sometimes employ the use of independent financial advisors, who are thought to help the issuer with the structure and sizing of deal and to optimize timing. The use of a financial advisor is thought to drive down interest costs and help issuers avoid the use of investment banks. The purpose of refunding bonds is to refund another bond. These bonds tend to have slightly lower interest costs, as bonds are generally refunded in favor of lower interest rates. Bonds that are taxable to issuers do not have the benefit of “tax-exempt” status and therefore tend to have higher interest rates. Bond issues with a sinking fund require that the municipality set aside savings throughout course of repayment. Bonds repayments are unlikely to be an issue as savings are put aside over the life of the bond, however they are more likely to be called. The time period being studied includes the end of the Great Recession in 2009, and the bankruptcy of AMBAC,

a major bond insurer in the municipal bond market in 2010. Therefore the year of the issue is incorporated into the study in addition to other interest rate controls.

Control Variables

Jurisdiction-specific Controls

DEBT - (+) – Total outstanding debt per capita

SIZE (-) – natural log of total assets of municipality

OWNREV (-) – revenue derived per “own sources” including property tax, sales tax, etc. divided by population

Bond-Issue Specific Controls

ST20IND (+) - the State of Texas 20 weekly index for the week of the sale

PAR (-) – natural log of the par value of the bond issue

BQ (-) – 1 if issue was bank qualified

FA (-) – 1 if issue was sold with the assistance of an independent financial advisor

MAT (+) - number of years from the dated date to the maturity date of issue’s final maturity

COMP (-) – 1 if bond was sold through competitive auction

TAXABLE (+) – 1 if interest payments to holders of the issue are subject to federal income tax

INSURED (-) - issue was sold with third party insurance against default

CALLABLE (+) - issue contains a provision that allows the issuer to refund some or all

of the issue before its stated maturity date;

GOUN (-) - issue is backed by the jurisdiction's unlimited general obligation pledge

REV (+) – 1 if issue is a revenue-type bond

GOLTD (?) – 1 if issue has limited backing by the jurisdiction

REFUND (-) - issue's proceeds were used to refund another outstanding issue

SINKFD (?) – 1 if bond requires a bond sinking fund.

BBB- issue's highest rating from Moody's, Standard & Poor's, or Fitch was BBB-/Baa3, BBB/Baa2, or BBB+/Baa1

A - issue's highest rating from Moody's, Standard & Poor's, or Fitch was A-/A3, A/A2, or A+/A1

AA - issue's highest rating from Moody's, Standard & Poor's, or Fitch was AA-/Aa3, AA/Aa2, or AA+/Aa1

AAA - issue's highest rating from Moody's, Standard & Poor's, or Fitch was "natural AAA"

2009 – 1 if bond was issued in 2009

2010 – 1 if bond was issued in 2010

2011 – 1 if bond was issued in 2011

2012 – 1 if bond was issued in 2012

Using the above controls variables, and Disclosure Score, the variable of interest, the model to predict interest costs is as follows:

$$\begin{aligned} \text{TIC} = & \beta_0 + \beta_1 \text{DScore} + \beta_2 \text{DEBT} + \beta_3 \text{SIZE} + \beta_4 \text{OWNREV} + \beta_5 \text{ST20IND} + \beta_6 \text{PAR} + \\ & \beta_7 \text{BQ} + \beta_8 \text{FA} + \beta_{10} \text{MAT} + \beta_{11} \text{COMP} + \beta_{12} \text{TAXABLE} + \beta_{13} \text{INSURED} + \\ & \beta_{14} \text{CALLABLE} + \beta_{15} \text{GOUN} + \beta_{16} \text{REV} + \beta_{17} \text{GOLTD} + \beta_{18} \text{REFUND} + \beta_{19} \text{SINKFD} \\ & + \beta_{20} \text{YR2009} + \beta_{21} \text{YR2010} + \beta_{22} \text{YR2011} + \beta_{23} \text{YR2012} + \beta_{24} \text{BBB} + \beta_{25} \text{A} + \beta_{26} \text{AA} \\ & + \beta_{27} \text{AAA} \end{aligned}$$

3.6 Results

Since multiple bond issues were included in the sample for several of the subject municipalities, ordinary least squares would not be appropriate, because standard errors could be correlated, a violation of the OLS assumption of homoskedasticity. To account for the possibility of heteroskedasticity, a robust standard error test was used to determine the standard errors and the significance of the variables. The model syntax used to run this test in SPSS (syntax HC3) was developed by Hayes and Cai (2007). This model was first run for the entire sample set. See Table 22 below. Results indicate that the model is significant with an r-square of .71 and a $p < .0001$. However, after accounting for bond-specific characteristics, prevailing interest rates, and macro-economic factors, disclosure score, the variable of interest, is not significant in the model. In fact, outside of having an underlying bond rating of AAA, no jurisdiction specific variables appear to matter when determining interest costs for cities in Texas.

Model Fit:					
R-sq	0.711	F	21.459	df1	25
				df2	162
				p	0.000
Heteroscedasticity-Consistent Regression Results					
	Coeff	SE(HC)	t	P> t 	
(Constant)	0.4305	1.757	0.245	0.8068	
Disclosure Score	-0.0118	0.0243	-0.4845	0.6287	-
Debt outstanding per capita	0	0.0001	0.5608	0.5757	+
In Total Assets	0.0611	0.0772	0.7904	0.4304	-
Own Revenue per Capita	0	0.0002	-0.2125	0.8320	-
State GO 20	0.656	0.3253	2.0163	0.0454	+
In Par	-0.1441	0.075	-1.9203	0.0566	-
Bank Qualified	-0.341	0.1317	-2.5889	0.0105	-
Independent FA	-0.1431	0.1418	-1.0087	0.3146	-
Months to Maturity	0.0073	0.001	7.1718	0.0000	+
Competitive Sale	-0.0032	0.1388	-0.0227	0.9819	-
Taxable	0.8961	0.5068	1.7684	0.0789	+
Insured	-0.193	0.2143	-0.9007	0.3691	-
Callable	0.1258	0.1512	0.8317	0.4068	+
UNLTD GO	0.1548	0.3195	0.4844	0.6287	-
Revenue	0.0731	0.3008	0.2431	0.8082	+
LTD GO	-0.1387	0.2999	-0.4627	0.6442	?
Refunding	0.2069	0.1316	1.5724	0.1178	-
Sinking Fund	0.1568	0.2414	0.6495	0.5170	?
Year 2009	0.6878	0.2913	2.3615	0.0194	?
Year 2010	0.4787	0.2443	1.9592	0.0518	?
Year 2011	0.0002	0.2416	0.0009	0.9992	-
BBB Rating	1.5142	88.8012	0.0171	0.9864	+
A Rating	-0.1404	0.2733	-0.5136	0.6082	-
AA Rating	-0.4774	0.3866	-1.235	0.2186	-
AAA Rating	-0.8987	0.3602	-2.4951	0.0136	-
N = 188					
DV: TIC ALL IN					

Table 22: Robust standard errors model – full sample

Next the model was run for the sample of debt issues based on the year of the debt issue. The time period covered by the sample includes a recession, the decline of the bond insurance market, and ultimately the bankruptcy of AMBAC, a major bond insurer. Results should be considered cautiously because the sample sizes by year are small which could influence the power of the test and the stability of the variables.

The results were run first for 2009 (n=39) using the robust standard error test. Cook's Distance analysis confirms no significant outliers. The model is significant with an r-square of .8561 and a p<.001, however, results show again that disclosure is not significant (p=.3778). Months to maturity is the only significant indicator when estimating robust standard errors with a p<.10.

Model Fit:					
	R-sq	F	df1	df2	p
	0.8561	29.6139	21	17	0.000
Heteroscedasticity-Consistent Regression Results					
	Coeff	SE(HC)	t	P> t	
(Constant)	-4.8411	8.6071	-0.5625	0.5811	
Disclosure Score	-0.1846	0.2038	-0.9056	0.3778	-
Debt outstanding per capita	-0.0002	0.0002	-1.0124	0.3256	+
In Total Assets	-0.0069	0.2494	-0.0276	0.9783	-
Own Revenue per Capita	-0.0001	0.0005	-0.2004	0.8436	-
State GO 20	0.8974	1.1583	0.7748	0.4491	+
In Par	0.368	0.3258	1.1296	0.2744	-
Bank Qualified	-0.1589	0.887	-0.1791	0.8599	-
Independent FA	0.5138	0.6885	0.7463	0.4657	-
Months to Maturity	0.0071	0.0036	1.9573	0.0669	+
Competitive Sale	-0.2268	0.7113	-0.3189	0.7537	-
Taxable	1.2283	61.5139	0.02	0.9843	+
Insured	-1.2817	1.1459	-1.1184	0.2789	-
Callable	-0.1568	0.8331	-0.1882	0.8529	+
UNLTD GO	1.1677	1.2429	0.9395	0.3606	-
Revenue	0.2202	0.5553	0.3965	0.6967	+
LTD GO	0.4852	0.7735	0.6272	0.5389	?
Refunding	-0.0015	0.5332	-0.0028	0.9978	-
Sinking Fund	0.0496	1.0112	0.049	0.9615	?
A Rating	1.4545	1.4758	0.9856	0.3382	
AA Rating	0.1264	1.3572	0.0932	0.9269	-
AAA Rating	-0.2096	0.6922	-0.3028	0.7657	-
N = 39					
DV: TIC ALL IN					

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Table 23: Robust standard errors model - 2009

Next the results were run for 2010 (n=47), the year that AMBAC filed for bankruptcy. Results are shown in Table 24 below. Cook's Distance analysis confirms no significant outliers. The model is significant with an r-square of .9579, with a combination of significant variables including both jurisdiction specific and bond issue specific. In this model, disclosure score is significant with a p=.0149. However, it is not

significant in the direction predicted. The results indicate that in 2010, disclosure is associated with higher interest rates. This is not unexpected, as disclosure can be both a positive and a negative for a municipality, depending upon what news they are providing. Whereas overall disclosure quality is theorized to lower costs of debt, if disclosure informs the public of bad news, it could have the opposite effect. The results could be an indication that the bankruptcy of AMBAC and the significant reduction in the bond insurance market during this time resulted in investors looking more carefully at the municipal disclosures and having to consider the underlying condition of the municipalities. If disclosure informed investors of greater risk, it could lead to an increase in interest costs.

Model Fit:					
R-sq	0.9579	F	33.63	df1	21
				df2	25
				p	0.000
Heteroscedasticity-Consistent Regression Results					
	Coeff	SE(HC)	t	P> t 	
(Constant)	-27.0723	5.6477	-4.7935	0.0001	
Disclosure Score	0.1141	0.0436	2.6151	0.0149	-
Debt outstanding per capita	0.000	0.0001	-0.0587	0.9536	+
In Total Assets	-0.338	0.1234	-2.7379	0.0112	-
Own Revenue per Capita	-0.0003	0.0003	-1.0427	0.3071	-
State GO 20	7.9916	1.3962	5.724	0.0000	+
In Par	-0.0763	0.0955	-0.7996	0.4315	-
Bank Qualified	-0.6818	0.311	-2.1922	0.0379	-
Independent FA	-0.3429	0.205	-1.6723	0.1069	-
Months to Maturity	0.0072	0.0011	6.2764	0.0000	+
Competitive Sale	0.1731	0.17	1.0183	0.3183	-
Taxable	1.6436	0.3617	4.5442	0.0001	+
Insured	-0.0149	0.1806	-0.0827	0.9348	-
Callable	0.2326	0.1553	1.4976	0.1468	+
UNLTD GO	0.4033	0.3432	1.1753	0.2510	-
Revenue	0.3524	0.3189	1.105	0.2797	+
LTD GO	0.3142	0.3478	0.9033	0.3750	?
Refunding	-0.2225	0.1722	-1.2922	0.2081	-
Sinking Fund	-0.1603	0.3203	-0.5006	0.6210	?
A Rating	0.2699	0.4285	0.63	0.5344	
AA Rating	0.2079	0.4732	0.4393	0.6642	-
AAA Rating	-0.392	0.5981	-0.6555	0.5181	-
N = 47					
DV: TIC ALL IN					

Table 24: Robust standard errors model - 2010

For 2011 the model is significant with an r-square of .878 and a $p < .001$. Again, disclosure is not significant as an individual variable in the model. See Table 25 for details.

Model Fit:					
	R-sq	F	df1	df2	p
	0.878	4.2418	20	28	0.0003
Heteroscedasticity-Consistent Regression Results					
	Coeff	SE(HC)	t	P> t	
(Constant)	3.8152	4.3562	0.8758	0.3886	
Disclosure Score	0.0306	0.0839	0.3648	0.7180	-
Debt outstanding per capita	-0.0001	0.0002	-0.5264	0.6027	+
ln Total Assets	0.0203	0.2225	0.0914	0.9279	-
Own Revenue per Capita	0.0004	0.0007	0.6283	0.5349	-
State GO 20	-0.1339	0.7431	-0.1802	0.8583	+
ln Par	-0.0873	0.1779	-0.4906	0.6275	-
Bank Qualified	-0.8397	0.4876	-1.7222	0.0961	-
Independent FA	-0.1699	0.4564	-0.3722	0.7126	-
Months to Maturity	0.0092	0.0039	2.3483	0.0261	+
Competitive Sale	-0.1656	0.3311	-0.5	0.6210	-
Taxable	-0.9072	1483.7356	-0.0006	0.9995	+
Insured	0.2345	0.3561	0.6586	0.5156	-
Callable	0.3082	0.6462	0.4769	0.6371	+
UNLTD GO	1.2752	140.74	0.0091	0.9928	-
Revenue	0.1165	0.455	0.256	0.7998	+
Refunding	0.5888	0.3661	1.6082	0.1190	-
Sinking Fund	0.546	0.3016	1.8107	0.0809	?
A Rating	-1.3969	0.8605	-1.6234	0.1157	
AA Rating	-1.7652	0.9365	-1.8848	0.0699	-
AAA Rating	-0.4843	2.2739	-0.213	0.8329	-
N = 49					
DV: TIC ALL IN					

Table 25: Robust standard errors model - 2011

For 2012, the model is significant with an r-square of .7936 and a $p < .05$ but none of the variables are independently significant. See Table 26 for details.

Model Fit:					
R-sq	F	df1	df2	p	
0.7936	2.3619	21	31	0.0146	
Heteroscedasticity-Consistent Regression Results					
	Coeff	SE(HC)	t	P> t 	
(Constant)	-4.1749	4.213	-0.9909	0.3294	
Disclosure Score	0.0159	0.0485	0.3285	0.7448	-
Debt outstanding per capita	0.0001	0.0001	0.6036	0.5505	+
In Total Assets	0.0965	0.1244	0.7756	0.4438	-
Own Revenue per Capita	0.0001	0.0001	0.9253	0.3620	-
State GO 20	1.8898	1.2585	1.5016	0.1433	+
In Par	-0.1924	0.1651	-1.1656	0.2527	-
Bank Qualified	-0.4308	0.2797	-1.5399	0.1337	-
Independent FA	0.2415	0.1945	1.2417	0.2237	-
Months to Maturity	0.004	0.0025	1.5986	0.1201	+
Competitive Sale	0.1693	0.263	0.6437	0.5245	-
Taxable	0.1361	1047.1114	0.0001	0.9999	+
Insured	0.0486	0.5566	0.0874	0.9310	-
Callable	-0.4166	0.3697	-1.1269	0.2684	+
UNLTD GO	-0.0681	192.2817	-0.0004	0.9997	-
Revenue	-0.3188	0.7533	-0.4232	0.6751	+
LTD GO	-0.3399	0.6893	-0.4931	0.6254	?
Refunding	0.3132	0.2613	1.1984	0.2399	-
Sinking Fund	-0.519	0.6623	-0.7836	0.4392	?
A Rating	0.0658	0.3714	0.1772	0.8605	
AA Rating	0.1133	0.6446	0.1757	0.8617	-
AAA Rating	-0.8537	0.9818	-0.8696	0.3912	-
N = 53					
DV: TIC ALL IN					

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Table 26: Robust standard errors model - 2012

Entity Size

Prior studies have found that disclosure matters more for smaller entities than for the population of entities as a whole (Botosan 1997, Reeve and Herring 1986).

Evaluating the smaller municipalities will indicate whether disclosure is valued more

when there may be little known outside of the annual report disclosures. Municipalities with a natural log of total assets of less than 18.8 represent the smallest third of the sample set ($n=63$). Total assets for the municipalities included in this sub-sample range from 7,775,590-143,752,306. The total sample of municipalities ($n=188$) ranges in size from 7,775,590-19,376,030,000. Results for the sub-sample indicate that disclosure is inversely related to true interest costs for smaller entities, but the results are not significant ($p=.1660$). However, this could be due to a lack of testing power. Results are shown in Table 27.

Model Fit:					
R-sq	F	df1	df2	p	
0.8307	8.9361	20	42	0.000	
Heteroscedasticity-Consistent Regression Results					
	Coeff	SE(HC)	t	P> t 	
(Constant)	1.8982	114.4338	0.0166	0.9868	
Disclosure Score	-0.0532	0.0377	-1.4098	0.1660	-
Debt outstanding per capita	0.0002	0.0001	2.2408	0.0304	+
In Total Assets	0.009	0.131	0.0689	0.9454	-
Own Revenue per Capita	0.0001	0.0001	1.3093	0.1975	-
State GO 20	0.9729	0.2287	4.2542	0.0001	+
In Par	-0.3868	0.1161	-3.3325	0.0018	-
Bank Qualified	-0.6364	0.3914	-1.6258	0.1115	-
Independent FA	-0.3194	0.3415	-0.9352	0.3550	-
Months to Maturity	0.0085	0.0018	4.6095	0.0000	+
Competitive Sale	-0.0021	0.1618	-0.0129	0.9898	-
Insured	0.4553	0.3104	1.4668	0.1499	-
Callable	-0.3016	0.2446	-1.2334	0.2243	+
UNLTD GO	1.3996	96.5719	0.0145	0.9885	-
Revenue	0.6362	96.5722	0.0066	0.9948	+
LTD GO	0.7645	96.5716	0.0079	0.9937	?
Refunding	0.611	0.2423	2.522	0.0155	-
Sinking Fund	0.3351	0.2843	1.1784	0.2453	?
A Rating	0.4463	61.3336	0.0073	0.9942	
AA Rating	0.6696	61.3346	0.0109	0.9913	-
AAA Rating	-0.119	645	-0.0002	0.9999	-
N = 63					
DV: TIC ALL IN					

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Table 27: Robust standard errors model – smaller municipalities

To further examine whether the lack of significance of disclosure for smaller entities could be due to a lack of testing power, available data for the sample municipalities for the years 2005-2008 were added, which added an additional 18 observations to the dataset. Results were then rerun and disclosure is significant and

negatively associated with true interest costs in the model with a $p=.0616$. Although these additional observations are outside of the testing period, the significance of disclosure once they are added is an indication that the lack of results is possibly due to a lack of testing power of the sample.

Model Fit:					
R-sq	F	df1	df2	p	
0.5581	9.1602	20	60	0.000	
Heteroscedasticity-Consistent Regression Results					
	Coeff	SE(HC)	t	P> t 	
(Constant)	-6.6148	9.5805	-0.6904	0.4926	
Disclosure Score	-0.1253	0.0658	-1.9049	0.0616	- SIG
Debt outstanding per capita	0.0000	0.0002	-0.2994	0.7656	+
In Total Assets	0.4747	0.3541	1.3405	0.1851	-
Own Revenue per Capita	0.0002	0.0002	0.9781	0.3319	-
State GO 20	0.8401	0.2916	2.8813	0.0055	+
In Par	-0.1734	0.3328	-0.5211	0.6042	-
Bank Qualified	-0.3957	0.4465	-0.8863	0.3790	-
Independent FA	0.1161	0.3912	0.2967	0.7677	-
Months to Maturity	0.0067	0.0023	2.8791	0.0055	+
Competitive Sale	-0.1478	0.1917	-0.7713	0.4436	-
Insured	0.3742	0.462	0.8098	0.4212	-
Callable	-0.308	0.318	-0.9688	0.3365	+
UNLTD GO	1.069	0.6123	1.7458	0.0860	-
Revenue	0.5155	0.284	1.8151	0.0745	+
Refunding	0.5166	0.2768	1.8666	0.0668	-
Sinking Fund	0.2155	0.3642	0.5915	0.5564	?
BBB Rating	0.0486	0.7642	0.0635	0.9495	
A Rating	0.4031	0.6318	0.6381	0.5258	
AA Rating	0.1761	0.8768	0.2009	0.8415	-
AAA Rating	-0.19	188.7146	-0.001	0.9992	-
N = 81					
DV: TIC ALL IN					

Table 28: Robust standard errors model – expanded sample of smaller municipalities

3.7 Conclusions

This is the first study that evaluates the association between disclosure quality in the post-Statement 34 era and credit risk as well as interest costs in the municipal bond market. The results indicate that disclosure is valued by rating agencies and is incorporated into their assessment of credit risk. Since it appears that complex

municipalities and municipalities with greater economies of scale or greater political incentives provide better quality disclosure, it appears that rating agencies view these as mitigating factors in evaluating risk. Rating agencies have previously indicated that they consider financial, political, and socioeconomic factors when evaluating credit risk, along with budgetary performance and debt burden (S&P 2007, Moody's 2004, Fitch 2002). They have also emphasized the increasing importance of management as a factor in determining bond ratings (Moody's 2004, Fitch 2002, 2000). Whereas prior studies of Statement 34 in the accounting literature have focused on the relationship between financial factors and default risk, this study captures disclosure quality, which may be viewed by rating agencies as a dimension of management quality. In addition, analysts' including those affiliated with rating agencies, indicated in the survey that the MD&A is the most valuable component of the new information provided by Statement 34.

In contrast to the importance of disclosure in the determination of default risk, disclosure does not appear to be important to the same extent within the municipal credit markets. When considering bond-specific as well as jurisdiction-specific characteristics for a cross-section of cities in Texas, disclosure is not a significant in determining interest costs beyond these other characteristics. This indicates that disclosure is an important component of default risk, but investors do not view disclosure quality via the MD&A as important over the bond rating and other issue-specific information in the determination of interest costs. The size of the municipality, which was significant in determining level of disclosure and significant in the determination of default risk, was not significant in the full model when the dependent variable was true interest costs. This is interesting

given that analysts indicated in the survey that the MD&A is the most valuable component of the new information provided by Statement 34. Since this disclosure appears to be utilized differently by different segments of the credit market, future research could evaluate whether analysts' responses in the analyst survey (see previous essay) varied depending upon the type of employer and market segment.

When the sample is divided by year, disclosure is significantly associated with interest costs in 2010 only. However, contrary to disclosure theory, the greater extent of disclosure appears to be positively associated with interest costs, meaning that higher interest costs are associated with a higher level of disclosure. This is an interesting result because this is the year that a major bond insurer filed for bankruptcy, so the market may have had to refocus on underlying information provided by the municipalities. A higher level of disclosure could have highlighted information about risk that was not outweighed by good disclosure practices. Given these results, evaluating the news provided by the disclosure in addition to the quality of the disclosure would be an avenue for future research. These results should be interpreted cautiously due to the size of the sample. Expanding the 2010 sample size would help to increase the power of the test.

For smaller entities disclosure appears to have a stronger association with interest costs. Although the small sample size reduces the power of the test, a moderately expanded sample indicates that disclosure is a significant determinant of interest costs above other jurisdiction and issue specific information. Further research in this area by collecting a larger sample of these entities would provide a clearer conclusion.

CHAPTER 4 - Assessing the Impact of GASB 34: Overall Conclusions

This dissertation set out to explore the period after the implementation of GASB Statement No. 34 to determine whether financial statement users find the new information valuable in their analyses, and to evaluate whether the new information provided is incorporated into credit analyses and contracting. This dissertation includes the first high-level survey asking bond analysts about how valuable the new Statement 34 information is in their analyses. It is timely because Statement 34 was implemented a decade ago, so analysts have had time to incorporate trends from this information into their analyses. Survey results indicate that analysts find Statement 34 has improved quality, but it has not reduced uncertainty, nor has it impacted the time they spend communicating with government officials.

The most valued new component of Statement 34 as indicated by the responses is the MD&A. Evidence from the survey suggests that a well-written MD&A can provide important insight pertaining to the quality of management, and the financial condition of the government, but that many MD&A are too general to be effectively utilized. However, the highest-ranking information by analysts' is still information that can be found for the most part on the fund financial statements.

Negative sentiment about Statement 34 suggests that the government-wide financial information is of limited usefulness because it is in a summary format, with information combined from funds that are not able to actually mix. Correlations between the demographic information of the respondents and the previewed value of the Statement 34 information suggests that the longer individuals have worked in the

municipal bond sector, the less value they place on the government-wide financial statement information. Further research is needed to understand how different segments of the municipal bond market may have varied in their responses, and how other respondent demographic information may have influenced the results.

Following up on the survey results, including ratings and analyst comment, the MD&A is further evaluated to explore the cross-sectional variation in disclosure and possible determinants of this variation. Results show that the size of the municipality is by far the most important determinant of disclosure via the MD&A. While other variables such as bond insurance, sources of revenue, and level of debt are associated with disclosure level, the size of the municipality appears to dictate many of these variables, and so they become insignificant in the presence of size.

MD&A disclosure is further explored to determine whether this Statement 34 disclosure is associated with contracting costs, including default risk or interest costs in the municipal capital markets. Results indicate that the information provided in the MD&A is valued by ratings analysts and is associated with default risk, where higher levels of disclosure are associated with lower default risk.

Contrary to the importance of this disclosure to ratings analysts, Statement 34 MD&A disclosure does not appear to provide additional information to investors over other jurisdiction and bond issue-specific characteristics in most cases. In fact, it appears that issue-specific characteristics are the most important determinants of interest costs to issuers.

However, in 2010, the year one of the largest bond insurers filed for bankruptcy, disclosure is associated with higher interest costs, indicating that investors do use municipal disclosure absent other mechanisms for evaluating credit risk. In addition, disclosure appears to be significant for smaller entities in determining interest costs. However, results should be considered cautiously because the small sample sizes of the sub-samples could impact the power of the tests. Further research is needed to expand these sample sizes and determine whether the results are consistent. In addition, the 2010 results are significant, but contrary to theory, so further research to understand the news provided by the MD&A disclosure would be useful in interpreting the results.

This dissertation contributes to the existing literature in governmental accounting disclosure, specifically the new disclosure provided by GASB Statement No. 34. It is the first study that asks bond analysts about the value of the new information in their analyses now that they have had time to understand and incorporate this information. It is also the first study that specifically evaluates the MD&A and attempts to explain the cross-sectional variation in disclosure and the impacts of this disclosure across the municipal markets. It provides an important first step in understanding this municipal disclosure, and it suggests future research to further support the conclusions in the studies presented in this dissertation.

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APPENDIX A

COPY OF SURVEY

Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments

Survey of Users of Governmental Financial Information

My name is Rebecca Bloch and I am a doctoral student in Accounting at Rutgers University working with support from the Governmental Accounting Standards Board (“GASB”) and under the guidance of my dissertation committee chaired by Dr. Dan Palmon. I am interested in better understanding the decision-making process used by those in the municipal bond market when evaluating financial reports and related information. I would like to thank you for participating in this research. This document is a consent form for your participation in this research study. Your involvement entails a short questionnaire that requires approximately 10 - 15 minutes to complete. The information in the study records will be kept strictly confidential. Data will be stored securely in a locked cabinet and/or restricted-access computer and will be made available only to persons conducting the study unless you specifically give permission in writing to do otherwise. No reference will be made in oral or written reports which could link you to the study; they are solely disclosed to me as well as the GASB and the members of my dissertation committee. The aggregate results of the study will be primarily used for educational purposes. Hence, individual names and individual responses will not be used in published reports, and all responses will be kept completely confidential. This survey will be sent to the over 1,200 members of the National Federation of Municipal Analysts seeking their participation. Again, I would like to thank you for your time and effort. Your participation is vital as it provides relevant insights into the factors that influence evaluation and investment decisions.

This questionnaire elicits your judgments; accordingly, please use the same high level of care you would on an actual decision context. We are looking for your individual judgments, so please do not confer with colleagues when completing this questionnaire.

Please note that your participation in this study is strictly voluntary, and you do not need to answer any questions with which you are uncomfortable. Some of the survey questions require a response to continue. If you are uncomfortable answering these questions or do not wish to provide an answer, you may withdraw from the study at any

time without penalty.

There are no foreseeable risks to participating in this study and subjects will not directly benefit from participating in the research. Please contact the Rutgers University Institutional Review Board (<mailto:humansubject@orsp.rutgers.edu> or 848-932-4054) with any questions regarding your rights as a human subject. A red asterisk (*) denotes those questions requiring responses.

* Thank you for your timely participation in this study. Please indicate your willingness to participate by choosing 'Accept' below.

☐ Accept

☐ Exit

Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments

Survey of Users of Governmental Financial Information

Introduction

In 1999, the GASB issued Statement No. 34, *Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments*. Governmental entities that follow generally accepted accounting principles (GAAP) implemented Statement 34 in the early 2000s. Among many changes, Statement 34 (a) introduced accrual-basis financial statements covering the entire government, (b) required a narrative management's discussion and analysis to precede the financial statements, (c) required that the most significant individual governmental funds and enterprise funds be shown individually, rather than aggregated by type of fund, and (d) required a comparison of actual revenues and expenditures with a government's original budget. At the same time, the GASB also issued Statement 35, which described how colleges and universities should comply with Statement 34. (All references in this survey to Statement 34 should be understood to encompass Statement 35 as well.)

Instructions

If you would like to return to the survey at a later time to complete or revise your responses, you can click the Save button to retain your responses. After clicking the Save button, you will be presented with a link that you should keep and use to return to your survey responses at a later time. The survey can be saved from any page on which feedback is requested. Please note that, depending upon your response to a question, the next question may not follow in numerical order.

This survey is best viewed with your PC's browser window maximized.

When you are finished providing feedback, click the Submit button and you will be provided with a summary of your responses.

If you have any questions on this survey, please contact Dean Mead at DMMEAD@gasb.org or Rebecca Bloch (blochre@andromeda.rutgers.edu, or 914-420-9203) or Dr. Dan Palmon (dpalmon@business.rutgers.edu, or 973-353-5472). Please contact the Rutgers University Institutional Review Board (humansubject@orsp.rutgers.edu or 848-932-4054) with any questions regarding your rights as a human subject.

Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments

Survey of Users of Governmental Financial Information

Background

A red asterisk (*) denotes those questions requiring responses.

- * 1. What types of governments do you evaluate?

- ☐ States, counties, cities, other localities, taxing districts, and/or school districts
 - ☐ Colleges/universities, toll roads, hospitals, utilities, airports, mass transit, and/or other governments that charge a fee for service
 - ☐ Both types of governments
 - ☐ Neither. I don't evaluate governments
 - ☐ Other (please explain:)
-

Please tell us about yourself. This information will be used only for internal purposes and will not be shared with anyone outside of the GASB. Your answers to this survey are strictly confidential and will remain anonymous.

* Name

* Organization/Firm

* Email address

* 2a. What type of firm do you currently work for?

- ☐ Rating agency
- ☐ Mutual Fund
- ☐ Private wealth management
- ☐ Other buy-side
- ☐ Sell-side
- ☐ Bond insurance/credit enhancement
- ☐ Commercial bank
- ☐ Public finance advisor
- ☐ Other

* How many years have you been in that position?

* 2b. What types of firms have you worked for in the past? (check all that apply)

- ☐ Rating agency
- ☐ Mutual Fund
- ☐ Private wealth management

- ☐ Other buy-side
- ☐ Sell-side
- ☐ Bond insurance/credit enhancement
- ☐ Commercial bank
- ☐ Public finance advisor
- ☐ Other

* How many years were you in your past positions?

Rating agency	<input type="text"/>
Mutual Fund	<input type="text"/>
Private wealth management	<input type="text"/>
Other buy-side	<input type="text"/>
Sell-side	<input type="text"/>
Bond insurance/credit enhancement	<input type="text"/>
Commercial bank	<input type="text"/>
Public finance advisor	<input type="text"/>
%Q61SPECIFIED_9%	<input type="text"/>

* 3. How many total years of professional experience do you have analyzing governments?

* 4. What certifications do you have? (check all that apply)

- ☐ CPA
- ☐ CFA
- ☐ CMA
- ☐ Other (please describe)
- ☐ None of the above

* 5. What degrees do you have? (check all that apply)

- ☐ BS
☐ BA
☐ MBA
☐ MPA
☐ Ph.D.
☐ High school diploma
☐ Other

* In what discipline is your BS?

* In what discipline is your BA?

* In what discipline is your Ph.D.?

* 6. Please list the three factors that you consider most important in your evaluation of a government's financial information? Please list in order of importance, beginning with the most important.

- a.
 b.
 c.

* 7. Did you evaluate government financial statements prior to Statement 34?

- ☐ Yes
☐ No
☐ Not applicable. I am not aware of Statement 34.

Statement 34 in General

* 8. How familiar are you with the new information governments report as a result of Statement 34

- 1
Extremely unfamiliar
2
3
Somewhat unfamiliar
4
5
Somewhat familiar
6
7
Extremely familiar

* 9. Has Statement 34 increased or decreased the amount of time that you spend evaluating a government?

- ☐ Increased
☐ Decreased
☐ No change
☐ Not applicable. Didn't analyze pre-Statement 34 financial statements

* 10. Has Statement 34 increased or decreased the uncertainty that you have about the financial condition of a government you are evaluating?

- ☐ Increased
☐ Decreased
☐ No change

* 11. You answered that Statement 34 %[10]Q12LBL% the uncertainty that you have about the financial condition of a government you are evaluating. Please indicate on the following scale the extent that the uncertainty has %[10]Q12LBL%,

- 0% Very insignificant
10%
20%
30%
40%
50%
60%
70%
80%
90%

100% Very significant

* What is the reason that the uncertainty %[10]Q12LBL%?

* 12. Has Statement 34 increased or decreased the quality of the information provided by governments?

☐

Increased

☐

Decreased

☐

No change

* 13. You answered that Statement 34 %[12]Q15LBL% the quality of the information provided by governments. Please indicate on the following scale the extent that the quality of the information has %[12]Q15LBL%:

0% Very insignificant

10%

20%

30%

40%

50%

60%

70%

80%

90%

100% Very significant

* 14. To what in the financial reporting under Statement 34 do you attribute this change in quality?

Government-Wide Financial Statements

* 15. How valuable to you is the information in the government-wide financial statements in evaluating a government's finances?

1 Extremely not valuable

- 2
3 Slightly not valuable
4
5 Slightly valuable
6
7 Extremely valuable

* 16. Do you rely more on government-wide financial statements or fund financial statements in your analyses?

- ☐ Government-wide financial statements
☐ Fund financial statements
☐ I use them equally in my analyses
☐ Unsure

* 17. You answered that you rely more on %[16]Q20LBL% financial statements in your analyses. Why?

* 18. What information in the statement of net assets do you find most valuable? Please list in order of importance, beginning with the most important.

- a.
b.
c.

* How do you use this information?

* 19. Prior to the implementation of Statement 34, were you able to obtain the information provided by the statement of net assets?

- ☐ Yes
☐ No
☐ Unsure
☐ Not applicable. Did not analyze pre- Statement 34 financial statements

* 20. Has Statement 34 made this information easier to obtain?

- ☐ Yes
☐ No

* 21. What information in the statement of activities (or statement of revenues, expenses, and changes in net assets) do you find most valuable? Please list in order of importance, beginning with the most important..

- a.
b.
c.

* How do you use this information?

* 22. Prior to the implementation of Statement 34, were you able to obtain the information provided by the statement of net activities?

- ☐ Yes
☐ No
☐ Unsure
☐ Not applicable. Did not analyze pre- Statement 34 financial statements

* 23. Has Statement 34 made this information easier to obtain?

- ☐ Yes
☐ No

Budgetary Comparisons

Statement 34 revised the budgetary comparison information that governments present to include the original budget, final budget, and actual results, as well as an explanation of

how and why the actual results on a budgetary basis differ from the amounts reported in the governmental funds financial statements.

* 24. How valuable to you is the information in the budgetary comparison in evaluating a government's finances?

- 1 Extremely not valuable
- 2
- 3 Slightly not valuable
- 4
- 5 Slightly valuable
- 6
- 7 Extremely valuable

* 25. You answered %[24]Q35_A_1LBL%. What do you think would make this information more valuable?

* 26. You answered %[24]Q35_A_1LBL%. What do you find most valuable about the budgetary comparison?

* 27. Prior to the implementation of Statement 34, were you able to obtain the information provided by the budgetary comparison in Statement 34?

- ☐ Yes
- ☐ No
- ☐ Unsure
- ☐ Not applicable. Did not analyze pre- Statement 34 financial statements

* 28. Has Statement 34 made this information easier to obtain?

- ☐ Yes
- ☐ No

Management's Discussion and Analysis

Statement 34 requires governments to present management's discussion and analysis (MD&A) before the financial statements. MD&A summarizes information from the financial statements and notes to the financial statements for the current and preceding years and explains the changes in that information from year to year.

* 29. In general, how valuable to you is the information in MD&A in evaluating a government's finances?

- 1 Extremely not valuable

- 2
- 3 Slightly not valuable
- 4
- 5 Slightly valuable
- 6
- 7 Extremely valuable

* 30. You answered %**[29]Q40_A_1LBL%**. How valuable to you are the following required components of MD&A in evaluating a government's finances?

a. Brief discussion of the basic financial statements, including the relationships of the statements to each other, and the significant differences in the information they provide.

- 1 Extremely not valuable
- 2
- 3 Slightly not valuable
- 4
- 5 Slightly valuable
- 6
- 7 Extremely valuable

b. Condensed financial information derived from government-wide financial statements comparing the current year to the prior year.

- 1 Extremely not valuable
- 2
- 3 Slightly not valuable
- 4
- 5 Slightly valuable
- 6
- 7 Extremely valuable

c. Analysis of the government's overall financial position and results of operations to assist users in assessing whether financial position has improved or deteriorated as a result of the year's operations.

- 1 Extremely not valuable
- 2
- 3 Slightly not valuable
- 4
- 5 Slightly valuable
- 6
- 7 Extremely valuable

d. Analysis of balances and transactions of individual funds, including the reasons for significant changes in fund balances or fund net position and whether restrictions, commitments, or other limitations significantly affect the availability of fund resources for future use.

1 Extremely not valuable

2

3 Slightly not valuable

4

5 Slightly valuable

6

7 Extremely valuable

e. Analysis of significant variations between original and final budget amounts and between final budget amounts and actual budget results for the general fund, including any currently known reasons for those variations that are expected to have a significant effect on future services or liquidity.

1 Extremely not valuable

2

3 Slightly not valuable

4

5 Slightly valuable

6

7 Extremely valuable

f. Description of significant capital asset and long-term debt activity during the year, including a discussion of commitments made for capital expenditures, changes in credit ratings, and debt limitations that may affect the financing of planned facilities or services.

1 Extremely not valuable

2

3 Slightly not valuable

4

5 Slightly valuable

6

7 Extremely valuable

g. Description of currently known facts, decisions, or conditions that are expected to have a significant effect on financial position or results of operations.

1 Extremely not valuable

2

3 Slightly not valuable

- 4
 5 Slightly valuable
 6
 7 Extremely valuable

31. What other items have you seen reported in MD&A that you find valuable?

* 32. Prior to the implementation of Statement 34, were you able to obtain the information provided by the MD&A?

	Yes	No
a. Brief discussion of basic financial statements	<input type="radio"/>	<input type="radio"/>
b. Condensed financial information from the government-wide statements	<input type="radio"/>	<input type="radio"/>
c. Analysis of overall financial position and results of operations	<input type="radio"/>	<input type="radio"/>
d. Analysis of balances and transactions of individual funds	<input type="radio"/>	<input type="radio"/>
e. Analysis of significant budget variations	<input type="radio"/>	<input type="radio"/>
f. Significant capital asset and long-term debt activity	<input type="radio"/>	<input type="radio"/>
g. Description of currently known facts, decisions, or conditions	<input type="radio"/>	<input type="radio"/>

* 33. Has GASB 34 made this information easier to obtain?

	Yes	No
a. Brief discussion of basic financial statements	<input type="radio"/>	<input type="radio"/>
b. Condensed financial information from the government-wide statements	<input type="radio"/>	<input type="radio"/>
c. Analysis of overall financial position and results of operations	<input type="radio"/>	<input type="radio"/>
d. Analysis of balances and transactions of individual funds	<input type="radio"/>	<input type="radio"/>
e. Analysis of significant budget variations	<input type="radio"/>	<input type="radio"/>
f. Significant capital asset and long-term debt activity	<input type="radio"/>	<input type="radio"/>
g. Description of currently known facts, decisions, or conditions	<input type="radio"/>	<input type="radio"/>

Impact of Statement 34

* 34. Has Statement 34 improved the efficiency of your evaluation of governments?

- ☐ Yes
☐ No

* You answered that Statement 34 improved the efficiency of your evaluation of governments. Please indicate on the following scale the extent that the efficiency of your evaluation has improved:

0% Very insignificant

10%

20%

30%

40%

50%

60%

70%

80%

90%

100% Very significant

* 35. Has the implementation of Statement 34 increased or decreased the amount of time you spend communicating with government officials as part of your evaluation of governments?

☐

Decreased

☐

Increased

☐

No change

* 36. You answered that implementation of Statement 34 %[35]Q53LBL% the amount of time you spend communicating with government officials as part of your evaluation of governments. Please explain why:

* 37. How has the implementation of Statement 34 affected your ability to understand a government's finances?

1 Significantly diminished my ability

2

3 Slightly diminished my ability

4

5 Slightly improved my ability

6

7 Significantly improved my ability

* 38. To what degree do you believe that analysts and other municipal market participants rely on Statement 34 information in making decisions?

- 1 Completely unreliable
 2
 3 Slightly unreliable
 4
 5 Slightly reliable
 6
 7 Completely reliable

* 39. Based on your personal experience, do you think information provided by Statement 34 has affected the opinions of analysts and other municipal market participants?

- ☐ Yes
☐ No
☐ Unsure

* 40. You answered yes, information provided by Statement 34 has affected the opinions of analysts and other municipal market participants. Do you believe that the change in their opinions has increased or decreased any of the following?

	Increased	Decreased	No change
Borrowing costs on new bonds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bid-ask spread on bonds traded in secondary market	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Amount of time between fiscal year-end and issuance of the financial statements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Underwriter costs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 41. Based on your experience, what percentage of municipalities using the municipal bond markets issue financial statement in accordance with Statement 34?

- 0% None
 10%
 20%
 30%
 40%
 50%
 60%
 70%
 80%
 90%

100% All

Parting Thoughts

42. If you have other comments about Statement 34 not specifically addressed in the survey questions, please feel free to include them here:

Thank you for your participation in this survey.

If you are finished providing comments, click the Submit button.

APPENDIX C

EXAMPLE OF FUND-BASED FINANCIAL STATEMENTS (BALANCE SHEET ONLY)

	General Fund Townwide	Highway Fund Town Outside Village	Special District Sanitation	Capital Project Fund
ASSETS				
CASH				
Demand Deposits	\$ 28,805	\$ -	\$ 1,888	\$ 88,594
Time Deposits	9,183,729	2,092,794	651,535	5,368,323
Special Reserve	182,490	-	-	-
Restricted for Debt Redemption	207,778	-	-	-
Departmental Petty Cash	5,000	200	150	-
TOTAL CASH	\$ 9,587,802	\$ 2,092,994	\$ 653,371	\$ 5,432,917
INVESTMENTS	\$ 14,997,399	\$ -	\$ -	\$ -
RECEIVABLES				
Accounts Receivable	\$ 2,103,238	\$ 572,411	\$ 840,838	\$ 1,251,861
Due from Other Funds	698,163	63,275	75,000	-
Assessments Receivable	680,774	-	-	-
TOTAL RECEIVABLES	\$ 3,482,175	\$ 635,686	\$ 915,838	\$ 1,251,861
OTHER ASSETS				
Prepaid Expenses	\$ 1,455,886	\$ 128,159	\$ 3,645	\$ -
Other Deposits	110,000	-	-	-
TOTAL OTHER ASSETS	\$ 1,565,886	\$ 128,159	\$ 3,645	\$ -
TOTAL ASSETS	\$ 29,633,042	\$ 2,856,839	\$ 1,572,852	\$ 6,684,778
LIABILITIES & FUND BALANCES				
LIABILITIES				
Accounts Payable	\$ 658,011	\$ 375,747	\$ 852,573	\$ 330,446
Due to Other Funds	145,117	6,013	543,961	58,655
Due to Other Governments	-	-	-	118,637
Accrued Expenses	2,883,435	224,613	6,499	-
TOTAL LIABILITIES	\$ 3,686,563	\$ 606,373	\$ 1,403,033	\$ 505,738
DEFERRED REVENUE				
Special Assessment	\$ 680,774	\$ -	\$ -	\$ -
Deferred Revenue	88,648	908	271	228,325
TOTAL DEFERRED REVENUE	\$ 769,422	\$ 908	\$ 271	\$ 228,325
FUND BALANCE				
Reserve for DARE	\$ 72,778	\$ -	\$ -	\$ -
Reserve for Seized and Forfeited Property	89,712	-	-	-
Reserve for Encumbrances	144,156	2,946	5,345	127,134
Reserve for Insurance	332,971	-	-	-
Reserve for Debt Redemption	207,778	-	-	-
Reserve for Parklands	1,860,176	-	-	-
Appropriated for:				
Subsequent Years Budgeted	1,200,000	135,000	-	-
Unappropriated	21,269,488	2,111,812	164,203	5,825,581
TOTAL FUND BALANCES	\$ 25,177,057	\$ 2,249,558	\$ 169,548	\$ 5,952,715
TOTAL LIABILITIES AND FUND BALANCES	\$ 29,633,042	\$ 2,856,839	\$ 1,572,852	\$ 6,684,778

APPENDIX D

DISCLOSURE INDEX

MD&A Recommended Format
Financial Highlights
1. Overview of Financial Statements
- Should include general descriptions of financial statements
- Chart: Major Features of a Local City's Basic Financial Statements
- Government-wide financial statement subsection
- Fund financial statements subsection
EXTRAS:
- Other information included (i.e. may include discussion of budgetary or other RSI included)
- Reference to the single audit (single audit section)
TOTAL OVERVIEW OF FINANCIAL STATEMENTS
TOTAL POSSIBLE OVERVIEW OF FINANCIAL STATEMENTS
TOTAL %
2. Gov't Wide Financial Analysis or Financial Analysis of the City as a Whole
- Net Assets subsection with financial statement excerpt
- % change from prior year shown on Net Assets Statement or % of total
- Changes in net assets subsection
- Breakdown of current vs. PY for governmental activities and business type activities SEPARATELY
- % change from prior year shown on Statement of Changes in Net Assets (I/S report or on B/S report)
TOTAL GOVERNMENT-WIDE EXCERPTS

TOTAL POSSIBLE GOVERNMENT-WIDE EXCERPTS
TOTAL %
- Governmental activities subsection (or analysis of City's operations)
EXTRAS:
- Includes comparison of CY vs. PY NA in narrative (OR OVERALL CHANGE IN GOVTL FUNDS) OR SHOWN IN % CHANGE COLUMN IF INCLUDED
- Includes overview of changes in governmental revenues and/or governmental expenses from prior year with reason (NOT THE DETAILED BREAKDOWN)
- Includes breakdown of components of the SONA (B/S) for governmental and/or business activities
- Discussion of changes in program revenue in detail (i.e. by funding source) and reasons for changes if significant (0 if significant changes in program revenue are not explained in detail - n/a if no significant changes)
- Discussion of changes in property tax revenue including reasons for change (this is a type of general revenue) - n/a if not significant
- Discussion of changes in ANY "other" general revenue including sales tax, franchise tax, etc. and reasons for changes
- Discussion of ALL revenue categories with a significant change year over year (> 10%)
- Discussion of changes in ALL spending areas with significant change and reasons for change (n/a if no change is >10%)
- Discussion of transfers between funds, if applicable
- Discussion of funding for pension or OPEB in accordance with GASB 45 (they don't have to specifically say GASB 45)
- Visual aids - charts, graphs, etc. (this can be in either governmental or business-type area)
If budget variances are included in this section:
- discussion of some ACTUAL vs. BUDGETED expense variances including amount and reason
- Discussion of any RESTATEMENTS or PPA on Statement of Changes in (n/a if not applicable) in either govt'l or bus type activities
- City Highlights Section or other special section with a discussion of certain economic development and costs or extreme detail in the financial highlights section
- Business-type activities subsection including a table with changes in net assets and cost of governmental activities

EXTRAS:

- Overview of changes in business activities revenue/net assets from prior year
- Detailed breakdown of all significant changes in business activities revenue - n/a if nothing discussed but also none significant (1 if details discussed even if not significant)
- Detailed breakdown of changes in OTHER (or GENERAL) business activities revenue IF CHANGE IS 10%
- Overview of changes in business expenses from prior year
- Detailed breakdown of (all significant) changes in business expenses - n/a if none significant but none discussed (or 1 if discussed but not sig)
- Financial statement showing the breakdown of program revenue and net income by program

TOTAL GOVERNMENT-WIDE ANALYSIS**TOTAL POSSIBLE GOVERNMENT-WIDE ANALYSIS****TOTAL POSSIBLE GOVERNMENT-WIDE ANALYSIS - ADJUSTED FOR N/A****TOTAL %****Financial analysis of the Government's Funds****EXTRAS:**

- If fund balance is reserved in governmental funds, a note about what it is reserved for or a note that nothing is reserved
- A separate discussion of the proprietary funds
- Some discussion of changes in fund BALANCE SHEET items besides for fund balance
- If proprietary funds are discussed separately, a note about whether any fund/net asset balance is restricted and if so what balance restrictions are for.
- Note about any unreserved fund balance DESIGNATIONS or a note that it is unreserved AND undesignated
- Discussion of changes in fund balance (either general fund and/or prop funds OR COMBINED) including reasons for change
- Multi-year (more than just prior year comparison) breakdown of general fund balance reserved and unreserved (may be in chart form)
- Table showing changes in governmental fund balances in

total or for individual projects or funds (i.e. St of Activities for funds or projects)
- Table showing changes in governmental revenues and/or expenditures from prior year (includes \$\$ change and/or % change)
- Discussion of changes in tax rates or amounts (property taxes increased XXX due to increase in prop tax rate or other reason)
- Discussion of key changes in any general funds or other major fund revenue, expenses, etc. vs. the ALSO MAY BE TERM LIKE "LOWER THAN EXPECTED" when referring to budget
- Discussion of key changes in any general funds or other major fund revenue, expenses, etc. vs. the PRIOR YEAR
- Policies for maintaining general fund or other major fund balances and where they stand vs. policies
- Description of specific capital projects or other specific reason causing changes in fund balance of CP fund
- Description of changes in debt service fund balance with some or limited detail (payment of DS or specific DS or other reason for change or a note that unchanged)
- Financial statement showing breakdown of any of the fund financial statements
- Detailed financial statement breakdown of proprietary funds
- Discussion of and pension/OPEB fund (i.e. retiree healthcare) in accordance with GASB 45
- Discussion of transfers between funds or funding between funds
- Discussion of any RESTATEMENTS or PPA on Statement of Changes in (n/a if not applicable) in either govt'l or bus type activities with some detail
Minus 1 if the city confuses and co-mingles fund and government-wide information
TOTAL ANALYSIS OF GOVERNMENT'S FUNDS
TOTAL POSSIBLE ANALYSIS OF GOVERNMENT'S FUNDS
TOTAL POSSIBLE ANALYSIS OF GOVERNMENT'S FUNDS - ADJUSTED FOR N/A
TOTAL %
- General fund budgetary highlights
EXTRAS:

- General discussion of some budget amendments with reason for change OR A NOTE THAT THERE WERE NONE
- Comparison of general fund original to adjusted budget revenue with reason for change (i.e. why over or under budget in each area - or a note that there were no amendments)
- Comparison of general fund original to adjusted budget expenses with reason for change (i.e. why over or under budget in each area) or a note that there were no amendments
- Comparison of general fund original or adjusted budget to actual revenue with reason for change (i.e. why over or under budget in each area or a note that nothing was significant)
- Comparison of general fund original or adjusted budget to actual expenses with reason for change (i.e. why over or under budget in each area or a note that nothing was significant)
- includes a proprietary funds budget highlights section OR CLEARLY DISCUSSES PROPRIETARY BUDGETS
- Includes detailed variance financial statement showing original to final and final to actual variances
- discussion of strategic planning and other initiatives included in the budget (for that year and perhaps in future years)
- discussion of specific challenges in the previous year and how it impacted the budget NOT ECONOMY DISCUSSION
- discussion of policies for maintaining fund balance and where they stand vs. policies
TOTAL GENERAL FUND BUDGETARY HIGHLIGHTS
TOTAL POSSIBLE GENERAL FUND BUDGETARY HIGHLIGHTS
TOTAL POSSIBLE GENERAL FUND BUDGETARY HIGHLIGHTS - ADJUSTED FOR N/A
TOTAL %
3. Capital Asset and Debt Administration
- Capital assets subsection including Capital Assets detailed financial excerpt
EXTRAS:
- Description of current year major investments in capital assets including AMOUNT and TYPE (specific)
- Capitalization policy disclosed
- Discussion of governmental and business-type capital projects separately and/or clearly noted
- Visual aids included or % change year over year in detailed

financial statement
- discussion of future capital projects in budget for future year
- discussion of depreciation or impairment of assets
- Long-term debt subsection
- Long-term debt subsection includes Year-End Outstanding debt detailed financial excerpt
EXTRAS:
- Increase or decrease in bonded debt from prior year with explanation for change (general discussion)
- Disclosure of debt issued or refunded during the year with explanation of debt (XX debt was issued to do or for the purpose of XXX) If debt is refunding for lower interest and this is noted, purpose of debt is required but not amount since just a replacement. Also 1 if disclose that no new debt was issued.
- Disclosure of bond rating (Any bond rating)
- Discussion of bond rating change for any bond type WITH REASON (a 1 or 0 indicates that bond rating change was disclosed but a 0 indicates that no explanation was given)
- Disclosure of allowable debt limitations or debt policies per STATE statutes
- Discussion of current outstanding debt in relation to the allowable debt limitations per STATE statutes OR RATE
- Discussion of allowable tax rate allowed for debt per City statutes
- Discussion of current year tax rate for debt in relation to allowable tax rate per City statutes
- Disclosure of current debt per capita vs. prior year
- Discussion of debt coverage ratio policy vs. current debt coverage
- Discussion of other liabilities including reasons for current year changes OR DISCUSSION OF WORKS COMP LIAB
- Disclosure of OPEB obligation (or just disclosure in the debt subsection)
TOTAL CAPITAL ASSET AND DEBT ADMINISTRATION
TOTAL POSSIBLE CAPITAL ASSET AND DEBT ADMINISTRATION
TOTAL POSSIBLE CAPITAL ASSET AND DEBT ADMINISTRATION - ADJUSTED FOR N/A
TOTAL %

4. Maintaining the Condition of the City's Infrastructure

EXTRAS:

- Disclosure of maintenance policy rating
- Disclosure of current rating of infrastructure
- Disclosure of costs needed in the coming year to comply with policy rating

5. Factors Bearing on the City's Future

- Economic Factors and Next Year's budgets and Rates subsection

EXTRAS:

- Discussion of change in overall or general fund budget from prior year and some budget assumptions (revenue and/or expenses overall changes may be discussed separately)
- Discussion of unemployment compared to state averages (or national averages)
- Discussion of unemployment vs. prior year
- Discussion of possible decline or increase in revenue sources w reason for adjustment (i.e. trend and decreasing the budget or change or rate or APPRAISED VALUE rather than NEW ACCOUNTS) – or a note that revenue will be steady
- Discussion of budgetary adjustments for changes in specific revenue sources or stream vs. prior year (i.e. budgeting for an increase due to NEW WATER ACCOUNTS)
- Discussion of inflationary trends vs. averages in state/nation
- Discussion of future tax rates (may be just an increase or note of no change from prior year)
- Discussion of whether there is a balanced budget (or breakeven level) - specific terminology required
- Discussion of whether there is a balanced budget (or breakeven level) by just specifying use of fund balance or financial position
- Discussion of (major) initiatives budgeted for in future budget OR A NOTE THAT THERE ARE NONE
- Discussion of other specific items budgeted for or included in future budget
- Discussion of budget assumptions for Enterprise funds (or business-type activities)
- Discussion of population change
- Discussion of local economy including costs of living, job growth and business incentives OR COMPARING TAX RATES OR DEBT POSITIONS WITH OTHER LOCAL COMMUNITIES

- Discussion of employee compensation, benefits, and/or retirement contributions or incentives or union negotiations
- Discussion of unfunded pension or benefits or retirement liability (OPEB)
- Discussion of building reserves in fund balance or of budgeted reserve vs. policy or goal
- Discussion of fiscal management policies and monitoring of spending or revenues vs. budget
- Financial statement comparing CY actual to next years budget figures or CY budget to next year's budget
- Mention of the mission of the City Council overall or with this budget (i.e. WHAT it is, not simply that a mission or plan exists) - not just to provide services at lowest costs

Contacting the City's Financial Management

- includes contact information including address AND phone # or email)

TOTAL ECONOMIC FACTORS AND NEXT YEAR'S BUDGET

TOTAL POSSIBLE ECONOMIC FACTORS AND NEXT YEAR'S BUDGET

TOTAL POSSIBLE ECONOMIC FACTORS AND NEXT YEAR'S BUDGET- ADJUSTED FOR N/A

TOTAL %

TOTAL OVERVIEW OF FINANCIAL STATEMENTS

TOTAL GOVERNMENT-WIDE EXCERPTS

TOTAL GOVERNMENT-WIDE ANALYSIS

TOTAL ANALYSIS OF GOVERNMENT'S FUNDS

TOTAL GENERAL FUND BUDGETARY HIGHLIGHTS

TOTAL CAPITAL ASSET AND DEBT ADMINISTRATION

TOTAL ECONOMIC FACTORS AND NEXT YEAR'S BUDGET

TOTAL OVERVIEW OF FINANCIAL STATEMENTS WEIGHTED

TOTAL GOVERNMENT-WIDE EXCERPTS
TOTAL GOVERNMENT-WIDE ANALYSIS
WEIGHTED
TOTAL ANALYSIS OF GOVERNMENT'S FUNDS
WEIGHTED
TOTAL GENERAL FUND BUDGETARY
HIGHLIGHTS WEIGHTED
TOTAL CAPITAL ASSET AND DEBT
ADMINISTRATION WEIGHTED
TOTAL ECONOMIC FACTORS AND NEXT
YEAR'S BUDGET WEIGHTED
TOTAL DISCLOSURE SCORE

Curriculum Vitae

Rebecca I Bloch

1978	Born January 5, 1978 at Northern Westchester Hospital, Mt. Kisco, NY
1995	Graduated from Westlake High School, Thornwood, NY
1995-1999	Attended Binghamton University, Binghamton, NY (SUNY)
1999	Bachelor of Science in Accounting, Binghamton University, Binghamton, NY
1999-2001	Employed by J.H. Cohn, LLP, New York, NY – Staff Accountant
2001-2002	Employed by Ernst & Young LLP, New York, NY – Senior Accountant
2002	Certified Public Accountant – New York State
2002-2004	Employed by the Council on Foreign Relations, New York, NY – Accounting Manager
2004-2008	Employed by Downey Studios, Downey, CA - Controller
2009-2013	Employed by Rutgers University, Newark, NJ – Part-time Lecturer, Teaching Assistant, Assistant Instructor
2009-2013	Attended Rutgers University, Newark, NJ
2013-present	Employed by Fairfield University, Fairfield, CT – Instructor of Accounting
2014	PhD in Management, Rutgers University, Newark, NJ