

PRESENTATION TO HOUSE JUDICIARY COMMITTEE, SUBCOMMITTEE ON COURTS,
COMMERCIAL, AND ADMINISTRATIVE LAW

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THE MUNICIPAL BOND MARKET AND STATE BANKRUPTCY

Thank you for providing the opportunity to present our thoughts on the potential market impact of legislation to allow US states to file for protection under the federal bankruptcy code. To briefly introduce myself and my firm, I am a managing director at Municipal Market Advisors (“MMA”), an independent research and strategy group based in Concord, Massachusetts. MMA does not buy, sell, or trade any bonds or financial instruments or advise on their trading; rather, our sole product is research, commentary, and training on the municipal bond market for active market participants. Personally, I have been a municipal credit analyst since 1993, and I’m the current chair of the Municipal Analysts Group of New York and a board member for the National Federation of Municipal Analysts. In my comments today, however, I solely represent my own views and those of my firm, MMA, and not the views of any other group with which I am affiliated.

- Legislating state bankruptcy would disrupt the current municipal bond market and undermine investor confidence going forward. We strongly believe that municipal bond prices would fall, yields would rise, were states made able to file for bankruptcy. For longer maturity bonds, interest rates could easily rise by 10-20% versus current levels. Shorter maturity bonds would weaken somewhat less.
- In large part, this yield increase would belie the municipal industry’s already highly conservative practice in assessing credit and default risk. The prospect of state bankruptcy, however remote, requires a much more corporate-like measure of risk and reward. This is because bankruptcy within a Federal court makes vulnerable the robust protections for bondholders (for example, first payment priorities and senior liens on tax revenues) now provided by state bond laws and state constitutions.
- The adjustment in yields could happen quickly, but any increase in rates—and thus increases in the cost of new infrastructure projects—would persist in the long term. From a policy perspective, this means related upward pressure on state and local taxes, downward pressure on spending and state employment.

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PRESENTATION (CON'T)

- While the impact would be greatest on states perceived to be most likely to file for protection (e.g. Illinois and California), ALL states—including those with well managed pensions and budgets alongside the profligate—would reasonably pay a substantive penalty when coming to market for new loans. In effect, all states would suffer for the perceived faults of a few.
- And, because states and their local governments are deeply intertwined with management of tax collections, spending and borrowing programs, and mandates, the impact would not be confined to just states, but rather to all local governments. In addition, we'd expect that school districts; smaller, rural issuers; and poorer, urban governments—those entities most dependent on state aid for revenue—would feel the brunt of investor rejection.
- It is difficult to isolate the threat of state bankruptcy as a variable amid recent losses in the municipal market, which is also contesting with a weaker Treasury bond, headlines of looming issuer collapse, and poor communications between industry professionals and retail investors. But keep in mind that, despite these adverse vectors, long term municipal yields—as described by the Bond Buyer 20 yield index of high grade, general obligation credits—are still 125 basis points *below* their average over the last 30 years. In other words, while market participants are following the current debate extremely closely, they are not yet penalizing issuers to the extent that might be required should state bankruptcy become law.
- While some observers have defined “many” states as already “insolvent”, professional market consensus does not support this view. Rather, the majority of institutional investors, municipal credit analysts, and issuer groups appear to believe that states already retain sufficient abilities to manage their short and long term liabilities, without need of bankruptcy or other potential forms of federal bailout. Thus, the immense economic and political costs of a hypothetical state bankruptcy filing reasonably outweigh the need for such an extreme remedy. We agree with this view.
- Proponents of this bankruptcy legislation might argue that this law would simply add to the state manager's toolbox as a strategy of last resort; thus, investors more bullish over a state's economic or financial prospects could disregard the risk of any future filing. However, this perspective disregards municipal credit analysts' duty to focus on worst case scenarios to protect their portfolios, their investors, and issuers themselves from default. And in practice, investors could not expect ALL elected officials within a state legislature to not at least discuss or threaten the use of bankruptcy, while outside observers, political pundits, dedicated academics, journalists, etc., could be counted upon to remind the broader markets of the tool and its potential implications for various stakeholders.
- Thus even an unused bankruptcy law would amplify related headline risk that has already been highly disruptive to normal capital markets functions, exacerbating systemic illiquidity and pushing yields and spreads higher.

FURTHER DISCUSSION AND THE EXAMPLE OF ILLINOIS

The municipal bond market has long afforded state and local governmental borrowers a low cost of capital to finance infrastructure, not only through use of the federal tax exemption and other subsidies, but also because of excellent issuer credit quality and low historical default rates. The latter follows a number of factors, including a general lack of refinancing pressure (which mitigates issuers' vulnerability to a loss of market access); very manageable annual debt service expenses; the limited benefit from, and lopsided costs of, default; close supervision of transaction structuring by analysts worried exclusively over default risk; flexibility by states to set revenue and spending policies and account for same; steadily improving management sophistication; and, perhaps most importantly, the exceptional structural protections of bondholders versus other government stakeholders as granted by state bond laws and state constitutions.

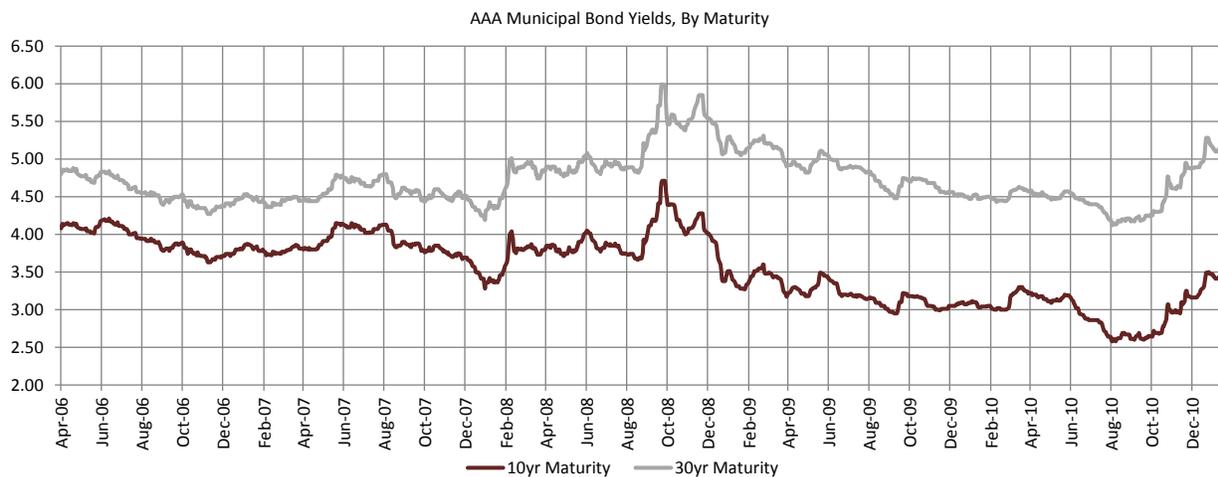
A hypothetical law to permit states to seek bankruptcy protection in Federal court would materially weaken our view, and we assume the market's view, of exactly these structural protections, aligning municipal default risk much more closely to the US corporate bond sector. For example, let's look at the state of Illinois. Pursuant to state law, the governor of Illinois has no discretion over whether or not to pay debt service; he or she must appropriate for the full payment of any outstanding general obligation debt. Again by state law, the state actually pays debt service by segregating sufficient cash at the end of each month to cover 1/6th of all coming semi-annual interest payments and 1/12th of all principal payments. Cash is deposited in the General Obligation Bond Retirement and Interest (GOBRI) Fund, which cannot be tapped for any other purpose. According to the Civic Federation's Institute for Illinois Fiscal Sustainability, "the monthly transfers to the GOBRI fund needed to make the State's debt service payments in FY11 will average between \$230MM and \$250MM ... compared to the estimated monthly General Fund receipts and transfers in ranging from \$2.3Bn and \$1.4Bn." This implies minimum five times monthly coverage by revenues, a good portion of which are under the complete and sovereign control of the state itself. And, should the General or Road Fund revenues be inadequate, or should the General Assembly not also appropriate for the payment of debt service, state law institutes an, "irrevocable and continuing appropriation of all amounts necessary for that purpose" along with compelling the state treasurer and comptroller to implement these actions as required.

In other words, Illinois' payment of debt service is effectively made senior to any other obligation of the state, while the monthly segregation schedule helps negate timing, seasonal, liquidity, and even political hurdles that might arise. It is thus very hard to see ANY problem with payment of debt service on the state's long term debt, even under the most strenuous or long-term scenarios being played in the media. And so, despite the state's extremely difficult budget situation, management's limited willingness to make structural corrections to that budget problem instead of relying on gimmicks and borrowing, and its enormous long term pension funding challenges, investors continue to buy and hold state of Illinois general obligation bonds. Were a hypothetical law passed to allow Illinois to file for bankruptcy, the state's GOBRI and other legal bondholder protections become potentially vulnerable to revision, while debts could be adjusted outside of these mechanisms altogether. This completely changes the measure of risk in holding state of Illinois paper, forcing yields higher. Similarly, investor and regulator demands for better financial and event disclosure would grow, bolstering efforts for SEC regulation of municipal issuers and bond issues. The economic and political cost of compliance with much stronger disclosure requirements would add to budget pressure, again increasing the potential for tax increases and/or spending reductions.

THE MUNICIPAL BOND MARKET IS FRAGILE BUT SURVIVING AT PRESENT

Since the summer of 2007, the US municipal bond market has experienced extraordinary price and volume volatility because of the housing market crisis, the flight to safety in Treasury securities, downgrades to the bond insurers, the auction rate securities collapse, the unwinding of leveraged bondholders, the downfall of Lehman Brothers and other bank counterparties, the ARRA and its Build America Bonds Program, the expiration of that program, the reversal of flight to safety demand for Treasuries, and, most lately, media pundit guesses that widespread municipal bond defaults are imminent. Tax exempt bond yields, which reached historical highs in 4Q08 amid forced selling by hedge funds and dealer proprietary desks, achieved all-time lows in 3Q10 because of relative product scarcity—most longer maturity, high grade issuance was being sold through the BAB program—and, drawn along with the Treasury market, have now climbed back to somewhat elevated levels. Still, media coverage analogizing municipal bonds as the next “subprime” collapse, not to mention a broader realization among investors of this market’s fundamental complexity and time-intensive demands on investment management, have precipitated large de-allocations to municipal portfolios. This has come via withdrawals from tax-exempt mutual funds, a weak reinvestment of principal payments being received by retail investors, and larger institutional portfolio downsizing to address liquidity, pricing, and credit concerns at both the portfolio manager and senior executive level. Further, weaker and inconsistent demand, in particular within the legacy of the financial collapse of 2007 to 2009, means that underwriters are currently less able to carry unsold loan proceeds when they bring a new bond to the primary market, meaning they cannot cushion poorly received primary loans with their own buying power as formerly. Issuers are thus already paying somewhat higher interest rates to help bonds move more quickly to buy-and-hold accounts, in addition to paying wider spreads and adhering to more stringent credit conditions.

So municipal issuers, apparently on expectation of a quick rebound in the bid side, have been reluctant to bring new loans in the primary market, depriving participants of what has historically been our market’s prime source of price discovery and, paradoxically, worsening illiquid conditions. This will drive a far lower new issue calendar in 2011 than in 2010; MMA has estimated long term sales will decline from \$430Bn last year to \$350Bn this year, with likely more downside than upside in that projection. And finally, while there has very recently been some opportunistic bidding for bonds by non-traditional municipal investors, our market will need a better bid from traditional institutional accounts before yields and spreads can become more organized and persistent. The concept of state bankruptcy is helping to delay this return.



On fears of sweeping credit defaults, MMA believes that, while a change in current default trends to a much higher level is possible, much more likely is a continuation of very low default activity for governmental and “safe sector” issuers. Historically, rating agency studies have shown that AAA-rated corporate bonds have defaulted almost ten times more frequently than single-A-rated municipal bonds. However, MMA also maintains a database of all ongoing default and impairment filings made to the MSRB’s EMMA system since July 1, 2009. These show that current municipal default activity is largely confined to smaller, non-rated transactions with security pledges that skew almost entirely to so-called “risky” sectors, meaning bond types that have been responsible for the large majority of payment defaults over the last four decades. As of January 28, 2011, there were \$8.1Bn of municipal bonds outstanding (issued by 258 different entities) where there is an uncured default in either principal or interest. Of those 258 entities, 117 were special districts created to speculate on the development of a real estate property or properties, 47 were bonds backed by the net income of an apartment building, and 27 were bonds backed by nursing homes. Only 15 of the 258 entities sold bonds that initially carried any rating at all, implying an effective default rate of less than 0.1% among the 25,000 or so rated municipal entities. Finally, none of these 258 bonds in payment default are

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“traditional” munis, meaning governmental general obligation bonds. Thus, while fears persist of a looming credit crisis, that crisis, to date, has yet to begin. We also note that there are \$9.0Bn of outstanding municipal bonds that most recently relied on emergency sources (such as reserve funds or bond insurance) to cover debt service and have not yet replenished or repaid those source. And there is another \$8.0Bn of municipal bonds where management notes some financial pressure but is still able to service its debt by regular means.

Par (and #) of Loans Impacted in Notices of Payment Defaults and Credit Impairments (\$MM)				
Sector	All Notices	DEFAULT	Support	Other
ALL	\$25,121 (566)	\$8,111 (258)	\$8,974 (200)	\$8,035 (108)
Land Secured	\$4,432 (233)	\$2,261 (117)	\$1,585 (97)	\$585 (19)
Toll Road/Transit	\$1,760 (5)	\$1,488 (3)	\$143 (1)	\$129 (1)
Tribal	\$1,400 (7)	\$1,385 (6)	none	\$15 (1)
Housing	\$901 (63)	\$736 (47)	\$129 (12)	\$35 (4)
Retirement	\$1,591 (52)	\$685 (27)	\$263 (7)	\$643 (18)
Hotel	\$696 (12)	\$338 (5)	\$260 (6)	\$98 (1)
Hospital	\$1,401 (29)	\$288 (7)	\$692 (6)	\$421 (16)
Other Risky Sectors	\$5,818 (121)	\$882 (43)	\$1,732 (52)	\$3,204 (26)
Safe Sectors (GO,Wtr/Swr,SalesTx)	\$7,122 (44)	\$47 (3)	\$4,171 (19)	\$2,904 (22)
Initially Non-Rated Bonds	\$9,278 (402)	\$5,006 (216)	\$2,614 (131)	\$1,658 (55)
Initially Insured/LOC Bonds	\$9,089 (80)	\$827 (5)	\$5,631 (44)	\$2,631 (31)
Initially Rated, Uninsured Bonds	\$5,398 (43)	\$1,306 (14)	\$427 (16)	\$3,665 (13)

PUBLIC PENSIONS AND THE MUNICIPAL BOND MARKET

As the recession has taken its toll on equity and alternative investment valuations, state and local pension systems have reported steep deterioration of assets and a resulting sharp growth in unfunded liabilities. This is a source of alarm for some municipal investors and commentators, reflecting widespread misunderstanding of the distinction between bondholder and other state government stakeholder risks. Because, while pension costs will, over the next twenty years, draw an increasing share of tax revenues away from more growth-friendly investments like infrastructure, education, and social services, there is only a remote risk of these costs getting between issuers and current bondholders.

This is not to say that long-term defined benefit funding challenges haven't grown worse; they have. Through September 2010, the US Census shows the 100 largest public pension plan assets at \$2.5Tn, down from \$2.9T at the end of 2007. Meanwhile estimates of unfunded pension benefit liabilities are at least \$800Bn, and, because public pension accounting rules employ what some have called aggressive liability discounting assumptions, this number may greatly understate the true gap in funding of future retiree costs. What's more, the severe and continuing recession in state tax revenues has led many governments to defer, restructure, or borrow for current employer contributions and/or unfunded liability amortizations, exacerbating the asset gap and undermining managers' aspiration to fiscal discipline.

Still, pension funding challenges are only an oblique threat to the near- and long-term payment of municipal bond debt service, and thus the municipal bond market itself.

- While total pension liabilities are very large, it is annual servicing charges and their related impact on state cash flow that is relevant to bondholders who are also being paid out of annual cash flow. And, with only 3% of state budgets currently being used to cover annual employer contributions to pensions, pension funds are not a prime source of budget distress. Even assuming a doubling or tripling of annual employer contributions, bondholders—who themselves receive 5-10% of state budgets via annual principal and interest payments—will feel only a modest competitive threat from pension funding needs.
- Unlike US corporations, which MUST amortize unfunded pension liabilities over seven years, the Governmental Accounting Standards Board (GASB) has given states and local governments thirty years to pay down their gap. Of course, this depends on whether or not the states choose to abide by GASB at all. Annually budgeted pension payments—away from actual benefit payments to current retirees which can approximate a state's obligation to pay GO debt service—are thus effectively optional, at least in a legal sense. (Were they not so optional, it is unlikely that such large deficits would exist in the first place). Recently introduced legislation to enhance and standardize the reporting of state pension liabilities may provide a modest benefit to analysts seeking more malleable information when constructing long-term state financial projections, although, again, higher disclosure costs and a new set of official numbers may put upward pressure on taxes and increase political volatility.
- Regarding actual benefit payments, states currently pay their retirees about \$150Bn per year in regular pension disbursements according to Novy-Marx and Rauh. The authors project that annual payments to current retirees and retired current employees will increase to about \$300Bn per year by 2030, meaning the states will likely need to source an additional \$150Bn in annual spending over the next twenty years. While this number is steep, it is still less than the immediate revenue crisis of the current recession. The National Conference of State Legislatures shows that, since FY08, states have closed cumulative budget gaps of \$414Bn. And of course, in their pension funds, the states have already accrued substantial cash balances in anticipation of this burden. The retirement costs of employees not yet hired are more manageable as these can, have been, and likely will continue to be reduced in future labor agreements.
- Keep in mind that state-by-state choices for addressing long-term funding gaps can have an impact on the state's near-term headline and rating risk and can even create actual credit risks. For example, Illinois' repeated decision to borrow in the public debt markets to fund both immediate and long-term pension costs has reduced that state's annual budgetary discretion, to the detriment of its ratings and capital market access costs. While the risk of Illinois actually defaulting on a bonded obligation is remote (see above), its continual replacement of flexible with inflexible obligations is making future budget challenges larger and weakening the state's ability to invest in projects for economic growth and education.
- In funding their future retiree costs, states make a combination of 1) regular employer contributions and 2) unfunded liability amortization payments. To cushion the General Fund against volatility in the latter, states typically smooth annual returns on invested assets over five years. So a large bull market will dramatically diminish a state's calculated unfunded liability, while a large sell-off will not dramatically reduce projected asset values. Thus, while assets under management at state pensions have been rising since June 2009, calculated funding gaps will continue to widen over the next few quarters as the

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states slowly incorporate the impact of the market selloff in 2008.

- Consistently high liability funding ratios are not necessarily optimal as these can be subject to incremental benefit grants to employees, the implementation of high cost/high risk investing strategies, or employer payment holidays. We'd also argue that low funding ratios, in concert with long-term strategies to steer excess cash or credit into infrastructure and education or lower state taxes, might better facilitate tax base development, bolstering future tax revenues with which retirees can be paid.
- And finally, we believe that state and local pensions receive excessive attention because long term liabilities are easily visualized in accountants' reports. The fundamental issue for the country is the extent to which future retirees will have sufficient financial resources to live without undue stress. The recent recession—and its impact on long-term 401k and housing values—has created an enormous future funding challenge for non-pensioned employees and retirees. In our opinion, the impact of diminished retiree financial resources on a consumption-based economy like our own is likely to have more dramatic ramifications for the private than the public sector over the next several decades.

BANKRUPTCY AND THE MUNICIPAL BOND MARKET

In the past, Chapter 9 bankruptcy has been seldom used by the local governments allowed to file for protection under their respective state laws. This limited use has meant: 1) few precedents as to the treatment of bondholders in bankruptcy, allowing 2) substantial room for speculation as to what would happen under a state bankruptcy. Still, it does not appear that state bankruptcy would be the financial panacea its proponents expect. In most recent cases, municipal bankruptcies have not resulted in serious losses to either bondholders or existing pensioners.

Below we show a table of all 25 Chapter 9 filings since 2007, including five in 2007, four in 2008, ten in 2009 and six in 2010. Sixteen of these governments had a total of \$627MM in debt outstanding at the time of filing, although more than half of that was issued by the Connector 2000 Association toll road in South Carolina, which filed last year. In that case, bondholders have tentatively agreed to large haircuts in their principal, in particular for subordinate debt holders; however, most filings have not resulted in significant impairments to bondholders. The second largest case in the table, the \$103MM Valley Health System in CA, saw redemption of all bonds at par. Vallejo is third-largest filing at \$52MM, and we note the city's recent proposal to repay all outstanding par plus interest, although not penalty interest currently due. Note that, contrary to fears at the time and since, Vallejo remains the last governmental entity (meaning a regular city or county or school district) with any public debt outstanding to file for bankruptcy. Importantly, Vallejo entered Chapter 9 ostensibly to restructure public employee contracts; however, it does not appear that contracts for existing employees were substantially revised. The city bankruptcy's high cost (estimates of legal fees are at least \$10MM), extended duration, and middling results are likely a good explanation of why other cities have not followed in Vallejo's footsteps.

Rounding out the top 5 filers since 2007 are the \$34MM Pierce Co. Housing Authority in WA where bondholders were fully repaid, and the \$33MM Sierra Kings Health District, received a ruling last fall reinforcing the non-impairment of GO bondholders when paid by a dedicated tax levy. Finally, 5 (or 20%) of all Chapter 9 filings since 2007 have been by Sanitary Improvement Districts: tiny non-rated land speculation entities in Nebraska. In general, trends in the last four years show little divergence from longer patterns of much higher incidence of bankruptcy filings in CA, NE, and TX versus any other state. 108 of the total 224 Chapter 9 filings since 1983 have been in just 3 states. While these data do not show that municipal credit issues are lightly dismissed, they DO indicate that the speculation over a wave of near term Chapter 9 filings is, to this point, just speculation.

Chapter 9 Bankruptcies since 1/1/07			
DATE	FILER	BONDS	NOTES
2/6/2007	Marion, MS	none	Case dismissed as cities in MS can't file for Ch 9.
4/2/2007	McCurtain Municipal Auth., OK	none	Authority used rural development loans
4/5/2007	Palm Drive Health Care Dist., CA	\$15MM	Bondholders unimpaired
8/30/2007	Timberon Water & Sanitary Dist, NM	none	Dismissed, closed
12/13/2007	Valley Health Sys., CA	\$103MM	Initial non-payment, all bonds redeemed at par
4/21/2008	Gould, AR	none	Case may still be open
5/23/2008	Vallejo, CA	\$52MM	Issuer plan: 100% principal repay, plus regular interest, minus penalty interest
7/22/2008	Benton Co. Prop. Owners Imp. Dist., AR	\$3MM	Bondholders ultimately received 21 cents
10/13/2008	Pierce Co. Housing Auth., WA	\$34MM	Bondholders unimpaired, mold lawsuit issues
2/12/2009	Natchez Reg. Medical Ctr., MS	\$17MM	LOC on bonds, holders unimpaired
2/24/2009	Douglas Co. Sanitary Imp. Dist. 452, NE	\$2MM	No plan available yet
4/10/2009	Westfall Twp., PA	none	Payment plan for lawsuit and bank loan
7/6/2009	Washington Park, IL	none	Tax/fee lawsuits & embezzlement
7/13/2009	Sarpy Co. Sanitary Imp. Dist. 251, NE	\$10MM	Bondholders impaired, issue close to resolved
10/8/2009	Sierra Kings Health Dist., CA	\$33MM	Court affirmed bondholder lien on ad valorem taxes; bonds will not be impaired
10/22/2009	Moffet, OK	none	Follow up to 2006 filing, disincorporation
10/27/2009	Pritchard, AL	none	Pension issues, city also filed in 1999
11/19/2009	Douglas Co. Sanitary Imp. Dist. 509, NE	\$2MM	Bondholders unimpaired, managed bankruptcy
12/3/2009	New York City Off Track Betting, NY	none	Dismissed, closed
3/4/2010	Grimes Co. MUD #1, TX	\$1MM	Plan is to sell assets, distribute to bondholders
3/10/2010	Lost Rivers Dist. Hospital, ID	\$1MM	Bond are paid by county tax levy; unimpaired
6/24/2010	Connector 2000 Assoc., SC	\$329MM	Bondholders agreeing to large haircuts in restructuring
8/27/2010	Lake Lotawana Comm. Imp. Dist., MO	\$9MM	Ongoing trial
9/28/2010	Douglas Co. Sanitary Imp. Dist. 507, NE	\$4MM	Plan extends maturities but pays 100%
12/14/2010	Douglas Co. Sanitary Imp. Dist. 528, NE	\$12MM	Proposing debt exchange, reduced interest