

**VILLAGE OF DOWNERS GROVE**  
**REPORT FOR THE SPECIAL VILLAGE COUNCIL WORKSHOP**  
**MARCH 31, 2008 AGENDA**

SUBJECT:	TYPE:	SUBMITTED BY:
Discussion of Bond Issuance for Watershed Improvements	Resolution Ordinance Motion <input checked="" type="checkbox"/> Discussion Only	Cara Pavlicek Village Manager

**SYNOPSIS**

Staff has scheduled an informal meeting to allow for Council discussion regarding the issuance of General Obligation (GO) bonds in the amount of approximately \$24,679,000 for the purpose of watershed improvements. Northern Trust, the Village's Financial Advisor, will be at the Workshop and discuss the options available relative to the GO bond issuance as well as the potential for any refunding of existing debt.

**STRATEGIC PLAN ALIGNMENT**

The Five Year Plan and Goals for 2007-2012 identifies *Top Quality Village Infrastructure and Facilities*. A supporting objective is *Improve Neighborhood Infrastructure Curbs, Gutters, Streets, Sidewalks, Stormwater and Drainage System*. The Policy Agenda for 2007-2008 identifies *Watershed Infrastructure Improvement Plan: Development and Funding* as a Top priority.

**FISCAL IMPACT**

The FY08-12 CIP includes approximately \$27.3 million of expenditures in the Stormwater Fund over three fiscal years for the construction of selected projects identified in the Watershed Infrastructure Improvement Plan. These expenditures would include design and construction.

In August 2007, staff presented a comprehensive financial review to the Village Council regarding funding strategies for the proposed Watershed Infrastructure Improvement Plan. Those alternatives were discussed with the Council as well as at a series of four public meetings prior to a more detailed review of these financial alternatives as a part of the annual budget process in October. On November 6, 2007, the Village Council authorized a professional services agreement with Northern Trust to provide an analysis of the Village's financial position and to provide a general strategy for the issuance of bonds to fund construction of the stormwater projects. On November 20, 2007, Northern Trust provided a report to the Village Council. The recommended strategy for three separate bond issuances (2008, 2012 and 2015) included the issuance of GO bonds with constant annual debt service payments in the amount of approximately \$4.0 million. This recommended strategy is consistent with the adopted FY08 Municipal Budget and FY08-12 CIP.

During the review and approval of the FY08 Municipal Budget, the Village Council and staff discussed options for financing these project expenditures. Given the nature of these public capital improvements, it is recommended that GO bonds be issued to finance the projects over thirty years. The FY08 Municipal Budget includes for the first time a Stormwater Improvement Fund which is supported by a quarter cent increase in the Home Rule sales tax, an annual property tax levy of \$2,130,000 (to fund debt service payments and annual stormwater maintenance expenses) and the pre-existing detention variance fee. The Home Rule sales tax increase will be effective July 1, 2008. It is anticipated that a GO bond of approximately \$24,679,000 will be issued in FY08, followed by a GO bond issuance of approximately \$24,124,000 in FY12 and finally a GO bond issuance of approximately \$23,464,000 in FY15. The debt service on these issuances will be covered by the above mentioned quarter cent Home Rule sales tax,

property taxes and detention variance fees. The resulting bond proceeds will allow the Village to complete the most critical capital improvements identified in the Watershed Infrastructure Improvement Plan.

## **RECOMMENDATION**

Discussion only.

## **BACKGROUND**

Pursuant to the Village Council's Debt Management Policy, the Village should seek to minimize debt interest costs and consider market timing when issuing debt. During the preparation, review and approval of the FY08 Municipal Budget, the Council and staff discussed issuing bonds in mid- to late-2008. However, the interest rates for long term municipal bonds are currently fluctuating on a daily basis as changes in the secondary market continue to unfold. Despite these fluctuations, the average rates have remained relatively low when viewed from a historical perspective.

At the February 5, 2008 Council meeting, staff outlined the following schedule for the issuance of the bonds.

Selection of a Financial Advisor – On February 19, 2008, the Village Council approved a contract with Northern Trust Corporation to serve as the Village's Financial Advisor.

IRS Reimbursement Resolution – On February 19, 2008, the Village Council adopted an IRS resolution that is required for the Village to be able to "reimburse" project expenditures from the proceeds of a tax-exempt bond. Upon issuance of a GO bond, the Village may utilize bond proceeds for expenses related to the watershed infrastructure improvements as early as 60 days prior to the passage of the resolution.

Public Hearing for the Issuance of GO Bonds – The Village Council held a public hearing on February 19, 2008.

Issuance of GO Bonds – The Village is in the process of beginning the bond issuance for watershed infrastructure improvements.

The Village's Financial Advisor, Northern Trust, will present information relative to the options available to the Village for issuing GO bonds. Northern Trust's presentation (attached) addresses the following issues.

- Market Overview – An assessment of the current municipal bond market and the issues that may affect the market in the near future.
- Types of Available Bond Issuances – An overview of the types of competitive processes that the Village could use to issue the bonds.
- Timing – An explanation of how the timing of the bond issuance could affect the Village.

Based upon the discussion at this meeting, staff will schedule the proposed bond issuance for discussion at a future Council Workshop meeting.

## **ATTACHMENTS**

Northern Trust presentation for the March 31, 2008, Special Workshop  
Northern Trust presentation for the November 20, 2007, Council Meeting  
Glossary of Terms



*Presentation to:*

*The Village of Downers Grove*



## *Special Workshop Meeting*

March 31, 2008

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- ▶ Section 2 - Financing Analysis
- ▶ Section 3 - Refunding Opportunities



## *Section 1 – Market Update*



# Current Interest Environment

- ◆ The sub-prime mortgage crisis has had a rippling effect on the municipal market.
- ◆ Bond insurance companies have exposure to sub-prime credits and have impaired their capital structure.
  - Many Bond insurers have been downgraded (FGIC: ‘A3/A/BBB’ and XL Capital: ‘A3/A-/BB’).
  - Other Bond insurers have a negative credit outlook (MBIA).
  - FSA and Assured Guaranty have maintained their ‘AAA/Aaa/Aaa’ Ratings and stable outlook.
- ◆ As a result of the downgrades and the uncertainty in the bond insurance market, insured municipal bonds have been trading based on their underlying rating and not to the insured rating.
- ◆ Auction Rate Securities which are typically supported by bond insurance have recently had many failed auctions.
  - From 1984 to 2007, only 44 auction rate programs had failed auctions.
  - In February of 2008, there were over 2,000 failed auctions which drove interest rates on the auction rate securities to the maximum levels (9-20%).

# Current Interest Environment

- ◆ The failed auctions have resulted in issuers converting their Auction Rate Securities into alternative structures:
  - Convert to traditional variable rate demand bonds backed by a bank letter of credit.
  - Convert to traditional fixed rate bonds.
  
- ◆ In the current market we are seeing:
  - Investor mentality – flight to quality (treasuries).
  - Increased supply of long-term bonds (due to converting auction rate securities).
  
- ◆ As a result of the credit and liquidity crisis, we are seeing municipal bonds trade at 100% to 120% of treasuries. In a typical market, we would see this ratio at 70-80%.

	As of March 12, 2008				As of March 27, 2008			
	10-Year	vs. Treasury	20-Year	vs. Treasury	10-Year	vs. Treasury	20-Year	vs. Treasury
Treasury	3.70%	-	4.42%	-	3.74%	-	4.42%	-
AAA Municipal	3.75%	101.4%	4.77%	107.9%	3.79%	101.3%	4.78%	108.1%
AA- Municipal	3.94%	106.5%	4.88%	110.4%	3.90%	104.3%	4.96%	112.2%
A- Municipal	4.27%	115.4%	5.17%	117.0%	4.18%	111.8%	5.12%	115.8%

- ◆ Although taxable interest rates are low, now may not be the most opportune time to enter into the municipal market due to the trading levels of municipal bonds.



## *Section 2 – Financing Analysis*





# Historic Interest Rates

- ◆ The chart and graph below detail the historic average of the Bond Buyer 20-year General Government Index that consists of 'AA' rated 20-year general obligation secured debt.

Historical Interest Rates	
	20-Yr. GO
<b>Current:</b>	4.88%
<b>Average:</b>	
1-Year	4.48%
3-Year	4.41%
5-Year	4.51%
10-Year	4.89%
15-Year	5.18%
<b>10-Year High:</b>	6.09%
<b>10-Year Low:</b>	4.03%



- ◆ The current 20-year G.O. rate is 4.88% as opposed to 4.54% on November 20, 2007.
- ◆ Although rates have increased, current rates are at 10-year historic averages and below the 15-year average.

# Stormwater Financing Assumptions

## Structure

- **Structure** – Issue fixed rate bonds.
- **Timing** – Assumed three bond issuances with anticipated delivery dates of July 1, 2008, January 1, 2012 and January 1, 2015.
- **Amortization** – Total amortization of 30-years. The 2008 issue will amortize over 30 years, the 2012 bond issue will amortize over 26 years and the 2015 bond issue will amortize over 23 years.

## Fees

- **Bond Insurance** – Assumes no bond insurance.
- **Costs of Issuance** – Excluding bond insurance premium fees, our analysis assumes total cost of issuance to be \$10.00/\$1,000.

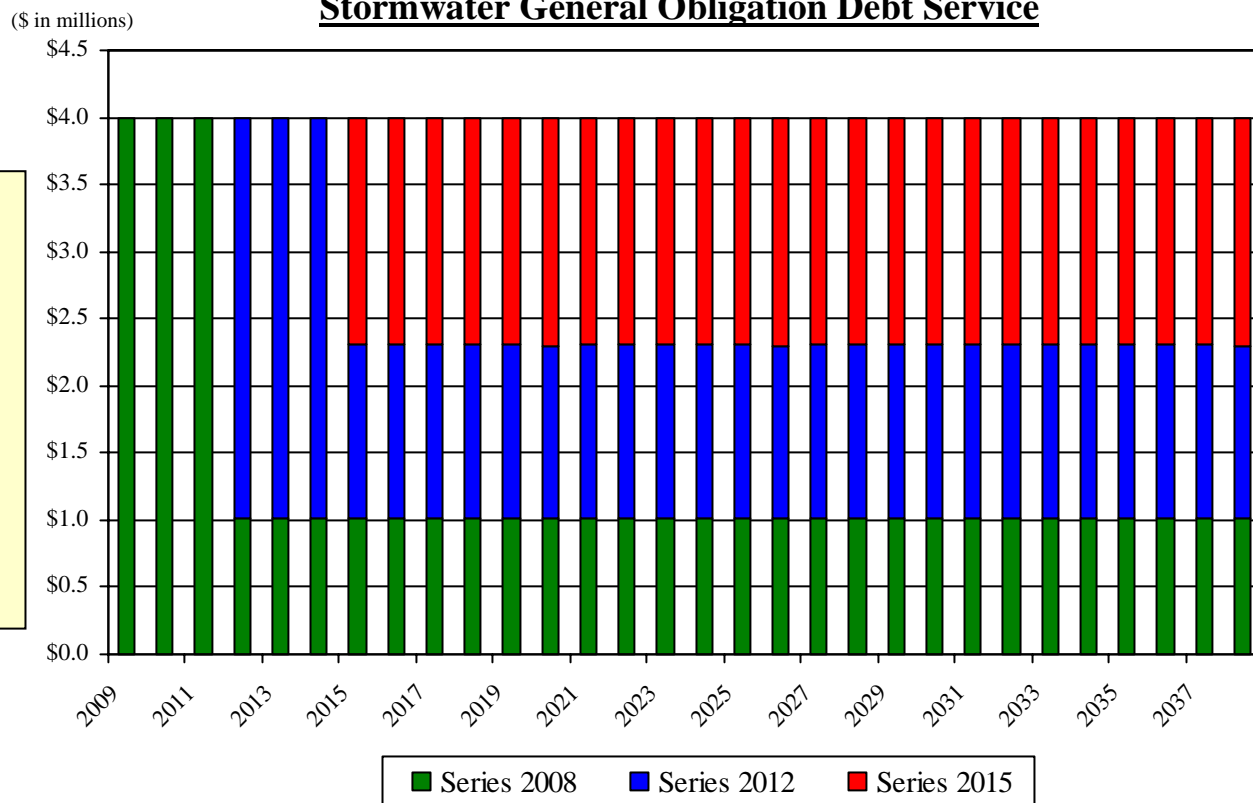
## Interest Rates

- **Scale** – Our analysis reflects a ‘AA+’ tax-exempt non-bank qualified fixed rate scale as of March 27, 2008.
- **Future Interest Rates** – The 2012 issue reflects a 25 basis point increase from the 2008 scale and the 2015 issue reflects a 25 basis point increase from the 2012 scale.

# \$4.0 million Debt Service Scenario

- ◆ \$4.0 million in debt service can potentially support up to **\$71,105,000** in project costs plus costs of issuance.
- ◆ As of November 20, 2007, this analysis generated total net proceeds of \$72,267,000 or a difference of \$1,162,000.

**Stormwater General Obligation Debt Service**



Net Proceeds by Series

Series 2008 - \$24,680,000

Series 2012 - \$23,555,000

Series 2015 - \$22,870,000

Total Net Proceeds - \$71,105,000





## *Section 3 – Refunding Opportunities*



# Refunding Update

- ◆ Based on current interest rates, there are no refunding candidates that generate greater than a 2.0% savings threshold on a maturity-by-maturity basis.
- ◆ As the Village's Financial Advisor, Northern will continue to monitor the markets and advise the Village of potential refunding opportunities.



*Presentation to:*

*The Village of Downers Grove*



# *Stormwater Financing Analysis*

November 20, 2007



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- ▶ Section 1 - Financing Capacity
- ▶ Section 2 - Potential Credit/Ratings Impact
- ▶ Section 3 - Refunding Opportunities



## *Section 1 – Financing Capacity*





# Stormwater Financing Assumptions

## Structure

- **Structure** – Issue fixed rate bonds supported by ‘AAA’ bond insurance.
- **Timing** – Assumed three bond issuances with anticipated delivery dates of July 1, 2008, January 1, 2012 and January 1, 2015.
- **Amortization** – Total amortization of 30-years. The 2008 issue will amortize over 30 years, the 2012 bond issue will amortize over 26 years and the 2015 bond issue will amortize over 23 years.

## Fees

- **Bond Insurance** – Northern expects ‘AAA’ bond insurance fees to range from 15 basis points to 25 basis points. Our analysis assumes a bond insurance premium of 18 basis points.
- **Costs of Issuance** – Excluding bond insurance premium fees, our analysis assumes total cost of issuance to be \$10.00/\$1,000.

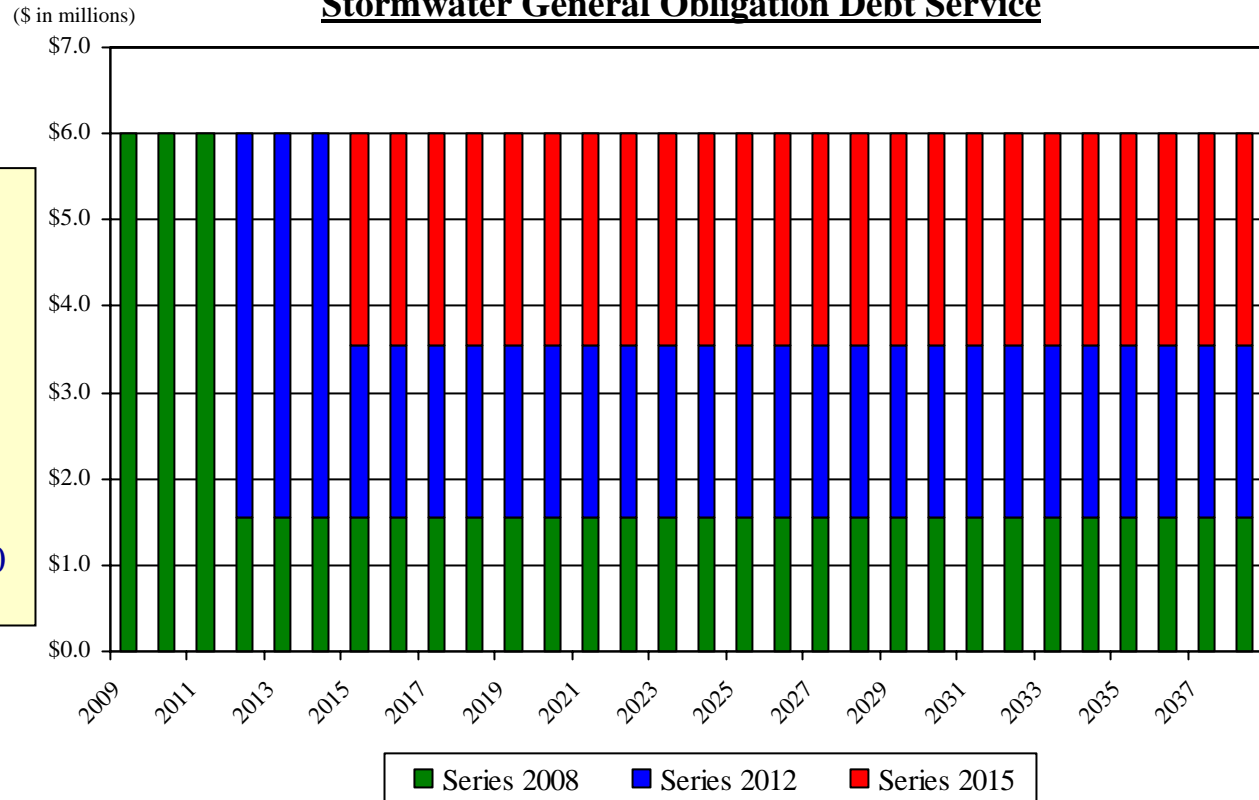
## Interest Rates

- **Scale** – Our analysis reflects a ‘AAA’ insured tax-exempt non-bank qualified fixed rate scale as of November 12, 2007. The Series 2008 Bonds have an average coupon of 4.41%.
- **Future Interest Rates** – The 2012 issue reflects a 25 basis point increase from the 2008 scale and the 2015 issue reflects a 25 basis point increase from the 2012 scale.

# \$6.0 million Debt Service Scenario

- ◆ \$6.0 million in debt service can potentially support up to **\$108,254,000** of project costs plus costs of issuance.

**Stormwater General Obligation Debt Service**



Net Proceeds by Series

Series 2008 - \$37,512,000

Series 2012 - \$36,649,000

Series 2015 - \$34,093,000

Total Net Proceeds - \$108,254,000

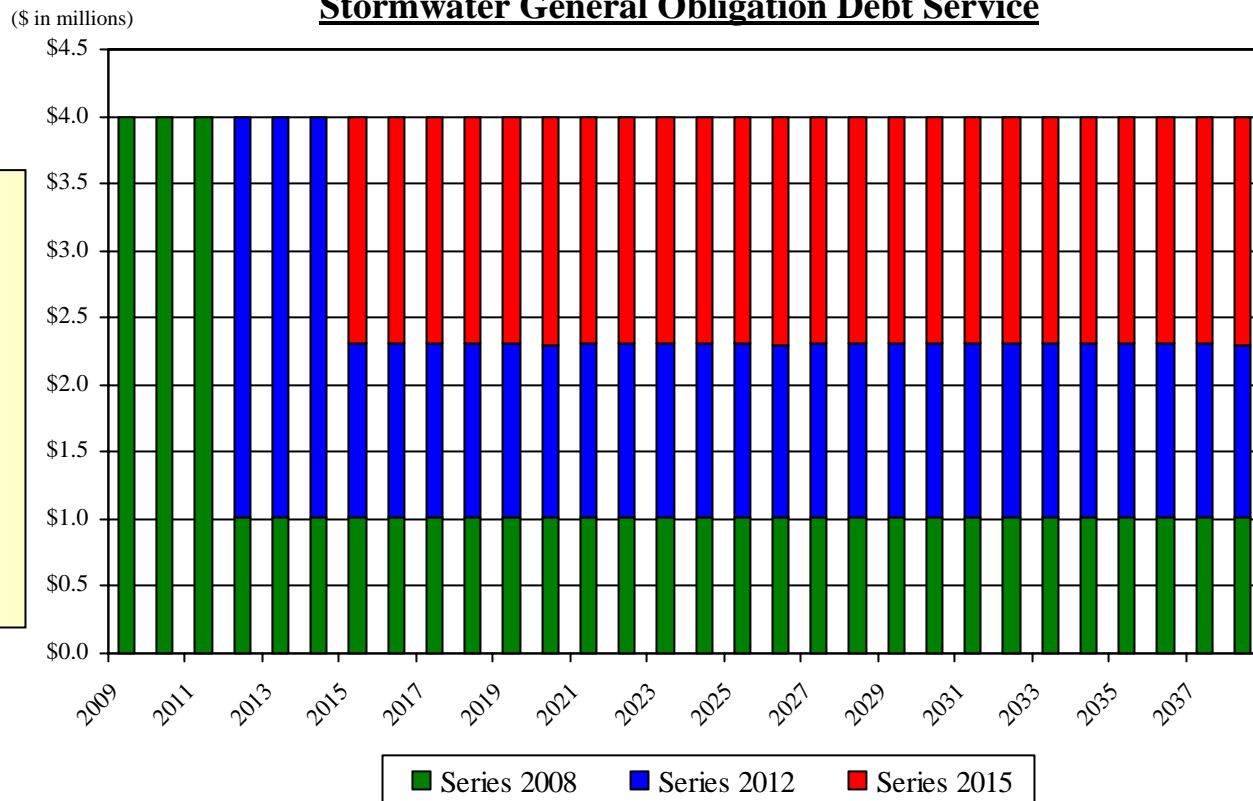
**Note:**

Series 2008 All-inclusive Cost: 4.50%  
 Series 2012 All-inclusive Cost: 4.73%  
 Series 2015 All-inclusive Cost: 4.95%

# \$4.0 million Debt Service Scenario

- ◆ \$4.0 million in debt service can potentially support up to **\$72,267,000** in project costs plus costs of issuance.

**Stormwater General Obligation Debt Service**



Net Proceeds by Series

Series 2008 - \$24,679,000

Series 2012 - \$24,124,000

Series 2015 - \$23,464,000

Total Net Proceeds - \$72,267,000

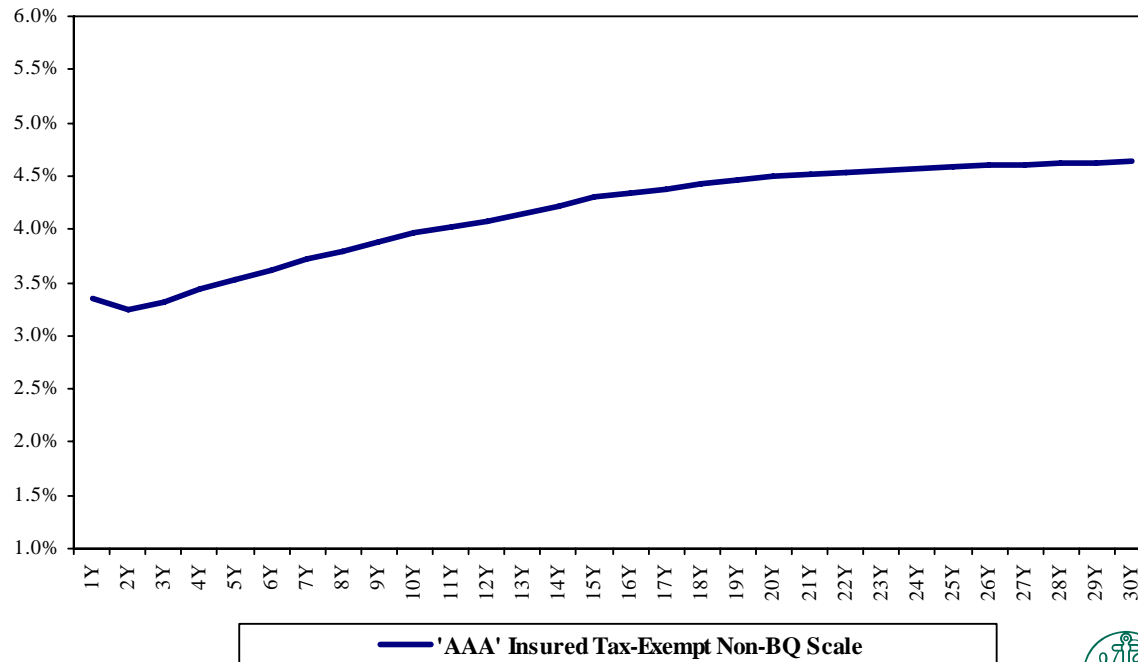
**Note:**  
 Series 2008 All-inclusive Cost: 4.50%  
 Series 2012 All-inclusive Cost: 4.73%  
 Series 2015 All-inclusive Cost: 4.95%

# Protecting Against Rising Interest Rates

- ◆ To mitigate the risk of rising interest rates between now and the anticipated future bond issuances, the Village of Downers Grove can utilize a financing vehicle called a “Rate-Lock”.
- ◆ A Rate-Lock locks in current debt service levels for a future bond issuance, but there is a cost to the Rate-Lock.
- ◆ A Rate-Lock to July 1, 2008 would cost the Village approximately **8 basis points**.
  - Our analysis assumes the Series 2008 bonds are issued at current interest rates with an average coupon of 4.41%. With a Rate-Lock, the Village could lock-in to debt service levels at an average coupon of 4.49%.
- ◆ A Rate-Lock to January 1, 2012 would cost the Village approximately **40 basis points**.
  - Our analysis assumes the Series 2012 bonds are issued with an average coupon of 4.63%. With a Rate-Lock, the Village could lock-in to debt service levels at an average coupon of 4.81%.

# Current Market Environment & Projected Interest Rate Movement

- ◆ Currently the tax-exempt yield curve is relatively flat versus historic averages.
- ◆ The spread between the 30-year maturity and the 20-year maturity is only 15 basis points. Thus the cost to borrow out 30-years versus 20-years is very low in the current interest rate environment.
- ◆ Northern's economist's expect interest rates to decrease over the next 2 quarters and to remain relatively steady through fiscal year 2008. Northern's economists are projecting two additional 25 basis point cuts in the Federal Funds rate in the first and second quarter of 2008.



# Historic Interest Rates

- ◆ The chart and graph below detail the historic average of the Bond Buyer 20-year General Government Index that consists of 'AA' rated 20-year general obligation secured debt.

Historical Interest Rates	
20-Year GO	
<b>Current:</b>	4.54%
<b>Average:</b>	
1-Year	4.34%
3-Year	4.40%
5-Year	4.54%
10-Year	4.92%
<b>10-Year High:</b>	6.09%
<b>10-Year Low:</b>	4.03%



- ◆ The current 20-year G.O. rate is 4.54% which is equal to the 5-year historic average and 38 basis points below the 10-year historic average.



## *Section 2 – Potential Credit/Ratings Impact*



# Impact on Credit/Ratings

- ◆ The Village of Downers Grove is currently rated AA+ by Standard and Poor's.
- ◆ Assuming \$6.0 million of revenues are allocated to pay debt service on the Stormwater Bonds, at current interest rate levels the Village could finance \$109,675,000 of bonds (net proceeds plus total costs of issuance) over three separate bond issuances from 2008 through 2015.
- ◆ In addition to the Stormwater Bonds, the Village anticipates the need to issue an estimated \$60 million to fund other projects including a new Village Hall and a new Police Station.
- ◆ Based on the anticipated bond issuances over the next 10 years, Northern has analyzed the potential impact on the Village's rating focusing on four critical ratios:
  - Debt to Valuation
  - Debt per Capita
  - Amortization over 5 years
  - Amortization over 10 years



# Base Case - \$6 million Debt Service

- ◆ Standard and Poor's rating methodology uses the following guidelines:

Debt to Valuation		Debt per Capita		Amortization	
Low Debt Burden	≤ 3%	Low	\$1,000	5-Years	25.0%
Moderate Debt Burden	3% - 6%	Moderate	\$1,000 - \$2,500	10-Years	50.0%
High Debt Burden	≥ 6%	High	≥ \$2,500		

Valuation and Population (\$ in millions)											
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Valuation	\$6,668,625	\$7,200,291	\$7,774,345	\$8,394,165	\$9,063,402	\$9,785,994	\$10,566,197	\$11,408,602	\$12,318,169	\$13,300,252	\$14,360,634
Valuation Growth		7.97%	7.97%	7.97%	7.97%	7.97%	7.97%	7.97%	7.97%	7.97%	7.97%
Population (2002)	49,403	49,615	49,829	50,043	50,258	50,474	50,691	50,909	51,128	51,348	51,569
Population Growth		0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%

Non-Self Supported General Obligation Debt											
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Library (Series 2003)	\$5,475,000	\$5,000,000	\$4,510,000	\$4,005,000	\$3,485,000	\$2,950,000	\$2,395,000	\$1,825,000	\$1,240,000	\$630,000	\$0
Stormwater (Series 2008)		\$38,000,000	\$33,510,000	\$28,870,000	\$24,080,000	\$23,575,000	\$23,050,000	\$22,510,000	\$21,950,000	\$21,370,000	\$20,765,000
Stormwater (Series 2012)						\$37,130,000	\$34,285,000	\$31,340,000	\$28,290,000	\$27,590,000	\$26,865,000
Stormwater (Series 2015)									\$34,545,000	\$33,700,000	\$32,820,000
Village Hall (Series 2013)							\$30,000,000	\$29,460,000	\$28,900,000	\$28,325,000	\$27,730,000
Police Station (Series 2013)							\$30,000,000	\$29,460,000	\$28,900,000	\$28,325,000	\$27,730,000
<b>TOTAL</b>	<b>\$5,475,000</b>	<b>\$43,000,000</b>	<b>\$38,020,000</b>	<b>\$32,875,000</b>	<b>\$27,565,000</b>	<b>\$63,655,000</b>	<b>\$119,730,000</b>	<b>\$114,595,000</b>	<b>\$143,825,000</b>	<b>\$139,940,000</b>	<b>\$135,910,000</b>

<b>Debt/Valuation</b>	<b>0.1%</b>	<b>0.6%</b>	<b>0.5%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>0.7%</b>	<b>1.1%</b>	<b>1.0%</b>	<b>1.2%</b>	<b>1.1%</b>	<b>0.9%</b>
<b>Debt Per Capita</b>	<b>\$110.82</b>	<b>\$866.67</b>	<b>\$763.01</b>	<b>\$656.93</b>	<b>\$548.47</b>	<b>\$1,261.14</b>	<b>\$2,361.94</b>	<b>\$2,250.96</b>	<b>\$2,813.02</b>	<b>\$2,725.32</b>	<b>\$2,635.50</b>
<b>Amortization over 5 Years</b>	<b>46.1%</b>	<b>52.1%</b>	<b>41.5%</b>	<b>36.7%</b>	<b>30.2%</b>	<b>24.8%</b>	<b>15.9%</b>	<b>14.5%</b>	<b>13.1%</b>	<b>13.5%</b>	<b>14.0%</b>
<b>Amortization over 10 Years</b>	<b>100.0%</b>	<b>100.0%</b>	<b>52.6%</b>	<b>48.1%</b>	<b>41.9%</b>	<b>36.3%</b>	<b>28.0%</b>	<b>27.6%</b>	<b>28.0%</b>	<b>29.5%</b>	<b>31.1%</b>

**Notes:**

Valuation reflects 3x Equalized Assessed Valuation as of audited financials as of April 30, 2006.

Valuation growth assumes 5-year compounded annual growth rate of Equalized Assessed Valuation of 7.97% from 2002 through 2006.

Population as of 2002 census.

Population growth assumes 10-year compounded annual growth rate of 0.43% from 1990 through 2000.

- ◆ The Village's Debt/Valuation will not change from its low debt burden (maximum of 1.2%).
- ◆ The Village's Debt per capita will increase from low to high (maximum of \$2,813).
- ◆ Debt Amortization will fall below S&P guidelines for both the 5-year and 10-year periods.



# Conservative Case - \$6 million Debt Service

- ◆ Standard and Poor's rating methodology uses the following guidelines:

Debt to Valuation		Debt per Capita		Amortization	
Low Debt Burden	≤ 3%	Low	\$1,000	5-Years	25.0%
Moderate Debt Burden	3% - 6%	Moderate	\$1,000 - \$2,500	10-Years	50.0%
High Debt Burden	≥ 6%	High	≥ \$2,500		

Valuation and Population (\$ in millions)											
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Valuation	\$6,668,625	\$6,934,458	\$7,210,888	\$7,498,337	\$7,797,245	\$8,108,068	\$8,431,282	\$8,767,380	\$9,116,876	\$9,480,304	\$9,858,219
Valuation Growth		3.99%	3.99%	3.99%	3.99%	3.99%	3.99%	3.99%	3.99%	3.99%	3.99%
Population (2002)	49,403	49,509	49,616	49,722	49,829	49,936	50,044	50,151	50,259	50,367	50,476
Population Growth		0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%

Non-Self Supported General Obligation Debt											
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Library (Series 2003)	\$5,475,000	\$5,000,000	\$4,510,000	\$4,005,000	\$3,485,000	\$2,950,000	\$2,395,000	\$1,825,000	\$1,240,000	\$630,000	\$0
Stormwater (Series 2008)		\$38,000,000	\$33,510,000	\$28,870,000	\$24,080,000	\$23,575,000	\$23,050,000	\$22,510,000	\$21,950,000	\$21,370,000	\$20,765,000
Stormwater (Series 2012)						\$37,130,000	\$34,285,000	\$31,340,000	\$28,290,000	\$27,590,000	\$26,865,000
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<b>TOTAL</b>	<b>\$5,475,000</b>	<b>\$43,000,000</b>	<b>\$38,020,000</b>	<b>\$32,875,000</b>	<b>\$27,565,000</b>	<b>\$63,655,000</b>	<b>\$119,730,000</b>	<b>\$114,595,000</b>	<b>\$143,825,000</b>	<b>\$139,940,000</b>	<b>\$135,910,000</b>

<b>Debt/Valuation</b>	<b>0.1%</b>	<b>0.6%</b>	<b>0.5%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>0.8%</b>	<b>1.4%</b>	<b>1.3%</b>	<b>1.6%</b>	<b>1.5%</b>	<b>1.4%</b>
<b>Debt Per Capita</b>	<b>\$110.82</b>	<b>\$868.53</b>	<b>\$766.29</b>	<b>\$661.17</b>	<b>\$553.19</b>	<b>\$1,274.72</b>	<b>\$2,392.51</b>	<b>\$2,284.98</b>	<b>\$2,861.67</b>	<b>\$2,778.39</b>	<b>\$2,692.59</b>
<b>Amortization over 5 Years</b>	<b>46.1%</b>	<b>52.1%</b>	<b>41.5%</b>	<b>36.7%</b>	<b>30.2%</b>	<b>24.8%</b>	<b>15.9%</b>	<b>14.5%</b>	<b>13.1%</b>	<b>13.5%</b>	<b>14.0%</b>
<b>Amortization over 10 Years</b>	<b>100.0%</b>	<b>100.0%</b>	<b>52.6%</b>	<b>48.1%</b>	<b>41.9%</b>	<b>36.3%</b>	<b>28.0%</b>	<b>27.6%</b>	<b>28.0%</b>	<b>29.5%</b>	<b>31.1%</b>

#### Notes:

Valuation reflects 3x Equalized Assessed Valuation as of audited financials as of April 30, 2006.

Valuation growth assumes 50% of 5-year compounded annual growth rate of Equalized Assessed Valuation of 7.97% from 2002 through 2006.

Population as of 2002 census.

Population growth assumes 50% of 10-year compounded annual growth rate of 0.43% from 1990 through 2000.

- ◆ The Village's Debt/Valuation will not change from its low debt burden (maximum of 1.6%).
- ◆ The Village's Debt per capital will increase from low to high (maximum of \$2,862).
- ◆ Debt Amortization will fall below S&P guidelines for both the 5-year and 10-year periods.



# Standard & Poor's Ratings Guidelines

- ◆ The table below details median ratios based on Standard & Poor's credit ratings.

<b>Cities with Populations Between 20,000 and 150,000</b>		
	<b>Net Direct Debt as a % of Market Value</b>	<b>Overall Net Debt per Capita</b>
<b>'AAA'</b>	0.7%	\$2,905
<b>'AA'</b>	1.0%	\$2,283
<b>'A'</b>	1.5%	\$2,054
<b>'BBB'</b>	2.3%	\$1,994

# Comparable Dupage County Municipalities

- ◆ The Village of Downers Grove is currently rated AA+ by Standard and Poor's.

Municipality	As of	Non-Self Support Debt Outstanding	Valuation	Debt/ Valuation	Population	Debt per Capita	5-Yr. Amortization	10-Yr. Amortization
<b>Downers Grove</b>	<b>2007</b>	<b>\$5,475,000</b>	<b>\$6,668,625,498</b>	<b>0.1%</b>	<b>49,403</b>	<b>\$111</b>	<b>46.1%</b>	<b>100.0%</b>
Darien	2005	\$8,425,000	\$2,488,748,940	0.3%	22,860	\$369	30.9%	67.2%
Elmhurst	2006	\$11,235,000	\$6,093,065,385	0.2%	42,762	\$263	30.0%	76.9%
Lombard	2005	\$24,120,000	\$4,243,029,867	0.6%	42,322	\$570	80.6%	100.0%
Westmont	2007	\$0	NA	NA	NA	NA	NA	NA
Wheaton	2006	\$35,145,000	\$5,878,446,354	0.6%	55,416	\$634	30.0%	63.3%
Woodridge	2006	\$3,579,800	\$3,210,224,973	0.1%	30,934	\$116	60.0%	100.0%
<b>AVERAGE</b>		<b>\$12,568,543</b>	<b>\$4,763,690,170</b>	<b>0.3%</b>	<b>40,616</b>	<b>\$344</b>	<b>46.3%</b>	<b>84.6%</b>

Source: Most recent CAFR for each municipality.



## *Section 3 – Refunding Opportunities*

# Refunding Analysis

- ◆ Based on interest rates as of November 12, 2007, Northern has performed a comprehensive refunding analysis on the Village of Downer's Grove outstanding debt on a maturity-by-maturity basis.
- ◆ Based on current market rates, the Village can refund \$5.11 million of outstanding bonds and generate \$173,134 of present value savings or 3.388%.

Refunding Summary	
Par Amount	\$5,190,000
Premium	\$251,248
Refunded Par Amount	\$5,110,000
Average Coupon	4.811%
All-in Cost	4.332%
<i>Present Value Savings (\$)</i>	<i>\$173,134</i>
<i>PV Savings (% of refunded bonds)</i>	<i>3.388%</i>

**Notes:**

Reflects interest rates as of November 12, 2007. Assumes bond insurance premium of 18 basis points and total cost of issuance of \$10.00/\$1,000.

# Summary of Refunded Bonds

- ◆ The table below detail the bonds that would be refunded.

Series 1999 (Parking)				
Maturity	Principal	Coupon	Call Date	Call Price
1/1/2012	\$350,000	5.000%	1/1/2009	100.0%
1/1/2013	\$400,000	5.000%	1/1/2009	100.0%

Series 2000 (TIF)				
Maturity	Principal	Coupon	Call Date	Call Price
1/1/2012	\$265,000	5.700%	1/1/2010	100.0%
1/1/2013	\$320,000	5.375%	1/1/2010	100.0%
1/1/2014	\$55,000	5.400%	1/1/2010	100.0%

Series 2001 (TIF)				
Maturity	Principal	Coupon	Call Date	Call Price
1/1/2020	\$1,530,000	5.125%	1/1/2011	100.0%

Series 2003A (TIF)				
Maturity	Principal	Coupon	Call Date	Call Price
1/1/2020	\$1,070,000	5.000%	1/1/2009	100.0%
1/1/2021	\$1,120,000	5.000%	1/1/2009	100.0%



## *Miscellaneous Information*



# Base Case - \$4 million Debt Service

- ◆ Standard and Poor's rating methodology uses the following guidelines:

Debt to Valuation		Debt per Capita		Amortization	
Low Debt Burden	≤ 3%	Low	\$1,000	5-Years	25.0%
Moderate Debt Burden	3% - 6%	Moderate	\$1,000 - \$2,500	10-Years	50.0%
High Debt Burden	≥ 6%	High	≥ \$2,500		

	Valuation and Population (\$ in millions)										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Valuation	\$6,668,625	\$7,200,291	\$7,774,345	\$8,394,165	\$9,063,402	\$9,785,994	\$10,566,197	\$11,408,602	\$12,318,169	\$13,300,252	\$14,360,634
Valuation Growth		7.97%	7.97%	7.97%	7.97%	7.97%	7.97%	7.97%	7.97%	7.97%	7.97%
Population (2002)	49,403	49,615	49,829	50,043	50,258	50,474	50,691	50,909	51,128	51,348	51,569
Population Growth		0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%	0.43%

	Non-Self Supported General Obligation Debt										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Library (Series 2003)	\$5,475,000	\$5,000,000	\$4,510,000	\$4,005,000	\$3,485,000	\$2,950,000	\$2,395,000	\$1,825,000	\$1,240,000	\$630,000	\$0
Stormwater (Series 2008)		\$25,000,000	\$21,995,000	\$18,890,000	\$15,680,000	\$15,350,000	\$15,010,000	\$14,655,000	\$14,290,000	\$13,910,000	\$13,515,000
Stormwater (Series 2012)						\$24,440,000	\$22,505,000	\$20,500,000	\$18,430,000	\$17,975,000	\$17,505,000
Stormwater (Series 2015)									\$23,775,000	\$23,190,000	\$22,585,000
Village Hall (Series 2013)							\$30,000,000	\$29,460,000	\$28,900,000	\$28,325,000	\$27,730,000
Police Station (Series 2013)							\$30,000,000	\$29,460,000	\$28,900,000	\$28,325,000	\$27,730,000
<b>TOTAL</b>	<b>\$5,475,000</b>	<b>\$30,000,000</b>	<b>\$26,505,000</b>	<b>\$22,895,000</b>	<b>\$19,165,000</b>	<b>\$42,740,000</b>	<b>\$99,910,000</b>	<b>\$95,900,000</b>	<b>\$115,535,000</b>	<b>\$112,355,000</b>	<b>\$109,065,000</b>

<b>Debt/Valuation</b>	<b>0.1%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.2%</b>	<b>0.4%</b>	<b>0.9%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>0.8%</b>	<b>0.8%</b>
<b>Debt Per Capita</b>	<b>\$110.82</b>	<b>\$604.65</b>	<b>\$531.92</b>	<b>\$457.51</b>	<b>\$381.33</b>	<b>\$846.77</b>	<b>\$1,970.95</b>	<b>\$1,883.74</b>	<b>\$2,259.71</b>	<b>\$2,188.10</b>	<b>\$2,114.94</b>
<b>Amortization over 5 Years</b>	<b>46.1%</b>	<b>52.1%</b>	<b>43.0%</b>	<b>38.9%</b>	<b>33.3%</b>	<b>27.1%</b>	<b>15.5%</b>	<b>14.2%</b>	<b>13.0%</b>	<b>13.3%</b>	<b>13.6%</b>
<b>Amortization over 10 Years</b>	<b>100.0%</b>	<b>100.0%</b>	<b>55.6%</b>	<b>51.2%</b>	<b>45.3%</b>	<b>38.2%</b>	<b>27.3%</b>	<b>27.0%</b>	<b>27.5%</b>	<b>28.8%</b>	<b>30.3%</b>

**Notes:**

Valuation reflects 3x Equalized Assessed Valuation as of audited financials as of April 30, 2006.

Valuation growth assumes 5-year compounded annual growth rate of Equalized Assessed Valuation of 7.97% from 2002 through 2006.

Population as of 2002 census.

Population growth assumes 10-year compounded annual growth rate of 0.43% from 1990 through 2000.

- ◆ The Village's Debt/Valuation will not change from its low debt burden (maximum of 0.9%).
- ◆ The Village's Debt per capita will increase from low to medium (maximum of \$2,260).
- ◆ Debt Amortization will fall below S&P guidelines for both the 5-year and 10-year periods.



# Conservative Case - \$4 million Debt Service

- ◆ Standard and Poor's rating methodology uses the following guidelines:

Debt to Valuation		Debt per Capita		Amortization	
Low Debt Burden	≤ 3%	Low	\$1,000	5-Years	25.0%
Moderate Debt Burden	3% - 6%	Moderate	\$1,000 - \$2,500	10-Years	50.0%
High Debt Burden	≥ 6%	High	≥ \$2,500		

Valuation and Population (\$ in millions)											
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Valuation	\$6,668,625	\$7,200,291	\$7,774,345	\$8,394,165	\$9,063,402	\$9,785,994	\$10,566,197	\$11,408,602	\$12,318,169	\$13,300,252	\$14,360,634
Valuation Growth		3.99%	3.99%	3.99%	3.99%	3.99%	3.99%	3.99%	3.99%	3.99%	3.99%
Population (2002)	49,403	49,509	49,616	49,722	49,829	49,936	50,044	50,151	50,259	50,367	50,476
Population Growth		0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%	0.22%

Non-Self Supported General Obligation Debt											
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Library (Series 2003)	\$5,475,000	\$5,000,000	\$4,510,000	\$4,005,000	\$3,485,000	\$2,950,000	\$2,395,000	\$1,825,000	\$1,240,000	\$630,000	\$0
Stormwater (Series 2008)		\$25,000,000	\$21,995,000	\$18,890,000	\$15,680,000	\$15,350,000	\$15,010,000	\$14,655,000	\$14,290,000	\$13,910,000	\$13,515,000
Stormwater (Series 2012)						\$24,440,000	\$22,505,000	\$20,500,000	\$18,430,000	\$17,975,000	\$17,505,000
Stormwater (Series 2015)									\$23,775,000	\$23,190,000	\$22,585,000
Village Hall (Series 2013)							\$30,000,000	\$29,460,000	\$28,900,000	\$28,325,000	\$27,730,000
Police Station (Series 2013)							\$30,000,000	\$29,460,000	\$28,900,000	\$28,325,000	\$27,730,000
<b>TOTAL</b>	<b>\$5,475,000</b>	<b>\$30,000,000</b>	<b>\$26,505,000</b>	<b>\$22,895,000</b>	<b>\$19,165,000</b>	<b>\$42,740,000</b>	<b>\$99,910,000</b>	<b>\$95,900,000</b>	<b>\$115,535,000</b>	<b>\$112,355,000</b>	<b>\$109,065,000</b>

<b>Debt/Valuation</b>	<b>0.1%</b>	<b>0.4%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.2%</b>	<b>0.4%</b>	<b>0.9%</b>	<b>0.8%</b>	<b>0.9%</b>	<b>0.8%</b>	<b>0.8%</b>
<b>Debt Per Capita</b>	<b>\$110.82</b>	<b>\$605.95</b>	<b>\$534.21</b>	<b>\$460.46</b>	<b>\$384.61</b>	<b>\$855.89</b>	<b>\$1,996.45</b>	<b>\$1,912.21</b>	<b>\$2,298.79</b>	<b>\$2,230.72</b>	<b>\$2,160.75</b>
<b>Amortization over 5 Years</b>	<b>46.1%</b>	<b>52.1%</b>	<b>43.0%</b>	<b>38.9%</b>	<b>33.3%</b>	<b>27.1%</b>	<b>15.5%</b>	<b>14.2%</b>	<b>13.0%</b>	<b>13.3%</b>	<b>13.6%</b>
<b>Amortization over 10 Years</b>	<b>100.0%</b>	<b>100.0%</b>	<b>55.6%</b>	<b>51.2%</b>	<b>45.3%</b>	<b>38.2%</b>	<b>27.3%</b>	<b>27.0%</b>	<b>27.5%</b>	<b>28.8%</b>	<b>30.3%</b>

#### Notes:

Valuation reflects 3x Equalized Assessed Valuation as of audited financials as of April 30, 2006.

Valuation growth assumes 50% of 5-year compounded annual growth rate of Equalized Assessed Valuation of 7.97% from 2002 through 2006.

Population as of 2002 census.

Population growth assumes 50% of 10-year compounded annual growth rate of 0.43% from 1990 through 2000.

- ◆ The Village's Debt/Valuation will not change from its low debt burden (maximum of 0.9%).
- ◆ The Village's Debt per capital will increase from low to medium (maximum of \$2,299).
- ◆ Debt Amortization will fall below S&P guidelines for both the 5-year and 10-year periods.



# Financing Sensitivity Matrix

- ◆ The table below shows the total net proceeds that can be raised through the three stormwater financings based on: (1) Debt Service; and (2) Movement in Interest Rates.

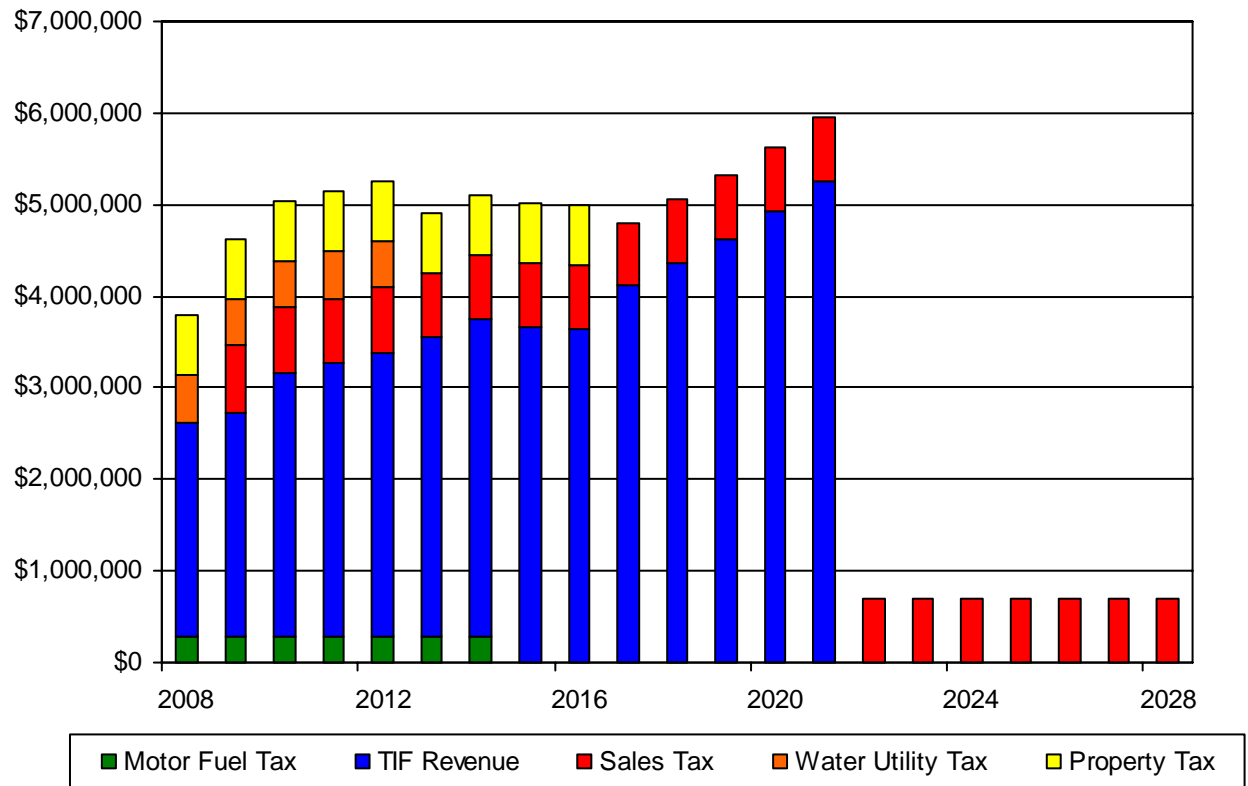
Debt Service	Total Net Proceeds										
	- 100 bps	- 80 bps	- 60 bps	- 40 bps	- 20 bps	Base Case	+ 20 bps	+ 40 bps	+ 60 bps	+ 80 bps	+ 100 bps
\$1,000,000	\$19,827,893	\$19,457,175	\$19,093,389	\$18,736,404	\$18,386,094	\$18,042,333	\$17,705,000	\$17,373,974	\$17,049,137	\$16,730,373	\$16,417,569
\$1,500,000	\$29,741,839	\$29,185,763	\$28,640,083	\$28,104,606	\$27,579,141	\$27,063,500	\$26,557,500	\$26,060,961	\$25,573,705	\$25,095,559	\$24,626,353
\$2,000,000	\$39,655,785	\$38,914,350	\$38,186,778	\$37,472,808	\$36,772,188	\$36,084,667	\$35,410,000	\$34,747,947	\$34,098,273	\$33,460,746	\$32,835,138
\$2,500,000	\$49,569,731	\$48,642,938	\$47,733,472	\$46,841,010	\$45,965,235	\$45,105,833	\$44,262,500	\$43,434,934	\$42,622,841	\$41,825,932	\$41,043,922
\$3,000,000	\$59,483,678	\$58,371,525	\$57,280,166	\$56,209,212	\$55,158,282	\$54,127,000	\$53,115,000	\$52,121,921	\$51,147,410	\$50,191,118	\$49,252,707
\$3,500,000	\$69,397,624	\$68,100,113	\$66,826,861	\$65,577,414	\$64,351,329	\$63,148,167	\$61,967,500	\$60,808,908	\$59,671,978	\$58,556,305	\$57,461,491
\$4,000,000	\$79,311,570	\$77,828,700	\$76,373,555	\$74,945,616	\$73,544,376	<b>\$72,267,000</b>	\$70,820,000	\$69,495,895	\$68,196,546	\$66,921,491	\$65,670,275
\$4,500,000	\$89,225,517	\$87,557,288	\$85,920,249	\$84,313,818	\$82,737,422	\$81,190,500	\$79,672,500	\$78,182,882	\$76,721,114	\$75,286,678	\$73,879,060
\$5,000,000	\$99,139,463	\$97,285,875	\$95,466,944	\$93,682,020	\$91,930,469	\$90,211,667	\$88,525,000	\$86,869,869	\$85,245,683	\$83,651,864	\$82,087,844
\$5,500,000	\$109,053,409	\$107,014,463	\$105,013,638	\$103,050,223	\$101,123,516	\$99,232,833	\$97,377,500	\$95,556,855	\$93,770,251	\$92,017,050	\$90,296,629
\$6,000,000	\$118,967,356	\$116,743,050	\$114,560,333	\$112,418,425	\$110,316,563	<b>\$108,254,000</b>	\$106,230,000	\$104,243,842	\$102,294,819	\$100,382,237	\$98,505,413

**Note:**

Base case assumes the Series 2008 Bonds are issued at interest rates as of November 12, 2007, the Series 2012 Bonds assume a 25 basis point increase from the November 12, 2007 scale and the Series 2015 Bonds assume a 50 basis point increase from the November 12, 2007 scale.

# Village of Downers Grove Debt Service Overview

- ◆ The graph to the right illustrates the Village's outstanding debt service.
- ◆ The Village has \$48.7 million of principal outstanding through 2028.
- ◆ The Village has \$75.5 million of total debt service due through 2028.
- ◆ The average annual debt service from 2008 to 2021 is \$5.0 million.



# Debt Chart

	\$3,000,000 Village of Downers Grove General Obligation Bonds Motor Fuel Tax Series 1998		\$6,500,000 Village of Downers Grove General Obligation Bonds TIF Revenue Series 1999		\$6,200,000 Village of Downers Grove General Obligation Bonds TIF Revenue Series 2000		\$6,000,000 Village of Downers Grove General Obligation Bonds TIF Revenue Series 2001	
	Aa2		Aa2		AAA/AAA		Aa2	
	Principal	Coupon	Principal	Coupon	Principal	Coupon	Principal	Coupon
	January 1		January 1		January 1		January 1	
2008	210,000	3.800%	130,000	4.700%	85,000	6.000%	40,000	4.500%
2009	215,000	3.900%	195,000	4.800%	145,000	6.000%	20,000	4.500%
2010	225,000	3.900%	250,000	4.900%	170,000	6.000%	60,000	4.750%
2011	240,000	4.000%	320,000	4.950%	225,000	6.000%	65,000	4.750%
2012	250,000	4.000%	350,000	5.000%	265,000	5.700%	135,000	4.750%
2013	260,000	4.000%	400,000	5.000%	320,000	5.375%	185,000	5.000%
2014	275,000	4.000%		5.050%	55,000	5.400%	255,000	5.000%
2015				5.050%		5.400%	150,000	5.000%
2016				5.150%		5.500%	135,000	5.000%
2017				5.200%		5.500%	195,000	5.000%
2018				5.250%		5.675%	180,000	5.000%
2019				5.250%		5.675%	320,000	5.000%
2020						5.700%	1,530,000	5.125%
2021							2,690,000	5.000%
2022								
Dated Date	10/1/1998		7/1/1999		5/1/2000		8/1/2001	
Delivery Date	10/21/1998		7/26/1999		5/24/2000		8/9/2001	
Insurance					FSA			
Principal Out.	\$1,675,000		\$1,645,000		\$1,265,000		\$5,960,000	
Call Provisions	1/1/09 @ 100.0%		1/1/09 @ 100.0%		1/1/10 @ 100.0%		1/1/11 @ 100.0%	
Use of Proceeds	New Money Public improvements		New money Public improvements		New money Public improvements		New money public, utility, parking facility improvements	

# Debt Chart (continued)

	\$4,000,000 Village of Downers Grove General Obligation Bonds Water Revenue Series 2001A		\$6,000,000 Village of Downers Grove General Obligation Bonds TIF Revenue Series 2002		\$6,265,000 Village of Downers Grove General Obligation Bonds Property Tax Series 2003 Refunding		\$12,000,000 Village of Downers Grove General Obligation Bonds TIF Revenue Series 2003A	
	AA+		AAA/Aaa/AAA		AAA/AAA		AAA/Aaa/AAA	
	Principal	Coupon	Principal	Coupon	Principal	Coupon	Principal	Coupon
	January 1		January 1		January 1		January 1	
2008	415,000	4.150%	190,000	3.500%	475,000	2.625%	475,000	2.625%
2009	430,000	4.300%	100,000	4.000%	490,000	2.875%	490,000	2.875%
2010	450,000	4.450%	100,000	4.000%	505,000	3.125%	505,000	3.125%
2011	470,000	4.550%	100,000	4.000%	520,000	3.200%	520,000	3.200%
2012	485,000	4.600%	120,000	4.500%	535,000	3.200%	535,000	3.200%
2013			185,000	4.000%	555,000	3.200%	555,000	3.200%
2014			265,000	4.000%	570,000	3.350%	570,000	3.350%
2015			355,000	4.150%	585,000	3.500%	585,000	3.500%
2016			220,000	4.250%	610,000	3.650%	610,000	3.650%
2017			560,000	4.350%	630,000	3.750%	630,000	3.750%
2018			685,000	4.450%				
2019			830,000	4.550%				
2020			980,000	4.600%				
2021			1,205,000	4.750%				
2022								
Dated Date	12/1/2001		8/1/2002		6/1/2003		11/1/2003	
Delivery Date	1/17/2002		8/19/2002		6/19/2003		11/18/2003	
Insurance			FSA		FSA		FGIC	
Principal Out.	\$2,250,000		\$5,895,000		\$5,475,000		\$5,475,000	
Call Provisions	None		1/1/12 @ 100.0%		1/1/13 @ 100.0%		1/1/09 @ 100.0%	
Use of Proceeds	New money water utility improvements		New money economic improvements		Refunding Series 1996 Library Bonds		New money economic improvements	

# Debt Chart (continued)

	\$9,950,000		\$9,250,000	
	Village of Downers Grove General Obligation Bonds TIF Revenue Series 2005 Refunding		Village of Downers Grove General Obligation Bonds Sales Tax Revenue Series 2007	
	AAA/Aaa/AAA		AAA/Aaa/AAA	
	Principal	Coupon	Principal	Coupon
	January 1		January 1	
2008	70,000	3.500%		
2009	70,000	3.500%	100,000	4.000%
2010	70,000	3.500%	335,000	4.000%
2011	70,000	3.500%	350,000	4.000%
2012	80,000	3.500%	360,000	4.000%
2013	80,000	3.500%	375,000	4.000%
2014	840,000	3.500%	390,000	4.000%
2015	1,175,000	3.550%	400,000	5.500%
2016	1,365,000	3.600%	420,000	5.500%
2017	1,505,000	3.600%	435,000	3.750%
2018	1,735,000	3.700%	450,000	3.800%
2019	1,820,000	3.750%	470,000	3.850%
2020	885,000	3.850%	490,000	3.850%
2021			500,000	3.900%
2022			525,000	4.000%
2023			550,000	4.000%
2024			570,000	4.000%
2025			595,000	4.000%
2026			620,000	4.000%
2027			645,000	4.000%
2028			670,000	4.050%
Dated Date	3/1/2005		5/1/2007	
Delivery Date	3/3/2005		5/17/2007	
Insurance	FSA		MBIA	
Principal Out.	\$9,765,000		\$9,250,000	
Call Provisions	1/1/14 @ 100.0%		1/1/16 @ 100.0%	
Use of Proceeds	Refunding Series 1999 & Series 2000 Bonds		New money Fire Station	

## Glossary of Terms

Many terms used in public financing debt transactions may be unfamiliar to those new to debt financing. Below are some of the most frequently used terms in our industry.

### Accrued Interest

Interest earned on a bond or security from the last date interest was paid. The purchaser buys this interest at the time the bonds are bought, then receives the entire interest on the next interest payment date.

### Advance Refunding

An issuance of debt where the proceeds are earmarked for the payment of existing bonds more than 90 days from the date of receipt by the issuer. These proceeds are put into a trust and invested until utilized to pay off the outstanding obligations. The purpose of these transactions is either to save money by refinancing at lower interest rates or to restructure the payment streams of the existing issue to more favorable terms. NOTE: Tax-exempt municipal debt issued after 1986 may not be advance refunded more than once.

### Arbitrage

A term that describes a guaranteed or pure profit opportunity. This can be achieved by the guarantee of access to borrow funds at a rate less than a comparable investment opportunity, or the guarantee that an asset can be resold immediately at a price above its initial acquisition cost. Issuers face arbitrage opportunities and scrutiny from the IRS when the cost of tax-exempt funds are below that of investment returns available in taxable markets.

### Bank Qualification

If an issuer of tax-exempt debt issues \$10 million or less of tax-exempt debt per calendar year, its debt will be deemed bank-qualified. This designation allows banks to purchase the issuer's bonds and receive favorable tax treatment. A bank-qualified issue will result in lower interest rates (10 to 25 basis points).

### Basis Point

Interest rates are often expressed as points and basis points. A point is a full one percent. For example, 2.00% is expressed as 2 points. Basis points are a fraction of a full percent. For example, on an interest rate of 3.10%, the .10 is referred to as 10 basis points.

### Bid

A proposition by an underwriter to purchase an issue offered for sale either in a competitive offering or on a negotiated basis.

### Bid Specifications or Specs



The parameters to which underwriters must comply in their bid for the corresponding bond issue, i.e., principal maturity schedule, minimum/maximum coupon rates, ascending or descending coupon rates, call provisions, par or premium bid, bond insurance, etc. Specs are usually prepared and published at the same time as the notice of sale.

#### Bond Covenants

Stipulations attached to obligations regarding the behavior and rights of the obligor and the holder of the debt instrument. These may include provisions pertaining to an issuer's right to redeem bonds prior to maturity and possible operating restrictions, such as the annual maintenance of adequate cash flows and reserves. These restrictions are typically designed to ensure that the investor's principal and interest will be paid promptly. NOTE: The issuer's auditor would normally verify that the issuer is in compliance with any bond covenants.

#### Bond Insurance

Bond insurance provides investors with a source of repayment of the principal and interest on bonds, if the issuer does not pay. This added security for the investor results in the bond issue receiving the highest possible credit rating. This higher rating results in lower interest rates on the bonds. If these lower rates sufficiently cover the cost of the insurance premium, it is financially worthwhile to pursue bond insurance.

#### Bond or Credit Rating

Bond rating provides investors with a simple gradation system to note the relative investment qualities of bonds. Key to most frequent Moody's municipal ratings:

##### Aaa

Bonds rated Aaa are judged to be of the best quality.

##### Aa

Bonds rated Aa are judged to be of high quality by all standards. Together with the Aaa group, they comprise what are considered high-grade bonds.

##### A

Bonds rated A possess many favorable investment attributes and are to be considered as upper medium-grade obligation.

##### Baa

Bonds rated Baa are considered as medium-grade obligations; i.e., they are neither highly protected nor poorly secured.

#### Bond Record or Transcript

When an issue is completed, a bond record is prepared for the issuer by bond counsel which includes:

A schedule of payments  
All pertinent documentation relative to the issue  
Closing documents  
Legal opinion

#### Bond or Sale Resolution

A proclamation adopted by a debt issuer's governing body indicating its acceptance of the bond terms, such as maturities, interest rates, payment dates and any covenants offered by the underwriter.

#### Book-Entry-Only System

To simplify the registration process of municipal bonds and eliminate the need for printing individual bonds, a computerized book-entry-only system was developed by the municipal bond industry. Most bonds issued today take advantage of this efficient, cost-effective registration method.

#### Call Provisions

Unless the issuer reserves the right to repay bonds before they mature, it must have the consent of the holder to do so. It is usually an advantage to the issuer to have the right of prepayment. This gives the program flexibility and enables the issuer to refinance if this becomes necessary or desirable.

While the right of prior redemption is sometimes reserved in the hope that the issue may be paid off faster than originally scheduled, it is our opinion that the primary purpose of reserving a call is to give the program flexibility for refinancing. From the standpoint of the issuer, it would be desirable if all bonds could be prepaid at any time. However, this is not practical from a marketing standpoint.

Municipal bond holders are usually investors hoping to keep their bonds to the stated maturity. Insurance companies, especially, gear their portfolios on the assumption that they will have an assured income for the life of the bond. Amortization of the premium is a major concern of the holder when the right of redemption exists. If the bond is called before its maturity date and the holder has paid a premium for it, the yield won't be received as expected. This is because, when the bond was purchased, the yield was computed on the basis of the return for its entire life. Therefore, when a call is reserved, these factors must be taken into consideration.

The adverse effect of a call on the bond holders may be partially offset by the offer of the borrower to pay a premium, an amount in excess of principal of the bond if there is repayment. This offer generally does not completely satisfy the holder who wishes to keep a bond to its maturity. This is especially true if the bond is high-yielding.

For these reasons, reserving a right of call must be made judiciously and the amount of premium offered, if any, should be studied carefully. When the dealer resells the bonds, they are normally priced to the call date. This means that the holder must assume that the bonds will be called, and the yield is therefore computed to the earliest call date. Each factor, including the amount of bonds maturing prior to the call date, the length of the call, the market conditions and the amount of bonds callable, must be carefully weighed in determining the terms of prior redemption.

#### Capitalized Interest

Additional funds borrowed in a debt issue designated for the payment of interest for a specified initial period (typically one to three years). This period of time allows for sufficient revenues to be implemented that will make the ongoing payments.

#### Closing Date

The date that investors must provide funds to the borrower (approximately two weeks following sale date is typical).

#### Costs of Issuance

Expense items paid by the issuer directly related to the sale of the bonds, such as legal fees, consultant fees, fiscal agent fees, rating fees and printing costs.

#### Coupon Rate

Interest rate for a specific principal maturity.

#### Current Refunding

A debt issuance where the proceeds are earmarked for the payment of existing bonds less than 90 days from the date of receipt by the issuer. The purpose of these transactions is to either save money by refinancing at lower interest rates, or to restructure the payment streams of the existing issue to more favorable terms. Unlike advance refunding issues, tax-exempt debt may be current refunded as often as deemed necessary by the issuer.

#### Dated Date

The date from which interest on the bonds accrues.

#### Discount Bid

When discount bidding is used, the issuer receives less than par. For example, it offers \$500,000 of bonds, but accepts only \$490,000 in payment. The underwriter takes delivery of \$500,000 from the ultimate investors.

#### Legal Opinion

One of the most important characteristics unique to municipal bonds. To be marketable, municipal bonds must carry a legal opinion, which attests to two points. First, that the bonds are legal and binding obligations of the state or local government according to the statutes, constitution and other governing procedures of the locality. Second, whether the bond interest is tax-exempt according to federal and/or state laws.

Bond counsel, usually paid for by the issuer, also prepares all necessary resolutions regarding the bond issue and provides the issuer with necessary publication requirements and format.

The legal opinion procedure grew out of widespread defaults of municipal bonds in the 1870s and 1880s bonds that were issued mostly to finance railroad construction. The legality of these securities was questioned at the time. Until the 1960s and 1970s, the legal opinion had become quite routine. But new types of bond issues, the financial difficulties some municipalities have experienced and increased federal scrutiny have forced bond counsel to broaden their traditional role.

#### Maturity Schedule

The schedule of dates and amount of principal payments due thereon.

#### Notice of Sale

Announcement by an issuer stating its intention to sell bonds, describing the terms and conditions of sale.

#### Official Statement

A compilation of facts and figures relative to the issuer, which gives any potential bond investor information necessary to formulate a bid. The official statement provides a political, economic, demographic, and financial overview, along with a detailed explanation of the specific bond issue.

The Securities and Exchange Commission (SEC) regulates new issues of corporate bonds under the securities laws, and issuers are required to file a prospectus with the SEC that discloses all material information about the offering and the corporation. The SEC reviews the prospectus prior to issuance. The official statement is the municipal issuer's equivalent of the prospectus. New federal requirements state that an official statement must be prepared for most bond issues in excess of \$1 million. Underwriters are required to send official statements, if available, to all investors according to MSRB Rule G-32. Recently instituted ongoing disclosure rules require issuers to agree to provide updated disclosure of the information in the original official statement for the term of the issue.

#### Par Bid

When par bidding is used, the issuer receives the full par value. The issuer will only accept bids of at least par value from underwriters. Therefore, the winning underwriter must bid higher than market rates to raise additional monies from investors to cover its costs and fees.

#### Premium Bonds

An issuer may pay an investor above-market rates for certain maturities in the bond issue. The investor then offers a premium over the stated par value of that bond. The issuer could then use this premium to cover any associated costs.

This is often done to cover the costs of bonding, thereby leaving the entire par amount of the bond issue available for projects.

#### Reserve Fund

An account established, generally with bond proceeds, which is used as additional security for debt holders. A revenue bond usually has a reserve fund which can be tapped to pay principal and interest to bond holders if the revenues pledged to service the debt are insufficient when payments are due. These funds usually are funded to 10 percent of the principal amount of the issue, or an amount equivalent to the maximum annual debt service for any particular year.

#### Sale Date

The date that the issuer approves the resolution authorizing the bond issue and all of its terms, including interest rate, payment schedule, etc.

#### Small Issuer Exemption

If an issuer of tax-exempt debt issues of \$5 million or less of tax-exempt debt per calendar year, its debt is designated as a small issuer. This designation allows the issuer three years to spend bond proceeds for construction projects, rather than the usual two-year period.

#### Tax-Exempt (and Double Tax-Exempt)

A designation given to certain issuer obligations that allows investors to avoid federal income taxes on the interest earned. This exemption allows issuers to issue debt at interest rate levels below that of most taxable debt issuers, since investors are willing to accept lower interest rates when the income received is not subject to federal income taxes. Certain obligations that are also exempt from state income taxes are referred to as double tax-exempt bonds.

#### Yield Curve

A mechanism for plotting the level of interest rates of similar debt instruments for different maturities. Generally, yield curves slope upward, meaning that interest rates tend to increase as the time to maturity is lengthened.