REVISED

SANDAG

BOARD OF DIRECTORS POLICY AGENDA

Friday, February 13, 2009
10 a.m. to 12 noon
SANDAG Board Room
401 B Street, 7th Floor
San Diego

AGENDA HIGHLIGHTS

- ***TransNet* EARLY ACTION PROGRAM FINANCING OPTIONS**
- **COMPASS CARD STATUS UPDATE**

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Welcome to SANDAG. Members of the public may speak to the Board of Directors on any item at the time the Board is considering the item. Please complete a Speaker's Slip, which is located in the rear of the room, and then present the slip to the Clerk of the Board seated at the front table. Also, members of the public are invited to address the Board on any issue under the agenda item entitled Public Comments/Communications/Member Comments. Speakers are limited to three minutes. The Board of Directors may take action on any item appearing on the agenda.

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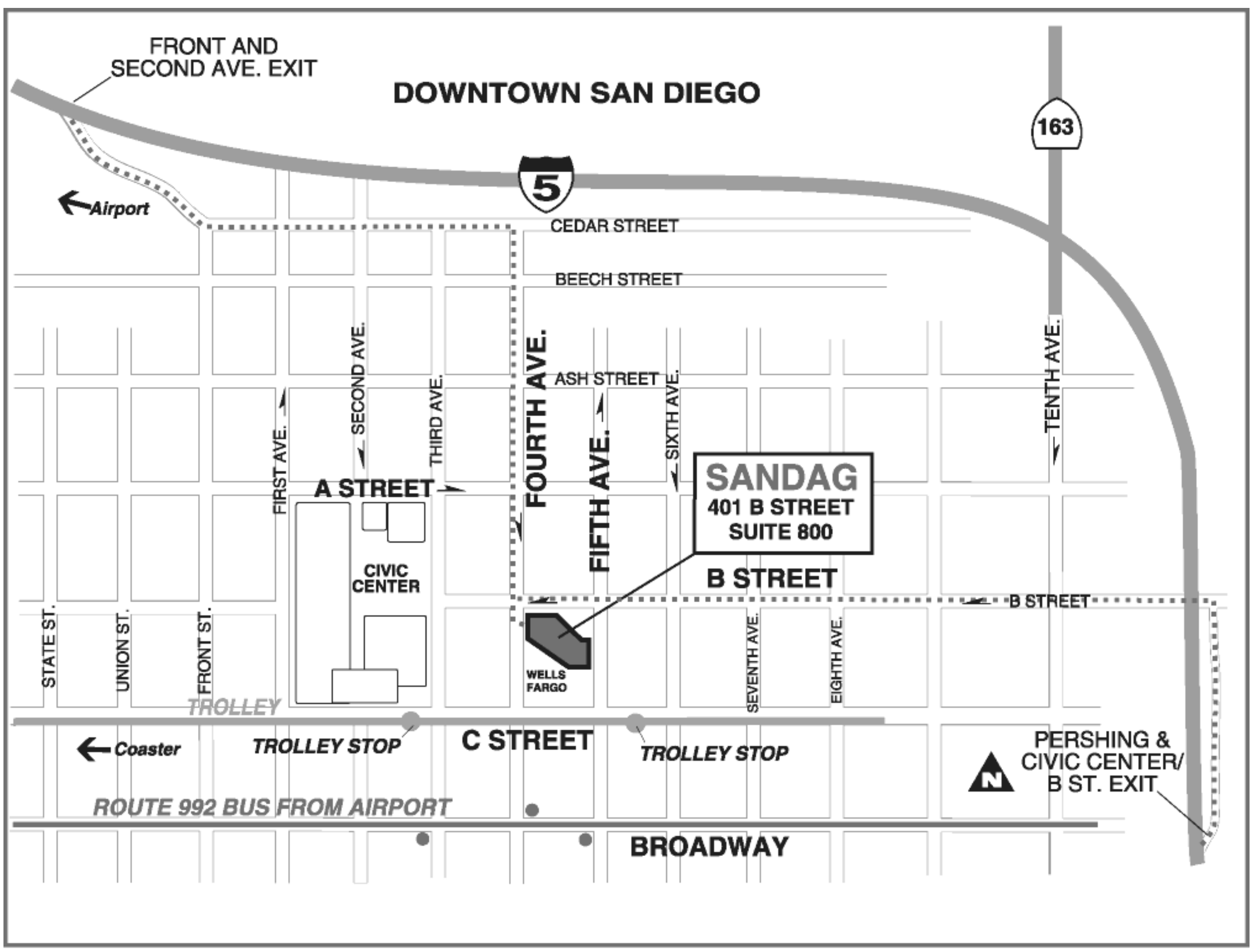

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REVISED

BOARD OF DIRECTORS POLICY AGENDA

Friday, February 13, 2009

ITEM # **RECOMMENDATION**

1. PUBLIC COMMENTS/COMMUNICATIONS/MEMBER COMMENTS

Members of the public shall have the opportunity to address the Board on any issue within the jurisdiction of SANDAG. Anyone desiring to speak shall reserve time by completing a "Request to Speak" form and giving it to the Clerk of the Board prior to speaking. Public speakers should notify the Clerk of the Board if they have a handout for distribution to Board members. Speakers are limited to three minutes. Board members also may provide information and announcements under this agenda item.

REPORTS (2 through 4)

+2. *TransNet* EARLY ACTION PROGRAM FINANCING OPTIONS (Renée Wasmund)* — APPROVE

With the current liquidity instrument for $300 million of the $600 million in bonds issued in March 2008 approaching the expiration of its one-year term, several options for replacement were considered by the SANDAG finance team and its advisors. This report presents a summary of the options considered and asks that the Board of Directors authorize the Executive Director to amend the current agreement with J.P. Morgan to renew the liquidity facility on Series A and B bonds for 364 days through March 25, 2010, at a rate of 105 basis points (1.05%).

+2A. PROPOSED AMENDMENT TO *TransNet* EXISTING INTEREST RATE SWAPS (Renée Wasmund; Keith Curry and Andrew McKendrick, PFM)* — APPROVE

The current market conditions have created an unusual situation that may be an opportunity for SANDAG to lower our borrowing costs by amending two of the three existing *TransNet* interest rate swaps. The Board of Directors is asked to concur with the recommendation from our financial advisor, Public Financial Management, to solicit interest to possibly amend the existing interest rate swaps. Further discussion and action by the Board will be scheduled for the February 27, 2009, Board meeting.

+3. COMPASS CARD STATUS UPDATE (James Dreisbach-Towle) INFORMATION

Staff will update the Board of Directors on the status of Compass Card system deployment. Two issues have been identified in the full system testing conducted to date: intermittent software problems with stand-alone validators on contract and suburban buses, and inconsistent test results when cards are tapped for rides on and transfers between services. The vendor, Cubic Transportation, has developed a patch to the software, which is currently undergoing testing. Cubic is performing a quality assurance test on the entire system. SANDAG, Metropolitan Transit System, and North County Transit District staffs will need to do additional testing beyond March 1, 2009, to ensure the system's stability and operational readiness. All three agencies are still working toward the complete system launch on July 1, 2009.

4. CLOSED SESSION: CONFERENCE WITH LEGAL COUNSEL CONCERNING INITIATION OF LITIGATION

Pursuant to Government Code Section 54956.9(c) - ONE POTENTIAL CASE

5. UPCOMING MEETINGS

The next Business meeting of the Board of Directors is scheduled for Friday, February 27, 2009, at 9 a.m. The next Policy meeting of the Board of Directors is scheduled for Friday, March 13, 2009, at 10 a.m.

6. ADJOURNMENT

+ next to an agenda item indicates an attachment
* next to an agenda item indicates a San Diego Regional Transportation Commission item

BOARD OF DIRECTORS
FEBRUARY 13, 2009

AGENDA ITEM NO. 09-02-2
ACTION REQUESTED – APPROVE

TransNet EARLY ACTION PROGRAM FINANCING OPTIONS

File Number 1110200

Recommendation

The Board of Directors is asked to authorize the Executive Director to amend the current agreement with J.P. Morgan to renew the liquidity facility on Series A and B bonds for 364 days through March 25, 2010, at a rate of 105 basis points (1.05%).

Introduction

In December 2005, the Board of Directors approved a *TransNet* financial strategy for implementing the Early Action Program (EAP) of projects and for fulfilling ongoing commitments for the existing *TransNet* program. The financial strategy approved by the Board included expanding the existing commercial paper program from $135 million to $335 million (to provide cash flow until the bonds were issued), locking in low interest rates through an interest rate exchange agreement (swap), and issuing $600 million of long-term variable rate debt in March 2008. The strategy has been executed, and has resulted in significant progress on the EAP projects in the last three years.

This item is being discussed with the Independent Taxpayer Oversight Committee (ITOC) at its February 11, 2009, meeting. Any comments will be brought to the Board of Directors for consideration.

Discussion

Monthly reports have been provided to the Board since October 2008 providing the status of the financial market, and the steps we are taking to minimize any potential impact on SANDAG. As reported previously, and as discussed in the attached memo from our financial consultant, Public Finance Management (PFM), (Attachment 1), the J.P. Morgan liquidity facility (supports the Series A and B bonds) expires at the end of March 2009. Additionally, although the Dexia facility (supports the Series C and D bonds) doesn't expire for another 4 years, we've been exploring our options with respect to replacing Dexia, which could result in a reduction of our borrowing costs. The current cost of the J.P. Morgan liquidity facility is 20 basis points, and the current cost of the Dexia liquidity facility is 22.5 basis points. A Request for Quotes for replacement liquidity facilities was issued in January 2009 to 22 banks. The only bid received was from J.P. Morgan to renew its facility for another 364 days at a cost of 120 basis points. Upon further negotiations with J.P. Morgan, it agreed to reduce its bid to 105 basis points.

This bid is 85 basis points higher than the current J.P. Morgan facility, but is reflective of the current environment. We considered another option that would involve issuing a one-year bond anticipation note, which would allow us to convert $300 million of our variable rate debt into a short-term fixed rate for one year. Following are the pros and cons associated with both options:

Renewal of J.P. Morgan Liquidity Facility:

Pros:

- Despite the volatility in the banking sector and credit markets in general, J.P. Morgan-supported variable rate bonds are trading near all-time record lows, thereby reducing the cost of borrowing.

- Continues business relationship with a highly rated credit provider in an environment where credit is extremely tight, thereby increasing our options for renewal.

Cons:

- Renewal fee is 85 basis points higher than the current agreement, thereby increasing the cost of borrowing.

One-Year Bond Anticipation Note:

Pros:

- Does not require a liquidity facility, thereby saving the additional 85 basis points.

- Potentially lower cost of borrowing (current one-year note rates are 93 basis points, but are on the rise).

Cons:

- Cost of borrowing is not locked in until closing at the end of March, which means we are exposed to interest rate risk until that time. Since the J.P. Morgan renewal bid will no longer be available (bid expires 2/13/09), even If the rates are not attractive at that point, we would have no choice but to execute the transaction at whatever the one-year note rate is at the time.

- Necessitates a second transaction in one year to either reenter the variable rate bond market, or sell another one-year bond anticipation note. Both of these transactions carry their own risks. Reentering the variable rate market would again require a liquidity facility and given our current experience, it is unclear what the availability will be in one year for liquidity facilities. Selling another one-year bond anticipation note a year from now exposes us to interest rate risk.

- Requires a significant modification to the default provisions of the trust indenture, which if in the unlikely event we were unable to refund the notes at the end of one year, would mean SANDAG would be in default and could trigger a cascading default, which would impact the entire capital structure (including the interest rate swaps).

We are recommending that we continue with our current variable rate strategy and renew the J.P. Morgan liquidity facility for the Series A and B bonds at 105 basis points, and maintain the Dexia liquidity facility for the Series C and D bonds. While this means that we will be trading higher than what we expected when we initially executed this strategy, it is on average approximately 80 basis points lower than current traditional fixed-rate bonds. Since issuing the bonds 45 weeks ago, SANDAG has saved more than $5.5 million as compared to the cost if we had issued fixed rate bonds. It is important to remember that our strategy is a long-term one, and this liquidity renewal is only for one year. After the end of one year, we will again examine our options and the pricing of those options. In addition, in our opinion, this strategy carries less overall risk to SANDAG than issuing a one-year bond anticipation note, given the current market environment. Because of the extraordinary conditions of the market, the program will continue to require ongoing monitoring and adjustments to reflect the most advantageous and cost-effective approach for SANDAG.

GARY L. GALLEGOS
Executive Director

Attachment: 1. Memo from Public Financial Management

Key Staff Contact: Renee Wasmund, (619) 699-1940; rwa@sandag.org

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The PFM Group

Public Financial
Management, Inc.
PFM Asset

February 2, 2009

Memorandum

To: SANDAG

From: Keith D. Curry, Public Financial Management

Re: Renewal of Liquidity for 2008 Variable Rate Bonds

As you are aware, in February 2008, SANDAG solicited underlying liquidity support for its then-expected issuance of $600 million in Variable Rate Demand Bonds (VRDBs).

At that time, SANDAG received multiple and aggressive bids for its credit support. One half of the program was placed with Dexia Bank at a rate of 22.5 basis points per annum for a period of five years.

The second half of the program was placed with JP Morgan at a rate of 20 basis points per annum for a period of 364 days. Because the JP Morgan facility will expire in March, 2009, it is necessary to renew or replace this facility.

In the past year, there has been an unprecedented change in the credit support market. Many major international banks have been downgraded or pulled out of the market and the remaining participants have sharply curtailed their initiation of new facilities. All major bond insurers except FSA and Assured Guaranty (which is acquiring FSA), have been downgraded and no longer compete effectively in the municipal market.

In addition, the disintegration of the Auction Rate Bond market has sent billions of Auction Rate issuers in search of new bank liquidity or credit support.

The net impact of this has been a scarcity of bank liquidity support and pricing that is unprecedented in terms of its increase.

In December, SANDAG in consultation with PFM and its investment banking team solicited for new liquidity bids for the purpose of renewing/substituting the JP Morgan commitment upon its expiration, and to consider the option of replacing the Dexia liquidity early given the trading differential resulting from credit downgrades at Dexia. Dexia also provides credit support for the SANDAG commercial paper program.

Twenty-two banks were solicited and encouraged to bid. Only JP Morgan provided a bid to renew its facility for a period of 364 days. The bid would increase the annual cost of the JP Morgan facility from 20 basis points to 105 basis points or $2.55 million on $300 million of bonds. (The actual increase will be somewhat less since the bonds begin to amortize this year.)

In light of this bid, the SANDAG finance team considered other options, the most likely of which would have been to issue a one-year bond anticipation note that would not have required credit support. This approach would have eliminated the bank liquidity charge, but would have required SANDAG to incur costs of issuance and be committed to undertaking a second transaction in one year to refund the notes. In light of the costs involved, the risk in necessitating a second transaction in 2010, and the ongoing uncertainty in the credit support markets, SANDAG has elected to maintain the JP Morgan liquidity and to closely monitor this situation.

It is expected that as the banking system continues to improve under Federal stimulus and oversight, additional liquidity and more competitive pricing will be available in the future.

On a positive note, the JP Morgan supported bonds are trading near all-time record lows. The remarketing for the week of January 26 was at 0.15%.

The higher liquidity fee would suggest that the two tranches of the SANDAG capital program supported by JP Morgan would trade at the sum of the swap rate and the liquidity/remarketing cost or 4.52% and 4.93% respectively for 2009. While this is higher than the expected synthetic fixed rate at the swap rate, it is on average approximately 80 basis points lower than a traditional fixed rate bond cost, saving approximately $2.4 million annually over traditional fixed rate bonds.

As we have noted in prior discussions of the international financial crisis, SANDAG continues to maintain a lower cost of capital and to be able to successfully negotiate these unprecedented circumstances.

We are continuing to monitor the situation with Dexia and the credit support markets in general to identify additional measures to reduce cost and risk associated with the SANDAG debt portfolio.

In light of the upcoming expiration, it is important that SANDAG take steps to renew the JP Morgan liquidity facility prior to March 26, 2009.

Please feel free to contact me should you have any questions.

BOARD OF DIRECTORS
FEBRUARY 13, 2009

AGENDA ITEM NO. 09-02-**2A**
ACTION REQUESTED – APPROVE

PROPOSED AMENDMENT TO *TransNet* EXISTING INTEREST RATE SWAPS

File Number 1110200

Recommendation

The current market conditions have created an unusual situation that may be an opportunity for SANDAG to lower our borrowing costs by amending two of the three existing TransNet interest rate swaps. The Board of Directors is asked to concur with the recommendation from our financial advisor, Public Financial Management, to solicit interest to possibly amend the existing interest rate swaps.

Introduction

The current market conditions have created an unusual situation that may be an opportunity for SANDAG to lower its borrowing costs by amending two of the three existing *TransNet* interest rate swaps.

Discussion

On November 22, 2005, SANDAG executed three 30-year floating-to-fixed interest rate swaps of $200 million each. The swaps were entered into in order to lock in historically low interest rates in advance of issuing $600 million of variable rate demand bonds. The swaps are designed to hedge the variable rate bonds to a fixed rate. The swaps are working as designed and have resulted in a borrowing rate of approximately 4.2 percent, realizing a savings to date of $5.7 million compared to borrowing at a fixed rate. An opportunity has presented itself that could further reduce our cost of borrowing beginning in 2018. The attached memorandum (Attachment 1) from SANDAG's financial advisor, Public Financial Management (PFM), explains the potential amendment to the two swaps. PFM staff will be present at the February 13, 2009, Board of Directors meeting to review the proposed strategy.

Board Policy No. 032, "San Diego County Regional Transportation Commission Interest Rate Swap Policy," establishes guidelines for the use and management of interest rate swaps. The policy will be used as guidance for any recommended swap amendments.

Next Steps

With the Board of Directors' approval, staff will issue a Request for Quotes to determine the financial feasibility of amending the swaps. We will provide an update and recommended action to the Board of Directors at the February 27, 2009, meeting.

GARY L. GALLEGOS
Executive Director

Attachment: 1. Memorandum from PFM dated February 9, 2009

Key Staff Contact: Renée Wasmund, (619) 699-1940, rwa@sandag.org

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February 9, 2009

Memorandum

To: SANDAG

From: Andrew McKendrick, *PFM Asset Management LLC*

CC: Keith Curry, *Public Financial Management, Inc.*

Re: Benefit of amending an existing hedge related to 2008 Trans Net II financing by the overlay of a SIFMA/LIBOR basis swap

Introduction

An interesting opportunity has appeared in the market for the swaps used as part of the existing \$600,000,000 long-term financing. PFM suggests SANDAG consider an amendment to the existing transactions to take advantage of the market's unusual moves during the recent turmoil in order to reduce the cost of that financing. SANDAG should reasonably expect, based upon historical relationships, that the amendment would on average generate 136 basis points of annual cash flow benefit beginning in 2018 on the outstanding debt (136 basis points would be \$2,130,000 in 2018 for each of the two, then \$156,600,000 bond issues), and the likelihood of being worse off in the future as a result of entering this transaction is extremely low.

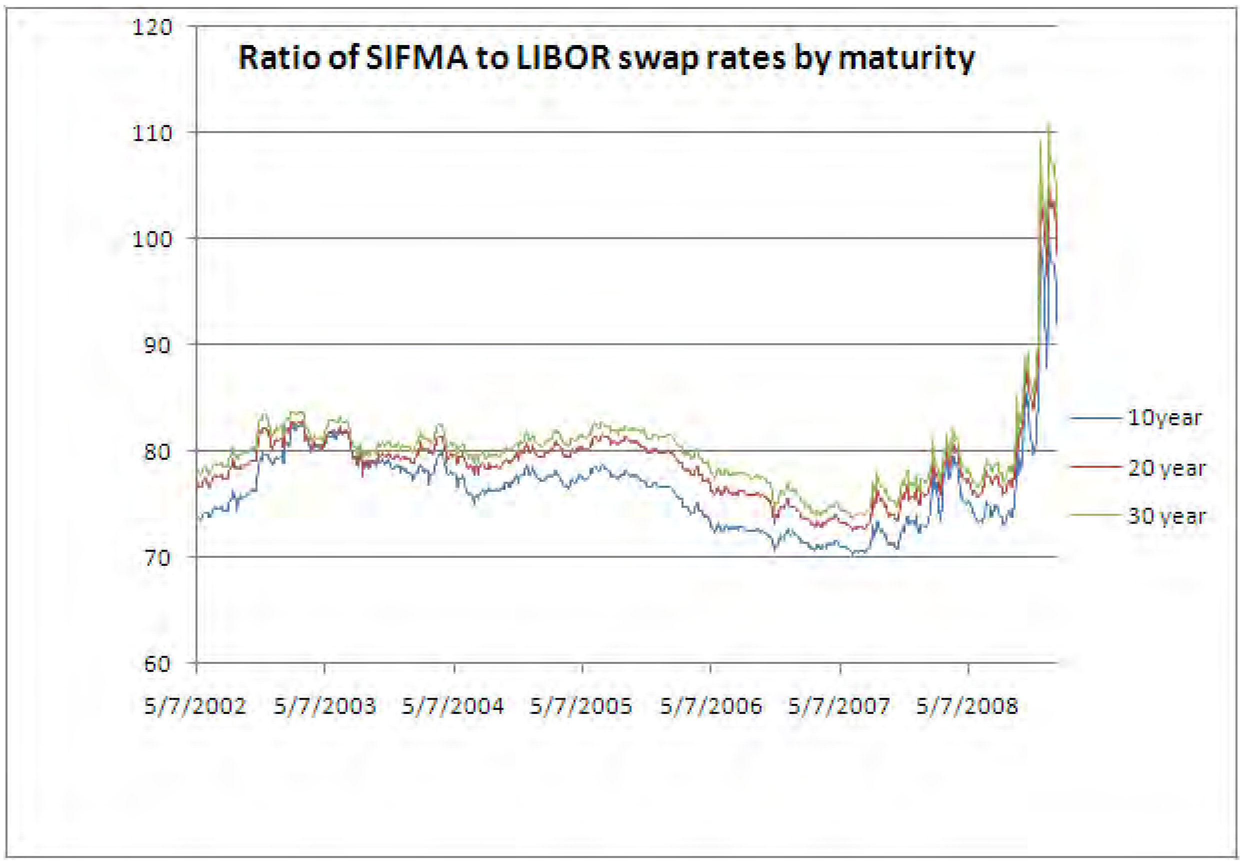
On November 22, 2005, the San Diego County Regional Transportation Commission ("SANDAG") executed three floating-to-fixed interest rate swaps (the "Swaps"). The Swaps were entered in anticipation of the issuance of \$600,000,000 2008 variable-rate TransNet II Bonds issued early in 2008. The Swaps are designed to hedge the variable rate bonds to a fixed rate and together form a "synthetic fixed rate" financing. The hedge was done as three swaps of \$200,000,000 each.

The first executed transaction is a \$200,000,000, 30-year, floating-to-fixed swap with Bank of America under which SANDAG pays a fixed rate of 3.41% and receives 65% of 1-month LIBOR. The other two executed transactions are each \$200,000,000, 30-year, floating-to-fixed swaps with Goldman Sachs Mitsui Marine Derivative Products and Merrill Lynch Capital Services under which SANDAG pays a fixed rate of 3.8165% and receives 65% of 1-month LIBOR for the first 10 years of the swap (April 1, 2008 to April 1, 2018) and receives the SIFMA Municipal Swap Index for the last 20 years of the swap (April 1, 2018 to April 1, 2038). Appendix A lists further details and includes graphics of the cash flows.

In 2005, the financing team, consisting of advisors, banks and SANDAG staff, determined to take tax risk on some of the hedge by using a 65% of LIBOR swap for the full maturity of the Bank of America swap and for the first 10-years of the Goldman Sachs and Merrill Lynch swaps in order to reduce the fixed rate payable by SANDAG under each swap.. Tax risk is the risk that income tax rates will be lower in the future causing the receipt on the variable side of a % of LIBOR swap to be less than the payment on the hedged tax-exempt variable rate debt.

Market

The recent market turmoil has created an interesting opportunity for SANDAG given the structure of the Swaps with the SIFMA index during the latter years. As illustrated in the graph below, the market traded ratio between LIBOR swaps and SIFMA swaps has increased dramatically due to a number of factors, including a lack of liquidity, a breakdown in the similar markets for fixed rate taxable and tax-exempt bonds and the bankruptcy of Lehman Brothers, which has created an imbalance in the SIFMA swap market relative to the LIBOR swap market. This allows SANDAG to effectively amend the existing SIFMA swaps to LIBOR by overlaying a SIFMA to LIBOR basis swap, which would significantly reduce the costs of the financing after 2018, assuming a return to normal, or even near to normal trading relationships.



Typically, SIFMA to LIBOR ratios are higher for longer maturities than they are for shorter maturities as illustrated both in the chart above, which is beneficial to the pricing of the proposed change.

Basis Swaps

SANDAG could take advantage of the current SIFMA/LIBOR relationships by executing a SIFMA versus LIBOR floating-to-floating or "basis" swap. The combination of the basis swap and the existing swap would effectively amend the existing swaps without having to actually change the existing floating-to-fixed interest rate swaps. This overlay would allow SANDAG to bid out the new transaction to a group of potential counterparties without changing the existing hedges.

In the current market for basis swaps of that particular maturity SANDAG could enter a new transaction with a payment of the SIFMA index, and receive 98.3% of 1-Month LIBOR.

The expected benefit to SANDAG would be a substantial reduction in the cost of the debt after 2018. Assuming current income tax rates, PFM expects that on average and over time, the Bonds will trade at approximately 65% of LIBOR so the expected excess payment on the hedge to SANDAG would be 33.3% of LIBOR.

Based upon the historical performance shown in Appendix B and expectation for a similar differential in future performance, PFM would expect that on average the benefit to SANDAG would be similar to historical levels. Current market pricing is less attractive than it was in late 2008, as illustrated by the decline on the chart on page 2 from the recent higher levels. PFM would be cautious about choosing a target level that is relatively "safe" such as <u>100% of LIBOR or better</u>.

Risk

In exchange for these expected savings, SANDAG would be accepting tax risk, but would be doing so at levels that imply no income taxes in future years, due to the current market anomaly. We use a % of LIBOR as a proxy for tax-exempt debt. Historically, 67% of LIBOR has approximately equaled SIFMA and 65% of LIBOR has approximately equaled the rate paid on SANDAG variable rate bonds. By entering the basis swap at SIFMA vs. 100% of LIBOR, the expectation is that even if marginal income tax rates are substantially reduced, SANDAG would not be worse off by having made the change. Appendix C contains risk analysis for one of the two possible basis swaps.

Conclusion

The current market turmoil creates an opportunity for SANDAG to effectively amend the existing fixed payer swaps in place for the TransNet II financing by entering a basis swap that will effectively change the future receipt of the Swaps from SIFMA to a high percentage of LIBOR. The expectation, based upon the historical benefit of this basis swap (136 basis points), would be for a $2,210,000 annual cash flow benefit beginning in 2018 for each of the two, then $156,600,000 bond issues. If the market moves so that this basis swap can be done at 100% of LIBOR, this is a good level to enter such a transaction and provides substantial likely benefit with limited downside risk to SANDAG.

Appendix A

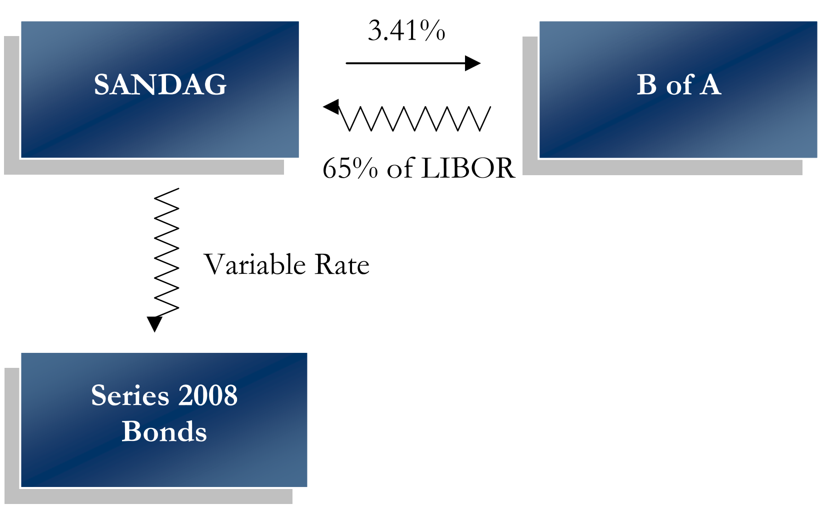
Structure of current swaps

On November 22, 2005 SANDAG executed the following three (3) interest rate swaps. The terms of the transactions are outlined below:

1. Floating-to-fixed Interest Rate Swap

Notional Amount:	$200,000,000
Effective Date:	April 1, 2008
Maturity Date:	April 1, 2038
SANDAG Pays:	3.41% (monthly, 30/360)
SANDAG Receives:	65% of USD-LIBOR (monthly, Act/360)
Reset Dates:	Effective date and first day of each calendar month
Counterparty:	Bank of America, N.A.

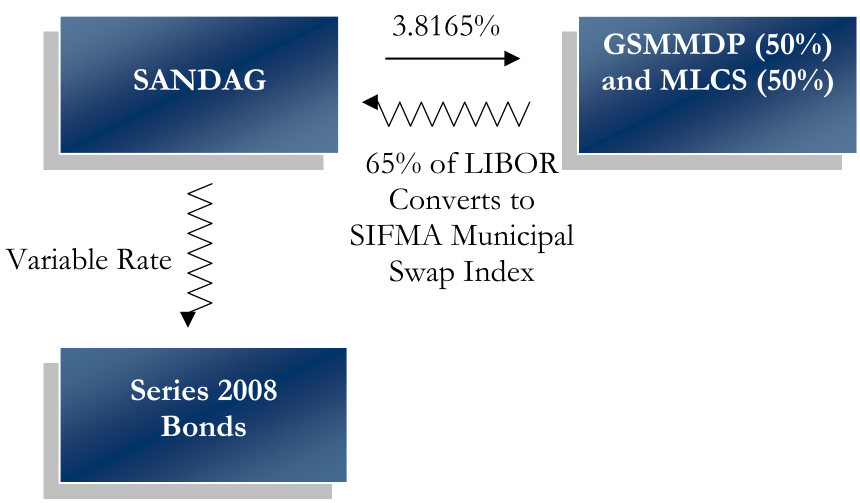
A diagram of the swap is shown below:



2. Floating-to-fixed Interest Rate Swaps

Notional Amount:	$400,000,000 (aggregate)
Effective Date:	April 1, 2008
Conversion Date:	April 1, 2018
Maturity Date:	April 1, 2038
SANDAG Pays:	3.8165% (monthly, 30/360)
SANDAG Receives:	65% of USD-LIBOR until conversion date, SIFMA Municipal Swap Index thereafter (monthly, Act/360)
Reset Dates:	Effective date and first day of each calendar month until conversion date, Weekly every Thursday thereafter
Counterparties:	Goldman Sachs Mitsui Marine Derivative Products, L.P. Merrill Lynch Capital Services, Inc.

A diagram of the swaps is shown below:



Appendix B – Basis Swap Historical Results

1-Mo LIBOR	98.0%	plus	0.00%
SIFMA	100.0%	less	0.00%

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Jan	2.61	2.27	1.38	0.83	1.16	2.72	2.29	2.09	2.14	1.86	2.72	3.01	0.59	0.31	0.12	0.76	1.49	1.71	1.03	(0.21)
Feb	2.77	2.50	1.62	1.03	1.04	2.24	2.07	2.11	2.46	2.39	2.24	1.95	0.58	0.26	0.16	0.71	1.43	1.69	0.97	
Mar	2.46	2.00	1.44	0.97	1.39	2.23	2.10	2.31	2.41	1.95	2.26	1.94	0.57	0.20	0.14	0.89	1.63	1.70	0.19	
Apr	2.02	1.54	0.67	0.69	1.29	1.83	1.84	1.82	1.69	1.61	1.89	0.81	0.34	0.10	0.03	0.41	1.41	1.54	0.73	
May	2.11	1.64	0.30	0.46	1.39	1.60	1.55	1.53	1.72	1.44	1.49	0.82	0.30	0.07	0.03	0.11	1.54	1.41	0.47	
Jun	2.50	2.23	1.36	1.01	1.87	2.29	2.15	1.73	2.09	1.72	2.26	1.15	0.55	0.11	0.18	0.81	1.62	1.58	0.87	
Jul	2.71	2.05	1.27	0.92	2.09	2.44	2.44	2.01	2.27	2.07	2.72	1.35	0.55	0.31	0.38	1.14	1.77	1.69	0.79	
Aug	2.42	1.08	1.03	0.61	1.81	2.12	1.87	2.18	2.38	2.11	2.44	1.40	0.49	0.30	0.48	1.15	1.80	1.79	0.61	
Sep	1.88	0.55	0.20	0.65	1.66	2.00	1.90	1.87	2.05	1.96	2.16	0.89	0.31	0.17	0.43	1.21	1.74	1.59	(1.18)	
Oct	2.21	1.07	0.53	0.58	1.99	2.13	1.92	1.96	2.00	1.94	2.35	0.39	0.14	0.13	0.19	1.34	1.79	1.45	0.10	
Nov	2.50	0.84	0.93	0.77	1.93	1.94	1.92	1.83	2.06	1.80	2.20	0.43	(0.03)	0.02	0.46	1.23	1.71	1.32	0.45	
Dec	1.00	0.20	0.74	0.83	1.74	1.54	1.94	2.09	2.25	2.11	2.35	0.56	0.23	0.05	0.67	1.19	1.66	1.64	(0.05)	
Average	2.27	1.50	0.95	0.78	1.61	2.09	2.00	1.96	2.13	1.91	2.26	1.22	0.38	0.17	0.27	0.91	1.63	1.59	0.42	

Annual:	
	1990-2008
Average	1.36
Max	2.27
Min	0.17
St Dev	0.71

Average
1.36

This table shows (in basis points) the historical difference between a receipt based upon 98% of 1-Month LIBOR and a receipt based upon SIFMA. Each number in the table shows the difference in a given month with the average annual difference along the bottom row. This forms the basis for our expectation for performance in the future, assuming the same marginal income tax rate. All other factors being equal, an increase in marginal income tax rates would create higher benefit to SANDAG and a reduction in marginal income tax rates would cause less benefit to SANDAG.

PFM suggests setting a target, of 100% of LIBOR, for entering the basis swap. This would generate a higher expected benefit, and a higher historical benefit than the numbers illustrated here.

Appendix C – Risk Analysis

Table 1 – Present Value Analysis

Table 1 shows the likely present value depending on the realized relationship between LIBOR and SIFMA in the future. It also shows the likely termination amount that would be owed due to an early termination of a swap related to one of the two possible basis swaps at various future dates (down the left side of the table) and various market trading ratios between SIFMA and LIBOR (across the top of the table).

Effective Date	4/1/18	
Swap Maturity	4/1/28	
Floating Index	98.3%	**of LIBOR**
LIBOR Swap Rate	3.50%	

PRESENT VALUE GAIN (LOSS) OF CHANGE IN RATIO

		SIFMA/LIBOR Ratio				
		S&P Worst				
Effective Date of Change	**Notional Amount**	**65.0%**	**75.5%**	**90.0%**	**98.3%**	**105.0%**
4/1/18	$156,600,000	$17,087,663	$11,699,661	$4,259,087	$0	($3,438,058)
4/1/20	$145,800,000	$14,566,101	$9,973,186	$3,630,590	$0	($2,930,717)
4/1/22	$134,100,000	$12,131,083	$8,305,967	$3,023,663	$0	($2,440,788)
4/1/24	$121,500,000	$9,811,937	$6,718,083	$2,445,618	$0	($1,974,174)
4/1/26	$107,900,000	$7,638,904	$5,230,241	$1,903,991	$0	($1,536,957)
4/1/28	$93,200,000	$5,646,831	$3,866,299	$1,407,468	$0	($1,136,149)
4/1/30	$77,300,000	$3,876,700	$2,654,317	$966,264	$0	($779,997)
4/1/32	$60,200,000	$2,373,676	$1,625,220	$591,637	$0	($477,587)
4/1/34	$41,700,000	$1,187,369	$812,973	$295,951	$0	($238,900)
4/1/36	$21,700,000	$374,623	$256,498	$93,374	$0	($75,375)
4/1/38	$0	$0	$0	$0	$0	$0

Table 2 – Impact on Annual Cashflow

Table 2 shows the likely impact a basis swap may have on future cash flows given a variety of levels for LIBOR (down the left side) and levels of the LIBOR/SIFMA ratio (across the top).

As shown in both tables, tax exempt rates (SIFMA) would have to be greater than taxable rates (LIBOR) for SANDAG to be made worse off in the future by having entered the basis swap.

Basis Risk - Cash Flow

Notional Amount	**$156,600,000**
LIBOR Ratio	98.3%
Fixed Margin	0.00%

Annual Swap Cashflow Sensitivity

LIBOR Rate	**Actual SIFMA/LIBOR Ratio** 65.0%	75.5%	90.0%	98.3%	105.0%
1.00%	521,478	357,048	129,978	0	(104,922)
2.00%	1,042,956	714,096	259,956	0	(209,844)
3.00%	1,564,434	1,071,144	389,934	0	(314,766)
4.00%	2,085,912	1,428,192	519,912	0	(419,688)
5.00%	2,607,390	1,785,240	649,890	0	(524,610)
6.00%	3,128,868	2,142,288	779,868	0	(629,532)
7.00%	3,650,346	2,499,336	909,846	0	(734,454)
8.00%	4,171,824	2,856,384	1,039,824	0	(839,376)
9.00%	4,693,302	3,213,432	1,169,802	0	(944,298)
10.00%	5,214,780	3,570,480	1,299,780	0	(1,049,220)

Appendix D - Definitions

Basis Swap – an agreement between two parties to exchange interest payments based on different variable-rate indices, e.g. SIFMA vs. LIBOR; a floating-to-floating swap

Interest rate swap – a contract between two parties, referred to as "counterparties", to exchange interest rate payments at specified dates in the future. One party under the swap contract normally makes payments based on a fixed rate while the other party makes payments based on a variable (floating) rate.

LIBOR – the London Inter-Bank Offered Rate is the rate on U.S. dollar denominated deposits with maturities from 1 day to 12 months transacted between banks in London. LIBOR is the benchmark swap floating index in the taxable or corporate swap market.

SIFMA Index – a composite of 650+ high-grade, weekly reset, tax-exempt Variable-Rate Demand Obligations (VRDO's). The SIFMA Municipal Swap index is the benchmark floating-rate index in the tax-exempt or municipal swap market.

Synthetic Fixed-Rate Debt – the issuance of variable-rate debt in conjunction with a floating-to-fixed ("fixed-payer") swap

Percentage of (% of) LIBOR swap – a swap whose floating leg is reset based on a percentage of a taxable rate (e.g. 65% of LIBOR) rather than a true tax-exempt rate, e.g. the SIFMA Index, A % of LIBOR swap generally carries a lower expected or nominal fixed rate than a comparable SIFMA swap to compensate the fixed payer (issuer) for the assumption of basis and tax risk.

Note: for a Synthetic Fixed-Rate Debt transaction using a % of LIBOR swap, the actual, effective fixed rate paid may be higher or lower than the nominal swap rate depending on how well the swap floating index tracks the issuer's variable-rate bond cost.

Basis Risk – a shortfall between the interest rate paid on an issuer's underlying bonds and the rate received on a swap hedge. A tax-exempt variable-rate bond issue hedged with a % of LIBOR swap exposes the issuer to Basis Risk. Basis Risk normally refers to a temporary shortfall due to technical factors, e.g. supply/demand for tax-exempt VRDO's, as opposed to a permanent shortfall caused by structural factors (see Tax Risk)

Tax Risk - a form of Basis Risk resulting from tax law changes such that the federal or state tax exemption of municipal debt is eliminated or its value reduced. This will cause municipal bond yields to rise relative to taxable bond yields.

BOARD OF DIRECTORS
FEBRUARY 13, 2009

AGENDA ITEM NO. 09-02-3
ACTION REQUESTED – INFORMATION

COMPASS CARD STATUS UPDATE

File Number 1145700

Introduction

The Compass Card is the last element of a multi-year deployment of a new regional fare collection system. The fare collection system deployed new ticket vending machines, bus fareboxes, cash vault equipment, and computer systems to enhance our revenue collection and reporting capabilities. The Compass Card component is aimed at improving customer convenience and increasing the security of fare products.

At a special Transportation Committee meeting on December 5, 2008, staff reported that construction delays had delayed full system testing of the Compass Card. SANDAG, Metropolitan Transit System (MTS), and North County Transit District (NCTD) staffs agreed that the testing period was necessary to ensure that the system functioned as expected. The SANDAG Board of Directors approved the recommendation on December 19, 2008, and postponed the initial public launch of the Compass Card, for COASTER and Premium Bus services, until March 1, 2009. A multi-agency implementation team was established to complete the testing, develop marketing and educational materials for the public, and ensure that all functional areas affected by Compass Card are fully engaged and prepared for operations.

During the testing period, the multi-agency team and the system vendor, Cubic Transportation, have identified key issues which hinder system readiness for the March launch. While staff and Cubic have been resolving the system issues in a reasonable time frame, their occurrence means that the system's stability and operational readiness will not be established for an acceptable period of time prior to March 1. As the system's stability is vital to ensuring passengers can use transit services and that all fare revenue is accounted for without excessive fraud, more testing is required. As the system is proven ready for revenue operations, individual products such as the COASTER and Premium Bus passes will be launched to the public. This revised launch strategy will preserve rider confidence and help avoid potential revenue loss due to system failure or fraud.

Discussion

Since the last report to the Board of Directors in December, staff at all three agencies have completed the installation of equipment and initiated systemwide testing. The testing has revealed hardware, software, and configuration issues with platform validators, ticket vending machines, enforcement handheld units, and bus smart card readers. Some of these challenges have been procedural, others due to battery failures, and others the result of software/configuration failures. Cubic has been an engaged partner in the elevation and resolution of these issues, working with staff to remediate and/or correct the problems. While staff's and Cubic's efforts have been essential to the resolution of these problems, two significant issues still exist. On February 2, 2009, MTS, NCTD, and SANDAG management met with Cubic executives to get agreement that these issues must be resolved and tested to prove the system's stability prior to revenue operation.

- Bus Smart Card Readers (Software Bug) – intermittent software problems with stand-alone validators on contract and suburban buses preventing Compass Cards from functioning properly.

- Business Rules for Fare Products (Configuration Issue) – inconsistent test results when cards are tapped for rides on and transfers between services. (e.g., COASTER to bus to Trolley/SPRINTER or vice-versa)

Cubic executives agreed to add additional staff and do whatever it takes to resolve these problems, as they have a direct bearing on our ability to launch the program to the public. Customers could be negatively affected by the inability to tap and prove that they have a valid fare or by the system's incorrect determination of a pass as invalid. Staff and Cubic have identified resolutions to these issues and are implementing the fixes through a controlled test process which should conclude in mid-February. Once this is completed MTS, NCTD, and SANDAG will again subject the Compass Card system to thorough testing for an additional 30 days to confirm readiness for revenue operations.

Staff also is working with Cubic to conduct a quality assurance audit during this period to verify proper configuration of the system. This effort should resolve any undetected problems, serving as a final check before "going live" and increasing confidence in the system.

Cubic is completing software modifications to the ticket vending machines to support the sale of both calendar Monthly and Rolling Passes as directed by the Board. The modified software will be deployed and available by the scheduled March 1 date. However, the menu options for purchasing Compass Cards will be disabled until testing is complete and the public launch initiated. All three agencies are currently holding firm to the completed launch in July, resulting in the final conversion of all monthly paper passes to the Compass Card. This final phase would include the "Regional Pass" holders, representing our largest customer segment, a group of approximately 65,000 patrons.

The delay in implementation of the Compass Card will not conflict with the amended language of the Regional Comprehensive Fare Ordinance. Amended Section 3.5 states that the new 14-day Rolling Pass will be available as of March 1, which will occur on schedule. The 14-day Rolling Pass will be available in paper format until converted to Compass Card. Additionally, amended Section 3.6 of the Fare Ordinance states "[b]eginning March 1, 2009, each Regional Pass listed in Section 3 shall be available as a monthly pass either on a calendar month or a rolling 30-day basis." Individual passes (e g., COASTER, Premium, Regional, etc.) will be available on a calendar month basis until these products are converted to the Compass Card.

Staff will provide the Board with monthly status updates and results of systemwide testing.

GARY L. GALLEGOS
Executive Director

Key Staff Contact: James Dreisbach-Towle, (619) 699-1914, jdr@sandag.org

SANDAG Debt Program:

Proposed Amendment to Existing Interest Rate Swaps

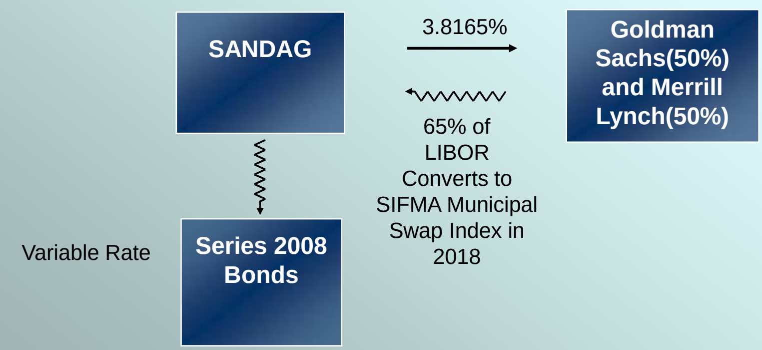
February 2009

SANDAG Debt Structure

- $100 million commercial paper program; Citigroup
  - Dexia Liquidity
- $600 million swaps:
  - Goldman Sachs
  - Merrill Lynch
  - Bank of America
- $600 million of variable rate debt:
  - Goldman Sachs and Barclays (replacing Lehman)
    - JP Morgan Liquidity
  - DeLaRosa (replacing UBS) and JP Morgan
    - Dexia Liquidity

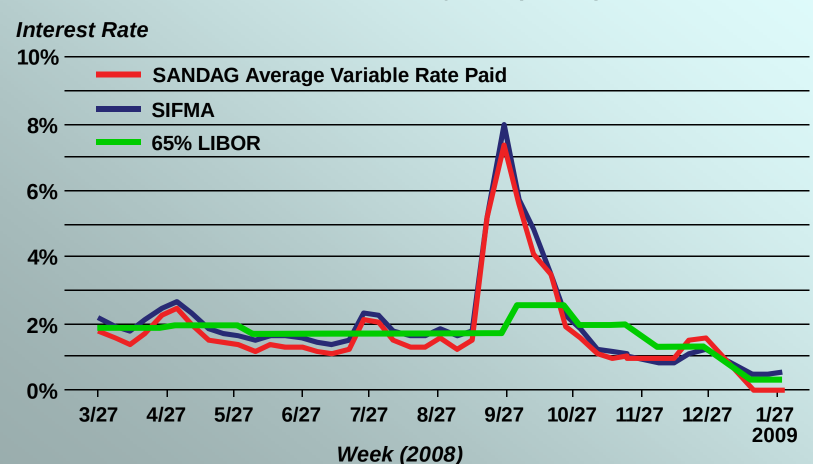
1

Existing LIBOR/SIFMA Swaps



SANDAG Variable Rate Program Performance

SANDAG Variable Rate Compared to Securities Industries and Financial Market Association (SIFMA) and London Interbank Offering Rate (LIBOR)



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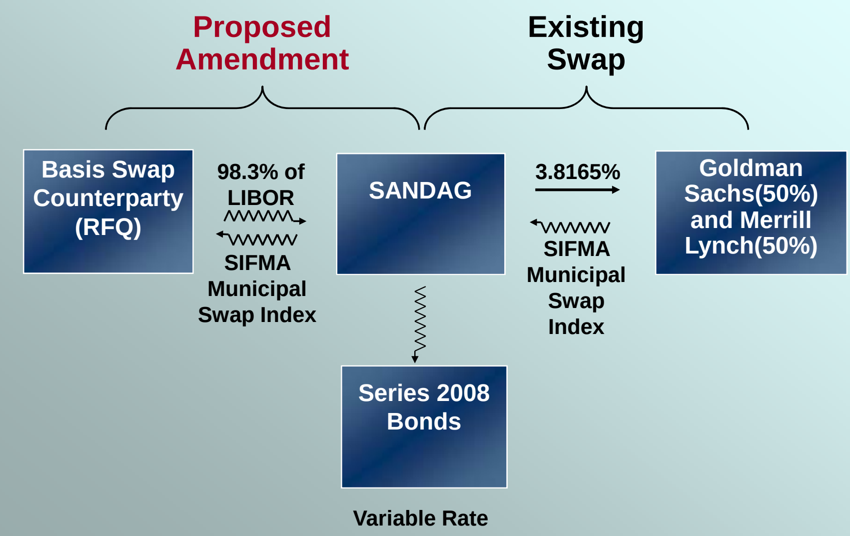
Proposed Swap Amendment



SANDAG Debt Program:

Proposed Amendment to Existing Interest Rate Swaps

February 2009