



## The PFM Group

Public Financial Management, Inc.  
PFM Asset Management LLC  
PFM Advisors

Suite 750  
660 Newport Center Drive  
Newport Beach, CA  
92660-6408

Attachment 1  
949 721-9422  
949 721-9437 fax  
www.pfm.com

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## Memorandum

**To:** SANDAG Board of Directors  
Independent Taxpayers Oversight Committee

**From:** Public Financial Management, Inc.  
PFM Asset Management LLC

**Re:** Locking in the 2008 Cost of Funds for the TransNet Program

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As we have previously discussed, SANDAG is advancing its ability to implement the Early Action Program through several financial strategies. The first is the expansion of the SANDAG commercial paper program from \$135 million to \$335 million. We expect this program expansion to close on November 9<sup>th</sup>.

At the same time, we have been developing a financial planning model to allow SANDAG's staff to evaluate various project delivery strategies and to determine cash flow and financing requirements. Multiple alternatives of the financial model have been produced, and we have determined that SANDAG is expected to face an estimated financing requirement in 2008 of over \$600 million.

Now that the initial financing requirement for the *TransNet* Early Action Program (EAP) has been identified, the third leg of our strategy, locking in a cost of funds at today's historically low rates, can be considered.

Limiting our exposure to rising interest rates helps ensure our ability to deliver the full TransNet program and avoids the potential of having to finance in an adverse market. Several California transportation issuers, including the Bay Area Toll Authority and the Contra Costa Transportation Authority are pursuing similar strategies. While rates are beginning to move up, on a historic basis, we continue to be in an interest rate environment that is exceptionally low and is highly favorable to SANDAG.

On September 19, 2005, SANDAG received nine proposals, from the firms in the established senior manager underwriting pool, related to hedging the cost of the 2008 bonds. These proposals were carefully considered, and good ideas were generated from multiple proposals. On October 20, 2005, interviews were held with all nine firms, and SANDAG's staff has recommended three firms to participate in the hedging program.



This proposal process has provided us with the best ideas Wall Street has to offer for the best price. Based on the proposals received and information developed during the interviews, we are recommending that SANDAG enter into interest rate exchange agreements, known as “swaps,” with three firms to establish today, the cost of its bonds in 2008. Based on rates as of November 7, 2005, SANDAG can lock in a cost of funds with an arbitrage yield of 3.79%. To put this in perspective, the average cost of funds for TransNet I was approximately 5.60%. Also, the cost today of a fixed rate, 30-year, non callable bond issue would be 4.58%. The proposed hedge would lock in a cost of funds approximately 79 basis points lower than traditional fixed rate bonds and 181 basis points lower than the 20-year average cost of funds achieved during TransNet I (100 basis points equals 1%). Based on SANDAG’s EAP financing requirements, the difference in annual debt service between today’s fixed rate transaction and this proposal is approximately \$3.10 million per year for thirty years. More importantly perhaps, by entering into these agreements, SANDAG will protect itself against potential upwards movements in interest rates prior to 2008. As you know, interest rates are near historic lows, and the consensus of Wall Street analysts is for rates to move higher. Should the hedges be terminated in 2008 without the issuance of bonds, SANDAG would “break even” if rates were only 17 basis points higher than today’s rates. In order to achieve the same cost of capital on fixed rate bonds in 2008, rates would have to be 79 basis points *lower* than today’s rates.

From a programmatic perspective, SANDAG would be locking in the cost of funds on approximately 40% of its expected long-term debt based on the analysis conducted for the draft *TransNet* Plan of Finance for the Early Action Program at a rate less than 4%. We believe this would be a substantial accomplishment. The lower rates would result reduced debt service requirements making more *TransNet* funds available for the EAP projects and would provide important insulation to SANDAG in the event of recession, excess inflation, or potentially higher borrowing costs.

### *Specific Recommendations*

PFM is recommending that SANDAG enter into three interest rate exchange agreements of \$200 million each. Two of these agreements would involve SANDAG paying a fixed rate of 3.92% and receiving 65% of one month LIBOR (London Interbank Offered Rate), for 10 years. In the tenth year, the agreement would convert to the receipt of the Bond Market Association (BMA) rate for the remaining 20 years. LIBOR is a widely used proxy for taxable variable rates and BMA is a proxy for tax-exempt variable rates.

In the third agreement, SANDAG would pay a fixed rate of 3.53% and receive 65% of LIBOR for the 30-year period.

In 2008, SANDAG is expected to issue variable rate bonds, which would be paid from the variable rate payments received under the agreements (either LIBOR or BMA). This leaves SANDAG with a fixed cost of capital of 3.92% on 2/3rds on the transaction and 3.53% on one-



third of the transaction for a blended cost of 3.79%. The agreements would amortize equally over thirty years. (All interest rate quotations are as of November 7<sup>th</sup>, and are subject to market changes.) In addition, fees related to remarketing and liquidity when the bonds are issued would increase the rates approximately 21 basis points.)

Based on staff's selection process, Merrill Lynch and Goldman Sachs would serve as counterparties on the LIBOR/BMA agreements and Bank of America would be the counterparty on the LIBOR agreement.

The counterparties do not "bet against" SANDAG in the transaction but rather engage in offsetting transactions with other parties seeking in this case to have variable rate exposure. The counterparties earn a "bid/ask" spread from both parties. In the case of SANDAG, this spread has been determined to be 4 basis points. Also built into the rate is a "forward premium" to compensate the counterparty for taking interest rate risk on behalf of SANDAG through 2008. Forward premiums are historically low today, due to the flat yield curve. The forward premium cost to hedge to 2008 is approximately 13 basis points. Therefore, if rates stay flat from today, our "cost" of this hedge (spread+forward premium) is 17 basis points.

### ***Rationale for the Recommendation and Risk Issues***

The ability to lock in a cost of funds 79 basis points lower than conventional fixed rate bonds currently results from a very flat yield curve and a historically low "forward premium" cost to hedge debt. The use of interest rate exchange agreements (swaps), to lower borrowing cost is a technique that has exploded among municipal issuers in the past five years. In a low interest rate environment where it is possible to lock in a 30 year cost of funds below 4%, the economics become compelling. However, the use of this tool, and the savings to be achieved, are not without specific risks which should be understood and evaluated prior to entering into the transaction.

The first risk is **counterparty** risk. This is the risk that the selected counterparty will fail to perform under the terms of the agreement. SANDAG is addressing this risk by diversifying its exposure among three counterparties with strong underlying credit ratings. The three counterparties recommended are rated AA or better. This diversification provides confidence that SANDAG can rely on the performance of its counterparties. Provisions will be built into the agreement, which provide specific remedies to ensure performance in the event of a default or downgrade.

The second risk is **basis** risk. Basis risk is the potential that the variable rate SANDAG receives will not be sufficient to fully cover the payment on SANDAG's variable rate bonds. In this case, in addition to the fixed rate paid under the agreement, SANDAG must also pay an additional amount to its bond holders. This issue can be acute during times of unusually low interest rates, such as we experienced in 2002-04, due to rate compression. Though the recent past has



provided an example of rate compression, we are seeing a return to more typical relationships as short-term interest rates rise. We have analyzed historic performance of variable rate bonds similar to those that will be issued in 2008 by SANDAG. In fact, based on this historical analysis, we would expect the payments received under the agreements to exceed the expected bond payments. For example, in the period 1998-2005 under a variable rate bond program managed by PFM, the underlying bonds outperformed the BMA index by 22.7 basis points. To the extent SANDAG's bonds outperform the variable rate receipt, this will provide additional savings.

The third risk is *tax* risk. Tax risk is the potential that Congress would reduce the highest marginal tax brackets, and therefore, reduce the benefit of tax-exempt bond income. This would not be a problem for BMA agreements, since BMA is a tax-exempt index and would adjust to reflect the change in taxable/tax-exempt relationships. In LIBOR transactions however, a change in federal tax rates would cause bonds to trade at a percentage of the LIBOR index higher than its historical percentage. For example, rather than trading at 65% of LIBOR, if the tax exemption were to be eliminated entirely, we would expect bonds to trade at 100% of LIBOR. If under SANDAG's agreement, it was receiving 65% and paying 100% of LIBOR, the difference would be additional cost to SANDAG. More incremental changes in the top tax rates would result in less dramatic, but similar changes. By the same token, if tax rates were to rise, we would expect the trading relationship of LIBOR to be reduced, therefore resulting in a net reduction in SANDAG's debt service costs. Over the first ten years of the transaction, we believe tax risk is manageable. Current rates are set until 2010. In the absence of specific reauthorization, rates will automatically rise to their pre-2001 levels. Given the current state of the economy and federal budget, it is difficult to imagine a scenario where tax rates can be reduced below the levels established in 2001. A more likely scenario is that rates will be made permanent at current levels. It is because of this tax risk, that SANDAG is able to achieve such a lower rate on the LIBOR only portion of this transaction. By taking this risk, we achieve savings of 91 basis points. Because we simply cannot predict future changes in tax laws on a long-term basis, such as the advancement of the flat tax idea or a challenge to the tax exemption on bonds, we are recommending that in year ten, two-thirds of the transaction converts to a BMA swap. This essentially eliminates the tax risk for two-thirds of the bonds, while allowing us to achieve an additional 52 basis points of savings vs. a solely BMA agreement. This essentially pays us approximately \$2.1 million per year to take this limited tax risk, while eliminating it on two-thirds of the transaction when potential changes could have the most impact on the TransNet program.

The fourth risk is *termination risk*. While SANDAG anticipates maintaining these agreements through the amortization of its proposed bonds out to 2038, and indeed, will likely covenant to issue bonds in 2008 as part of this transaction, there is the risk that SANDAG will not issue bonds or that during the course of the agreement it may wish to terminate the agreement. If interest rates are at least 17 basis points higher than current levels when the agreement terminates, the counterparties will owe a payment to SANDAG. Termination risk for SANDAG



will occur if interest rates are *lower* than today's current rates. Under this market environment, SANDAG will owe a termination payment to the counterparties. To use an extreme example, assume interest rates are 100 basis points or 1% lower on March 1, 2008 and that SANDAG terminates the agreements rather than selling bonds and entering into the payment exchange. Under that environment, SANDAG could owe a payment in excess of \$55 million. However, this would imply a market where the ten year Treasury bond, currently at 4.64% would be at 3.64%. Given historical performance, we would not expect rates to reach this low level, but if they did, SANDAG would be able to finance both its projects and its termination fee at record low rates in the low 3% range. Termination risk is mitigated by ensuring that SANDAG will have sufficient reason to borrow in 2008. Since we will be refunding the commercial paper and any notes that may be issued, and in light of the higher project requirements indicated in the draft Plan of Finance, we believe there will be a compelling justification for a financing in 2008 in order to maintain the schedule of the TransNet program. Given the excellent bids recently received for liquidity support on the commercial paper, and the reaffirmation of SANDAG's AA ratings during the commercial paper process, we do not believe SANDAG will face significant market access or liquidity risk in 2008.

These risks will be discussed in more depth during the ITOC and Board meetings.

We would note that the recommended strategy is not the approach that would result in the absolute lowest cost of capital. By taking a higher exposure to the aforementioned risks, SANDAG could achieve a cost of funds as low as 3.53%. It is our recommendation however that the strategy as outlined, best strikes a balance between risk and reward to achieve the optimal risk profile and cost of capital.

### ***Summary Recommendation***

SANDAG is presented the opportunity to lock in a cost of funds under 4% for approximately 50% of its expected long-term debt program based on the draft *TransNet* Plan of Finance for the Early Action Program. It can do so during a period of historically low interest rates and when a flat yield curve allows a three year forward starting transaction to be highly attractive. While synthetic fixed rate debt is subject to some specific risks as discussed above, the cost of capital is more than 79 basis points lower than a conventional fixed rate bond issue sold today. The expected annual savings of over \$3 million annually (\$93 million over a 30-year bond measure) compensates SANDAG for this additional risk. We believe this structure has been carefully balanced to achieve SANDAG's objectives of achieving a low cost of capital, while mitigating potential risks. We believe it will be well received by the capital markets and the rating agencies, and it will best serve the interests of the motorists and transit users in San Diego County.