

AGENDA FOR
BOARD FACILITIES WORKSHOP
SAN DIEGUITO UNION HIGH SCHOOL DISTRICT
BOARD OF TRUSTEES

Thursday, May 18, 2006 San Dieguito District Office Conference/Board Room
3:00 p.m. 710 Encinitas Blvd., Encinitas CA 92024

A Special Board Facilities Workshop of the Governing Board of the San Dieguito Union High School District has been called for on Thursday, May 18, 2006.

DATE: Thursday, May 18, 2006

PLACE: San Dieguito Union High School District
District Office Conference/Board Room
710 Encinitas Boulevard
Encinitas, CA 92024

TIME: **3:00 p.m.**

Items to be transacted will be limited to the following:

INFORMATION ITEMS

1. Update on Refunding Plan of 1998 & 2004 Mello Roos Bonds
2. Adjournment


San Dieguito Union High School District

INFORMATION FOR BOARD OF TRUSTEES

TO: BOARD OF TRUSTEES

DATE OF REPORT: May 11, 2006

BOARD MEETING DATE: May 18, 2006

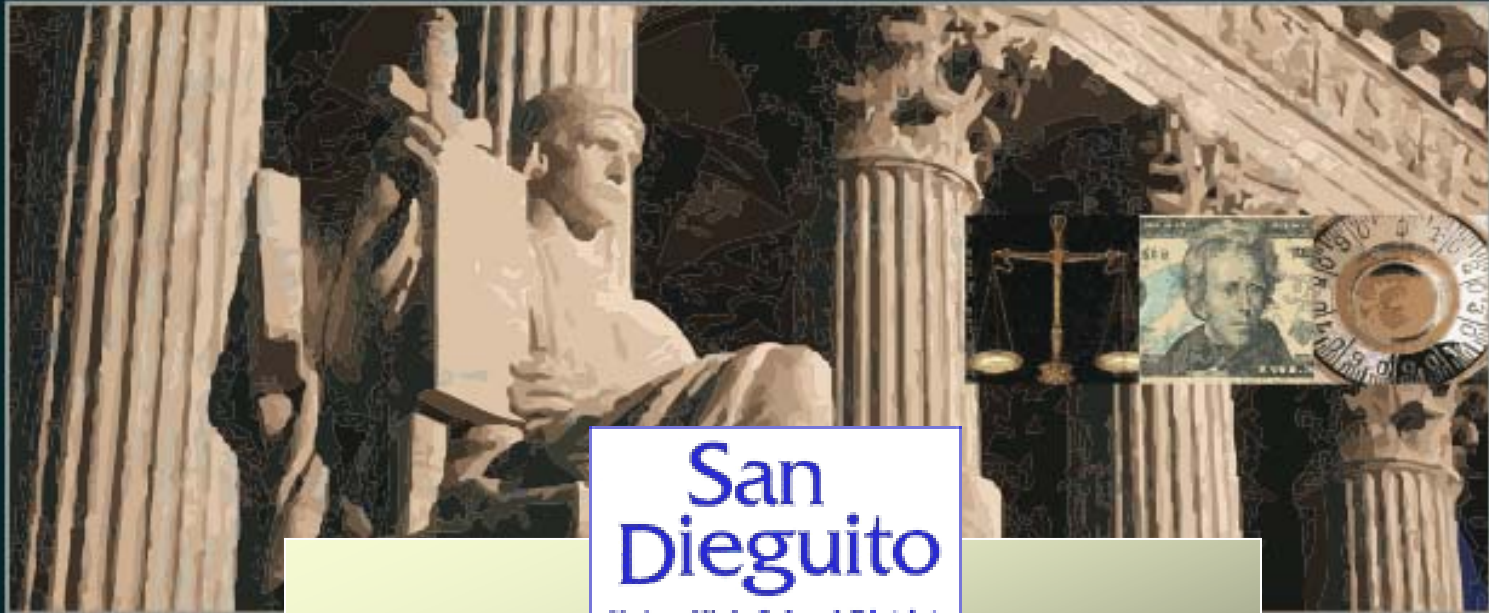
PREPARED BY: Steve Ma, Exec. Dir. Bus. Serv. 
Eric Hall, Assoc. Superintendent, Bus. Serv.

SUBMITTED BY: Peggy Lynch, Ed.D.
Superintendent

SUBJECT: Bond Refunding Update

On April 4, 2006, a board workshop was held to discuss a proposed refunding of the 1998 and 2004 Mello Roos Bonds. At the workshop, staff identified the goals of the refunding to include releasing the remaining funds locked in escrow and creating some present value savings in the process. The bond team presented a traditional fixed rate refunding to achieve these goals. During the past five weeks, there has been upward pressure on long-term rates, which has significantly changed the economics of the original refunding plan. This prompted staff to ask the bond team to explore alternative structures to achieve the district's goals.

The district's financial advisor, Bond Logistx, will present an alternative structure (Synthetic Fixed Rate) at the May 18th meeting. This alternate structure is complex and includes additional risks not associated with a traditional fixed rate refunding. The presentation will explain the financing mechanics, risks, and appropriate fit for the district's Mello Roos program.



**San
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Union High School District

Introduction to Interest Rate Swaps

School Board Workshop
May 18, 2006



San Dieguito Union
High School District

Introduction

Table of Contents / Agenda

Section 1	Background
Section 2	Interest Rate Swap Basics
Section 3	Termination Considerations





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High School District

Background

- Refinancing prior bonds will allow the District to avoid uncertainty of future releases from the Escrow Fund.
- Interest rates have increased since the April 4th workshop. Therefore the originally proposed refinancing has become more expensive.

- April 4, 2006 Board of Education Workshop
 - Discussed proposed refinancing of the District's 1998A, 1998B, and 2004 Bonds
 - Proposed refinancing will allow the District to mitigate the uncertainty of future releases from the Escrow Fund
 - Approx. \$15.4mm will be immediately available for facilities
 - District will save approx. \$1.2mm (present value) in future debt service payments
- May 18, 2006 Board of Education Workshop
 - Interest rates have increased and as a result the previously proposed structure has become more expensive
 - Approx. \$14.3mm will be immediately available for facilities
 - No savings in future debt service payments
 - Refinancing will increase future debt service payments by \$121,548 PV.





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Background

- Entering into an “interest rate swap” will allow the District to achieve and enhance financial objectives discussed during the April 4th workshop.
- May 18, 2006 Board of Education Workshop
 - District may achieve and enhance financial objectives discussed during the April 4th workshop by entering into an “interest rate swap”
 - Approx. \$17.9mm will be immediately available for facilities
 - District will save approx. \$4.4mm PV in future debt service payments



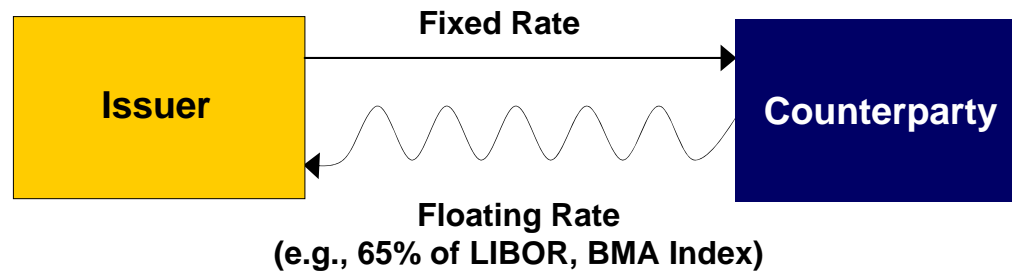


Interest Rate Swap Basics

What Is An Interest Rate Swap?

- Common terminology:
 - Participants = Counterparties
 - Notional = Principal used to calculate interest payment
 - Effective date = Swap cash flows start date

- An interest rate swap is a contract between two parties to exchange cash flows
 - Cash flows are calculated based on the product of a fixed or floating rate and a set notional amount
 - No principal is exchanged
- Interest rate swaps may incorporate a variety of indices including LIBOR, T-Bills, CPI, and BMA





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- Terms Very Flexible
 - Floating Leg Index
 - Payment Dates
 - Amortization
 - Netting

Interest Rate Swap Basics

Example Swap Cash Flow

Quarter Ending	Notional Amount	Average of LIBOR Index	Floating Leg Interest	Fixed Leg @ 3.77%	Net Swap Payments
Mar-06	100,000,000	4.520%	1,130,025	942,500	(187,525)
Jun-06	100,000,000	4.020%	1,005,025	942,500	(62,525)
Sep-06	100,000,000	3.820%	955,025	942,500	(12,525)
Dec-06	100,000,000	3.620%	905,025	942,500	37,475
Mar-07	80,000,000	3.220%	644,020	754,000	109,980
Jun-07	80,000,000	2.920%	584,020	754,000	169,980
Sep-07	80,000,000	2.420%	484,020	754,000	269,980
Dec-07	70,000,000	3.020%	528,517	659,750	131,233
Mar-08	70,000,000	2.920%	511,017	659,750	148,733
			6,746,692	7,351,500	604,808

Quarter Ending	Notional Amount	Average of LIBOR Index	Floating Leg Interest	Variable Bond Rate	Variable Bond Payments	Net Basis Gain/(Loss)
Mar-06	100,000,000	4.520%	1,130,025	4.550%	1,137,525	(7,500)
Jun-06	100,000,000	4.020%	1,005,025	4.050%	1,012,525	(7,500)
Sep-06	100,000,000	3.820%	955,025	3.850%	962,525	(7,500)
Dec-06	100,000,000	3.620%	905,025	3.650%	912,525	(7,500)
Mar-07	80,000,000	3.220%	644,020	3.250%	650,020	(6,000)
Jun-07	80,000,000	2.920%	584,020	2.950%	590,020	(6,000)
Sep-07	80,000,000	2.420%	484,020	2.450%	490,020	(6,000)
Dec-07	70,000,000	3.020%	528,517	3.050%	533,767	(5,250)
Mar-08	70,000,000	2.920%	511,017	2.950%	516,267	(5,250)
			6,746,692		6,805,192	(58,500)





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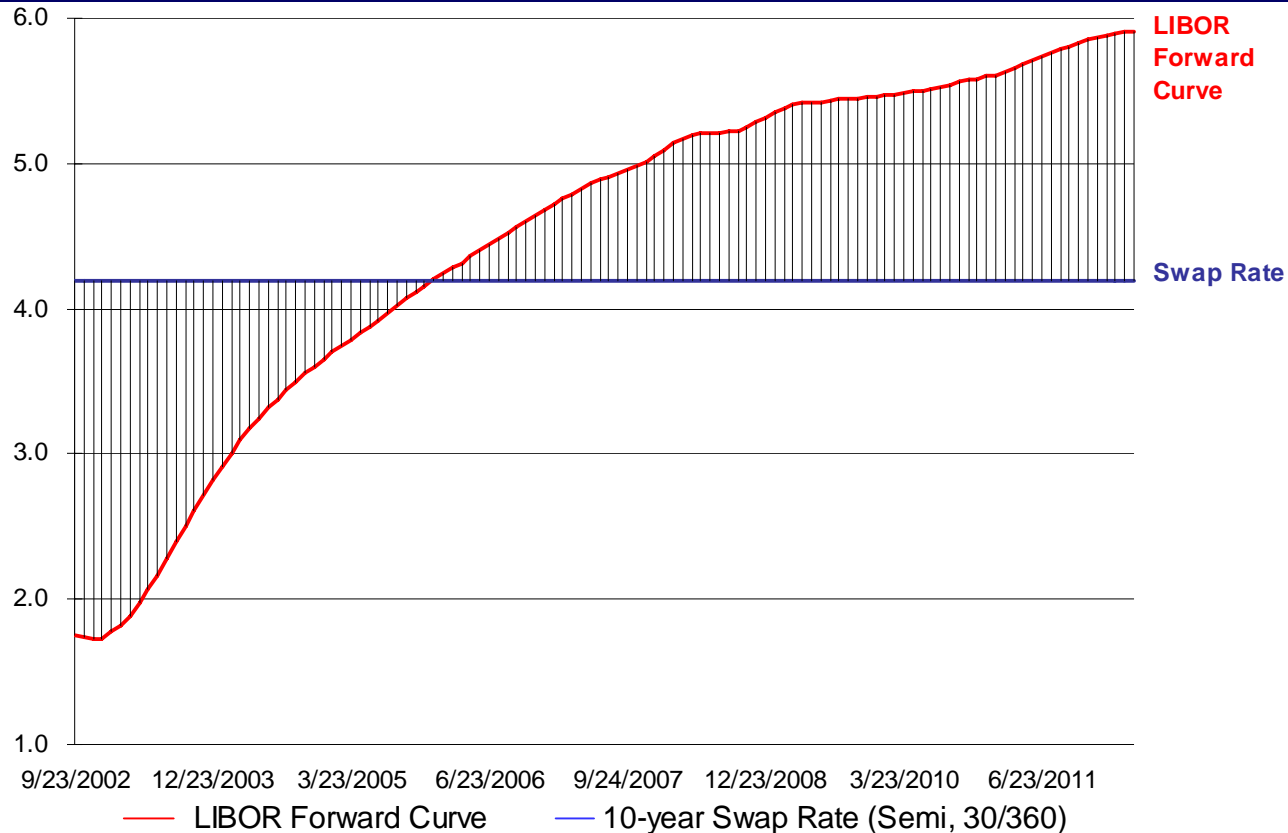
Interest Rate Swap Basics

Swap Pricing: Both “Legs” Equal

- Swaps are generally not used for speculative purposes – neither party enters into the transaction counting on receiving more than they pay.
- The future “expected” or “implied” variable rates produce a cash flow the present value of which is equal to that of the fixed leg.
- Accordingly, CP is not betting against Issuer. As indicated on the following page, CP is interest rate neutral on this transaction.

LIBOR Forward Curve

Rate (%)



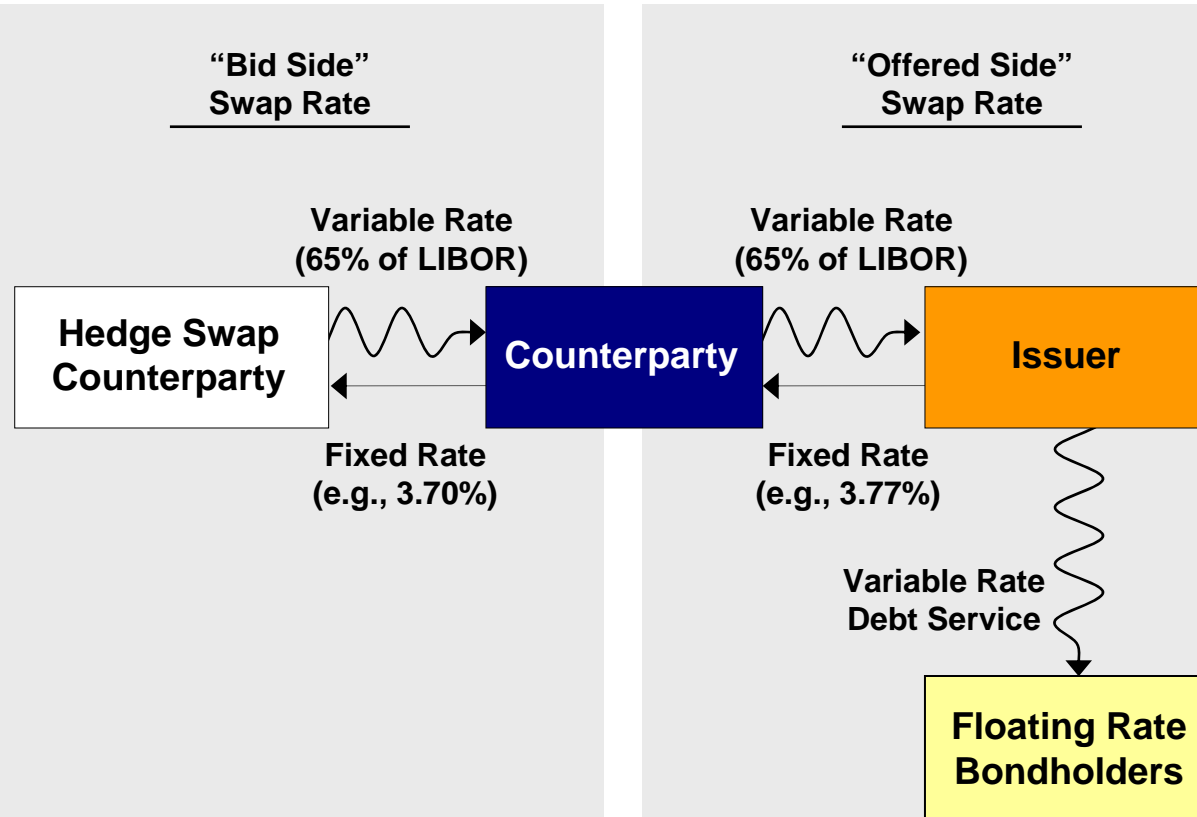


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- Counterparty profit comes from the difference between the bid and the ask.

Interest Rate Swap Basics

How Swap Dealers Make Money





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- Interest Rate Swaps are a common financial instrument.
- Information relating to the swap market is accessible.

Interest Rate Swap Basics

Mechanics of Swap Pricing

Deriving a taxable (LIBOR) swap rate the easy way

Bloomberg: IRSB US <GO>

USD INTEREST RATE SWAPS									
Ticker	Bid	Ask	Mid	Chng	Ticker	Bid	Ask	Mid	Chng
US Semi 30/360					US SPREADS				
2) 2 YR	5.3890	5.4290	5.4090	-.0045	22) 2 YR	45.30	45.70	44.60	-.90
3) 3 YR	5.4000	5.4400	5.4200	-.0010	23) 3 YR	43.75	47.75	45.75	+.55
4) 4 YR	5.4240	5.4640	5.4440	-.0105	24) 4 YR	45.00	49.00	47.00	+.20
5) 5 YR	5.4700	5.5210	5.4955	+.0085	25) 5 YR	46.75	50.75	48.75	--
6) 6 YR	5.5150	5.5380	5.5180	-.0040	26) 6 YR	48.00	52.00	50.00	+.10
7) 7 YR	5.5420	5.5820	5.5620	+.0105	27) 7 YR	48.75	52.75	50.75	+.05
8) 8 YR	5.5680	5.6080	5.5880	+.0075	28) 8 YR	49.50	53.50	51.50	+.20
9) 9 YR	5.5920	5.6320	5.6120	+.0060	29) 9 YR	49.75	53.75	51.75	+.15
10) 10 YR	5.6160	5.6560	5.6360	+.0060	30) 10 YR	49.75	53.75	51.75	--
11) 15 YR	5.6900	5.7060	5.7060	-.0020	31) 15 YR	57.60	58.00	57.75	-.05
12) 20 YR	5.7310	5.7710	5.7510	+.0085	32) 20 YR	59.40	59.80	59.50	-.10
13) 30 YR	5.7380	5.7780	5.7580	+.0085	33) 30 YR	56.60	57.00	56.75	-.05
Change on day					Change on day				
IYC4 I52<GO>					IYC4 I48<GO>				
Change on Month					Change on Month				
IYC6 I52<GO>					IYC6 I48<GO>				
					For US Govt Yield Curve, type {IYC1 I25 <GO>}				
					For US swap Curve, type {IYC1 I52 <GO>}				
					Ann ACT/360 Rates				



Notes
 For illustrative purposes only. Rates as of May 8, 2006.
Source Bloomberg: IRSB 18 <GO>

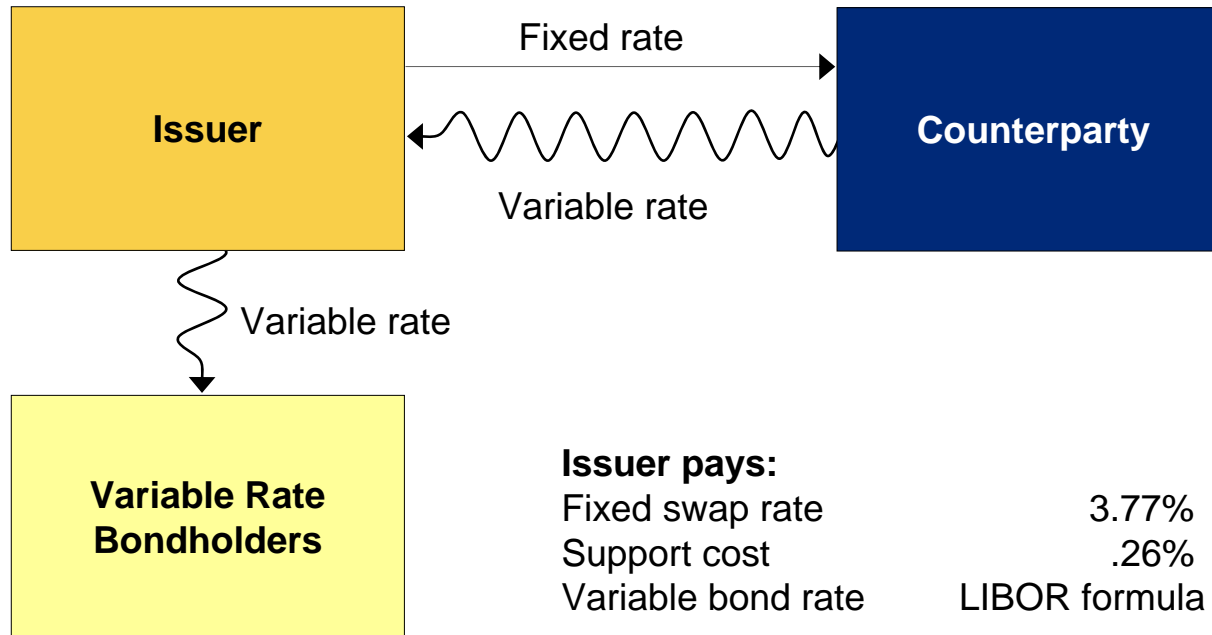


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Interest Rate Swap Basics

Most Common Derivative Application

- Combination of variable rate bonds and fixed payer swap creates so-called "synthetic fixed rate" debt.
- All-in-cost equals fixed swap rate plus support costs.



Issuer pays:

Fixed swap rate	3.77%
Support cost	.26%
Variable bond rate	LIBOR formula

Issuer receives:

Variable swap rate	LIBOR formula
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All-in cost 4.03%





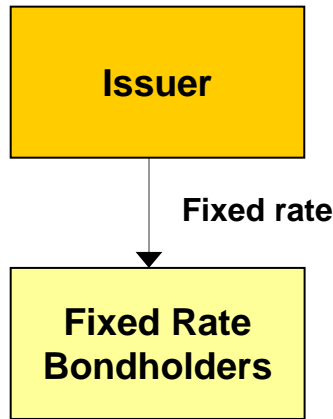
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Interest Rate Swap Basics

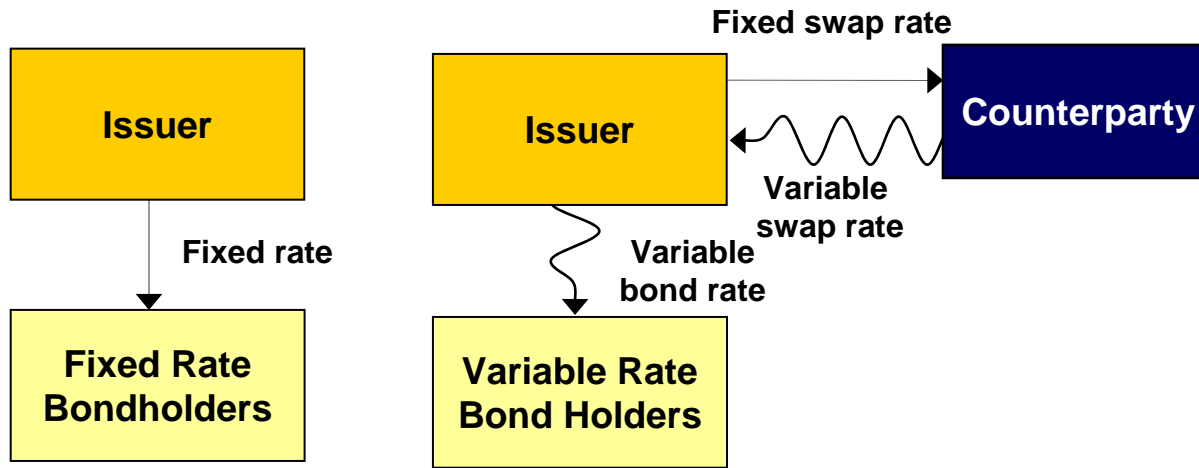
Rationale For Synthetic Fixed Rate Debt

- Yields assume cash market bonds are:
 - Insured
 - Sold at par
 - Non-callable
- BMA and LIBOR-based swaps assume:
 - Offer swap rates
 - + 25 basis points per annum for broker / dealer
 - + 1 basis point per annum for auction agent

Natural Fixed Rate Bonds



Synthetic Fixed Rate Debt



Traditional Fixed Rate Debt

All-in cost =
4.815%
 (\$121,548 PV add. debt pmts)
 (\$14,269,968 for projects)

Synthetic Fixed Rate to Maturity (BMA)

All-in cost =
5.000%
 +/- Credit Risk
 (\$2,037,598 PV add. debt pmts)
 (\$12,128,334 for projects)

Synthetic Fixed Rate to Maturity (65% of LIBOR)

All-in cost =
4.255%
 +/- Credit Risk
 +/- Tax/Basis Risk
 (\$4,442,943 PV savings)
 (\$17,913,036 for projects)





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Interest Rate Swap Basics

Financing Cost Comparison

Fixed-Rate Bonds vs. Synthetic Fixed-Rate Swap

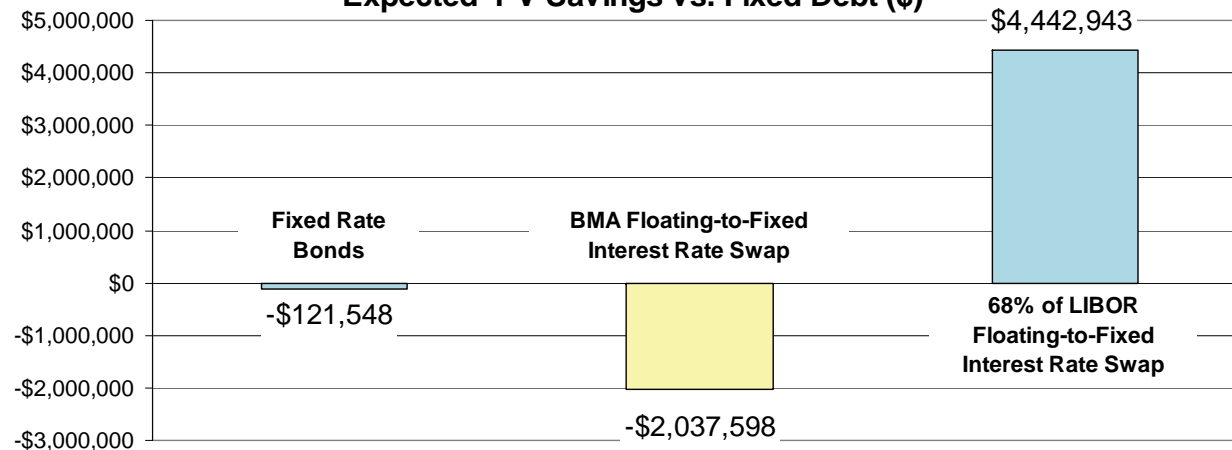
Cost Comparison of Financing Alternatives

	Fixed Rate Bonds	BMA Floating-to-Fixed Interest Rate Swap	% of LIBOR Floating-to-Fixed Interest Rate Swap
	\$81,105,000	\$85,475,000	\$93,160,000
All-In TIC	4.815%	5.001%	4.255%
Total Debt Service	163,163,775.00	158,912,317.50	158,686,370.00
PV of Debt Service	\$88,003,972.07	\$85,373,128.59	\$85,211,513.24
PV Refunding Savings	\$5,108,997.26	\$5,138,099.42	\$5,368,756.67
Net Prior Funds On Hand	(\$5,230,545.03)	(\$7,175,697.51)	(\$925,813.27)
Net PV Savings	(\$121,547.77)	(\$2,037,598.09)	\$4,442,943.40

- By implementing a percentage of LIBOR synthetic fixed-rate swap, Issuer can reduce its “expected” all-in TIC by over 56 basis points.
- Expected total payments in a synthetic fixed-rate transaction assume that the variable swap payments received will equal payments to auction rate bond holders.
- Issuer’s actual borrowing cost will include any differential between swap receipts and bond payments.



Expected PV Savings vs. Fixed Debt (\$)



Notes
Present value calculations assume 4.5%





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Interest Rate Swap Basics

Overview of Ongoing Risk Exposure




- Risks
 - Basis risk
 - Counterparty risk
 - Credit risk
- The expected debt service cost savings of the % of LIBOR synthetic fixed rate structure must be compared to, or adjusted for, the incremental risks it introduces relative to the cash bond alternative
 - Basis risk
 - Counterparty credit risk
 - Credit deterioration risk





Interest Rate Swap Basics

Understanding Swap Risk Factors

Level of Indicated Risk		Description	Supporting Examples
Low	High		
		On-going mismatch between variable leg of Swap and variable interest rate on debt	Change in Tax Policy causes BMA to trade much higher than historical averages
Basis Risk (Acceptable)			
		Failure of Swap Counterparty to fulfill contractual obligations	Swap counterparty defaults requiring Issuer to replace swap in current marketplace or to have un-hedged variable rate bonds
Counterparty Risk (Low Risk)			
		Decline in Credit Quality increases borrowing costs	Issuer downgrade triggers an automatic termination on swap in addition to higher short-term borrowing costs
Credit Risk (Minimal Risk)			



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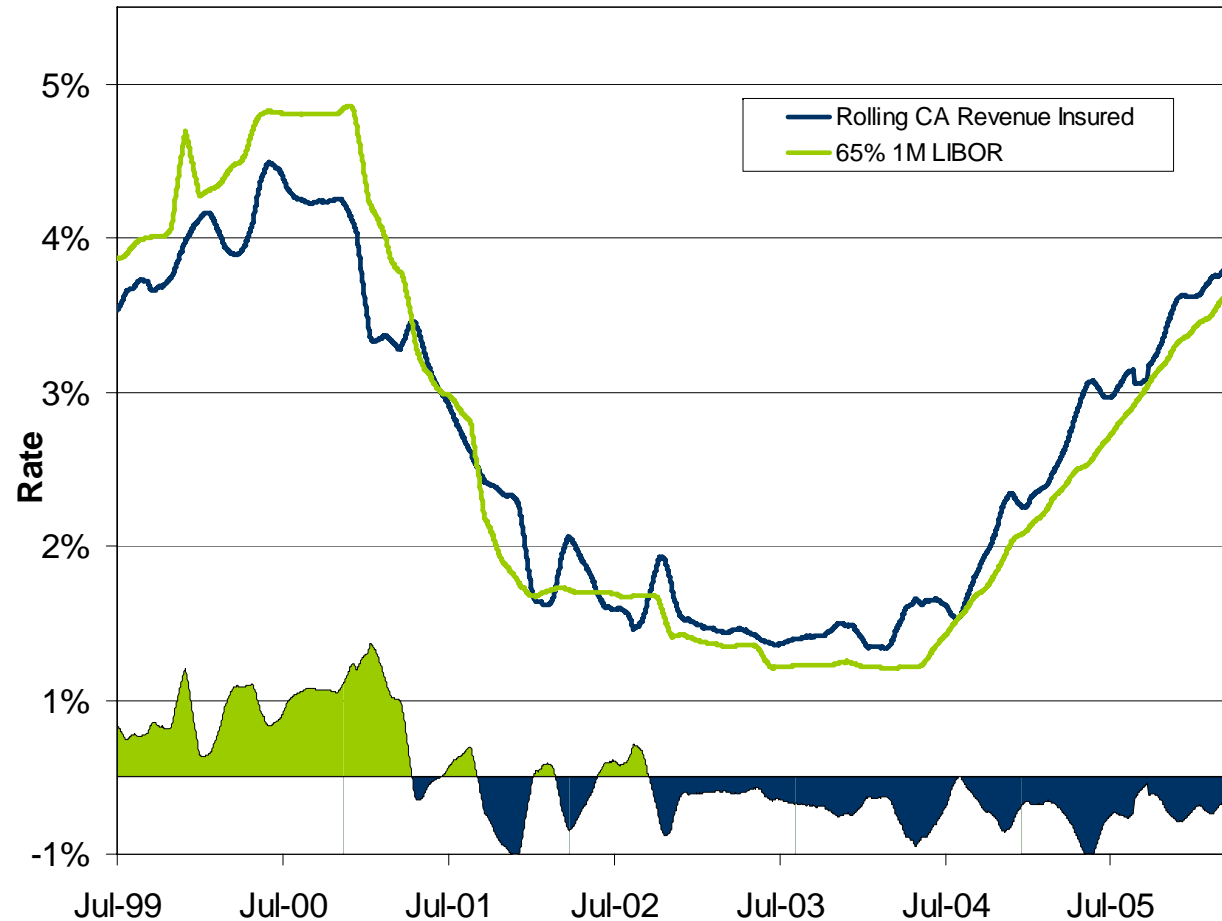
Interest Rate Swap Basics

Example Floating Leg of Swap vs Issuer Bonds

Hypothetical Historical Relationships

Aug '99 To Date Averages

Proxy Rate	2.12%
Swap Formula	2.12%
Correlation	97.87%



Notes

For illustrative purposes only. Both LIBOR and California Proxy Rate are on a rolling average.





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Interest Rate Swap Basics

Quantifying Basis Risk

Sensitivity Analysis – Annual Funding Costs

- Issuer is not immediately worse off if bond costs exceed swap receipts because of initial 56 basis point advantage over fixed rate bond alternative.
- What probability is assigned to that (or worse) outcome?
- Table assumes constant \$93.160 million notional, although Issuer swap amortizes.
- A high rate / high ratio scenario is unprecedented. It is generally believed that only a significant change in the value of tax exemption could cause such an outcome.

Basis Risk Analysis for LIBOR Synthetic Fixed Rate Debt
Additional Annual Funding Cost (bps)

LIBOR	Assumed Trading Level of Variable Rate Bonds Issuer Receives 65% of LIBOR					
	55.00%	60.00%	65.00%	70.00%	75.00%	80.00%
2.00%	- 20 bps	- 10 bps	--	+ 10 bps	+ 20 bps	+ 30 bps
4.00%	- 40 bps	- 20 bps	--	+ 20 bps	+ 40 bps	+ 60 bps
6.00%	- 60 bps	- 30 bps	--	+ 30 bps	+ 60 bps	+ 90 bps
8.00%	- 80 bps	- 40 bps	--	+ 40 bps	+ 80 bps	+ 120 bps
10.00%	- 100 bps	- 50 bps	--	+ 50 bps	+ 100 bps	+ 150 bps
12.00%	- 120 bps	- 60 bps	--	+ 60 bps	+ 120 bps	+ 180 bps

Basis Risk Analysis for LIBOR Synthetic Fixed Rate Debt
Additional Annual Funding Cost (\$) \$93,160,000

LIBOR	Assumed Trading Level of Variable Rate Bonds Issuer Receives 65% of LIBOR					
	55.00%	60.00%	65.00%	70.00%	75.00%	80.00%
2.00%	(186,320)	(93,160)	-	93,160	186,320	279,480
4.00%	(372,640)	(186,320)	-	186,320	372,640	558,960
6.00%	(558,960)	(279,480)	-	279,480	558,960	838,440
8.00%	(745,280)	(372,640)	-	372,640	745,280	1,117,920
10.00%	(931,600)	(465,800)	-	465,800	931,600	1,397,400
12.00%	(1,117,920)	(558,960)	-	558,960	1,117,920	1,676,880





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- Notice / Remedy Periods
- Under certain circumstances, swaps can be terminated.

Termination Considerations

Potential For Early Termination

- Events of Default
 - Failure to pay or deliver
 - Breach of agreement
 - Credit support default
 - Misrepresentation
 - Default Under Specified Transaction
 - Cross Default
 - Bankruptcy
 - Merger Without Assumption
- Termination Events
 - Illegality
 - Credit Event Upon Merger
 - Additional Termination Event (Ratings-based “ATE”) (“Remedies”)
- Optional Termination (Issuer Only)





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- Termination (“market”) value is the present value of the difference between the original and then- prevailing swap rates (based on the offsetting side of the market) discounted at LIBOR flat (a taxable rate) for the remaining term of the swap
- Bid/Ask Spread
 - Can be substantial
 - Can specify mid-market (or small spread) termination in advance, but may increase current rate
- Primary concern is Issuer owing payment when it’s credit deterioration makes assignment or replacement transaction impossible or extraordinarily expensive



Termination Considerations

Termination Considerations

- Early Termination requires “make whole” for non-affected or non-defaulting party.
 - Economically (and otherwise) indifferent to continuing/ terminating
 - Generally indifferent to which party causes early termination except for bid/offer spread.
 - “Market Quotation” and “Second Method” should be specified in Schedule to the Master Agreement
- Termination of a swap could result in a substantial unanticipated payment obligation
- Payment or receipt can be avoided or virtually simultaneously offset by (a) assignment or (b) replacement trade, respectively



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Termination Considerations

Swap Termination Payments

Issuer Pays Positive Amounts and Receives Negative Amounts

Date	Current Rate Which An Assignee Would Accept Assignment of Swap From Fixed Rate Payer / (Implied 100% of LIBOR Swap Rate)						
	2.000%	3.000%	3.500%	3.770%	4.500%	5.000%	6.000%
8/1/2007	24,596,706	9,889,027	3,337,861	-	(8,382,777)	(13,629,208)	(23,060,384)
8/1/2008	23,355,301	9,412,570	3,180,636	-	(8,004,891)	(13,027,774)	(22,083,924)
8/1/2009	22,125,065	8,938,285	3,023,795	-	(7,626,406)	(12,424,240)	(21,100,531)
8/1/2010	20,907,408	8,466,760	2,867,538	-	(7,247,815)	(11,819,388)	(20,111,444)
8/1/2011	19,703,763	7,998,600	2,712,068	-	(6,869,623)	(11,214,028)	(19,117,962)
8/1/2012	18,515,673	7,534,458	2,557,610	-	(6,492,393)	(10,609,061)	(18,121,555)
8/1/2013	17,344,793	7,075,043	2,404,407	-	(6,116,741)	(10,005,489)	(17,123,871)
8/1/2014	16,192,804	6,621,082	2,252,710	-	(5,743,306)	(9,404,347)	(16,126,635)
8/1/2015	15,061,501	6,173,353	2,102,786	-	(5,372,786)	(8,806,776)	(15,131,764)
8/1/2016	13,952,707	5,732,655	1,954,915	-	(5,005,902)	(8,213,957)	(14,141,263)
8/1/2017	12,868,361	5,299,844	1,809,395	-	(4,643,436)	(7,627,182)	(13,157,340)
8/1/2018	11,810,521	4,875,833	1,666,544	-	(4,286,235)	(7,047,850)	(12,182,416)
8/1/2019	10,781,364	4,461,596	1,526,706	-	(3,935,212)	(6,477,478)	(11,219,139)
8/1/2020	9,783,102	4,058,127	1,390,230	-	(3,591,310)	(5,917,641)	(10,270,274)
8/1/2021	8,818,157	3,666,522	1,257,506	-	(3,255,578)	(5,370,097)	(9,338,941)
8/1/2022	7,888,989	3,287,902	1,128,929	-	(2,929,104)	(4,836,671)	(8,428,401)
8/1/2023	6,998,184	2,923,452	1,004,924	-	(2,613,045)	(4,319,321)	(7,542,178)
8/1/2024	6,148,455	2,574,423	885,937	-	(2,308,640)	(3,820,142)	(6,684,072)
8/1/2025	5,342,648	2,242,134	772,440	-	(2,017,203)	(3,341,369)	(5,858,167)
8/1/2026	4,583,739	1,927,971	664,933	-	(1,740,133)	(2,885,388)	(5,068,848)
8/1/2027	3,874,838	1,633,394	563,940	-	(1,478,913)	(2,454,733)	(4,320,814)
8/1/2028	3,219,194	1,359,930	470,016	-	(1,235,113)	(2,052,103)	(3,619,093)
8/1/2029	2,620,192	1,109,185	383,742	-	(1,010,395)	(1,680,358)	(2,969,056)
8/1/2030	2,081,359	882,838	305,730	-	(806,515)	(1,342,532)	(2,376,433)

- The table at right indicates termination values based on certain assumed future market conditions

- 3.77% swap fixed rate
- 65.00% floating
- Issuer pays positive amts

- First % rate row is then prevailing “offer” rate for remaining term swap.

- Second % rate row is what 100% of LIBOR swap rate would be if Issuer swap rate is as indicated in 1st row.

- Actual swap unwind values will depend on Insurer, Issuer, and CP credit situations, and other factors





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Termination Considerations

Swap Termination Payments Continued

Issuer Pays Positive Amounts and Receives Negative Amounts

Date	Current Rate Which An Assignee Would Accept Assignment of Swap From Fixed Rate Payer / (Implied 100% of LIBOR Swap Rate)						
	2.000%	3.000%	3.500%	3.770%	4.500%	5.000%	6.000%
	3.077%	4.615%	5.385%	5.800%	6.923%	7.692%	9.231%
8/1/2031	1,606,452	682,683	236,633	-	(625,360)	(1,041,895)	(1,847,443)
8/1/2032	1,198,578	510,249	177,016	-	(468,595)	(781,356)	(1,387,698)
8/1/2033	861,602	367,408	127,566	-	(338,232)	(564,424)	(1,003,961)
8/1/2034	594,843	254,073	88,286	-	(234,454)	(391,547)	(697,512)
8/1/2035	391,860	167,652	58,304	-	(155,079)	(259,191)	(462,439)
8/1/2036	244,695	104,877	36,505	-	(97,266)	(162,703)	(290,776)
8/1/2037	140,313	60,250	20,991	-	(56,030)	(93,808)	(167,943)
8/1/2038	70,256	30,225	10,540	-	(28,185)	(47,232)	(84,711)
8/1/2039	27,883	12,019	4,195	-	(11,240)	(18,852)	(33,874)
8/1/2040	6,275	2,709	947	-	(2,540)	(4,264)	(7,674)

- The table at right indicates termination values based on certain assumed future market conditions
 - 3.77% swap fixed rate
 - 65.00% floating
 - Issuer pays positive amts
- First % rate row is then prevailing “offer” rate for remaining term swap.
- Second % rate row is what 100% of LIBOR swap rate would be if Issuer swap rate is as indicated in 1st row.
- Actual swap unwind values will depend on Insurer, Issuer, and CP credit situations, and other factors

