

# Refinancing: Do You Feel Lucky?

**Executive Summary:** Interest rates will almost certainly rise in the next few years. Utilities and communities that have adjustable rate loans or leases, and those that have relatively high interest fixed rate loans and leases can save substantial sums in loan and lease payments if they refinance before rates start up. This article illustrates likely savings a small system can expect if it were to convert a \$2.4 million adjustable rate loan to a fixed rate loan. The payback period from this conversion is estimated at 3.4 years with a total net savings of \$193,767. Systems with larger loans or higher interest rate loans can expect greater savings and quicker payback periods. This example should help you decide whether you need to discuss your situation with an investment banker to see if you really can save money. If you cannot save money you will just ride out your current loan.

For many years interest rates have been stable and during the last few years they have also been at or near historic lows. All in all it has been a great decade for loan financing of capital improvements.

After a “normal” recession, interest rates and inflation rise. That increase is usually manageable. The 2008-09 recession has been anything but normal. Many economists believe

**LIBOR: London Interbank Offered Rate. It's the rate of interest at which banks offer to lend money to one another in the wholesale money markets in London.**

– Bankrate.com

**If your adjustable lease interest rate is now at 3.75 percent, you can expect it to go to 4.75 percent in the short term after resetting. We are in for rate increases that could have devastating effects on adjustable rate loan and lease payments unless system managers take action to control the damage.**

– John Harris

interest rates and inflation will rise dramatically as the economy recovers from this recession. This, in turn, will dramatically affect tax exempt bond and lease rates.

John Harris, Vice President of Country Club Bank Capital Markets Group, specializes in municipal finance. He tracks interest rate trends. Harris believes, as do many others, that the 3-month LIBOR (and other interest rate indicators) will rise from 0.25 as of mid-January 2010 to about 1.50 by mid-2011.

Municipal bond and lease rates that are tied to these indices are projected to rise by the same amount. It is less certain what will happen to rates beyond 2011 but many believe that interest rates will not level off after just a one percentage point rise. Some believe rates will continue upward for a total increase of two percent or more and stay relatively high for some years.

**Disclaimer: In the course of doing user charge analyses, the author sometimes advises clients to refinance existing debt to reduce costs and rates. However, neither he nor his firms are engaged in finance.**

If your system has an adjustable interest rate loan or lease, you are probably looking at large debt payment increases as interest rates increase. By using a small water system with a \$2.4 million adjustable rate loan as an example, this article will give an idea of what payment increases might mean for a system and how refinancing with a fixed rate loan can prevent costs from rising too much.

## A small system example

Consider the following typical small water system with 667 users. Users average 7,500 gallons of water per month. This system has an adjustable rate loan. The payment accounts for one-third of all system costs, a typical debt level for a system that has recently built something substantial. Debt costs and debt service share for a 2,000 gallon/month user are shown in Table 1. The debt service share assumes 100 percent of the debt is assessed to minimum charges which is common in small systems.

The existing loan payments in Table 1 are for a 20-year adjustable rate lease or loan with rates reset every two years. The loan will be paid off in 18 more years. Therefore, the interest rate is due for adjustment now. The system incurs many costs besides debt payments. However, to avoid confusion, only the loan payment and debt cost per user are shown.

Usually the bill for a user of 2,000 gallons/month and less is the critical one. That is because most systems assess all or most of their debt service to the minimum charge, which affects low-volume users the most. In the case above, the 2,000 gallon/month user's share of the loan payment is \$21.08.

If household incomes in this community are strong (especially those of the low-volume users) and the improvements for which the debt was incurred are generally appreciated by the users, this level of debt service will be tolerable to most.

The interest rate on this loan is now 3.4 percent. The rate and payment will adjust upward as the indicator the loan is linked to, such as the 3-month LIBOR, goes up.

In contrast, Table 2 illustrates what will happen if the rate increases to 4.75 percent and holds there for the remaining 18 years of the loan.

The payments for this loan went up by almost \$20,000/year. The 2,000 gallon/month user's bill went up by \$2.44 for an increase of 12 percent. This is before inflationary increases to any other costs. Including those cost increases, this user's bill will likely rise by at least 15 percent during the next year. That will stress more of these users. If interest rates continue upward in subsequent years, user rates will have to follow, compounding the stress. Users will push back against the system or community if they see many such increases.

This is a grim picture and it simply cannot be brought all the way to "rosy" regardless of what management does. Operating costs are going to rise. Debt payments will rise, too. However, the picture might be made a little brighter by refinancing the remaining balance. Table 3 illustrates how refinancing might help this system and its ratepayers. Note that the new balance in Table 3 includes closing costs for the refinancing. Loan payments and user rates will be lower after refinancing than if the adjustable rate loan were allowed to ratchet up to 4.75 percent.

**Table 1:**  
**\$2,420,090 Loan,**  
**Original Term of 20 Years**

Annual payment at	Monthly Debt
3.4%	Cost/User
\$168,743	\$21.08

**Table 2:**  
**\$2,244,430 Remaining**  
**Balance, 18 Years Remaining**

Annual payment at	Monthly Debt
4.75%	Cost/User
\$188,254	\$23.52

**Table 3:**  
**\$2,289,115 New**  
**Balance, 18 Years Remaining**

Annual payment at	Monthly Debt
3.6%	Cost/User
\$174,995	\$21.86

**Table 4:**  
**Payback and Savings from**  
**Refinancing**

Inflation-adjusted Existing Loan Payments	\$188,254
Fixed Payments After Refinancing	\$174,995
Annual Payment Savings	\$13,258
Cost of Refinancing	\$44,885
Payback Period in Years	3.4
Net Savings Over Remaining Life of Loan	\$193,767

The savings created by converting to a fixed rate loan are great enough that after 3.4 years the loan closing costs (two percent of the balance to be refinanced) will be paid for by those savings. This "payback" period and the net payment savings are illustrated in Table 4.

These savings assume no additional adjustable interest rate increases in future years beyond the initial one percent increase. Considering that we are at historically low rates now, and

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recovery will create inflationary pressure, John Harris and others feel that it is unrealistic to expect no more interest rate increases during the next 18 years. If rates go higher, the payback period and net savings from refinancing will be even better.

### What you should do

If the current adjustable interest rate is close enough to the fixed rate, a system would save money by refinancing. The mechanics are the same as refinancing a home loan. Yes there will be some closing costs (usually built into the new loan) to do the refinancing but those costs are paid back by the savings created by the lower, locked-in rate.

If a system has a larger loan than the example or the current interest rate is higher, the savings from refinancing should be greater. At some smaller loan size there would be no net savings from refinancing because the closing costs would over take the interest rate savings. (If a system has a relatively high fixed interest rate loan that is eligible for refinancing, now is the time to take care of that, too.)

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As system managers and governing bodies decide to either keep an existing adjustable rate loan or refinance to a fixed rate, a few critical things to consider include: the payback period; the expected savings; the comfort level for having a locked-in rate versus the adjustable rate; and, timing of refinancing.

Savings are pretty straightforward considerations. Timing is harder to pin down. The watch word here is "risk." They are entrusted with public funds and have a duty to treat those funds conservatively. It is reasonable to prepare all the paper work and have

bonds ready to sell on a moments notice. Then, wait for what looks like the best day out of a two week or so window to catch the market just right before selling those bonds. But do not wait too long. In this era of recovery, the best bond sale day is more likely to be today rather than this same day next month. As Harris says, "Get your ducks in a row and leave sale timing up to your finance team."

**Your decision to refinance an adjustable rate loan comes down to the Clint Eastwood question, "Do you feel lucky?" If so, stick with your adjustable interest rate loan because you expect rates to stay down. Otherwise, you need to proceed with reasonable speed to refinance before Clint cocks the hammer.**

### Closing

The example cited in this article shows that many adjustable rate loans and leases should be refinanced very soon to prevent payments from going up as interest rates ratchet up. The higher the outstanding loan balance and the higher interest rates go, the greater will be the savings and the shorter will be the payback period for refinancing.

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