

# Incentives Package

When the time came to retire an engine and purchase a new one, this department found leasing to be a very attractive option. **By Fred Windisch**

**T**he time had come to purchase a replacement fire engine. The Ponderosa Volunteer Fire Department in Texas had established a 12-year engine replacement cycle some time ago, and it has worked well for us. But our apparatus dealer asked a simple question: Why don't we consider a lease purchase arrangement?

Our first response was "no," but we began a study to ensure we were making the right

decision; the question could have been easily disregarded if we had not developed an attitude of continually evaluating our business practices. By the time this purchasing process was over, I had thoroughly tested my knowledge of mechanics, computers and leadership.

## Addressing knowns

This particular study turned into an in-depth evaluation of all the costs associated with our existing plan, including developing a level play-

ing field during the maintenance cost research. We ended up with a pretty extensive Excel workbook with interrelated worksheets, and our board of directors provided constructive feedback during the recommendation process.

Our old approach was to replace engines on a 12-year cycle, with the heavy rescue and platform on a 15-year cycle. That seemed like a pretty simple approach until we analyzed the maintenance costs associated with older apparatus.

We developed some basic maintenance knowns: batteries, tires, preventative maintenance, brakes and miscellaneous costs. Based on our experience, we assumed that batteries would last two years, brakes and tires would last three years, preventative maintenance (by a private contractor) is a six-month cycle, and all three categories had relatively predictable costs that were based on recent repairs. Inflation was factored at 3% to further level the playing field.

The following cost figures were used:

- Batteries: \$500 every two years.
- Brakes: \$2,500 every three years.
- Tires: \$1,800 every three years.
- Preventative maintenance: \$1,100 every year.

Understand that not all dollar amounts are absolute. The intent was to use the same numbers for the scenarios developed to make like comparisons.

The miscellaneous items were a bit more difficult to establish, but associated costs would be the same for old and new apparatus. Miscellaneous items included valve rebuilds, electrical issues and other repairs. We did not consider engine or driveline repairs, as failures in our system have been close to zero. Body repairs are covered by insurance, and deductibles aren't related to maintenance budgets.



## BUDGET PLANNING

The following cost figures were used, with warranties taken into consideration:

- |                   |                    |
|-------------------|--------------------|
| ■ Year 1: \$100   | ■ Year 7: \$3,000  |
| ■ Year 2: \$500   | ■ Year 8: \$3,500  |
| ■ Year 3: \$1,000 | ■ Year 9: \$4,000  |
| ■ Year 4: \$1,500 | ■ Year 10: \$4,500 |
| ■ Year 5: \$2,000 | ■ Year 11: \$5,000 |
| ■ Year 6: \$2,500 | ■ Year 12: \$5,500 |

As we developed the worksheet, it quickly morphed into a workbook! We learned that using a standard approach of related maintenance costs identified opportunities to link the

really testing our Excel abilities, and it is amazing what happens when you use the help files.

The next phase of the study added a new and very exciting proposal from one of our command staff. Why don't we get three new engines? Our first reaction was "no," but we added that option to the study.

A roundtable discussion fleshed out the positives and negatives of buying three new engines at the same time. The first negative, as you might have guessed, was the cost factor. A small fire department has limited resources. We

### Decision time

When we came to the point of making direct comparisons of all of our options, we were pretty sure that our 12-year cycle was going to remain our standard, but we worked up a plan to lease three engines. This included our dealer evaluation and turn-in of our 1992, 1995 and 1997 engines for credit. We were very surprised to learn that the seven-year cycle was actually the most beneficial.

During this process, we were very pleased with OshKosh Capital's assistance and patience in answering many questions. The culture change for our organization was substantial, and their staff provided qualified answers to every question. We didn't even have to consider the question of insurance and titling; the lease/turn-in agreement already had addressed those issues.

We purchased three 2004 Pierce Enforcers with Husky 10 foam systems, and our dealer gave us a fair trade-in for our three engines. The triple purchase also reduced our overall manufacturing costs.

The workbook was designed to include at least two seven-year turn-in cycles that extended to 2018. It's difficult at this time to predict apparatus costs far into the future, but the workbook demonstrated savings through 2014, and we predicted a four-engine replacement in 2011. Remember that the workbook included an inflation factor of 3% per year and an apparatus inflation factor of 3.5% per year.

You're probably wondering what the financial incentive turned out to be. In our case, and using all the assumptions above, the cumulative savings to this organization is approximately \$128,000 at the end of the seven-year cycle. When we coupled the financial aspects to apparatus with Tak-4 suspensions, roll protection airbags, the latest NFPA 1901 requirements and much-improved reliability, the board of directors gave us the go-ahead.

If you are interested in a copy of the workbook to apply to your department, please e-mail [fwindisch@ponderosavfd.org](mailto:fwindisch@ponderosavfd.org). **[FC]**

---

Fred C. Windisch, EFO, CFO, is chief of the Ponderosa Volunteer Fire Department, located north of Houston, Texas. The ISO 3 combination department has three stations protecting about 50,000 citizens within 13 square miles of unincorporated Harris County, the third most populous county in the country. Windisch was FIRE CHIEF magazine's 2000 Volunteer Fire Chief of the Year.



**By the time this purchasing process was over, I had thoroughly tested my knowledge of mechanics, computers and leadership.**

worksheets into a master spreadsheet that combined all data into a direct comparison.

### Custom options

Another challenge was to lay out the 12-year standard cycle for our four engines to allow the worksheets to accurately depict their respective longevity. Sometimes a pencil and paper comes in handy when using several variables in a single-process explanation.

One option was the original 12-year replacement cycle with five-year local financing, a cash down payment, and combined annual payments with principal and interest. The other options were a five-year or a seven-year lease purchase plan.

For the purposes of this study, we chose an estimated used engine sale value that would be applied as the down payment for each engine. Another worksheet figured the estimated principal and interest costs. Research demonstrated the expected cost of a new engine to plug into the developing workbook. At the dealer's suggestion, we added the leasing option to the mix. We were at the point of

can't pass a bond issue due to our structure, but we can qualify for municipal loan rates by going through a pretty simple legal process.

The tangibles were pretty easy to identify. New apparatus have improved handling and many safety components engineered into the product. They are also more dependable, with identical parts replacement and preventative maintenance, which equates to less downtime.

All rigs would be identical, simplifying driver and pump operator education. Members could move from one engine to another with virtually no special knowledge requirements compared to manufacturer model changes and compartment layouts. Engines could be rotated among stations to balance use rates (using changeable identification panels) and out-of-service issues.

Finally, member motivation would be improved at all three stations. In the past, Station One always received the newest apparatus due to having the majority of responses in the center of our district. And at the turn-in date, we would be able to renew with state-of-the-art apparatus.