

award criteria is presented to the Review Board for their use in determining whom to recommend the awarding of the contract. Once the Review Board has voted to recommend the awarding of the contract to a vendor, a report is prepared reflecting resultant point allocations to each vendor, an analysis of each vendor's awarded points and a summary analysis of awarded points explaining point differences along with the recommendations of the Equipment Evaluation Committee and Equipment Review Board and sent to the Purchasing Section, Division of Finance and Administration for preparation of a Purchase Order and/or for further handling.

EQUIPMENT ACQUISITION CHOICES

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As capital budgets continue to come under closer scrutiny and tighter spending reduction pressures, individual agencies and public officials often are faced with having to use alternative equipment acquisition methods to secure needed machines for key maintenance operations.

Understanding the true costs of alternative machine acquisition methods can sometimes be rather confusing. What appears to make sense at the time of bid opening, often can prove to be a very expensive or impractical choice when considered on a long-term or entire fleet basis.

Determining which acquisition alternative is the best choice for a particular agency or operation will require detailed study, however, many times the best way to start is simply to ask, "do I have a real need to own the equipment, or do I simply want to have use of the equipment?" Depending on local acquisition laws, a public agency is normally in an excellent position to consider the benefits of paying to "use" a piece of equipment versus paying to "own" a piece of equipment.

There are many choices offered today for acquiring machines. Closed-end leases, open-end leases, municipal leases, residual values, short-term rental, total cost, skip payments, balloon payments, low A.P.R., fixed payments, variable payments, and many other choices. All of these different choices, however, can normally be grouped into one of the following six common categories of equipment acquisition methods, shown in Figure 1.

When renting or leasing (often called a true lease or operating lease) a piece of equipment, you are paying for the "use" of the equipment. Normally, a purchase

option can be provided as part of the rent or lease contract, however, the purchase option when combined with the monthly rental or lease payments will often prove to be a higher "owning" cost than other acquisition methods.

When cash purchasing, lease purchasing, or cash purchasing with a trade or buy-back guarantee, you are paying to "own" the equipment. Paying to "own" the equipment, however, normally requires a higher initial cash flow than "use" acquisition methods such as rentals or operating leases.

- Rental of equipment.
- Lease of equipment.
- Cash purchase of equipment.
- Lease Purchase of equipment.
- Cash purchase with trade or buy-back guarantee.
- Any of the above methods combined with a guarantee of repair, parts, labor, and/or maintenance costs.

Figure 1 Common Equipment Acquisition Methods.

Renting Equipment

Renting equipment is often a good choice for short-term use of equipment. Rental contracts normally have minimum customer obligations and requirements compared to other acquisition methods. The customer is paying for only the "use" of the equipment and not its ownership. Renting normally has a relatively low cash flow requirement for the "use" of the equipment and can serve as an excellent tool for "trying before buying" a particular model or make of equipment.

Leasing Equipment

Leasing equipment is normally a good choice for longer-term equipment "use" without making a relatively high investment. The customer usually has a longer term obligation with a lease than a rental, however, the monthly lease payment will often be lower than the rental due to the longer term of the lease. Like a rental, with a lease, the customer is paying for the "use," not the "ownership" of the equipment. Low cash flow options are available with leases that can help justify the development of newer equipment fleets or the replacement of higher quantities of machines. Numerous terms and options are available with leases, including master lease packages, which can reduce traditional acquisition paperwork and procedures.

Cash Purchase of Equipment

"Cash on the barrel head" is the most common method used today by governmental agencies to acquire equipment. It is the lowest cost method for acquiring a machine that you want to own. When combined with an effective machine repair, parts, and labor coverage contract, cash purchase is also the lowest cost method for owning, operating, and disposing of equipment. Properly structured, cash purchase can be a near ideal method for long-term use of equipment by a governmental agency. The biggest barrier to cash purchase for many agencies, however, is the high initial cash flow requirement.

Lease Purchase of Equipment

Properly structured, lease purchase (often called municipal lease purchase) contracts normally offer one of the lowest financing costs for owning equipment. As such, lease purchasing is an excellent ownership acquisition tool for matching existing equipment budgets to equipment needs by reducing initial cash flow requirements. Normally the financing cost associated with a lease purchase is lower than the costs incurred by an agency in issuing a bond for raising capital to pay cash for the equipment. The lease purchase contract can be written so there is no early payment penalties and also provide non-appropriation of funds clause protection for the customer.

Cash Purchase with Trade or Buy-Back Guarantee

On a long-term fleet management basis, cash purchase of equipment that includes a trade or buy-back guaranteed of those same machines will normally be the highest cost acquisition method for owning, operating, and disposing of equipment. The main reason for its high relative cost is that the customer is asking the bidder to be responsible for costs that the bidder has little control over. To protect himself, the bidder must add some cost cushion to his guarantees. In addition, this method of acquisition normally has extensive customer record keeping requirements, that if not performed, make the contract guarantees null and void. Due to the record keeping requirements, required maintenance, required inspections, required operator maintenance, required mechanic qualifications, instability of some dealers and resultant unenforceable performance bonds, force majeure, and/or a combination of these or other factors; a low percentage of the contracts have the trade or buy-back guarantee effectively utilized,

which negates any possible "real" benefit of this type of acquisition method.

Along with the high cost, this method normally also has the highest initial cash flow requirements and a few bidders are usually willing to participate. With all these problems, why would an agency want to consider this acquisition method? Although the costs are higher, if dealing with a reputable supplier, the costs are guaranteed and can be accurately budgeted. Accurate budgeting, in some cases, is worth the additional cost to some agencies.

Analyzing Acquisition Costs

When considering the six basic acquisition methods, it's sometimes helpful to layout the choices and look at their relative, bottom-line costs. Figure 2 details a sample four-wheel-drive loader that an agency might consider for acquisition.

Base machine price	\$75,000
Front axle hydraulic lock	800
17.5x25 12 PR L2 tires	500
ROPS cab and deluxe cloth seat	3,400
Bucket w/teeth & return-to-dig	4,850
Counterweight, drawbar, and fenders	<u>1,950</u>
M.S.R.P.	\$85,600

Figure 2 Sample 2.5 cubic yard wheel loader.

Now that the basic machine configuration has been considered, it can be helpful to see how the dealer might first look at the opportunity to price the machine to the governmental agency.

Figure 3 provides some general overview on pricing considerations by the dealer. The figures shown in the following tables are for examples only and show how an agency might develop a method for evaluating their best choice in acquiring equipment. The best choice available at any given time, on any given bid, in any given area, from any given bidder may vary from the examples shown.

For example purposes, let's assume that the customer bid price in figure number three of \$70,655 is acceptable and that the customer now wants to consider various acquisition alternatives. The customer in this example is considering the acquisition of twenty-five (25) machines and wants to compare the investment requirements of various "pay to use" and "pay to own" options.

Dealer Pricing Sheet

M.S.R.P.	\$ 86,600
Factory freight	1,800
Dealer prep, inspection, delivery	<u>400</u>
 Suggested Window Sticker Price	 \$ 88,800
 Customer Bid Price	 \$ 70,655

FIGURE 3 Sample 2.5 cubic yard wheel loader.

Figure 4 compares four acquisition alternatives and investigates the initial cash flow requirements, the first twelve month cash flow requirements, and the total investment over the term of the contracts. Using this approach, a governmental customer can quickly see which plan is the smarter choice in terms of initial cash flow or total investment. In two of the examples, the customer is paying to "own" the equipment and in the other two examples, the customer is paying for only the "use" of the equipment. The costs for machine repair, parts, and labor are assumed to be the same in each example. To compare single unit costs, divide totals by twenty-five.

Customer Bid Price = \$ 70,655
 Quantity Acquired = 25 Units

Cash Purchase Option	Lease Purchase Option (48 months @ 8.5%)
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First month cash = \$1,766,375	First month cash = \$ 43,538
First year cash = 1,766,375	First year cash = 522,456
Total investment = 1,766,375	Total investment = 2,089,824
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Rental Option (12 months)	Operating Lease Option (36 months)
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First month cash = \$ 38,750	First month cash = \$ 28,916
First year cash = 465,000	First year cash = 346,992
Total investment = 465,000	Total investment = 1,040,976

Figure 4 Analysis of Acquisition Costs.

In the above example, if the agency is interested in "owning" the equipment, the lowest investment is represented by the straight cash purchase option. If, however, the agency does not have \$1.766 million to purchase the units, they might consider the lease purchase option

which requires only \$0.522 million in cash the first year. If taken to full term, the lease purchase contract would carry \$0.323 million in finance charges compared to no finance charges with the straight cash purchase.

Another use of the lease purchase contract is to "leverage" an existing capital budget into covering additional items compared to the straight cash purchase method. For example, if the agency had \$1.766 million in cash to purchase the loaders, but decided to use the lease purchase contract, they would have more than \$1.243 million left after paying for the first year of the lease. These funds could then be applied to other purchases, capital, or personnel requirements and still have "use" of the twenty-five loaders. The agency could then pay-off the amount owed on the lease purchase the next year or continue the contract to its full term.

The rental or operating lease option offer even more "leverage" of an existing capital budget. If the agency was considering the purchase of the loaders, but trading them for new units after twelve months (commonly called rolling), they could save substantial cash flow (\$1.301 million) by simply renting the machines for twelve months with an option to rent new units at the start of the next twelve months.

More cash flow could be saved if the agency could commit themselves to a longer-term "use" of the equipment through an operating lease. Although the agency would not own the equipment at the end of the operating lease, they would have full "use" of the machines for thirty-six months and save \$0.725 million in cash flow compared to the cash purchase method and \$1.048 million in cash flow compared to the full-term lease purchase method. Because of the significant cash flow savings available with an operating lease compared to other acquisition methods, it's expected that this method will become more and more popular with agencies as budgets continue to be tightened.

True, an operating lease can provide cash flow savings. What about the straight purchase of a machine and considering it's trade-in or guaranteed repurchase value to figure the total investment? Many times this type of acquisition method is called a total cost bid or life cycle cost bid. Unfortunately, the total cost bid method of acquisition does not cover all the total machine or acquisition costs. Fuel consumption rates, ground engaging tool wear, and time-value of money are often overlooked or deliberately avoided in the total cost methods of acquisition. To avoid potential pit falls with this method of acquisition, it's often helpful to make a comparison to conventional purchasing techniques to determine total investment costs. Figure 5 outlines a

possible comparison of the loaders shown previously in Figure 4.

Customer has asked bidders to provide purchase price for unit, a guarantee for repair, parts, and labor, and a guarantee for repurchase price of unit in five years or 5,000 hours of use.

Shown below are two sample bidder responses. Bidder A has chosen not to bid the guaranteed repurchase price. Bidder B has submitted a guaranteed repurchase price.

Can you tell which one is the better choice?

<u>Bidder A</u>	<u>Bidder B</u>
Purchase price \$ 70,655	Purchase price \$ 80,655
Gtd pts/lab cost 4,500	Gtd pts/lab cost 3,500
Gtd repur price <u>no bid</u>	Gtd repur price <u>40,300</u>
Total Cost \$ 75,155	Total Cost \$ 43,855
<u>Bidder A Claims:</u>	<u>Bidder B Claims:</u>
Pur Price Saving \$ 10,000	Cost Savings \$ 31,300
Total Savings \$250,000	Total Savings \$782,500

Figure 5 Evaluating Bid Claims.

With only the information provided in Figure 5, it's difficult to know which bidder is the smartest choice for the agency. One might be tempted to conclude, however, that since bidder B had the confidence to provide a guaranteed repurchase price of the machine at the end of five year or 5,000 hours of use, that bidder B might be the smarter choice for the agency. To determine which bidder is the right choice, requires some additional analysis.

One technique that can help determine which bidder represents the best choice for the agency is to compare the bidders on the time value of money and wholesale equipment value basis.

The funds invested row in Figure 6 takes the position if the agency is going to accept bidder B and spend the whole \$2,016,375, why not purchase bidder A and invest

the purchase price difference and take advantage of the time value of money? The interest earned was computed on a \$250,000 investment earning 10% A.P.R., compounded monthly, for sixty months.

The wholesale value of bidder A was computed by taking equipment bid price and projecting the machine would have a wholesale value, as-is where-is, in five years or 5,000 hours of 55% of the bid price (\$70,655 x 55% = \$38,800).

An interesting note in this comparison, if the agency selects bidder A and spends the whole \$2,016,375 as shown, the agency saves \$99,300 in total investment and has \$250,000 remaining in the bank at the end of five years.

Based on this type of analysis, it would appear that bidder A, even with his higher repair costs, is the smarter choice if his machine is capable of performing the work assignment.

<u>Bidder A</u>	<u>Bidder B</u>
Purchase Cash \$ 1,766,375	Purchase Cash \$ 2,016,375
Maximum Repair 112,500	Maximum Repair 87,500
Funds Invested 250,000	Funds Invested 0
Interest Earned (161,300)	Interest Earned (0)
Wholesale Value <u>(970,000)</u>	Gtd Repur Price <u>(1,007,500)</u>
Total Investment \$ 997,075	Total Investment \$ 1,096,375
Funds in Bank \$ <u>250,000</u>	Funds in Bank \$ <u>0</u>

Figure 6 Comparison of total acquisition costs.

Making the right acquisition choice will not always be as simple as the examples detailed on the previous pages. However, it is hoped that armed with some of the analysis on acquisition choices covered here, a public official can better answer, "do I have a real need to own this machine, or do I simply want to have use of this machine?"