Trends In

OWNING vs. **RENTING** CONSTRUCTION EQUIPMENT

By Andy Agoos

CONSTRUCTION TRENDS AFFECTING YOUR DECISION

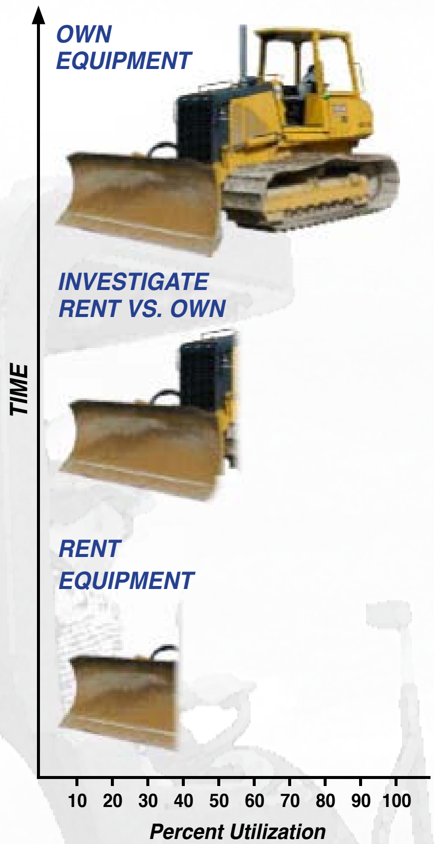
For the past 50 years, equipment rental has become increasingly popular. Today in the United States, approximately 40 percent of construction equipment is utilized through rental companies. The current economic climate could push construction equipment rental to 50 percent of total utilization during the next several years, according to a recent rental industry study.

In Europe, which has a mature infrastructure, and where construction and maintenance projects tend to be smaller and of shorter duration, approximately 70 percent of all equipment used is rented.

In the United States, long-term infrastructure and non-residential building projects are transitioning toward shorter restoration and maintenance, and smaller projects. For example, highway construction projects today are typically in the $5 million to $20 million range and measured in months instead of years.

With the U.S. economy slowly recovering from the recession, analysis of proposed future bid contracts over the next several years indicates that government infrastructure investment is slowing, and there is not a corresponding increase in commercial construction to compensate for the slowing in government investment. Thus, the future construction market is uncertain and is dependent upon a successful economic recovery.

RENT VS. OWN



OWNERSHIP COSTS

A company that owns all of its equipment that it uses has an increased exposure to risk in today's economy. This is particularly true for a new company, or an existing company that enters into a new type of work.

The on-going costs of ownership, particularly operating costs – maintenance, repairs, inspections, transportation and storage – escalate over the life of the equipment and compound the cost of actually using the equipment.

Rental companies tend to replace their core construction equipment every five to six years, and generally do not retain equipment past two models, whereas companies that own their equipment will likely retain their equipment for as long as it is economically feasible. Where most rental companies generate an average of 800 hours on core construction equipment annually, contractors average around 1,500 hours annually. Higher hours of annual utilization results in increased maintenance costs and ultimately more downtime.

Thus, renting equipment:

- Reduces the amount capital tied up in fleet especially when equipment is ultimately used when there is a project that requires it.
- Reduces the amount of start-up capital required for a new venture.
- Reduces maintenance costs, repairs, inspections, transportation and storage.

WHETHER TO RENT OR OWN

When making the rent or own decision, several factors should be considered:

EQUIPMENT UTILIZATION

Future utilization should be a primary factor in calculating ownership costs. Unless your company has secure, fixed-term contracts, future utilization is, at best, an educated guess. Factors to be considered when determining utilization include projected projects, near- and long-term bid prospects and the percentage of previous bids won.*

Most companies will not use their equipment every working day at a rate of eight hours per day. Holidays, equipment repairs and maintenance, and nonuse between projects decrease the amount of time that the unit is utilized.

To determine the expected rate of utilization, look at past operational history of your company's equipment. There are many ways to calculate utilization, but a simplified approach is to use the industry-standard calculation of operating equipment 22 days or 176 hours per month. Thus, equipment operated for 14 out of 22 days has a utilization rate of 64 percent.

A practical guide is that if construction equipment is to be utilized:

- More than 60-65 percent of the time, owning is usually more cost effective than renting.
- Less than 60 percent can be an increase financial risk if there is not sufficient profitable business to cover equipment expenses and operational costs.
- Less than 40 percent, then renting is almost always the best option.

EVALUATING COST OF OWNERSHIP

In addition to utilization, cost of ownership must be considered. Often even a highly utilized piece of equipment will not make financial sense to purchase in times when working capital is lean. When weighing the cost of ownership, calculate the cost of the equipment over the amount of time that it will be owned.

The full, true cost of ownership can be calculated and compared to the cost of rental equipment. This example is based on assumptions and figures from *Construction Equipment Economics* by Dr. Michael Vorster.

If you wish to purchase a wheel loader for $118,000 and own it for five years, the associated costs would look something like the following. Assume the loader would be used for 2,000 hours each year (a total of 10,000 hours) and that it will

OUTSOURCE RISK

Rental also means outsourcing risk, as the rental company is responsible for providing safe equipment on-site, thus also shouldering any risk linked to their transportation when this is carried out by the rental company.

OWNERSHIP FORMULA

Owning Costs
Operating Costs
+ Administrative Costs
Cost of Ownership

MINIMIZE FINANCIAL RISK

Renting can help companies reduce fixed and staff costs, and minimize the financial risks associated with owning large equipment fleets.

bring 26 percent salvage value ($30,470).

Owning Costs: The amount to be depreciated is $87,530 ($118,000 less $30,470). That means that the hourly depreciation is $8.75. Add in an assumed 6 percent interest or internal cost of money, which equals to $4,454 or $2.23 per hour. Add in $5,600 annually for such costs as insurance, taxes and permits, and that tacks on another $2.80 per hour. The total owning costs are now $13.78 per hour ($8.75 + $2.23 + $2.80).

Operating Costs: Add in wear parts, such as bucket edges and tips ($6.24 per hour), tires ($2.61 per hour), preventive maintenance ($4.16 per hour), and normal wear repairs ($11.96 per hour), and the sum of the operating costs equals $24.97 per hour.

Administrative Costs: Tack on $5,600 for annual overhead ($2.80 per hour).

The total owning and operating costs are $41.55 per hour. This covers everything except transportation to and from the jobs, accidents, other non-wear-and-tear repairs, the operator, and fuel. Fuel is a cost that is common to both owning and renting and needs to be considered for both. Roughly, one-third of your total expenses will be for the cost of fuel.

FINANCIAL FLEXIBILITY

Financing equipment, whether utilizing an existing line of credit or arranging a secured loan/lease reduces the amount of available cash that can be used for other purposes, and also affects the balance sheet, possibly limiting future borrowing. An important and relatively unpredictable variable is whether there are sufficient future jobs to cover the cost of multi-year ownership. In today's economy, unpredictability is the norm rather than the exception.

FLEET MAINTENANCE, REPAIRS AND DOWNTIME

What happens when your equipment breaks down? Unless experienced mechanics and a shop are employed to maintain and repair equipment, as well as management staff to oversee the maintenance operation, an outside service will need to be hired to maintain your equipment.

Renting eliminates this need, as all of the repair and maintenance services are included in the rental. If the equipment breaks down, the rental company sends someone to repair it. In most cases, if the equipment cannot be repaired on site, the rental company will replace an inoperable piece so your project can avoid costly delays.

Most rental companies also maintain equipment to manufacturer standards, and perform prescribed maintenance to keep units rent-ready. Relying on rental companies' maintenance services enables greater focus your core business.

TRANSPORTING EQUIPMENT

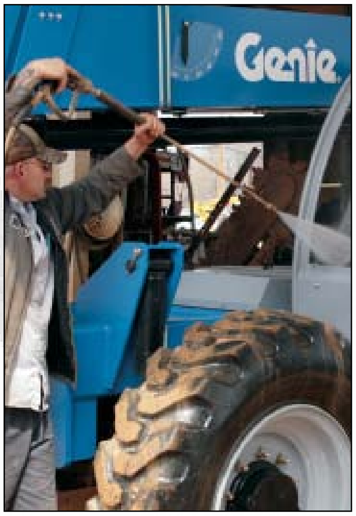
Depending on the equipment size, a driver with a commercial driver's license, as well as tractor-trailer rigs, may be required to haul equipment to job sites. Purchasing hauling equipment is an additional expense, and it is usually idle while construction equipment is being used. There are trucking companies that will contract to move equipment, but these add another layer of expense and complexity to planning equipment movement. Large rental companies employ experienced CDL drivers to deliver equipment.

COMPLIANCE WITH GOVERNMENT ENVIRONMENTAL REGULATIONS

Government environmental regulations have tightened requirements for air and water pollution, and disposal of hazardous materials. Assuring your shop and storage yard are in compliance with ground contamination standards is a challenge. Your equipment can carry contaminated soil into your storage yard, and it can leak oil, fuel or hydraulic fluid.

In addition, equipment emissions have been the target of regulatory concern. This has not only increased the cost of new equipment that must comply with Tier IV standards but has also increased the administrative overhead with required registrations and certifications.

Equipment rental companies remain current with new rules and ensure



that equipment and disposal processes are in compliance with new regulations, particularly in the areas of:

- Waste management, such as coolants, lubricants, filters, batteries, tires and degreasing machines;
- Energy savings;
- Proper storage of all fluids; and
- Reduction of the amounts of chemicals used in all shop and yard activities.

Renting helps protect the environment by using late model equipment that conforms to evolving environment regulations governing air pollution and waste disposal.

RELYING ON RENTAL EQUIPMENT

Many successful companies balance their core fleet with rental equipment that is needed for specialized projects or for a short duration. Renting fleet is an excellent method for growing a business. Companies with limited capital but a growing number of projects use rental equipment to capture the new business to protect their available working capital.

Larger rental companies also provide web-based programs that enable customers to rent equipment, track rental fleet inventory, call off equipment and review invoices. This online financial management tool provides an additional management and budgeting tool, enabling contractors to better control rental equipment costs.

CAPITALIZE ON RENTAL COMPANIES' BUYING POWER

Because rental companies buy huge quantities of equipment each year, their purchase costs are lower than firms owning one or two units. The costs are amortized over the units' useful life, resulting in rental rates that can be lower than the full cost of ownership.

CONTROL COSTS

Some construction or maintenance projects may require the utilization of different types of equipment. Renting enables access to a variety of equipment, including specialty equipment that are used infrequently for specific purposes, for as long as it is needed without tying up capital. Because you have a fixed cost for the rental, you can factor that cost into your bid. Most rental company representatives will assist you in the estimation process.

USE THE LATEST EQUIPMENT

Equipment rental companies rotate fleet, replacing aging equipment with newer models. Using late model equipment on projects provides the opportunity to gain productivity through recent technology advances, as well as use highly reliable equipment. It also provides the opportunity to test and evaluate rubber-tired loader versus a tracked loader, or a John Deere loader against an equivalent-sized Case or Kobelco. Some companies that are also considering unit purchases may want to operate late-model rental equipment several times before owning.

CONCLUSION

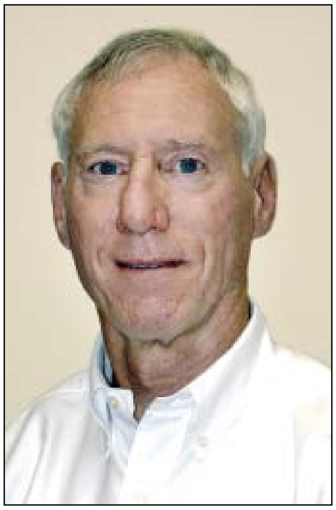
When deciding to rent or own equipment, consider the long-term affect of purchasing equipment on your company's operations and balance sheet, and determine whether the utilization rate is sufficient to justify ownership. If the full cost of ownership and the utilization rates are not substantially less expensive, then consider renting equipment as a more viable option.

* *These utilization guidelines may not apply to cranes and other specialized equipment.*

HELP THE ENVIRONMENT

Rental may be considered a fundamentally sustainable activity. Indeed, renting equipment is an environmentally sound option compared to all companies buying and owning their own.

About the Author



Andrew (Andy) Agoos has spent over 45 years in the equipment, service, and maintenance side of heavy construction. Mr. Agoos is currently president and principal of Agoos Consulting headquartered in Orlando, Florida and an adjunct professor in the University of Central Florida civil engineering department.

Mr. Agoos is a 1966 graduate of Georgia Institute of Technology with a co-operative bachelor's degree in mechanical engineering. Mr. Agoos also completed graduate MBA work at Bradley University and Georgia State University.

Mr. Agoos began his career in the construction industry with Caterpillar, Inc. He worked one year in the company's headquarters in Peoria, Illinois, two years in their European headquarters in Geneva, Switzerland, four years as a service representative throughout Africa, and four years as service director for Caterpillar dealerships in Atlanta, Georgia and Charlotte, North Carolina.

For 13 years, Mr. Agoos served as president of Austin Construction Equipment, which was the corporate equipment arm for Dallas, Texas-based Austin Industries that worked throughout the southern states.

Mr. Agoos then served as the senior vice president of equipment for Florida-based Hubbard Construction Company for 17 years while managing its award-winning 2,000-piece fleet operations and overseeing all centralized equipment operations including planning, budgeting, fleet standardization, acquisition, replacement, disposition, maintenance, fueling operations, repair, parts operations, transport, and storage.

Most recently, Mr. Agoos spent three years as the vice president of fleet for Neff Rental, Inc., a national heavy equipment rental company with over 13,000 major pieces of rental equipment and over $500 million in first cost value.

He also is a former president and charter member of the Association of Construction Equipment Managers (ACEM), is active with the Association of Equipment Management Professionals (AEMP) and has served as United Way industry chairman, Olympic Development Program director, chairman of the Orlando venue of the 1994 World Cup Soccer Committee, and Flame Soccer Club president.

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Neff Rental

Neff Rental serves construction companies, golf course developers, industrial plants, the oil industry, and governments with quality rental equipment. With more than 1,000 employees operating from branches coast to coast, Neff Rental is ranked by Rental Equipment Register (RER) magazine as one of the nation's largest equipment rental companies. Neff's tens of thousands of customers rent John Deere, Case, Bobcat, JCB, Doosan, Volvo, JLG, Komatsu, Lull, Kobelco, Multiquip, New Holland and other leading brands of equipment and tools.

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