

Getting the most out of your mowers

by JERRY ROCHE / Editor-in-Chief

In the last five years, I've seen some of the largest contractors in the country go broke," claims industry consultant Jim Huston. "It's been because they haven't had a handle on equipment costs."

Actually, Huston notes, equipment costs are just one small part of the bigger picture of estimating and bidding jobs, which should be a three-step process.

Phase I costs are those incurred for producing the end product: material, labor, equipment costs and sub-contracting costs.

Phase II costs are "general condition" costs: those required by the job but not part of the finished product

"Phases I and II are direct costs, Phase III indirect costs," Huston contends. "Direct costs are a piece of cake to estimate, but when it comes to overhead, there's a lot of heated discussion."

For instance, how are the costs measured? To what line are they allocated? And how do you, as owner, control them?

"Every cost you have should fit somewhere," Huston says. "Otherwise, you have a leak in your organization." He told landscapers in Louisville, Ky., last summer (during the Power Equipment Expo) that he consulted for one company that had a \$300,000 "leak" per year for 10 years.

Computers are not the total answer, either. "Most of the programs don't understand how complex estimating is," he contends.

Equipment costs

There are three components to equipment costs: acquisition, maintenance

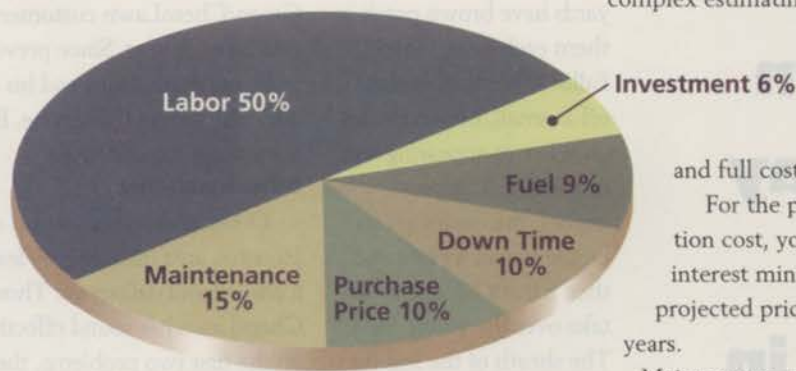
and full costs per hour.

For the purpose of determining acquisition cost, you take purchase price plus interest minus salvage value, divided by the projected price of the piece of equipment in years.

Maintenance costs applied to the estimating process are insurances, lube & oil, tires and other maintenance costs divided by the projected life in years.

"For a pick-up truck," Huston reveals, "equipment costs total about \$3.50 per hour, based on a life of 8,320 hours." For larger equipment like backhoes and tractors, and smaller equipment like mowers, Huston says you should calculate costs by engine running time rather than mileage or life in years. Lifetime maintenance costs for a

Mowing cost per acre or 1,000 sq. ft., of a typical mower used in the green industry, from Mike Bladon, University of Guelph, Canada.



like portable sanitary facilities, drive time, permits, soil tests and dump fees.

Phase III costs are mark-ups. They include sales taxes, labor burden (paid holidays, FICA, etc.); overhead recovery (rent, advertising, etc.); contingency factors and costs; and net profits. These can come to about \$10 per hour for installation jobs and about \$5 per hour for maintenance jobs.

tractor, he says, should run about the cost of a new tractor.

Be careful when calculating mower costs, though.

"A lot of fascinating things are happening in the small engine market," he cautions. "Engine life is very important to track. Equipment costs are extremely dynamic and if you're handling the equipment wrong, it can really increase your costs."

If you calculate equipment costs correctly, Huston notes, it should approximate 60 percent of the cost of renting the same piece of equipment.

Cost per unit

One of the keys to knowing mower costs is the ability to calculate costs per "unit" for a particular mower. The "unit" should be determined by your most common unit of measurement. If you're doing small home lawns, the "unit" is 1,000 sq. ft. If you're doing large landscapes, golf courses or athletic fields, the "unit" is acre.

"In order to save money, but not necessarily cut capital costs, the [mower] must minimize time and labor costs,"

according to an article in the Sports Turf Newsletter written by Mike Bladon of the grounds department at the University of Guelph (Canada).

Considerations he lists:

- ▶ Does it have engine power to cut heavy grasses at high ground speed?
- ▶ Does it have trimming capacity?
- ▶ Does it float to avoid scalping?
- ▶ Does it have adequate traction and side-hill stability?
- ▶ Does it have a sturdy frame construction?

According to Bladon, the biggest cost of operating a mower is labor—about 50% of the total cost of mowing.

Interestingly enough, purchase price comprises just 10 percent of the cost of mowing. Other costs: maintenance, 15 percent; fuel, 9 percent; downtime, 10 percent; investment, 6 percent.

A three-year formula

Ron Lauchnor of Gravely Tractor, speaking at the Louisville Expo a few years ago, came up with the accompanying chart listing "return" for various types of mowing equipment.

Lauchnor calculated acres per hour

by multiplying deck width by cutting speed and dividing by 10. He then extrapolated weekly gross profits from doing 30 typical jobs per week at what you might charge for that job. By subtracting costs (salaries, fuel, insurance, equipment and overhead) such as Huston notes above, Lauchnor comes up with net profits for one week using each piece of equipment. Assuming a 25-week production season, he then calculates a three-year return on the piece of equipment.

As you can see from the accompanying chart, any type of machine can bring you profits, if used properly and kept in constant use.

"If you understand the numbers, they're powerful data when it comes to negotiating," Huston says. "If you're making money now, don't panic—you're doing well. But costs could become a serious issue. Calculate and validate your costs, then compare your bidded costs to your actual costs." **LM**

EVALUATING MOWERS FOR PROFIT

Mower	Initial cost	Acres/Hr.	Jobs/Wk	Fee/Job	Gross/Wk.	Costs/Wk.	Net/Wk.	3-Yr. Return
21" push	\$400	0.5	30	\$15	\$450	\$175	\$275	\$20,625
40" rider	\$3000	1.0	30	\$25	\$200	\$200	\$550	\$41,250
42" rider w/bagger	\$6200	1.4	30	\$30	\$900	\$200	\$700	\$52,500
50" rider	\$3600	1.4	30	\$35	\$1050	\$250	\$800	\$60,000
60" rider (slower)	\$6400	2.5	30	\$60	\$1800	\$350	\$1450	\$108,750
60" rider (faster)	\$8400	3.0	30	\$70	\$2100	\$400	\$1700	\$127,500
72" rider	\$14,500	3.6	30	\$80	\$2400	\$450	\$1950	\$146,250
144" tractor	\$19,500	5.0	30	\$100	\$3000	\$500	\$2500	\$187,500

Acres/Hr. = width x cutting speed x 10
 Jobs/Wk. = if mower is kept busy all week
 Fee/Job = typical fees charged to customers
 Gross/Wk. = Jobs/Wk. x Fee/Job

Costs/Wk. = labor, fuel, insurance, maintenance, overhead
 Net/Wk. = Gross/Wk. — Costs/Wk.
 3-Yr. Return = Net/Wk. x 75 (based on 25-week season)