

# Utility Line Clearance

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**M**OST TREE problems are a nuisance to those persons who do not normally work with them. Our line clearance program, therefore, is a kind of service function.

If a person has a tree problem and doesn't know whom to call, he may tell the operator, who will connect the caller with someone qualified to help. But there are misunderstandings.

We work on about 2,000 trees per week. About once a month, we get into some sort of trouble. About one tree in 8,000 gives us trouble.

A contributing factor is semantics — words mean different things to different people. Pretty much the same is true with determining the cost of line clearance.

This problem of costs — how we measure what we are doing; or how

do we estimate what we need in money for coming years — is common to all overhead wire utilities.

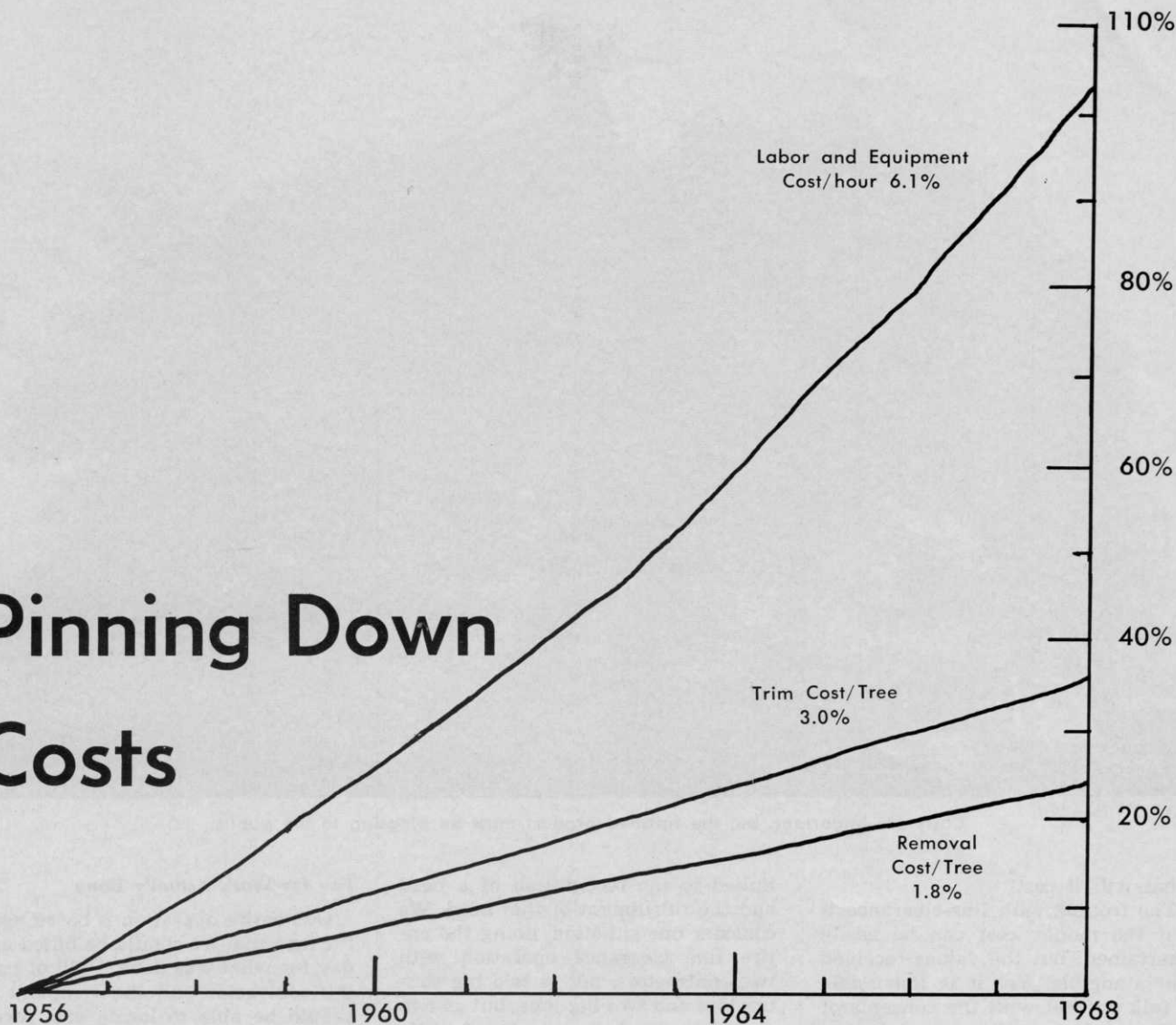
We have found that between 1960 and 1968 distribution maintenance consistently represents 78% in terms of dollars used. Transmission work has increased from 9% to 11%; sub-transmission maintenance has remained at 3%; and new construction work has dropped from 10% to 8%.

Concerning use of dollars by types of work, trimming accounts for 63% — up from 46% in 1960. Brush spraying has increased from 6% to 7%; brush cutting from 4% to 5%; and removal has decreased from 44% to 25%.

## How to Evaluate a Program

Line clearance is a functional type of enterprise where success is solely dependent upon performance. All of us who work with trees know there is a lot more involved in tree costs than just the price of trimming. Before we can deal with the

# Pinning Down Costs



problems of cost, we must understand them.

Frank Wagner of West Penn Power Company offers these points for evaluating a program:

1. Keep work methods attuned with administrative concepts and objectives.
2. Develop guidelines that can increase the effectiveness of expenditures.
3. Improve procedures, such as tailoring a crew to fit the job, converting to natural trimming, using chemical brush control vs. cutting.
4. Appraise results.
5. Be aware that success is dependent upon the workability or practicality of instructions and management support.
6. Results should demonstrate discretion, intelligent thought, sound economics, and a finished product pleasing to the eye.
7. Compliance with specifications should be in the vicinity of 90%.

Jack Stenberg of Consumers Pow-

er in Michigan says that good records help analyze the continuing, repetitive, and increasingly expensive work of maintaining adequate line clearance. Positive measurement of the annual work load helps provide an accurate guide for a well-defined budget, he says.

Jack is using initial surveys by area in conjunction with inspection and computerized records.

## Inspect and Record

We should not sell ourselves short on good records and on-the-job inspection. Attitude, skill and knowledge is important. On the job, talking face to face, you can observe, hear and evaluate feedback. You get first-hand knowledge, which, in conjunction with good records, is a combination that's hard to beat.

There are many specific areas of cost that are dependent on things other than the actual trimming job: pre-planning, better maps and prints, job routing, travel time, new tech-

niques, crew size, disposal, wages paid, daily weather, season of the year.

Cost, or value analysis, and these are not exactly the same, consists of providing and using guide lines so that each area of expense is known and contributes its share to the solution of the problems.

Two of our recent efforts have been: To convert a truck and trailer-type chipper unit to a truck-mounted chipper, enabling a crew to work easier in congested alleys; and shifting from two- to five-man crews working from the same site to permit compensation for absenteeism. With two-man crews, if one was late or didn't show up, the crew was lost for the day.

## Measurable Goal Needed

Regardless of what we foresters want, management also has a goal. Management wants to be able to measure that goal. What is being done? What else will do the job?



Costs are important, but the finished product must be pleasing to the public.

What will it cost?

The trouble with line-clearance is that the money cost can be easily ascertained; but the values received are intangible. Yet it is impossible to talk or deal with the concepts of value analysis without arriving at some standardization.

With some industries, a saving of 4% in costs is equivalent to a 20% increase in sales. Cost is important, but we also need quality.

As long as the contractor is making a satisfactory profit, his goal is the same as ours, continuous adequate service.

Our program is in three parts:

Achieving adequate clearance . . . at a cost we can afford . . . in a way that's pleasing to the customer.

#### Dispersed Management

No one can personally oversee 2,000 trees per week. So what do you do? You put good people in key spots and trust them to do the work. This is management by dispersion, or some management textbooks call this sort of thing "indirect control."

But different people do things in different ways. So in addition to trusting people, you must check once in a while to be sure they are doing things in an approved manner.

Success in any endeavor is closely

linked to the recognition of a need and the fulfillment of that need. We consider our situation, doing the entire line clearance operation with two contractors, not as two big contractors and two big jobs, but as two contracts and thousands of little jobs.



"Brace yourself, Joe. You did everything humanly possible to save that tree."

#### Pay for Work Actually Done

Our entire operation is based upon the idea that we should be billed and pay for what was done. Both of us—the contractor and the company—should be able to locate and verify who did what, where, why, and how much it cost.

Every invoice has all of this information on a cost-plus basis, plus three other items:

1. Total cost is proportioned as to the amount spent on each kind of work—trim or remove trees; spray or cut brush.

2. Each item of cost is shown in a specific way.

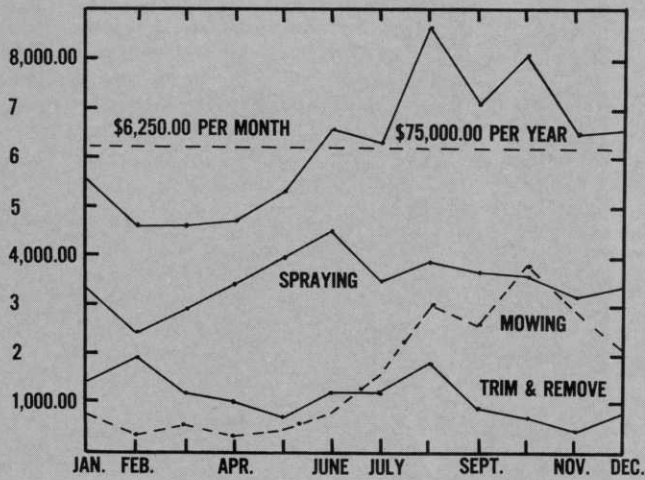
3. Each invoice can be calculated quickly to compare the cost-plus billing with a piece-rate system.

This matter of invoicing is probably our only area of difference from any other well-planned utility line-clearance program. Our invoicing system is just the application of industrial piece-rate technique. Perhaps the greatest significance is the continued usefulness of this system throughout 20 years of different line-clearance applications.

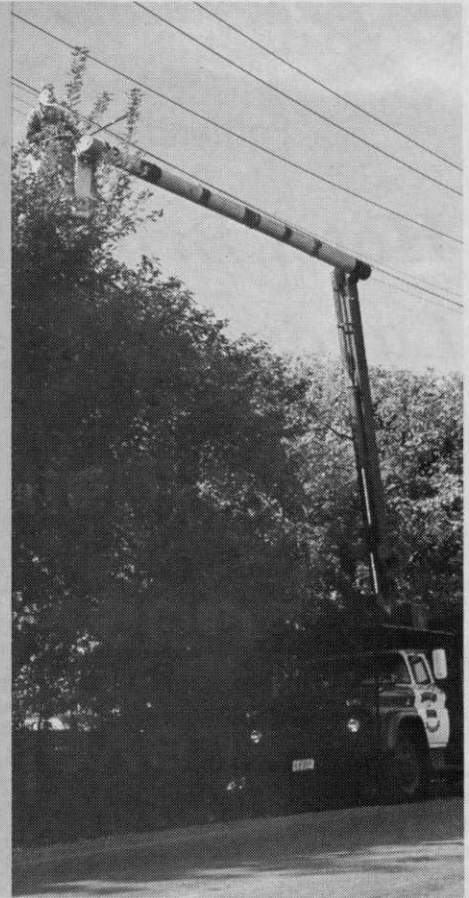
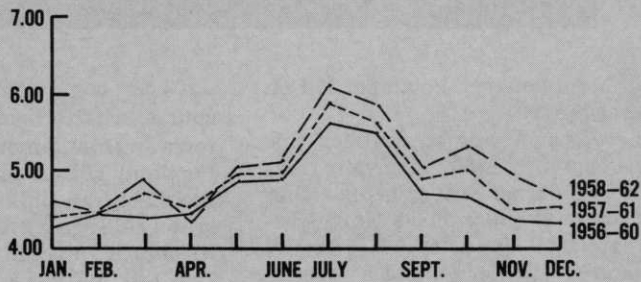
It's effective when estimating a job, when inspecting a job in progress, and when analyzing a completed job.

Both of our contractors consider

## TOTAL DOLLAR ACTIVITY MONTHLY



## AVERAGE DOLLAR COST PER TREE TRIM MONTHLY



the system to be fair to everyone. Both have been using it on the present job for more than 15 years. Karl Kuemmerling and Associates, Inc., has been on this same job for more than 25 years. Asplundh Tree Expert Company has been with us for 18 years.

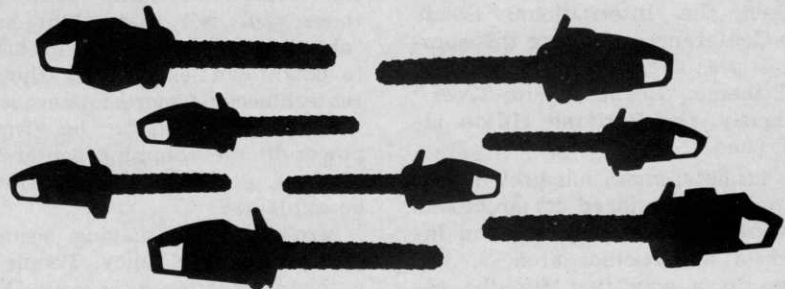
### Criteria Enable Cost Comparisons

The usual criteria for tree costs are to determine the average cost per tree to trim or remove. We also watch the amount of work produced per dollar. By using this third yardstick, we can compare the per-hour costs to what a job would cost on a piece-rate system.

With these three financial yardsticks, we can make almost any kind of comparative cost:

1. Compare one crew with another;
2. Compare one crew against itself when moved to another area; or
3. Compare the same crew in different months of the year.

Good management is hard work. There are no machines or canned management programs that can manage your business. The biggest mistake you can make is to borrow without change the objectives, goals, policies, job descriptions, or control systems from another company. Every business has characteristics that are distinctly its own.



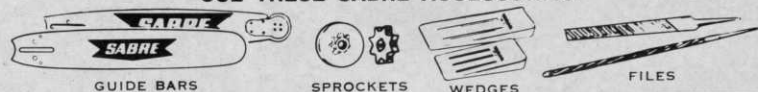
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