ORGANIZING AND DIRECTING A STANDARDS PANEL

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•IN 1966, myself and eight colleagues working for the Minnesota Highway Department were assigned to a task force dealing with maintenance work improvement and the development of new maintenance management techniques. A management consultant firm was hired to direct the study and on the first day of a series of orientation meetings, we were handed a list of what they called "Progress Killers."

"Progress Killers" are statements often used instinctively by people when approached with a new idea or a new way of doing something. We have all heard them and even used them ourselves. Reactions like "It won't work here," "We're too small for it," "We're too large for it," "Our conditions vary too much," and "This isn't the right time for a change" are some of the most common. The ironic part about this episode is that the last "Progress Killer" listed in the consultant's handout was "Let's form a committee." As a newly formed committee ourselves, you imagine what our natural reaction was.

It cannot be denied that some committees stymie rather than accelerate progress. We have all served on committees which, if we are honest about it, accomplished little if anything. We can agree, however, that it is not the committee concept that causes a committee to fail; it is the process under which the committee operates that determines whether it is a success or failure.

We in Minnesota believe that committees will play a very necessary and important role in the development of standards. To be valuable, however, they must be properly organized and must function as a committee should. My objective today is to discuss the experiences we have had with standards committees in Minnesota and explain the reasons why the committee concept is being used. I will also explain how we set up these committees and point out some of the results achieved thus far.

First of all, I should define the word committee. Webster defines this as "a group of people chosen to act upon a certain matter." For purposes of this paper, the word committee is synonymous with the words "task force," "subcommittee," or "standards panel."

Committees exist in almost every facet of society—in churches, schools, and civic organizations. Almost every organization of any size uses the committee concept in one way or another. Just as there are many different types of committees, there are many different purposes for which committees are formed. A small group of students on a college campus might label themselves a committee simply to imply that they have an organized movement set up or that they represent a certain number of people. The Congress of the United States has an almost unlimited number of committees to study different subjects before they are brought before the Senate or the House. In general, it can be said that committees are set up whenever a problem has to be solved or a decision made which one man or department cannot satisfactorily do alone.

In Minnesota, committees were appointed to help overcome certain problems we were faced with. Some of the things we wanted to accomplish with these committees were (a) to improve communication between the standards and the operating division, (b) to involve more people in the decision-making process, and (c) to capitalize on the talents and experience of people outside the standards offices.

As I mentioned before, Minnesota first joined the trend toward developing new and better maintenance management techniques in 1966. Like most other states, we were concerned with the increasing costs of maintaining our highways. We also had to prepare for the increasing mileage and service requirements of the Interstate system. As a result, a 6-month maintenance work improvement study was conducted. The principal objective was to apply industrial engineering techniques to highway maintenance in an effort to improve the department's utilization of available skills. This study led to a

number of things, primarily the development and implementation of a work-measurement program, a work-scheduling system, and a work-accomplishment reporting system.

While the study was in progress, a new and separate research and standards division was organized in our department. Within this division, an office of maintenance standards was established to continue the design, development, and implementation of an improved maintenance management system, consistent with the needs of safety, efficiency, cost control, and programmed budgeting.

Prior to the beginning of 1970, the maintenance standards office concentrated on designing, developing, and testing the proposed system. Most of this work was done in the central office headquarters. Little attention was placed on having the field directly involved except for the statewide work-measurement program and a pilot project in one of our 16 maintenance areas.

We began to realize, however, that there was a barrier between the field and standards offices when it came to communications. The right hand did not know what the left hand was doing. We were so bogged down with the design stages of the assignment that we failed to keep the people in the field adequately informed of our aims and progress. The few contacts we did make with the field employees indicated that lack of information had led to misinformation and rumor. Except in the pilot area, our proposed program was being resisted more than it was being accepted. We were not spending enough time selling the program. People were getting their information via the grapevine, and it was not always factual.

Our assistant commissioner of research and standards recognized this gap in communication shortly after he assumed the office in mid-1969. With this in mind, he proposed that advisory committees be formed for each of the standards offices, one of which was the advisory committee for maintenance standards. The purpose of this committee was "to establish more effective communication with the operating offices." He went on to say that "Standards personnel are somewhat isolated and lack the day-to-day exposure to operating problems. This breach can only be overcome by creating cooperative and harmonious relationships with those working in operations areas."

Communication is a problem that can stand improvement in any organization, especially when things are in a state of change as is the case in highway maintenance today. Methods, equipment, policies, public demands, traffic, material—everything seems to be changing at a more rapid rate than ever before. We decide to decentralize one year and maybe turn around and centralize again the next year. There has never been a time when good communication was more important than it is today.

Improving communication, then, was one of the primary purposes of the advisory committee. We wanted to better inform both the people in the field and the staff of the progress being made on the maintenance management system.

A second purpose I want to discuss deals with the word "involvement." Involvement is a term that is very popular and important today, particularly with the young people who want to be more involved in the decision-making process of their homes, schools, churches, and government. This desire, however, is not limited to the younger set; we find that involvement is a very important need of all ages including our maintenance employees. They also want to be involved, particularly with the decisions which affect their work.

During the initial stages of this project, the office of maintenance standards attempted to take on the whole project alone. Except in the pilot area there was a tendency to avoid bothering the field with questions and meetings. They had their day-to-day responsibilities to take care of. After all, one of the reasons our research and standards division was created in the first place was to delve into things that the operating division could not because of lack of time. Furthermore, the field people not directly involved with our work really did not have the enthusiasm we had toward the project. We wondered why. Perhaps it was because they felt "left out of it" and really wanted to be involved but never felt invited.

We learned that the lack of involvement also tends to hamper acceptance of and strengthen resistance to any change developed by the other person. Certainly, new ideas are much more acceptable if one has been involved with their innovation and development.

Just in the short time the committee has been in operation, attitudes have improved. We now have wider acceptance of the aims and value of the maintenance management system. We believe this is a result of the fact that field people now know that they are a part of the action.

A third purpose of our committee was to capitalize on the experience of people directly involved with the work in the field. It is commonly accepted that the person most capable of coming up with a new idea or an improvement is the motivated employee closest to the work or at least involved with the work. A research unit can have the analytical minds to figure things out and have access to all the printed information on a particular subject but such a unit still lacks one thing—direct contact with the field situation itself. The advisory committees and special subcommittees, which I will discuss later, were designed to fill this gap.

Our advisory committee for maintenance standards has been functioning since April of this year and is holding monthly meetings. The committee is composed of the maintenance standards engineer as chairman plus four area maintenance engineers from the field who were suggested by the assistant commissioner of maintenance. Two of the area maintenance engineers represent rural areas, while two are responsible for high-density urban areas. Maintenance experience varies from one year to 18 years. In other words, youth is represented as well as the "old hands." Two members have had central office maintenance administrative experience, while all have had experience in construction and materials. This varied background of experience is quite important as this committee determines priorities, reviews standards, and recommends additional or revised standards.

Proposals to be acted on can originate from within the advisory committee but usually come from maintenance personnel, offices such as the office of maintenance standards, or from various special subcommittees. The advisory committee cannot approve standards—it considers them and, if acceptable, recommends them to the assistant commissioner of research and standards. If he approves it, he passes it on to the deputy commissioner-chief engineer who makes the final determination.

Subcommittees were set up to work on a variety of standards and submit proposals to the advisory committee for study and recommendation to higher authority. We now have five quality standards subcommittees, each having the responsibility to develop quality standards in specifically assigned categories of work. The five quality standard categories are (a) roadway, (b) roadside, (c) drainage and structures, (d) traffic services, and (e) snow and ice control. These subcommittees began to hold their organizational meetings during the later part of June and the first part of July.

Committee assignments to the subcommittees were made by the deputy commissioner as recommended by the advisory committee. All area and assistant area maintenance engineers are divided among the five subcommittees. In this way, everyone gets involved. In addition, other department employees with special background and experience, such as a traffic engineer and director of environmental services, were assigned to appropriate subcommittees.

Earlier I mentioned that we had a work-measurement program in operation. We have nine specially trained work-methods technicians who time-study the actual field and shop operations to determine standard productivity rates. This is a very slow process, particularly the summarizing of studies to determine average rates for statewide application. As result, we recently set up productivity-standards subcommittees whose job it is to estimate productivity rates where possible for the various maintenance operations performed in the field and shop, with the estimates being based on their experience and judgment. The work-methods technicians, commonly called time-study men, are now used to restudy productivity rates as methods change and, when requested, do related method and cost analysis work for field supervisors.

The productivity-standards subcommittees are composed of shop and field foremen. Each of these subcommittees, as well as those dealing with quality standards, was specifically instructed to contact other knowledgeable people available to them. As a result, auto mechanics, highway maintenance men, and other field personnel are getting involved with the setting of standards.

I have already mentioned some of the results we have gained since the committees and subcommittees were formed. People in the field, for example, are presently much better informed regarding our program than they were before. With this knowledge, our area maintenance engineers as well as others are much more interested in the program and are volunteering suggestions such as "We would like this type of report," "We would like that right away," or "How about doing it this way." A road and right-of-way inventory, for example, was simplified and given top priority once the people in the field realized how it would significantly help them plan ahead.

You recall that there is a definite route which all proposals follow; i.e., advisory committee, assistant commissioner for research and standards, deputy commissioner-chief engineer, appropriate assistant commissioner, etc. The important thing is that action is required; either it is approved at each level or rejected along the way. We have heard comments such as "We have had problems with such and such material for a long time; now there is a definite channel to go through. Now it won't be buried or filed along the way." For example, excessive delineation has plagued the maintenance man plowing snow for years. Something is being done about it now that the advisory committee has become involved.

Sometimes the questions from the field regarded simple standards such as "What is the standard for placement and painting of no-passing terminal posts, culvert markers, and dummy posts?" It seems no one in the central office ever believed that there was a need for standardizing these items. The advisory committee saw the need and is taking care of it.

One of the most common questions we hear when we are in the field is "When are more time standards coming out?" We had not been making satisfactory progress on time standards because the one man we have for this work has not been able to clean up the backlog of time studies and complete our standards manual. The subcommittees have significantly accelerated this process and, in addition, have rewritten many of the operation descriptions to make it easier for the men to apply the proper standard. We expect that our work reporting will be more accurate and complete than it was before and that coverage by standards will increase 15 to 20 percent. We also expect the standards to be more acceptable to people in the field because they have been involved with setting the standards. These are but a few of the accomplishments we can credit to our committee and subcommittees, but, hopefully, they give an idea of what we have gained.

Before closing, however, I would like to reiterate some points which we think are very important in helping to ensure success when applying the "design by committee" concept.

1. Committees should never be set up to accomplish something that could better be done by one individual or department.
2. The committees should be small—4 or 5 people.
3. Committees should be given specific duties and responsibilities, preferably in writing. In other words, they should be given the ball before they are asked to run with it.
4. Target dates should be set indicating when results are expected. Remember Parkinson's Law which states, in effect, that a job will take as long as there is time available to do it.
5. The committee should concentrate on high-priority items which require the most study or would have the biggest impact as an improvement. Care should be taken to avoid discussing trifles or problems unique to only one member or geographical area.
6. Each meeting should have an agenda sent out to the committee members prior to the meeting to allow time for preparation.
7. A prerequisite for any committee is a strong leader as chairman. He is responsible for making the committee function. The chairman should be the person most interested in the job which needs to be done. The most knowledgeable or influential committee man does not necessarily make the best chairman.
8. The chairman is in charge of setting the date, place, and time of the meetings so that they are the most convenient to all concerned. Meetings scheduled on a regular basis, such as every second Wednesday of the month, allow for easier planning. On the

other hand, if there is no business to transact, the chairman should cancel the meeting.

9. The committee members should be carefully chosen. Two "heads" may be better than one but it depends on the "heads."

10. Each committee should have a secretary who records the minutes and disseminates them to interested parties. Decisions serve no purpose unless they are passed on for others to make use of.

11. Once the committee's work is completed, it should be disbanded.

The task taken on in Minnesota, like that taken on by many other highway departments represented at this workshop, is a very difficult and time consuming one. Our office of maintenance standards, even with a permanent staff, has neither the time nor the personnel to set up the quality, quantity, productivity, and other standards and components of a totally new system. The necessity of finding better and more economical methods of maintaining our highways to counteract rising costs is too pressing to allow time for a handful of people to do the job alone.

Minnesota has found that the committee concept can expedite the completion of this task and at the same time improve communication, generate involvement on the part of the others in the department and, in so doing, make use of the experience and competence available outside the confines of the central office. As an added benefit, results are much more acceptable and the "resistance to change" factor is much less of a problem.

Yes, the statement "Let's form a committee" can be a "Progress Killer." On the other hand, committees have proved to be a must for us in Minnesota. Our experience shows that, if properly organized, directed, and motivated, a committee can and will generate much progress.