

- Municipal Railway, San Francisco, Calif., April 1983.
20. H.L. Angle and J.L. Perry. Job-Related Employee Attitudes in Urban Mass Transit. Transportation Research Record 759, TRB, National Research Council, Washington, D.C., pp. 20-25.
21. R.M. Steers and S.R. Rhodes. Major Influences

on Employee Attendance: A Process Model. Journal of Applied Psychology, Vol. 63, No. 4, 1978.

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Washington State Department of Transportation Organizational Review-How and Why

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ABSTRACT

In 1981 the Washington State Department of Transportation undertook a review of the agency to identify productivity improvements. The program yielded savings in nearly all functional areas without reducing service. The method for study relied on a three-person internal core team for management, with special sub-teams for technical subjects. One division was treated separately by a consultant. The Washington experience indicates the validity of using internal resources to bring about savings and changed attitudes toward productivity. The study, which took less than 2 years, evolved into a formal permanent productivity program in the department based on the foundation laid by the review. The program, demonstrating agency policies of cost-consciousness and visible savings, is believed to have contributed to the success of efforts to increase state gasoline taxes by increasing agency political credibility. The authors do not offer their methods as a panacea to all state departments of transportation and highways, but believe that the internal approach to productivity improvements is worth considering.

The Washington State Department of Transportation (WSDOT) made a critical self-examination of its operation and made changes that will save nearly \$2 million per year without reducing service to the public. A few of the organizational and manpower adjustments resulting from the in-depth examination are as follows:

- Elimination of 21 supervisory and management positions.
- Overhead manpower expenditures 9 percent less than the previous fiscal year.

- All annual major program expenditures completed well below budget in both dollars and manpower.
- Numerous department authorities delegated to lower levels.
- Reduced vehicle fleet by 130 units.
- Reduced telephone lines by 9 percent.
- Established program to revitalize employees' safety program.

These examples indicate the broad range of activities reviewed. A brief review of how this program was established, how it was carried out, and the projections for the future should be of interest to other state departments of transportation and highways.

IMPROVEMENTS FROM WITHIN--WSDOT APPROACH

There are many approaches an agency can take to identify productivity improvements. The simplest approach may be to hire a consulting firm to do the job. The consultant can offer anyone from an individual project manager to a fully staffed team of management experts. You can then sit back and wait for them to present you with a solution, right? Wrong! You and your people know your organization and your jobs better than anyone else. A consultant must either draw on your knowledge (and time) or the product you get will be of little value.

This is not meant to imply that consultants should not be used. Without question, there are times when a team external to the agency is the best approach. This may provide maximum credibility to those outside the agency, minimize friction among agency managers, and provide experience and expertise unavailable internally.

Another approach, the approach taken by the Washington State DOT, is to do it yourself, if you can. In 1981 the Secretary of Transportation, Duane Berentson, decided to use an in-house team to review all divisions in the Washington DOT, with one exception; an external consultant would be used to review the Marine Division.

ORGANIZATION OF AN IN-HOUSE REVIEW

The first problem was how to establish an in-house team that would have the authority of the secretary of transportation, be respected by agency managers for its credentials, and have no prior biases and, therefore, would be impartial to all functional elements of the department. What appears to have worked well for the Washington State DOT was its use of a small core team reporting directly to the secretary. This core team was comprised of the following:

- Deputy Secretary of Transportation. A career employee with substantial experience both in the field and in the Headquarters office through 25 years with the department.
- Department Personnel Manager. Broad experience within and outside government; extensive experience in other state agencies as well as WSDOT; a thorough knowledge of the internal workings of the department.
- Management Analyst Supervisor. An individual with limited experience in the department, but with a high degree of analytical skills, extensive management experience outside the department, and proven organizational ability.

The secretary directed that the core team initiate studies throughout the department, which would basically ask, in a simplified manner, the following:

- Examine current functions
- What?
 - Why?
 - How?
 - Who?
 - How to improve?

The team first conducted face-to-face interviews with selected groups within the department to identify likely subject study areas. Seventy-seven subjects were listed for study and categorized in the following general groups:

- Policy
- Organizational structures
- Organizational relationships
- Procedural
- Minor remedial

This categorization of the study questions was believed necessary to assign a priority to the emphasis needed on each of the many topics raised from the review.

Many items of a major policy nature that were addressed related to fundamental issues about how the department conducts its business. At the same time, the team believed strongly that study areas of low manpower or low dollar impact must also be addressed although major organizational issues had much more visible return. Department credibility could be increased with the work force by solving many of the day-to-day annoyances, and big dollars can also be saved by making many small revisions in procedures.

EXPANDING THE KNOWLEDGE OF THE CORE TEAM

Shortly after the interviews were initiated among various department managers, it was realized that technical problems would require special expertise in subjects ranging from engineering to accounting and general administration.

As specialized subjects evolved, special teams of department employees were organized to address those subjects. These teams were closely administered by the core team to assure that the subjects were addressed in keeping with the secretary's direction for an open, no-holds-barred look at the department. The special team studies resulted in reports to the core team. The core team would either accept, reject, or direct additional study by the special teams and, ultimately, make a recommendation to the secretary.

A bonus benefit of the special teams was that additional department personnel could be involved in the in-house review and, therefore, have some stake in the eventual outcome. Without question, this method was highly successful in gaining acceptance of the recommendations throughout the department.

WHY A SPECIAL TEAM FOR PRODUCTIVITY

It may appear self-evident that managers should always work to improve the efficiency of operations. It is part of a manager's job. Why can't managers simply increase their emphasis on the subject and tell subordinates to do the same?

Washington's experience is that just as advertisers create a catchy slogan or title to influence buyers to change their behavior, so do managers need attention to influence subordinates to change their behavior, that is, to work more productively. A special title and designated effort for the study had special meaning in the Washington State DOT (and would possibly have special meaning in any department) to emphasize to the managers and employees that things are not "business as usual." It meant that innovation was welcome and encouraged, and that questions could be asked and answers given that might otherwise have been suppressed.

ARE THERE OTHER BENEFITS FROM A SPECIAL DESIGNATED STUDY?

There are, without question, other benefits. A special designated study will act as a catalyst. The Washington State DOT adopted more than 70 specific subjects for study. One of the most frequent comments heard was that many actions were needed for some time. Some have been tried and failed, but with the catalyst of the organization review many concerns and questions came together, bringing about coherent policy guidance with a rational plan for implementation.

Additionally, a formalized designated study will change manager and employee attitudes. It is well known that attitudes for improvements cannot be regulated, but they can surely be influenced to bring about change. This was one of the most gratifying observations as the organization review matured.

Productivity became more than a buzz word with managers; it became an element of conscious consideration in nearly all actions. Managers voluntarily left authorized positions vacant, reduced paper flow, and took many other actions that added up to increased productivity in the department. Attitudes from top to bottom were oriented toward productivity, and not just when a specific study was being conducted. The savings are substantial even though the total impact can never be quantified.

HOW LONG CAN A FORMAL PRODUCTIVITY TEAM BE EFFECTIVE?

The Washington DOT experience is that an in-depth study in all areas of the department, with a no-

holds-barred approach, has a limited time to be effective--not because all is well, but because managers still have day-to-day activities to accomplish. The continued probing by a study team eventually becomes an irritant, and objectivity will decrease. The study consumed less than 2 years of total effort on the 70 preliminary items selected for study.

Toward the latter part of the 2-year period, a formal productivity policy review board was established by policy order signed by the secretary. The net impact of this policy was to establish a productivity overview board as a permanent feature of the department, just as the contracting officer or the purchasing officer are a part of everyday business.

The formal productivity program continues to review the department for productivity improvements; however, it will focus on key subjects in specific department areas. The shift in emphasis will be from a broad review throughout all of the department at one time, to studies concentrated in selected phases of department operations.

Equally important in the continuing productivity review is the emphasis to all managers that improvements in productivity are as much a part of a manager's job as is designing a highway project or completing a public transportation study proposal.

EXTERNAL ACCEPTANCE

Any tax-supported public agency must, of course, remain supremely conscious of external opinions about the agency held by the legislature, its policy body, the governor, and last, but certainly not least, the taxpaying citizens of the state.

Washington State DOT believes that its continuing, conscious effort to achieve productivity improvements was a key factor in the department's success in obtaining additional transportation funding during the 1983 legislative session.

We are not perfect; we probably never will be. However, we believe the continuing in-house review of the organization with the direct involvement of the secretary of transportation provided credibility for the department with the lawmakers and, we hope, the citizens whom they represent.

We believe we established an atmosphere whereby we were viewed as an agency attempting to be more productive and succeeding in that effort. Thus, we could be responsibly considered for additional funding with the belief that funding would be effectively used to support the transportation system and not for alleged government inefficiencies.

Conducting a productivity study composed primarily of in-house rather than outside teams probably will make external credibility more difficult. Although the Washington State DOT was successful, frequently there are substantial reasons for government agencies to consider the use of outside people in productivity studies to reinforce external credibility. The Washington State DOT does expect to use people outside the department to accomplish future studies.

WHERE IS THE DEPARTMENT GOING NEXT?

Of the 70 proposals categorized for study, 51 were implemented, and the remaining ones were either rejected or are still in the process of implementation. The list at the beginning of this paper outlines only briefly some of the items studied and the results.

One important factor underlying the decision to

study the whole department at one time was to enable the core team and the secretary to address how the department as a whole was accomplishing its mission. This provided the best opportunity to determine strengths and weaknesses and overlaps and gaps within the agency. From this perspective decisions could be formulated for changes in direction in how the mission could be accomplished. The permanent productivity program will build on the foundation laid by the organization review.

A review of the established concept for accomplishing pre-contract activities was the first major study undertaken under the permanent program. The initial review addressed certain facets of pre-contract activities for improvement, but not the basic organizational concept.

During the initial team study, the department completed its review of the Computer Aided Design and Drafting (CADD) technology and has since proceeded with a contract to implement such a system. As this system is implemented, the organizational changes resulting from the pre-contract activities study will be a key to obtain maximum benefits from this new technology.

A recent decision from the productivity review is to expedite the training to introduce top managers into the computer age. It is the consensus in the department that managers must be more knowledgeable and involved in the decision-making process as we move into the automated age.

The Washington State DOT is an agency with activities in all modes of transportation. It cannot be predicted when the major studies of department operations will end. With the advancing technology occurring in the world today, the review of methods for accomplishing the agency's mission probably should never end.

POSTSCRIPT

There is no single unique answer to any organizational concept in the agencies of the 50 states. Departments of transportation and highways do not operate as islands separate from policymakers, elected officials, or the taxpaying citizens of the states. Maximum productivity cannot be the answer to all problems. Certainly, many services the public sector wants must be performed regardless of cost effectiveness. How cost-effective is plowing snow, for instance, when the tremendous cost of these activities to the snow states is considered and when these states cannot find sufficient dollars to fix bridges and resurface highways? Nonetheless, snowplowing is an activity that the mountain states owe their citizens for safe, convenient transportation during the winter months. It is accepted, therefore, as a service requested by citizens and one that they are willing to pay for.

Our productivity team is now spending a good deal of time reviewing the rapid advances in automation occurring across the country today. We are convinced that how transportation activities will be administered 10 years from today cannot be forecast. To survive, much less succeed, managers must address productivity and remain alert to this changing world. Transportation agencies must share individual improvements to the benefit of all.