TAMPA TRIES COMPUTER TO INCREASE EFFICIENCY BY SETTING PRIORITIES

Each crew was setting its own priorities with haphazard results until the computer began scheduling based upon system-wide needs.

Ferlita and the city recognized the problem and brought in a management consulting firm who organized the present system. The firm first had to assess the maintenance needs of the parks and the works capabilities of the crews. Data would then be correlated in the creation of a program to provide the most efficient use of the department’s resources.

The first task in the project was to determine exactly how much could be accomplished by the manpower available to the department. There was no labor shortage with over 200 on staff. But the demise of CETA had taken away a large surplus of workers the department was accustomed to having, requiring more careful use of those remaining. “We did time and

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motion studies for all of the activities involved in maintaining the parks: weeding, mowing, trimming, edging, etc. and compared our results to national averages," said Ferlita. Where the Tampa crews fell short of the average, changes were made in the methods or adjustments were made for the local climate differences.

Foreman roles have become much less physical and more managerial.

The study then broke down the tasks done by maintenance personnel into 46 work activities to standardize the methods for each activity. The number of man hours required for each task was then computed. The standard methods were incorporated into a book of performance guidelines and given to the staff.

Each task was fed into the computer with the amount of time and supplies it would take following the uniform method. The computer's job was to allot each job to one of the four district crews, the citywide crew or the forestry crew.

Each month, the computer produces a stack of cards. On each card is one of the jobs slated to be done that month. The cards are sorted by district, delivered to the manager of each district and then delegated to the supervisors. Using the cards the supervisors must design two schedules for each of the crews under their jurisdiction. Once the biweekly schedules are approved by the deputy superintendents, the cards are further divided up among the crew foremen and the workers.

The men later report back how many jobs were finished and a monthly log is kept on how much the schedule is completed and how many man hours it actually takes. At the end of a year on the system, Ferlita and his staff will refer to these logs to update the accuracy of the data that the computer has to work with, and make adjustments for the following year.

In theory, the system should run the Parks Department with robotic efficiency. But the human element has shown up in more ways than the sick days and vacation that are programmed into the computer.

Convincing employees to maintain grass, ornamentals and trees from a schedule designed by a computer has been difficult in many cases. Ferlita has found that workers and foremen, many who have been in the department for 20-30 years, always devised their own schedules according to what they observed on a day to day basis.

"It was hard to convince the foremen to stick to the new schedule, if...
they saw grass that needed to be cut, they cut it, regardless of whether it was a level three area and not to be cut for three months,” said Ferlita. These activities seem conscientious, but they divert time away from completing items on the list.

Ferlita also found resistance to the increased paperwork for supervisors and foremen. Their roles have become much less physical and far more managerial. “We have been able to keep most of the people in the same jobs, but we have had to take people that have been with us for years and channel their thinking into a whole new pattern of planning ahead to write schedules, record what gets done, and keep a backlog of additional work to be done in extra time,” explained Ferlita.

The Department has overcome many of its personnel problems by training the foremen and supervisors in the design and use of the system to clarify how their activities fit into the whole. Ferlita and his deputies have found patience in this endeavor has paid off. Most employees needed more than one sitting through the training class on the system to fully understand it. As Ferlita explains, “it often hits like a bolt of lightning; after attending the same class two, sometimes three times, the picture finally comes together for them.”

As the personnel problems in the field are ironed out, the system has been showing some immediate benefits to the operation of the administrative offices. Requisitioning and inventory are now done through the computer. Records for materials and supplies use are kept, not only in terms of the quantities used, but also according to the jobs and crews by which they were used. The computer then automatically purchases general supplies according to the inventory levels.

Budgeting, which begins in May, is a much simplified process with the computer. As plans are made for the coming year the data from the preceding year can easily be called up to document requests that may be questioned.

The Parks Department submits their finished budget to the mayor’s office in mid-July. "Now when we go to defend our budget, we’re not arguing with estimations, its all there in black and white,” said Ferlita. Although the final procedure is to submit the budget to the City Council in mid-August, in Tampa’s strong mayoral government, the Council has very little power to revise and almost no option to veto the document that the mayor’s office presents to them.

An evaluation of the management system will be made at the end of a full year. Ferlita is already aware of small changes that may have to be made but wants the system to run a complete year to get a consistent picture. At year’s end, the monthly and quarterly reports of work finished will be pulled out and seriously compared to the original projections.

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