# Local Agency Managers' Perceived Value of Motivation Among Maintenance Workers

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The results of a limited initial study of manager perceptions of employee motivation in local agency street and highway maintenance organizations are presented. All data are taken from cities and counties in Iowa. The agencies represent organizations generally having professional engineering management at some level in the organization. Managers were found to believe strongly that salary and benefits were prime determinants of employee satisfaction and morale, which is indicative of an organization that subscribes to the "rational-economic man" principle (i.e., tends to see working-level employees as a labor commodity to be bought and used). Conversely, managers were found to believe strongly that their employees were motivated by individual needs, suggestive of an organization with a management philosophy at the opposite extreme—the "complex man" model. The intermediate philosophies of management in the "social man" and "self-actualizing man" models were not found to be significantly subscribed to by local agency maintenance managers in this research. The results suggest that local agencies cannot be expected to be interested in training or programs to enhance employee motivation unless such programs recognize the wide variance of manager perceptions.

Standard works on industrial psychology and motivational behavior in management have presented the generally accepted theories describing a human behavioral approach to encouraging people to perform as the organization wishes (1-3). The various reasons for being motivated to work include satisfying different kinds of needs, such as physical and security needs, social needs, and egoistic needs. Physical and security needs are thought to include basic survival aspects of life such as food and water, shelter, and the emotional desire to be relatively secure in these areas. Social needs are thought to include the physical, emotional, and spiritual aspects of a person's life, which can only be met in communication and interaction with other people. Egoistic needs are thought to encompass a desire to be independent and successful on a person's own merit rather than in a social context. Maintenance work can provide opportunities to meet these types of needs, but in different degrees than perhaps other occupations. A maintenance worker who is struggling to make ends meet and satisfy physical needs will be most sensitive to salary scale, amount of overtime work available, and opportunities for advancement to higher pay grades. Workers who lack meaningful social life outside the job and who crave social acceptance will be interested in maintenance positions that

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permit them to work in groups that provide frequent opportunities to enter discussions. Persons with a strong desire to be recognized as productive are likely to seek individual tasks or supervisor positions to meet egoistic needs. These traditional views of needs suggest that maintenance workers may respond to a wide variety of motivational strategies. However, motivational strategies assuming that people work solely to satisfy some fixed need may not affect the productivity or quality of maintenance personnel.

The traditional views of human behavior in management also contain some fundamental assumptions about the nature of people. One is that at least some people can be described by the principle of the "rational-economic man." Another is that some persons can be described as members of a group classified as "social man." A third is that some persons can be thought of as belonging to "self-actualizing man" groups. A fourth is that some persons belong to a group identified as "complex man." An exhaustive description of these groups will not be presented here [see Schein (3)]. However, the implied managerial strategies tending to flow from a manager or an organization that assumes that their people fit into one of the model groups are worth noting here.

An organization following the rational-economic man principle assumes that it is buying the services and obedience of the employees. The organization adopting this approach is not necessarily the maintenance agency. It may be the union that represents the workers. Managers are concerned with planning, organizing, motivating, and controlling.

If productivity is low or morale is sagging, the manager is to change job (task or activity) specifications and organizational relationships among the jobs or change the incentive and control system to motivate employees and increase productivity (increase pay, cut pay, increase quality control standards, etc.). Managers are usually expected to evaluate first the organization itself to see where change may be needed. The manager is then expected to evaluate incentives for motivation and rewards for productivity.

Organizations following the social man assumption expect managers to devote more attention to the needs of the persons working under the manager than to the tasks of those persons. Managers are to be more concerned with the feelings of subordinates and the degree to which they believe that they are "part of the team" than with trying to control the subordinates. Managers are expected to focus more on work team (or crew) incentives than on individual incentives. The manager shifts from planning and controlling to being a go-between for the workers and the higher levels of management. A first-

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level manager in such an organization is seen more as facilitating and supporting the workers than as controlling and motivating them:

Managements that hypothesize the self-actualizing man model assume that worker motives fall into a hierarchy of value. The first level includes simple needs for survival and security, then come social interaction needs, then ego-satisfaction and self-esteem needs, then the needs for independent status, and finally the needs for self-actualization. Such managements also assume that people can and want to grow and mature in their jobs, that people are basically self-motivated, and that there is no conflict between self-actualization and improved agency performance.

This implies a resident management strategy similar to that followed under the social-man theory, but with expanded dimensions. In an agency assuming the self-actualizing man model, a manager will be encouraged to be less concerned about treating employees with consideration and sensitivity and to give more attention to making their work more challenging and meaningful. A manager will be encouraged to delegate as much authority and responsibility as, in the manager's opinion, the subordinate employees can handle. The idea shifts from the agency motivating people to giving the employee the freedom and latitude to dig into the job and become motivated from within. Agencies using this concept pride themselves on being "an organization of self-starters."

The complex man approach to management philosophy recognizes that every model is limited in its ability to describe all conditions. This philosophy accepts the value of the rational-economic man, social man, and self-actualizing man models to describe some people in some situations. However, the complex man concept suggests that people, relations among workers, and relations between workers and the agency are more complicated than do the previous models.

An agency assuming the complex man model is willing to adopt a variety of management strategies depending on the perceived problems and the perceived characteristics of the workers. Agencies thinking this way tend to seek managers who are good at evaluating people as individuals and analyzing situations and who place a high priority on investigating circumstances before acting. Managers in a complex man model organization are flexible.

## MERIT OF MOTIVATION SURVEY

In October 1988 an ongoing independent study was undertaken by faculty in the Civil and Construction Engineering Department and the Sociology and Anthropology Department at Iowa State University to investigate the appropriateness of high-level personnel management concepts in local street and highway maintenance agencies. Because it was an unfunded faculty release time effort, it has been a low-cost study restricted to local agencies in Iowa. A brief one-page survey was designed for easy response from maintenance managers in the 99 Iowa county engineering offices and the 71 cities having more than 5,000 persons. All counties in Iowa have registered professional engineers supervising the highway system. Cities with more than 5,000 persons have at least a public works department with a regular street maintenance program and have several employees conducting street maintenance. Even the largest of these organizations would still be classified as small in terms of managerial complexity. All county engineering offices in Iowa are required to have the road system supervised by a registered professional engineer. Some of the counties have only the one supervising engineer, whereas the larger counties may have up to three additional assistant engineers. All except the larger cities will generally have only one engineer responsible for the entire public works operation, so in most of the cities the direct responsibility for managing street maintenance falls on a nonengineer "street superintendent." Cities and counties in Iowa are stable public employers because the state has been in a series of limitedgrowth or slight decline cycles for the past two decades. Thus, for the sample population, maintenance employee motivation is not affected by sharp growth or decline in agency employment. The Local Systems Office of the Iowa Department of Transportation (DOT) mails to these agencies, on a monthly basis, materials considered essential to coordination by Iowa DOT of local government transportation matters. The Iowa DOT agreed to include the survey form in one of its regular mailings for distribution to the local agencies. Table 1 contains the response results.

It is interesting that, of the city engineering departments responding, almost all thought that more highly motivated maintenance workers would increase the quality of maintenance, but many county engineering departments were somewhat unsure (Question 1). There has been a general assumption that deficiencies in the quality of maintenance are strongly related to employees who do not care about their jobs. Results of the survey suggest that small local agencies generally want more highly motivated employees, but counties expressed some uncertainty about the impact that more highly motivated employees will have on maintenance quality.

Differences of opinion between cities and counties were more pronounced as to whether higher levels of motivation would reduce turnover among maintenance staff (Question 2). County respondents were almost equally divided between positive and negative respondents, and 15 percent were in the "don't know" category. City respondents mostly believed that higher levels of motivation could reduce employee turnover ("definitely" or "maybe"). This suggests that the counties responding to the October 1988 survey are more inclined to regard their employees under a rational-economic man model than either the social man or the self-actualizing man model. If the responding counties have turnover problems among their personnel, this suggests that they think individuals leave for more rational reasons than how they feel about themselves or the job. The more pessimistic response of the counties could be the result of very little turnover among personnel. If no problem exists, then higher levels of motivation cannot be expected to reduce turnover. In fact, for an agency with low turnover and low motivation among workers, stimulating the personnel to higher levels of motivation can increase turnover by encouraging competitive dissatisfaction.

Cities and counties both responded decidedly that higher levels of motivation would contribute to lower absenteeism and higher productivity (Question 3). There was some disagreement between cities and counties over whether motivation would "definitely" or "maybe" have an impact, but the sum of the positive responses was nearly the same for both types of agencies. It is interesting that small-agency managers believed more strongly that higher levels of motivation would

TABLE 1 SURVEY OF IOWA CITIES OF MORE THAN 5,000 PERSONS AND IOWA COUNTIES, 1988

|   | PERCENT              | RESPONDING            |
|---|----------------------|-----------------------|
|   | Cities (N= 29 of 71) | Counties (N=47 of 99) |
| 1. Do you think having more highly motivated maintena   | ince workers wou     | ld contribute to      |
| better quality of maintenance done?   | 5565                 |                       |
| DEFINITELY  | 93                   | 57                    |
| MAYBE   | 3                    | 36                    |
| DON'T KNOW  | 0                    | 0                     |
| PROBABLY NOT  | 0                    | 2                     |
| NOT AT ALL  | 0                    | 4                     |
| No Answer   | 3                    | 0                     |
| 2. Do you think that having more highly motivated ma  | intenance worker     | s would reduce        |
| worker turnover among maintenance staff?  |                      |                       |
| DEFINITELY  | 41                   | 26                    |
| MAYBE   | 34                   | 13                    |
| DON'T KNOW  | 10                   | 15                    |
| PROBABLY NOT  | 14                   | 38                    |
| NOT AT ALL  | 0                    | 9                     |
| 3. Do you think that having more highly motivated maint<br>to lower absenteeism and higher level of productivity? | enance workers w     | ould contribute       |
| DEFINITELY  | 76                   | 47                    |
| MAYBE   | 24                   | 40                    |
| DON'T KNOW  | 0                    | 6                     |
| PROBABLY NOT  | 0                    | 2                     |
| NOT AT ALL  | 0                    | 4                     |
|   | •                    |                       |
| 4. Do you think that having more highly motivated main  |                      |                       |
| staff to accept and adapt to changing work environment  |                      |                       |
| DEFINITELY  | 41                   | 40                    |
| MAYBE   | 45                   | 43                    |
| DON'T KNOW  | 10                   | 9                     |
| PROBABLY NOT  | 3                    | 6                     |
| NOT AT ALL  | 0                    | 2                     |
| 5. Would you be willing to participate in a pilot test of a   | ny methods or tra    | ining created to      |
| try to raise the motivation of maintenance workers to ev  | aluate the research  | ch results?           |
| DEFINITELY  | 24                   | 26                    |
| MAYBE   | 52                   | 49                    |
| DON'T KNOW  | 7                    | 19                    |
| PROBABLY NOT  | 14                   | 6                     |
| NOT AT ALL  | 3                    | 0                     |
|   |                      |                       |

NOTE: Percentages do not sum to 100 due to rounding each cell to nearest whole percent.

increase the *quality* of maintenance (Question 1) than that higher levels of motivation would increase *productivity* (Question 3). This suggests a managerial perception that an employee's attitude is more strongly associated with how work is done than with how much work is done. The implication is that management leans toward the rational-economic man model of personnel management.

There was no discernible difference between cities and counties in their perception of the effect higher levels of motivation would have on implementing changes in work rules or work environment. Both types of local agencies thought more highly motivated workers were more amenable to changes in the work environment (Question 4). This suggests a managerial perception more consistent with the self-actualizing man model, in which a person is expected to be most responsive to challenges and stimulation in the type of task assigned. This response also indicates that managers accept some elements of the social man model by assuming that highly moti-

vated persons are responsive to group goals. Because of how the question was asked, it is not possible to distinguish between the two possible managerial assumptions.

Question 5 was intended to measure the sense of commitment to employee motivation as a way to improve street and highway maintenance. Only about one-fourth of the respondents were strongly interested in a chance to implement measures that might increase employee motivation, and about another half were willing to think about it (responded "maybe"). The willingness of three-fourths of the respondents to consider motivational methods to improve maintenance suggests that local agency managers are interested in their employees' relationship to the agency and to their work.

Another inquiry to refine the managerial perceptions under the various behavioral classifications was desired as a followup to the initial inquiry. A brief telephone survey with city and county maintenance managers in the same survey population was conducted in 1990.

## TELEPHONE SURVEY OF IOWA CITIES AND COUNTIES

The 1988 survey brought to light a difference between the city and county perceptions of the value of employee motivation in reducing turnover. In the telephone survey, the following question was asked:

In your estimate, what proportion of your maintenance personnel have been with your agency less than 5 years? \_\_\_\_\_ And about what proportion have been with the agency more than 20 years? \_\_\_\_\_

This was intended to yield an estimate of turnover in a local agency. Any agency for which the percentage of the maintenance staff with 20 or more years of service exceeds the percentage of the staff with less than 5 years of service is considered to be stable and not to have employee turnover problems that could be improved with higher levels of employee motivation. Table 2 shows the results of the telephone survey of cities and counties. Twenty-or-more-year employees outnumbered 5-or-fewer-year employees in almost three times as many counties as those for which the reverse was true. In contrast, the cities were equally split between the two categories. In general, counties have stable maintenance work forces, whereas cities are about as likely to have stable as to have high-turnover work forces.

Seven questions were presented to the respondents regarding their perception of the importance of selected work environment conditions. The questions were designed to estimate the manager's evaluation of work environment characteristics and indicate a level of acceptance of the various behavioral models with respect to maintenance employees. Table 3 indicates how the questions were categorized to support the four behavioral models.

Table 4 contains the results of the telephone survey for the questions indicating acceptance of the rational-economic man behavioral model. For both cities and counties, salary or pay rate is seen as important, but not nearly as important as the

benefit package, in attracting and retaining maintenance workers. In the rational-economic man model, management is assumed to be buying the services of the workers. Clearly, the management perception, if a rational-economic man philosophy is applied, is that employee financial security is more important than pay. The questions considered to be secondary indicators of rational-economic man managerial assumptions provided results that were nearly identical to the salary question. Managers responded that these were factors of some importance but indicated a strong measure of uncertainty. Clearly, local agency maintenance managers think that monetary and individual success issues have a bearing on motivating their employees, but they do not regard these factors as the determining issues in building a highly motivated work force.

Table 5 contains the results of the telephone survey for the questions indicating acceptance of the social man behavioral model. The responses to the primary indicator question suggest that local agency maintenance managers do not place much value on the underlying assumption of the social man concept. The secondary indicator questions provided a strongly positive response, but these questions are more indicative of higher personal aspirations associated with other management behavioral models. Thus, the social man model view of maintenance employees is less of a managerial perception than the rational-economic man model.

Table 6 contains the results for the questions indicating acceptance of the self-actualizing man model. A weak positive response was given to the primary indicator questions, whereas a strong positive response was given to several of the secondary indicator questions. Because the secondary indicator questions with strong positive responses are more indicative of other managerial behavioral models, these data indicate that the self-actualizing man model is not seen as a good perceptual model for managing local agency maintenance workers. This was a bit surprising, because the direction of the responses in moving from the rational-economic man model to the social man model implied a more complex managerial attitude. The data indicate that the self-actualizing model is

TABLE 2 TELEPHONE SURVEY RESPONSE ON STAFF TENURE, IOWA, 1990

|  | PERCENT RESPONDING    |    |
|--|-----------------------|----|
|  | Cities (N = 20 of 65) |    |
| 0 - 10 percent of employees less than 5 years      | 20                    | 24 |
| 10 - 20 percent of employees less than 5 years     | 20                    | 42 |
| 20 - 30 percent of employees less than 5 years     | 35                    | 28 |
| 30 - 40 percent of employees less than 5 years     | 10                    | 6  |
| 40 - 50 percent of employees less than 5 years     | 0                     | 0  |
| more than 50 percent of employees less than 5 yrs  | 15                    | 0  |
| 0 - 10 percent of employees more than 20 yrs       | 15                    | 20 |
| 10 - 20 percent of employees more than 20 yrs      | 45                    | 24 |
| 20 - 30 percent of employees more than 20 yrs      | 20                    | 24 |
| 30 - 40 percent of employees more than 20 yrs      | 5                     | 20 |
| 40 - 50 percent of employees more than 20 yrs      | 0                     | 4  |
| more than 50 percent of employees more than 20 yrs | 15                    | 8  |
| more 20 yr employees than 5 yr employees           | 45                    | 64 |
| more 5 yr employees than 20 yr employees           | 45                    | 24 |

TABLE 3 CATEGORIZATION OF IMPORTANCE QUESTIONS FOR TELEPHONE SURVEY

|  | R-E | Soc | S-A | Cmplx |
|--|-----|-----|-----|-------|
| Importance of salary or pay rate         | P   |     | S   | S     |
| Importance of benefit package            | P   | *   | S   | S     |
| Importance of new equipment              | S   | 20  | P   | S     |
| Importance of group work experience      | Ä   | P   | S   | S     |
| Importance of individual review          | S   |     | P   | S     |
| Importance of public service recognition | -   | S   | S   | P     |
| Importance of supervisor sensitivity     |     | S   | S   | P     |

R-E = rational-economic man model

Soc = social man model

S-A = self-actualizing man model

Cmplx = complex man model

P = primary measure of adoption of management behavioral model
S = secondary measure of adoption of management behavioral model

TABLE 4 TELEPHONE SURVEY RESPONSES RELATED TO RATIONAL-**ECONOMIC MAN** 

|   | PERCENT I        | PERCENT RESPONDING |  |
|---|------------------|--------------------|--|
|   | Cities (N=       | Counties (N =      |  |
|   | 20 of 65)        | 50 of 99)          |  |
| PRIMARY Questions   |                  |                    |  |
| How important do you think the salary or pay rate is to your work for you, or in deciding to stay once they join you? | people in deci   | ding to come to    |  |
| VERY IMPORTANT  | 35               | 38                 |  |
| SOME IMPORTANCE   | 45               | 56                 |  |
| ONLY A LITTLE IMPORTANCE  | 15               | 4                  |  |
| NOT A FACTOR AT ALL   | 5                | 0                  |  |
| DON'T KNOW  | 0                | 2                  |  |
| How important do you think the retirement, health insura  | ance, sick leave | e, vacation, etc.  |  |
| programs are in attracting new employees or keeping good  | employees?       |                    |  |
| VERY IMPORTANT  | 60               | 70                 |  |
| SOME IMPORTANCE   | 35               | 30                 |  |
| ONLY A LITTLE IMPORTANCE  | 5                | 0                  |  |
| NOT A FACTOR AT ALL   | 0                | 0                  |  |
| DON'T KNOW  | 0                | 0                  |  |

## **SECONDARY** Questions

How important do you think it is to your maintenance personnel that your agency provide them with high quality equipment, such as new pickups, buying new graders rather than used equipment, and so on?

| VERY IMPORTANT           | 25 | 36 |
|--------------------------|----|----|
| SOME IMPORTANCE          | 70 | 50 |
| ONLY A LITTLE IMPORTANCE | 5  | 12 |
| NOT A FACTOR AT ALL      | 0  | 2  |
| DON'T KNOW               | 0  | 0  |

How important do you think it is to your maintenance personnel that each employee gets an annual review on his or her performance?

| m ms of her performance. |    |    |
|--------------------------|----|----|
| VERY IMPORTANT           | 30 | 8  |
| SOME IMPORTANCE          | 30 | 32 |
| ONLY A LITTLE IMPORTANCE | 30 | 28 |
| NOT A FACTOR AT ALL      | 10 | 18 |
| DON'T KNOW               | 0  | 2  |
| No Answer                | 0  | 12 |

## TABLE 5 TELEPHONE SURVEY RESPONSES RELATED TO SOCIAL MAN

|  | PERCENT I   | RESPONDING   |
|--|---|--|
|  | Cities (N=  | Counties (N =  |
|  | 20 of 65)   | 50 of 99)  |
| PRIMARY Question   |   |  |
| How important do you think it is to your employees that the  |   | teams or crews   |
| or groups where they can share their job efforts with other  |   |  |
| VERY IMPORTANT   | 25  | 10   |
| SOME IMPORTANCE  | 50  | 54   |
| ONLY A LITTLE IMPORTANCE   | 20  | 30   |
| NOT A FACTOR AT ALL  | 0   | 6  |
| DON'T KNOW   | 5   | 0  |
| SECONDARY Questions  |   |  |
| How important do you think it is to your maintenance pers  | onnel that the  | public be made   |
| ware of the value of their work to public safety and service   | e?  | •  |
|  |   |  |
| VERY IMPORTANT   | 45  | 50   |
|  | 45<br>45  | 50<br>38   |
| VERY IMPORTANT   |   |  |
| VERY IMPORTANT<br>SOME IMPORTANCE  | 45<br>5   | 38   |
| VERY IMPORTANT<br>SOME IMPORTANCE<br>ONLY A LITTLE IMPORTANCE  | 45  | 38<br>6  |
| VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW   | 45<br>5<br>5<br>0                                       | 38<br>6<br>4<br>2  |
| VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  How important do you think it is for the first-line supervis   | 45<br>5<br>5<br>0<br>or (foreman, cr                    | 38<br>6<br>4<br>2<br>rew chief) to be                      |
| VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW   | 45<br>5<br>5<br>0<br>or (foreman, cr                    | 38<br>6<br>4<br>2<br>rew chief) to be                      |
| VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  How important do you think it is for the first-line supervisensitive to differences among all the employees under his                                  | 45<br>5<br>5<br>0<br>or (foreman, cr                    | 38<br>6<br>4<br>2<br>rew chief) to be<br>sion?             |
| VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  How important do you think it is for the first-line supervise ensitive to differences among all the employees under his VERY IMPORTANT                 | 45<br>5<br>5<br>0<br>or (foreman, cr<br>or her supervi- | 38<br>6<br>4<br>2<br>rew chief) to be<br>sion?             |
| VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  How important do you think it is for the first-line supervise ensitive to differences among all the employees under his VERY IMPORTANT SOME IMPORTANCE | 45<br>5<br>5<br>0<br>or (foreman, cr<br>or her supervi- | 38<br>6<br>4<br>2<br>rew chief) to be<br>sion?<br>64<br>30 |

|                                       |  |  | PERCENT RESPONDING Cities (N = Counties (N   |  |
|---------------------------------------|--|--|--|--|
|                                       |  | 20 of 65)  | 50 of 99)  |  |
| PRIMARY Question                      | 15   |  |  |  |
| How important do y                    | ou think it is to your maintenance person  | onnel that your  | agency provid  |  |
|                                       | ty equipment, such as new pickups, buyir   | ng new graders   | rather than use  |  |
| equipment, and so o                   |  | 25   | 26   |  |
|                                       | VERY IMPORTANT<br>SOME IMPORTANCE  | 25<br>70   | 36<br>50   |  |
|                                       | ONLY A LITTLE IMPORTANCE   | 5  | 12   |  |
|                                       | NOT A FACTOR AT ALL  | 0  | 2  |  |
|                                       | DON'T KNOW   | 0  | 0  |  |
| How important do y                    | ou think it is to your maintenance pers  | sonnel that eac  | h employee ge  |  |
| an annual review or                   | his or her performance?  |  |  |  |
|                                       | VERY IMPORTANT   | 30   | 8  |  |
|                                       | SOME IMPORTANCE  | 30   | 32   |  |
|                                       | ONLY A LITTLE IMPORTANCE   | 30   | 28   |  |
|                                       | NOT A FACTOR AT ALL  | 10   | 18   |  |
|                                       | DON'T KNOW   | 0  | 2  |  |
|                                       | No Answer  | 0  | 12   |  |
| SECONDARY Ques                        | stions<br>ou think the salary or pay rate is to you  | r neonle in dec  | iding to come  |  |
| work for you or in                    | deciding to stay once they join you?   | people in dec  | iding to come  |  |
| work for you, or in                   | VERY IMPORTANT   | 35   | 38   |  |
|                                       | SOME IMPORTANCE  | 45   | 56   |  |
|                                       | ONLY A LITTLE IMPORTANCE   | 15   | 4  |  |
|                                       | NOT A FACTOR AT ALL  | 5  | 0  |  |
|                                       | DON'T KNOW   | 0  | 2  |  |
|                                       | you think the retirement, health insura  |  | e, vacation, etc   |  |
| programs are in atti                  | racting new employees or keeping good  |  |  |  |
|                                       | VERY IMPORTANT   | 60   | 70   |  |
|                                       | SOME IMPORTANCE  | 35   | 30   |  |
|                                       | ONLY A LITTLE IMPORTANCE   | 5  | 0  |  |
|                                       | NOT A FACTOR AT ALL<br>DON'T KNOW  | 0  | 0  |  |
|                                       |  |  |  |  |
|                                       | ou think it is to your employees that the<br>cy can share their job efforts with other   |  | teams or crew  |  |
| or groups where the                   | VERY IMPORTANT   | 25   | 10   |  |
|                                       | VERT IIII ORTINI   |  | 54   |  |
|                                       | SOME IMPORTANCE  | 20   |  |  |
|                                       | SOME IMPORTANCE ONLY A LITTLE IMPORTANCE   | 50<br>20   |  |  |
|                                       | ONLY A LITTLE IMPORTANCE   | 20   | 30   |  |
|                                       |  | 10.00  | 45.40  |  |
| How important do y                    | ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL   | 20<br>0<br>5   | 30<br>6<br>0   |  |
|                                       | ONLY A LITTLE IMPORTANCE<br>NOT A FACTOR AT ALL<br>DON'T KNOW<br>you think it is to your maintenance pers<br>to public safety and service?   | 20<br>0<br>5   | 30<br>6<br>0   |  |
|                                       | ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is to your maintenance pers to public safety and service?  VERY IMPORTANT  | 20<br>0<br>5<br>sonnel that the  | 30<br>6<br>0<br>public be made   |  |
|                                       | ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is to your maintenance pers to public safety and service?  VERY IMPORTANT SOME IMPORTANCE  | 20<br>0<br>5<br>sonnel that the  | 30<br>6<br>0<br>public be mad  |  |
|                                       | ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is to your maintenance pers to public safety and service? VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE  | 20<br>0<br>5<br>sonnel that the<br>45<br>45<br>5   | 30<br>6<br>0<br>public be mad<br>50<br>38<br>6   |  |
|                                       | ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is to your maintenance pers to public safety and service? VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL  | 20<br>0<br>5<br>sonnel that the<br>45<br>45<br>5<br>5  | 30<br>6<br>0<br>public be mad<br>50<br>38<br>6<br>4  |  |
|                                       | ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is to your maintenance pers to public safety and service? VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE  | 20<br>0<br>5<br>sonnel that the<br>45<br>45<br>5   | 30<br>6<br>0<br>public be mad<br>50<br>38<br>6   |  |
| aware of their work  How important do | ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is to your maintenance pers to public safety and service? VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is for the first-line supervis  | 20<br>0<br>5<br>sonnel that the<br>45<br>45<br>5<br>5<br>0<br>or (foreman, c                                 | 30<br>6<br>0<br>public be made<br>50<br>38<br>6<br>4<br>2  |  |
| aware of their work  How important do | ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is to your maintenance pers to public safety and service?  VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is for the first-line supervis ces among all the employees under his   | 20<br>0<br>5<br>sonnel that the<br>45<br>45<br>5<br>5<br>0<br>or (foreman, c<br>or her supervise             | 30<br>6<br>0<br>public be made<br>50<br>38<br>6<br>4<br>2<br>rew chief) to b                           |  |
| aware of their work  How important do | ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is to your maintenance pers to public safety and service?  VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is for the first-line supervis ces among all the employees under his VERY IMPORTANT  | 20<br>0<br>5<br>sonnel that the<br>45<br>45<br>5<br>5<br>0<br>or (foreman, c<br>or her supervis              | 30<br>6<br>0<br>public be made<br>50<br>38<br>6<br>4<br>2<br>rew chief) to b                           |  |
| aware of their work  How important do | ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is to your maintenance pers to public safety and service?  VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is for the first-line supervis ces among all the employees under his VERY IMPORTANT SOME IMPORTANCE                          | 20<br>0<br>5<br>sonnel that the<br>45<br>45<br>5<br>5<br>0<br>or (foreman, c<br>or her supervise<br>65<br>35 | 30<br>6<br>0<br>public be made<br>50<br>38<br>6<br>4<br>2<br>rew chief) to b<br>sion?<br>64<br>30      |  |
| aware of their work  How important do | ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is to your maintenance pers to public safety and service?  VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is for the first-line supervis ces among all the employees under his VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE | 20<br>0<br>5<br>sonnel that the<br>45<br>45<br>5<br>0<br>or (foreman, c<br>or her supervis<br>65<br>35<br>0  | 30<br>6<br>0<br>public be made<br>50<br>38<br>6<br>4<br>2<br>rew chief) to b<br>sion?<br>64<br>30<br>4 |  |
| aware of their work  How important do | ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is to your maintenance pers to public safety and service?  VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  you think it is for the first-line supervis ces among all the employees under his VERY IMPORTANT SOME IMPORTANCE                          | 20<br>0<br>5<br>sonnel that the<br>45<br>45<br>5<br>5<br>0<br>or (foreman, c<br>or her supervise<br>65<br>35 | 30<br>6<br>0<br>public be made<br>50<br>38<br>6<br>4<br>2<br>rew chief) to b<br>sion?<br>64<br>30      |  |

TABLE 7 TELEPHONE SURVEY RESPONSES RELATED TO COMPLEX MAN

| PRIMARY Questions How important do you think it is to your maintenance perso aware of their work to public safety and service?  VERY IMPORTANT  SOME IMPORTANCE  ONLY A LITTLE IMPORTANCE  NOT A FACTOR AT ALL  DON'T KNOW  How important do you think it is for the first-line superviso sensitive to differences among all the employees under his of   | onnel that the 45 45 5 5 | 50<br>38          |
|---|--------------------------|-------------------|
| How important do you think it is to your maintenance perso aware of their work to public safety and service?  VERY IMPORTANT  SOME IMPORTANCE  ONLY A LITTLE IMPORTANCE  NOT A FACTOR AT ALL  DON'T KNOW  How important do you think it is for the first-line superviso sensitive to differences among all the employees under his of   | 45<br>45<br>5<br>5       | 50<br>38          |
| aware of their work to public safety and service?  VERY IMPORTANT  SOME IMPORTANCE  ONLY A LITTLE IMPORTANCE  NOT A FACTOR AT ALL  DON'T KNOW  How important do you think it is for the first-line superviso sensitive to differences among all the employees under his of  | 45<br>45<br>5<br>5       | 50<br>38          |
| VERY IMPORTANT SOME IMPORTANCE ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  How important do you think it is for the first-line superviso sensitive to differences among all the employees under his o  | 45<br>5<br>5             | 38                |
| SOME IMPORTANCE ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  How important do you think it is for the first-line superviso sensitive to differences among all the employees under his o   | 45<br>5<br>5             | 38                |
| ONLY A LITTLE IMPORTANCE NOT A FACTOR AT ALL DON'T KNOW  How important do you think it is for the first-line superviso sensitive to differences among all the employees under his o   | 5                        |                   |
| DON'T KNOW  How important do you think it is for the first-line superviso sensitive to differences among all the employees under his o  |                          | 6                 |
| How important do you think it is for the first-line superviso sensitive to differences among all the employees under his o  | 0                        | 4                 |
| sensitive to differences among all the employees under his o  |                          | 2                 |
|   |                          |                   |
| VERY IMPORTANT  | n ner supervi<br>65      | 64                |
| SOME IMPORTANCE   | 35                       | 30                |
| ONLY A LITTLE IMPORTANCE  | 0                        | 4                 |
| NOT A FACTOR AT ALL   | 0                        | 0                 |
| DON'T KNOW  | 0                        | 2                 |
| SECONDARY Questions   |                          |                   |
| How important do you think the salary or pay rate is to your  | neonle in dec            | iding to come to  |
| work for you, or in deciding to stay once they join you?  | people in dec            | ionig to come to  |
| VERY IMPORTANT  | 35                       | 38                |
| SOME IMPORTANCE   | 45                       | 56                |
| ONLY A LITTLE IMPORTANCE  | 15                       | 4                 |
| NOT A FACTOR AT ALL   | 5                        | 0                 |
| DON'T KNOW  | 0                        | 2                 |
| How important do you think the retirement, health insurar   | nce, sick leav           | e. vacation, etc. |
| programs are in attracting new employees or keeping good  |                          | ,                 |
| VERY IMPORTANT  | 60                       | 70                |
| SOME IMPORTANCE   | 35                       | 30                |
| ONLY A LITTLE IMPORTANCE  | 5                        | 0                 |
| NOT A FACTOR AT ALL   | 0                        | 0                 |
| DON'T KNOW  | 0                        | 0                 |
| How important do you think it is to your employees that they  | get to work is           | n teams or crews  |
| or groups where they can share their job efforts with other p   |                          |                   |
| VERY IMPORTANT  | 25                       | 10                |
| SOME IMPORTANCE   | 50                       | 54                |
| ONLY A LITTLE IMPORTANCE  | 20                       | 30                |
| NOT A FACTOR AT ALL   | 0                        | 6                 |
| DON'T KNOW  | 5                        | 0                 |
| How important do you think it is to your maintenance perso them with high quality equipment, such as new pickups, buying equipment, and so on?  |                          |                   |
| VERY IMPORTANT  | 25                       | 36                |
| SOME IMPORTANCE   | 70                       | 50                |
| ONLY A LITTLE IMPORTANCE  | 5                        | 12                |
| NOT A FACTOR AT ALL   | 0                        | 2                 |
| DON'T KNOW  | 0                        | 0                 |
| How important do you think it is to your maintenance personan annual review on his or her performance?  | onnel that eac           | h employee gets   |
| VERY IMPORTANT  | 30                       | 8                 |
| SOME IMPORTANCE   | 30                       | 32                |
| ONLY A LITTLE IMPORTANCE  | 30                       | 28                |
| NOT A FACTOR AT ALL   | 10                       | 18                |
| Property and Company of the Company | 0                        | 2                 |
| DON'T KNOW  | 0                        | 12                |

not perceived as any more applicable than the social man model.

Table 7 contains the results for the questions indicating acceptance of the complex man model. The responses to the primary indicator questions are most positive for this model. The manager perception is, clearly, that people need to be treated as individuals in their particular circumstances, even though the manager regards the workers as sensitive to financial security issues. This is an interesting result because most of the local agencies are unionized, which limits the degree to which workers can be treated in a unique way for any given circumstance. It may be that, because these are small agencies, there is still an opportunity to know the workers intimately despite union contracts and work rules. Workers were not directly questioned in this study, so it is not known whether their perceptions match those of the managers to any significant degree.

#### **SUMMARY**

It was concluded that small local agency maintenance managers perceive their workers to be sensitive to financial security issues for employee motivation and that they also support an assumption of the complex man model of behavior. Acceptance of the complex man model indicates that the managers perceive that they must evaluate each employee's situation and respond differently to different people in different circumstances to motivate and lead their workers effectively. Local agency maintenance managers regard improved motivation as helpful in improving the quality of maintenance, achieving less absenteeism, and gaining higher productivity. These findings suggest that street and highway maintenance can be improved by providing local maintenance managers with tools and skills to better motivate employees.

Because the research reported in this paper only addresses the managers' perceptions, further study should be undertaken to examine the perceptions of the workers to determine whether they are similar. Even without data on worker perceptions, it is important to note how managers view the motivation of their employees. If managers do not believe that people-oriented and worker self-esteem incentives are important, study and research on developing methods to create such incentives will never be effectively implemented in local agencies. The results of this limited study suggest that a wide range of manager perceptions exist and, thus, that local agency maintenance managers are open to new ways of enhancing the motivation of their employees if the new ways are consistent with the managers' views of the employees.

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All conclusions and opinions drawn from these data and expressed in this paper are solely those of the authors.