

this section, as well as by the relatively lengthy employment of several of its members.

Design Section

The design section of the division of engineering is composed of some ten or eleven persons whose principal duties are associated with the design of city projects. Most of the personnel are either engineers or draftsmen. Like the other three sections of the engineering division, the design section is headed by an engineer (civil service classification Civil Engineer III), who is assisted by the man directly below in the classification-authority system. Much of the work of the members of this section is office work, although during the summer construction months some field inspections are made (unofficially) by personnel of the section.

Because the design section is at the center of the engineering function of the public works -- and because of the close personal ties between the head of the design section and the assistant director of public works -- members of this section work directly with the administration more frequently than do members of any of the other sections in the engineering division. Because the director of public works is more often concerned with intra-organizational and administrative matters than his assistant, the latter is likely to be called upon for engineering advice and policy by members of the design section. The head of this section, in fact, as the unofficial assistant of the assistant director, assumes the responsibilities of directing the public works when members of the administration are not available. He is also asked, again unofficially (at least in terms of his job description), to write certain memoranda and recommendations for the public works.

Additionally, other members of the department at times ask the design section head to use his unofficial influence to affect decisions which members of the administration are to make. Foremen from other divisions of public work, for example, have asked the head of the design section to help them by talking to the director and having him change requisitions submitted by their supervisors. While the requests involve no violation of legal standards, they do represent deviations from the official chain of command, deviations which do not always contribute to harmonious relations between the design section head and other comparable members of the public works.

The chain of command within the design section follows the civil service classification of positions. Design engineers have authority over draftsmen in the section. Similarly, among the engineers, their authority positions are consistent with their civil service classification. Strict adherence to this system is not characteristic of the design section, however. Depending on the circumstances -- the characteristics of the task, the knowledge a given individual may possess of a project, etc. -- information and orders may be given by the head of the section directly to one of the draftsmen. This arrangement, which appears to be typical of all the units within the public works, is also characteristic of the chain of command outside the section. Thus the director or his assistant may confer with one of the engineers or draftsmen without going through the head of the section.

Relationships with other divisions and other city organizations are frequently marked by personal acquaintanceships, either those which are based on previous experience together (the design section head and the manager of the water utility worked together, for example) or those based on friendships which have developed out of necessary work contacts ("I think it all goes along with the closeness," said one engineer, "we know each other rather well personally and in making shortcuts, we do it efficiently whereas in a much larger office you can't"). Personnel in the design section work closely with the maintenance and water divisions, the engineers drawing up the plans for installations which division crews will have to maintain. If the plans, then, can be made consistent from their beginnings with the procedures and equipment of these divisions, problems of maintenance and repair can be avoided.

Other extraorganizational cooperation results, not so much from overlapping responsibilities, as the presence of a professional fraternity. Engineers in the telephone department, for example, call on their counterparts in the design section for moral support in convincing the telephone administration that a certain set of plans instead of another, or one location rather than some other, is preferable. In addition, the professional fraternity includes private engineers in Anchorage whose advice may be sought on public projects. Particularly useful are the suggestions of those engineers who have been previously employed by the city and have, as a result, firsthand knowledge of the existing utility system. Although the exact number of former employees now engaged in private business is not known, comments from members of the public works, in virtually all of the divisions, suggest that there may well be a sizeable number of them.

Construction Section

The construction section is responsible for construction site inspection of all contracts let by the city. It is also responsible for assessment calculations of street construction and repairs and, during the winter, is engaged in the actual design of street construction projects. Composed of approximately six permanent members, and, depending on the work load, extra temporary men during the summer, the section is headed by a Civil Engineer III whose assistant, a public works "old-timer," is a Civil Engineer II.

Each of the inspectors in the section is assigned, during the summer months, to separate construction jobs; the result is that the official authority structure (i.e., the civil service classifications) does not have much relevance. Officially, the assistant head has authority over all of the inspectors but in actual practice this authority is not often evoked. Rather, each of the inspectors generally works independently of the others and makes the minor decisions and changes which accompany any construction without consultation with either the assistant or the section head. This independence of overt authority is suggested in a section member's description of his official responsibilities.

I work with contractors. I supervise and administer . . . construction contracts. The city council

awards a contract and then they turn it over to /us/ for supervision of inspection and administration of the contract. . . . My job duties, I would say, are very loosely and probably broadly described. They are not that specific. My main job is to foresee possible problems or make necessary changes and adjustments in projects that aren't apparent at the time they are awarded.

The same freedom of operation is described in the following characterization of the section head's position and the position of one of his inspectors.

/The section head/ has authority in /the director's/ office to handle problems with construction contractors and to delegate authority to me. His authority is seldom ever questioned, consequently mine is not. He's quite an independent little man and tolerates no interference and just about runs his section himself.

Priorities in these inspection operations are established by the contracting crews; whenever a decision is required which directly affects the progress a contractor makes on his project, that decision takes precedence over every other task.

During the winter months, the section is devoted largely to office work. Contracts from the previous building season are settled, plans for the coming season are developed, and necessary revisions are made in these plans before the work actually begins. Because the building season is relatively short (five months), advantage lies in making as many of the changes and revisions in construction plans as possible before the work begins. Similarly, the top priority of working crew's problems is based on the importance of efficiency during the summer.

The independence of the members of the construction section is reflected in the extent to which deviations from the official decision-making process and chain of command are tolerated. All along the line of authority, decisions are made at a lower level than is officially required. Supervisory personnel are informed of these decisions only after the fact. For one member of the section, this freedom constitutes "one of the most attractive aspects" of his job. Thus, he said:

I'm fairly free to make most decisions. If it involves a large amount of money, I usually clear it with my boss. If there are times that I don't feel there is enough time -- if there's something that has to be decided right away and he's not available -- I usually go ahead and make it. If he feels I've made a wrong decision, then he tells me so, and I get an appropriate chewing out . . . but he doesn't begrudge the fact that I've made the decision.

The small size of the section and the fact that many of the members have been employed by the public works for some time probably makes this independence possible and considerably more effective than it might otherwise be. However, the more important contingencies appear to be those associated with the independent nature of the assignments themselves and the efficiency required by the climatic limitations on the building season.

The section head maintains more overt friendly relationships with his subordinates than has been typical of those sections already discussed. All the personnel in his section are close friends. They have been working for the department five to nine years -- an average length of service which appears to be somewhat higher than that typical of public works employees. Nor is this friendship limited to the job as is frequently true of other units of the public works. Hunting and fishing trips involving members of this section, as well as other friendly nonwork associations, are a normal part of the section's activities.

Like the other sections of the engineering division, the construction section maintains a number of work-related ties with other divisions within the public works and with city organizations outside the department. "Actually, we get involved in pretty nearly all the departments at one time or another," said a member of the section, "but I would say the water utility, maintenance division, telephone department, and municipal light and power department most frequently." In the course of their official duties, section inspectors also take on a number of unofficial tasks; the most important is directly related to these extraorganizational ties. One member of the section described this task:

I travel around the city all day every day and I have occasion to see things that possibly need attention that are really not necessarily my responsibility. But I generally call the appropriate person -- whoever the job belongs to -- and try to see that it does get done.

Arrangements have also been made with fire and police departments and with the gas company and water utility to notify them when streets and utilities are to be cut off during construction projects. The section head has friends and acquaintances in virtually all of these organizations which facilitates the necessary communications. The official channels for notifying other city departments of changes and construction projects, it was suggested, are not always the most efficient. In addition to these ties with other city departments, the head of the construction section maintains close ties with private contractors in the area. These relationships are the result of his section's responsibilities: the inspection and supervision of construction projects contracted by the city.

Another Time One characteristic of the head of the construction section which was to be especially significant during the emergency was the esteem with which he is regarded by many of his fellow engineers. Both the head of

the survey and of the design sections respected the ability of the construction head. Thus, one described him as:

. . . just the type of person that commands a lot of respect and has a personality such that the people he works with willingly go along with him.

The assistant in the construction section is one of the "old-timers" in the public works department. His advice, as a result, is frequently sought by members of public works who have not been employed so long. His position was described in the following statement:

/He has/ a very wide range of experience in the construction field and the young engineers up there . . . /go to him/ with problems they have been doing -- principally how to work out something so it's going to be practical.

Since the earthquake, the assistant has been transferred to the port department and, because of his experience and unique qualifications, no one has been found to fill his position. Typical of his function in the public works as an "old-timer" is this characterization of him by the head of one of the other engineering sections.

He is a very old-timer, probably forty or forty-five years in the construction business. Fantastic memory. He can remember a method of solving a problem from forty years ago that will still work today. And he is very free in passing his information out . . . and that's very valuable to us many times.

Building Construction and Maintenance Section

The building construction and maintenance section of the engineering division was officially established in October of 1963, although it had existed for some time as an unofficial section of that division. Its principal responsibilities are associated with structural engineering, preventive maintenance, remodeling, and repairs of the eighty-six publicly owned buildings in Anchorage. In addition, the engineering staff of the section provides assistance to local architects and builders in meeting the standards set up by the building codes and serves as a coordinating and supervising agency for decision making in these matters. The origins of the section are outlined in the following statement from the 1964 Annual Budget of Anchorage:

Departments not employing civil engineering personnel called upon the /engineering division/ for design and estimating assistance. As the demand for these services increased it soon became necessary to make a specific assignment of an engineer

and a repair crew to handle them. Through necessity, a section has been set up, though unofficially, within the division. It was decided that the future need for such a unit is apparent and this budget request is made for it for the 1964 fiscal year.³

From the same source, the rationale for the section's organization within the public works is suggested, as well as an indication of the specific type of work the section will accomplish.

Considerable research work has gone into the organization and operation of this section. The type, use and size of all buildings has /sic/ been determined, "as built" plans have been assembled or produced, a cost accounting system has been set up, a cost curve covering routine jobs has been developed, an estimating table for numerous phases of construction work is being developed, a monthly inspection program of all buildings has been started, preventive maintenance as well as breakdown maintenance is being accomplished and where possible, city forces are used to accomplish work that would otherwise be contracted on a time and material basis.⁴

This section, then, combines the functions of both the engineering and maintenance divisions; it is a hybrid section, responsible for structural engineering designs and plans on the one hand, and for maintenance operations on the other. Thus, it belongs neither in the engineering division nor the maintenance division but would be most effective as an independent division -- a status which it attained some seven months after the earthquake. That it was, however, the most independent of the sections of the engineering division, particularly during the emergency period, will be discussed later in this report.

The section is composed of half a dozen men, loosely organized into two groups corresponding to the dual functions of the section. Their engineering responsibilities are assigned to the head of the section and his assistant, both classified as civil engineers. The maintenance and repair functions are the responsibility of the remaining men, who are essentially individual specialists in the relevant trades -- carpentry, plumbing and heating, and electrical work. These men, plus two general maintenance men, are supervised by the building maintenance foreman, who at Time Two, doubled as the professional carpenter of the section.

Perhaps to an even greater extent than the other sections of the engineering division, the building construction and maintenance section does not follow a strict chain of command; rather, the small size of the section, the individualized nature of the work, and the antibureaucratic methods of the section head produce an informal atmosphere and a pointedly independent orientation to the work. The section head's somewhat unorthodox interpretation of supervision was described in the following statement.

/He has/ never cared if /the men/ don't show up until noon. /He/ knows if they take off early or if they come in late that their job is going to be done anyway. /He/ can rely on them, there is no question about it. . . . It works very well. No one has ever taken advantage of it.

This same informal approach characterizes the section's relationships with other divisions of public works and with other city departments. Because this approach is not shared by others, the section head has often found himself and his section less than completely appreciated by his colleagues. "We pretty much have a reputation as the 'do-it kids,'" it was suggested.

We bounce in; we get it done; we move out. Sometimes we don't even ask if it's all right to do it. We just do it and worry about the consequences later. . . . We were sometimes very unpopular with other departments because we do get kind of over-zealous and we skirt the normal channels of the bureaucracy. . . . We don't adhere to them too strictly.

The section has also taken on a number of unofficial tasks, particularly the kinds of tasks which would, if they were done officially, take a considerable amount of time or, perhaps, never be authorized at all. Thus, members of the section provide engineering advice and structural plans on small jobs for city departments which do not employ engineering personnel; they are frequently called upon to provide men and equipment, unofficially, for little jobs which have not been budgeted, and to produce special tools and equipment for the water utility and the telephone department. For the parks and recreation department, more than any other city organization, the section does much unofficial "moonlighting." "They operate on a very limited budget," a member of the section explained, "and they have a small staff over there working constantly to improve the park system against great odds: so we help them out whenever we can with whatever we can." Unofficially, the section members also do favors for city employees who come to them for building advice and inspection: "If we can find the time, we'll fit it in." Priority in tasks, however, is always given to their official responsibility for the maintenance and repair of city-owned buildings.

The section head's informal adaptation of the authority system appears to be largely successful within his section. Those who work for him are granted the autonomy required to accomplish their work. As an independent carpenter or plumber or electrician, each is able to make his own decisions without constant referral to the section foreman or the section head. Indeed, one of the criteria for being hired in the section is the ability to work with little direct supervision. This autonomy is extended even to policy decisions: in the absence of both the section head and his assistant, the men are authorized to make their own decisions, with the assurance that

the section head will, whether their decisions were right or wrong, back them up. Understandably, the section head has sometimes been required to defend procedures at variance with the official public works regulations. He is convinced, however, that the advantages in this approach are greater than the possible disadvantages, a point of view which suggests that he is less concerned with his relationships with those outside his section than with those within it. Indeed, this independence is the source of much positive feeling within his section as well as some negative reactions from those outside.

During normal operations, for example, the independence of the section especially affects the section head's relations with his superiors. Not only the decisions made by members of his section, but also his own decisions made when the assistant director and director are unavailable -- and of which the section head informs them only after the fact -- often are the source of administrative displeasure. The section head is aware of what he is doing in making these unilateral decisions. He expects to get his "chewing out" if his decision is wrong; if it is right, he can expect "a pat on the head."

Similarly, the section head occasionally uses funds before they have been officially allocated to him. In situations he defines as serious -- repairs which are required immediately and the like -- he often goes ahead and makes the repairs before sending the work proposal to his superiors. When such a proposal for funds is turned down after the work has already been done, he has to pick up the money elsewhere in his budget to cover the deficit. These deviations from standard procedures, together with an apparently blunt manner of speaking with others, result in certain communication problems with others in the public works. Thus, it was indicated:

/Section/ relationships with some of the other department/s/ . . . are very poor. And the reasons they are very poor is because /we/ will just flatly tell them, "No, you go to hell," or what have you when it's necessary. /We've/ gotten in a fling with . . . just about everybody on that.

To this propensity for blunt speech, add a refusal to accept administrative pressure.

We don't accept pressure from above. To their saying, "Well, I've got to have this yesterday," we reply, "You just wait your turn; we have your work scheduled and we're going to do it." If we don't consider it of utmost importance, why, they just wait -- regardless of who it is. On occasion we have bent before it -- but not usually.

When these characteristics are combined with deviations from the department's official procedures for decision making and financial allocations, the results are very likely to be disrupting to the administration. Thus, to say, as one respondent did, that the section head's communication with those below him was much better than his communication with those above him is probably something of an understatement.

Additional evidence suggests that this assessment should be amended to include positive relationships with those members of the department (and other city organizations) whose positions are roughly equal to the section head's. A forthright approach and impatience with bureaucratic procedures probably annoy superiors in an organization far more than equals or subordinates. The difficulty, in oversimplified terms, is that the section is not bureaucratic enough. To that extent, the subsequent independence of the building construction and maintenance section (i.e., its autonomy as a division within the public works) may be seen as a partial solution to the problem. By making official the independence which the section had unofficially claimed, but by removing the section from the bureaucratic props of the engineering division and forcing it to compete on equal terms with other divisions in the department, the administration might force the section to bureaucratize itself.⁵

Maintenance Division

The maintenance division of the public works is the largest single division of the organization. It is composed of three sections and is headed by the superintendent of public works and his assistant, two positions which are also included in the administration of the entire department. Each of the three sections is headed by a foreman responsible to the superintendent of public works and his assistant. In the following portion of this report, each of these sections -- the general maintenance, equipment maintenance, and sanitation sections -- are discussed.

General Maintenance Section

The general maintenance section of the maintenance division is made up of some thirty permanent employees who are augmented during the summer months by about half their number in temporary help. The section is headed by the general foreman who supervises the three section foremen directly below him in the chain of command. Each of these foremen is responsible for one of the three sectors into which the city is divided. Within each of these sectors the foreman and his crew are charged with maintenance of streets, storm and sanitary sewers, snow removal, and other related functions.

The crews are made up of men with varying skills and varying experience with public works, some more knowledgeable about city installations than others, but the composition of these crews is not constant. The foremen are free to choose among the available men on the basis of the assignment, picking men whom they feel will be most useful in completing a particular task. Nonetheless, there appears to be an unofficial norm that the men with considerable time in public works will be assigned so that each crew has at least one man with personal knowledge of procedures and locations of existing installations. Thus, a certain degree of consistency does exist in the composition of the crews. This is particularly true of winter work when heavy equipment like snowplows is typically in use. "It's real good," one of the operators suggested, "if you can work with the same person. You get a team working: it makes real nice teamwork." If the men have worked together,

greater efficiency is frequently the result because they can anticipate the other's mode of operation.

Generally the men who have been employed by public works for an extended period of time hold the position of Maintenance Man III or IV. These are the employees who are included in every maintenance crew and who are designated within the department as "lead men." The lead man of any crew occupies a position of authority directly below that of the foreman. Officially, however, the lead man does not have the same authority as the foreman, even in the foreman's absence, although the lead man is delegated the responsibility of supervising the work of the crew when his superior is not there. Unofficially, the foremen have granted their lead men essentially the same authority in decision making which foremen enjoy. As one foreman put it:

The way I feel about it, if a man's going to be a lead man, he's the same as a foreman because you're putting him in that position and he should be making the decisions.

One of the members of the crew expressed the same expectations:

There's times that we know there's things to do and we go ahead on the job. I mean, that would be the only efficient way to do it. We know what's to be done. The foremen can't give us every detail and that's what some of the older fellows are supposed to be for.

Increased authority is delegated to the lead men during "normal emergency" work when the foremen find it impossible to directly supervise all the operations of their crews. The annual crisis which accompanies the spring break-up (approximately the middle of April), for example, is marked by an increase in the authority of the lead men as the section attempts to control flooding and to remove the mud and slush from the streets.

Each of the foremen and his crew are responsible for all maintenance work in their sector of the city. This work includes a wide range of tasks as was indicated in this summary statement:

Our normal duty is streets, sidewalks, storm drains, sewers, and anything else that would go along with them in maintenance. You can just about guess what goes along there: in winter time there would be snow removal, snow haul, sanding, and in the warmer spring days, we have problems with thawing and drains full of ice and so on. And then, of course, when the spring comes you have your major break-up when we try to keep the drains open, keep them from flooding, and, of course, the sewer problems which are there the year round. In summer time our work will consist of dust control, plus storm

storm drains, cleanup along the streets, pavement repair -- repaving and patching -- just about anything that goes along with the maintenance of any street.

The range of the work, however, makes proficiency in all its aspects difficult for any one of the foremen. As a result, some specialization has taken place. One of the foremen, for example, is unofficially designated as a supervisor of sewer maintenance. That he is also the senior man with a good deal more experience in the maintenance division than either of the other two foremen probably adds to his authority in this area. City systems, particularly those such as sewers which are not surface installations, are difficult to locate and maintain since the city maps are not always complete. Men who have firsthand knowledge of those installations -- men who were involved in the initial planning and construction of the sewer system, for example -- are especially vital to efficient maintenance and repair. The other two foremen, thus, rely on the third for advice and assistance in their own work. He, in turn, frequently consults with the head of the sanitation section for similar advice. Again, the reason for this consultation is the greater experience of the head of the sanitation section.

Emergency work is not alien to the members of the general maintenance section. The spring breakup is a yearly crisis, predictable certainly, but a situation which calls for emergency action nonetheless. Crises also occur in the city's sewage and water systems which the men of the general maintenance section are expected to meet. Such emergencies require that a certain amount of flexibility be built into the structure of the section. This is one reason why the men are not permanently assigned to any one of the foremen or to any one of the sectors of the city, or indeed, to any one type of work. Similarly, working hours must be variable if the recurrent emergencies are to be met. One foreman suggested the following situation as typical:

You can go to work in the morning at 7:00 and have all your work phased out, and by 12:00 noon everything's changed.

And a crew member described his own work experience.

It is not out of the ordinary here for them to have you do most anything. Suddenly things come up, a sudden emergency like a break in the water mains, and maybe you have to work all night even during normal times to get the water back on.

These "normal emergencies" also affect the section's relationships with other units in the public works and with other city departments. Maintenance personnel are loaned to other divisions of public works and to other departments when extra emergency help is needed. Within the section unofficial tasks are taken on, tasks which may be done as favors for other sections of the maintenance division or for other divisions of the public works. In addition, the members of the general maintenance section may, at their own

discretion, provide services unofficially for the public. Permission to engage in these activities has come from the public works superintendent under the rubric of "public relations."

The three foremen meet with the section general foreman at least once a day to draw up plans for future work and to make necessary decisions concerning present assignments. These meetings, which may take place in the morning before the men have been dispatched or at the end of a workday, sometimes include the lead men. One of the foremen, for example, likes to have his lead men explain the work to the members of the crew as this, he believes, tends to reinforce the position of the lead man and allows the foreman to delegate greater authority to his assistant. Major decisions, however, are normally left for the foremen to make, or, if there is a chance that their decisions may "backfire" (as one of the foremen put it), they are passed up to the general foreman and his supervisor.

According to the members of the section, the official chain of command is generally followed. Such deviations as occur result from the temporary inaccessibility of persons who officially should be consulted. "When you try to run down or try to look for something," one of the foremen said, "a lot of times you have to bypass somebody if you're going to get it done that particular day." When such gaps in the structure are created, the foremen attempt to fill them in as soon as possible by informing their superior of what has been done. Various members of the administration apparently follow the same procedure when they bypass the foremen and send orders directly to the men on the crews. At times some friction results from this kind of variation in the chain of command; one of the crew foremen expressed his reaction in the following statement:

I feel I know my men better than anybody else knows them. I know their capabilities and I know where I should place them. I don't feel that any man -- any supervisor above me -- should dispatch my men, and I don't feel that they should give me a job when it should come through the chain of command, because my immediate supervisor is the one that I consult and it's his responsibility. . . . Of course, I didn't care for it a bit and I expressed my opinion on two or three occasions of this.

This was not a criticism of all his superiors, however. The foreman indicated that there were no such difficulties between himself and his immediate supervisor, the general foreman; the latter has always conscientiously informed crew foremen of orders issued in their absence. In this respect, the general foreman acts much like a colleague of the crew foremen rather than a superior; certainly greater pressure motivates a subordinate to inform his superior of decisions made in the superior's absence than motivates a superior in the reverse of that situation. The colleague relationship of the three crew foremen and the general foreman will be discussed later in this monograph.

The five-hundred-dollar limit which applies to the requisitioning power of other employees of the public works also applies to the foremen of the maintenance division. Any equipment or supplies which cost in excess of that amount must be cleared through the director. The official process of requesting purchases, however, does permit a certain degree of deviation. As was true in other sections of the department, members of the general maintenance section engage in what may be called "after-the-fact requisitioning": when supplies are immediately needed, they can be acquired without the official paperwork. The record keeping can be done later. This practice is apparently common among the foremen; the lead men of their crews have also operated in this manner.

Such unofficial procedures are facilitated by the friendships which link members of the public works with the suppliers of the maintenance equipment. One of the foremen has worked with the department long enough to have established personal ties with most of the suppliers in Anchorage. Thus, he can send one of his men for whatever is needed and obtain it immediately on his own assurance of payment.

The work of the general maintenance section frequently is affected by decisions made in the engineering design section. Decisions made there which result from budget limitations are particularly apt to have repercussions for the section since maintenance crews will be responsible for the upkeep of installations designed by these engineers. Consequently, the general foreman and one of the crew foremen go directly to the head of the design section whenever budget problems arise. If the section head is not available, normally they will talk with the assistant director of public works. This relationship, which also holds in the reverse direction, is perhaps the most important extradivisional tie of the general maintenance section, although the section frequently works with the water division as well. In fact, one of the foremen was, before the earthquake, employed only half-time in the general maintenance section; the remainder of his time was spent with the water division.

Extradepartmental ties are maintained with many city organizations. The section's work requires coordination with the municipal light and power department, the telephone department, and the police. The general foreman has personal friends in all these organizations as do at least two of the crew foremen. Exchange agreements with the Alaska State Department of Highways, like those with city departments, are unofficial. With the state department, these agreements are limited to the borrowing of equipment and supplies, and do not normally include the borrowing of men. Arrangements have also been made between the maintenance section and its counterpart on the state level to share in the maintenance of certain streets in the Anchorage area which are not clearly defined as either city or state responsibilities. Extradepartmental ties exist between the general maintenance section and local suppliers of equipment and between the section and the railroad. Again, one of the foremen has friends among railroad personnel.