

CHAPTER III

TIME ONE: NORMAL STRUCTURE AND OPERATIONS

The internal organization of the public works department consists of six divisions, each structurally independent (at least officially) of the others and directly responsible to the public works director and his assistant. These divisions are: administration and engineering, traffic engineering, building inspection, maintenance, water utilities, and airport. Within the three largest of these divisions, engineering, maintenance, and water, the organization is further differentiated by sections. The maintenance division, for example, is made up of three sections: equipment maintenance, general maintenance, and sanitation (figure 2).

In the following discussion the "normal" operations, both official and unofficial, of five of these divisions are considered. (Only the airport division is not discussed: relative to the others, it is very small and its tasks are somewhat tangential.) Administrative personnel whose positions are officially located in the joint administrative and engineering division are considered separately because some of these personnel are actually engaged in administrative tasks in other than the engineering division, i.e., not all public works administrators are engineers. In addition, their administrative functions are analytically distinct from the variety of their other tasks. Administrative personnel are, for these reasons, discussed as a separate unit. Apart from these deviations, all other structural distinctions made in this discussion follow the public works official table of organization. Section and division overlapping and unofficial intraorganizational connections which normally exist, as well as patterned relationships which exist between the public works and other public and private organizations, are also indicated.

Administration

According to the 1964 Anchorage city budget, the public works department is charged with the following "major maintenance operating functions":

. . . the maintenance of streets, sewers, buildings, the water utility, engineering and construction of the streets, water and sewer lines, and miscellaneous engineering for other departments, municipal airport, building inspection and permits, traffic engineering, and administration and public service and information relating to these fields.¹

Three principal functions of the public works department may be suggested on the basis of this statement, of which the more important two are directly reflected in the personnel structure of the administration. The first -- engineering, including both planning and inspection -- is represented in the director of public works (or city engineer) and his assistant. Indeed, the official requirements for incumbents of these positions include a background in engineering. The assistant director of public works, in addition, is the

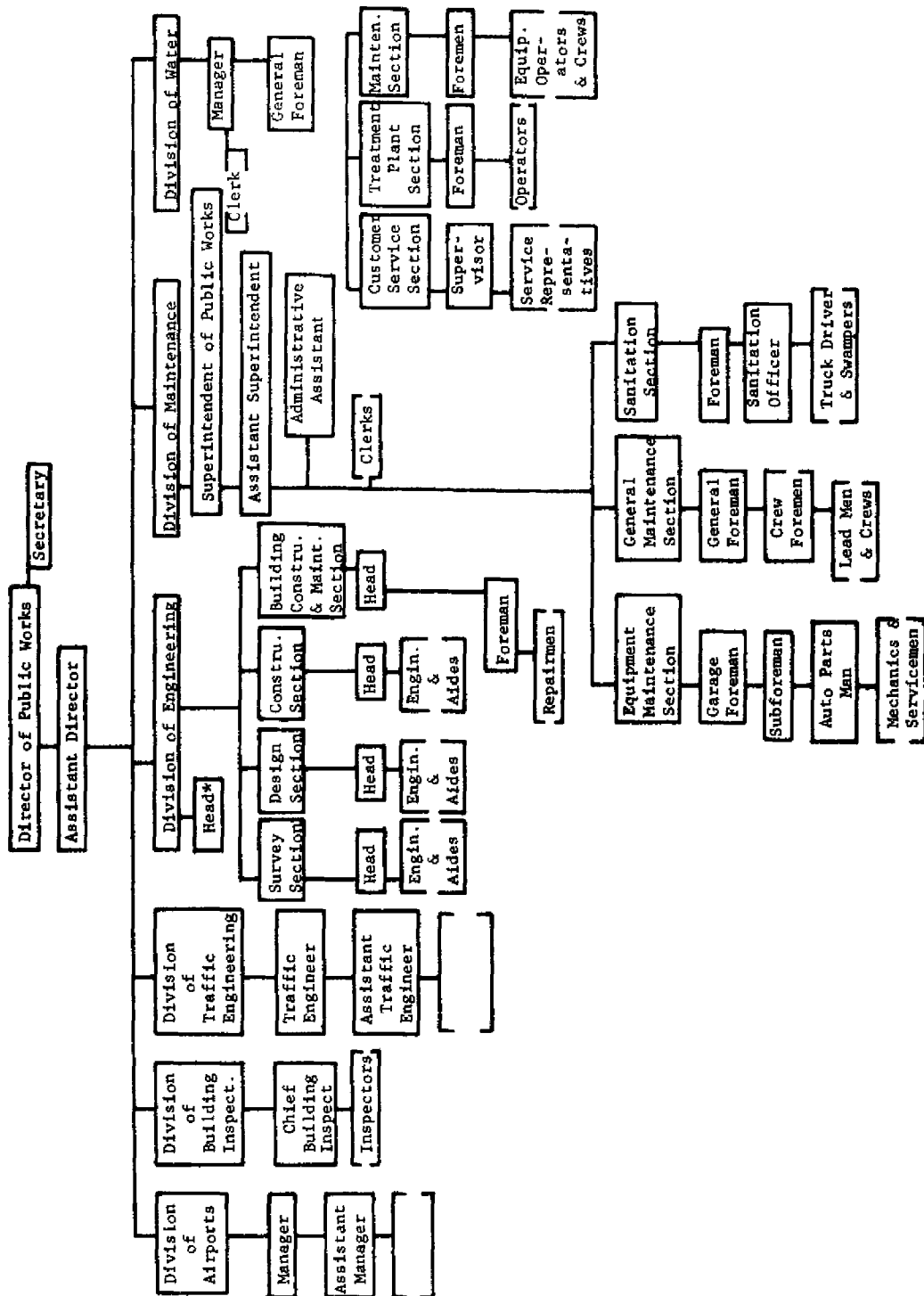


Fig. 2 - Time One Organization Chart, Department of Public Works, Anchorage, Alaska

official head of the division of engineering; thus, he may act as liaison between the four sections which make up the engineering division and the administration of the entire public works department.

The second function is that of maintenance (construction and repair) and is embodied in the positions of public works superintendent and assistant superintendent. Like the assistant director, the public works superintendent and his assistant occupy positions which are at once part of the administration of the public works and part of one of the divisions which make it up. He and his assistant are the official heads of the division of maintenance as well as members of the administration of the total organization.

The third function of the public works department may be loosely characterized as "services" -- including both record-keeping and customer services. Although the clearest structural indication of this function appears in the division of water in its customer service section, the position of departmental administrative assistant, included in the administrative staff of public works, but located by the organizational table in the division of maintenance, also belongs in this classification. The evidence from both Time One (figure 2) and Time Two (figure 3) charts suggests that positions with responsibilities primarily in this area are largely removed from the major operations of the public works. Their tasks are indispensable but tangential to the engineering and maintenance focus of the organization, and whether these positions are considered in terms of decision making, lines of authority, or communications, they appear peripheral to the two principal functions of the public works.

Engineering: Director and Assistant Director

While the director of public works is officially responsible for the operations of the entire department, and thus for all three of its functions, his personal background is less administrative than engineering. He was described, in fact, as an engineer who is learning organization "the hard way -- by experience." For this reason, and because of the diversity of the separate divisions in his department and the wealth of details which this diversity involves, he permits his division heads to operate as independently as possible, a policy of which the division heads generally approve. Daily conferences with his assistant and with the public works superintendent, as well as such discussions with the individual division heads as are required, are held to keep the director informed of the department's operations. Formal staff meetings are held once a week. However, the greatest portion of his time is spent in activities related to engineering.

The position of director is also the official link between the public works department and the larger city organization. Communications with the city manager or with the city council are officially channeled through the director of public works. Budget and policy decisions which require the approval of the city manager or the city council are normally presented to these city officials by the director. In the other direction, communications from these officials enter the public works through the office of the director, and, by way of the assistant director, are sent to the various divisions and sections of the department.

The bulk of the administrative paper work -- requisitions, memoranda, requests, official forms, etc. -- is the responsibility of the assistant director, although like the director, he is an engineer rather than a professional administrator. His opinion of much of this paper work is suggested in the following description one public works official gave of a method of dealing with written questions:

The paper work /that/ goes through here is terrific. I find that some of these notes, the questions that come over here, are so trivial in subject that I feel they are not worth bothering to answer. So I stick them down in the bottom of the pile usually. And then I dig down into it three or four days later, and nine times out of ten, those particular ones that I've shoved down there have taken care of themselves. They didn't need answering in the first place.

Essentially the same device can be employed in "making decisions" either in conference or by telephone with the division heads. In effect, an administrator suggested, the decisions have already been made at the divisional level; what is required of an administrator is confirmation or approval, rather than an actual decision, and such approval can often be given tacitly, avoiding both time-consuming written forms and lengthy conferences. The independence of the various division heads thus frees both the director and his assistant of the necessity of making a great number of decisions for these members of the department. The same procedure is followed in "answering questions" which come from the section heads within a division. One official described his response to such questions in the following statement:

It seems that a lot of the things that come to me . . . are probably things that are coming from some of my section heads that only want confirmation of a decision they've already made. They've always made up their minds what they're going to do and if I can see that there was no harm in it, why let it go and don't even bother to answer it. Nine times out of ten they'll put it in the form of a question. If I don't answer it, they'll go ahead and do it.

While these practices free administrators of much decision making and question answering, they also contribute to independent actions on the part of division and section heads which conflict at times with the official definitions of appropriate and orderly operations. This is particularly true of the process of requisitioning equipment and supplies.

Like the director of public works, the assistant director's administrative role is largely a coordinating one, mediating between the director and the division heads of the public works as the director mediates between public works and the city administration. Thus, the contrast between administrative

activities on a "normal day" and those immediately following the earthquake, are, with the exception of the absence of paper work, roughly the same: "You're still meeting people, you're still contacting your people, you're still determining what they're up to, and you're talking to your individual section heads and making decisions for them." Thus, his emergency tasks were in a broad sense just like those he carried out on any other day.

Contrasting the positions of director and assistant director, the latter is associated most closely with purely administrative duties -- decision making and question answering; only major decisions and questions normally require the action of the director. However, for both these positions, given their officially designated location in the organization and the training demanded of those who hold them, the focus of normal activities is engineering rather than administration (or, perhaps, engineering administration). These activities nonetheless involve coordination of the various other departments within the organization. Because the bulk of this administration falls to the assistant director, it was suggested that his "two-headed" position as assistant director and head of the engineering division be split, designating one man to head up the engineering division and another to act as assistant director full-time. Such a division of labor, it was stated, has been established in other cities only a little larger than Anchorage and would be much more efficient ("The assistant director/ would have more time for the entire department rather than trying to do two things only half as good as he/ would choose") than the present arrangement.

Maintenance: Public Works Superintendent
and Assistant Superintendent

The second function of the public works department is represented administratively by the public works superintendent and his assistant. They are nominally, more than functionally, a part of the administration, for their principal duties are those associated with the maintenance division, of which they are head and assistant, respectively. Indeed, little evidence exists to suggest that their inclusion in the administration makes any difference in their behavior when it is compared with the activities of the other division heads whose positions do not include them in the administration. Like the heads of the divisions of traffic engineering, building inspection, and water, the superintendent and assistant serve as the link between the director and assistant director of public works and the foreman and crews within their division. Only the size of the maintenance division (it is the largest single division within the public works) and its obvious relationship to the maintenance function of the department provide rationale for designating the superintendent and his assistant as members of the administration.

The duties of the superintendent are those of coordination and supervision. Normally, a working day begins with a conference with the foremen of the general maintenance section, the section which demands the greatest amount of direct supervision and also the section which is most closely related to the major maintenance functions of the department (streets and sewers). Following this review of projects and assignments, the superintendent usually spends a few minutes with the director of public works discussing the more

important projects, keeping him informed of present operations and those scheduled for the future. The superintendent also receives the requests and complaints which have been collected by the public works department and passes these on to the foremen of his division. Communication of this type is normally done by radio when the men are already in the field, although the superintendent also makes a daily tour of the three work areas into which his division has divided the city to inspect personally the work in progress. He completes this inspection by visiting the equipment maintenance garage and the sanitation dump to check on the operation of the other two sections within the maintenance division.

The general maintenance section is charged with all street maintenance (snow removal and storm drainage), maintenance of sanitary sewers, and operation of the sewer lift stations. In addition, and as a part of "good public relations," crews are authorized to provide personal aid to the public -- pulling out an automobile stuck in mud or snow, for example. Similarly, the superintendent favors "good public relations" within his division, between him and his foremen and crews. One member of the division contrasted a former superintendent's approach to employee relations with the incumbent's.

/A/ superintendent that used to be here . . . was real hard-nosed. He used to beat the desk and, brother, they'd get with it. /The present superintendent is/ not that type of person.

He and his assistant and the head of the general maintenance section form, according to a member of the division, a "pretty close-knit group." Most discussions concerning decisions which affect the operations of the division are held by these three men; all major problems, however, are discussed with the director, who is the superintendent's immediate supervisor.

Personal relationships of this type frequently characterize the division's associations with the community and with other organizations. Members of the division, for example, receive many telephone calls reporting disrupted conditions in the city's streets or sewage system. ("City Hall never realizes," said one respondent, "that we get this kind of information nor how much we get.") Often the callers will ask by name for a particular member of the division, some of whom have worked for the city as long as twenty years. Of one such employee an official of the department noted:

He grew up in this town and the old-timers know him. If they have a problem, they'll call and ask for him. People feel that they can get action a little faster, and probably they do.

The superintendent, too, has established acquaintances in almost all of the municipal and state organizations -- the police and fire departments, port department and telephone utility, and the state department of highways -- and these facilitate a more personalized relationship between the public works and these organizations than would otherwise be possible. In his informal liaison capacity with these organizations, the superintendent has developed

gentlemen's agreements, particularly with the state department of highways, providing for the exchange of favors and the loaning of equipment on condition of repayment. Although similar arrangements had been set up with private contractors, these exchanges have been discontinued; an official of the public works explained what had happened:

They're bugging you for everything. They're using us as a warehouse and I asked to be relieved of it because it was taking a lot of my time and we're not warehousing that stuff for the contractors.

Other members of the maintenance division, like the general foreman, had worked for the state prior to coming to the public works, and the interorganizational friendships of these men also aid in promoting mutual aid arrangements, at least between public works and related state departments.

The duties of the assistant superintendent of public works are similar to those of his immediate superior. Like the superintendent, the assistant's authority, despite his inclusion in the administration of the entire public works, extends only to the division of maintenance. His normal activities are largely those of supervising the work of the general maintenance section, making certain that jobs which have priority are attended to first, and insuring that problems which arise in the process are adequately resolved. Both the assistant and the superintendent have the authority to make local purchases of supplies and equipment up to five hundred dollars; purchases in excess of that amount require the approval of the city council. Normally, however, since the assistant occupies a position subordinate to the superintendent, he authorizes such purchases only after consultation with the superintendent.

The chain of command -- from the director of public works, through the superintendent to his assistant -- is generally followed, although there is some indication that the head of the general maintenance section sometimes goes directly to the superintendent with questions and problems, without going through the assistant. The close personal relationship which apparently exists among these three would not seem to require strict adherence to the chain of command in all circumstances. In any case, the work of both the assistant and the superintendent frequently takes them out of their offices into the field. When one or the other is thus unavailable, the similarity of their positions and authority suggests that whichever of them is available can handle most contingencies.

Office Services: Administrative Assistant

The position of the administrative assistant is also located in the division of maintenance. The duties of this position, however, are administrative, in the sense that they are coordinative and concern the entire public works department. Thus, the rationale which included the head and assistant head of the maintenance division in the administration is reversed; here, a largely administrative position is physically a part of the division of maintenance, although it is both nominally and functionally included in the administration.

The administrative assistant is in an office position. He is responsible for all the paper work for the public works -- requisitions, purchasing, some cost accounting, and similar reports -- and is responsible as the administrative superintendent of the foremen for all the reports they are required to submit. With the exception of a clerk-typist in the engineering division, who does some of the typing and reports, the administrative assistant works alone.

Because he is responsible for office routine, he is not in the operational (engineering-maintenance) chain of command. His supervisor appears to be the public works superintendent, although he also receives requests from the director of public works and frequently confers with him on matters of office procedure. His, then, is a somewhat ambiguous position with respect to the departmental chain of command. In effect, he is the "servant" of both those above him -- the superintendent and the director -- and the foremen under him. In neither case, however, are the vertical authority relationships clearly defined. Interview data suggest that the administrative assistant has solved this problem by accepting "requests" from administrators and foremen and by rejecting "orders" from both.

The scope of his work -- from payroll to workmen's compensation to cost accounting and requisitions -- brings the administrative assistant frequent occasions to call on members of all the divisions within the public works. The residual nature of his duties (whatever cannot be handled in another office is routed to the administrative assistant) adds to the diversity of these contacts. Generally, he goes to the person who is most likely to have the information he requires, regardless of the official chain of command. Such a procedure is frequently followed by administrators in the public works, as one of them indicated:

You get faster service going and talking to the one who ought to know. You want to know something and they can answer right now . . . and they don't object.

Only when there is a larger problem, one which involves policy decisions or authority which a clerk or a foreman does not possess, does the administrative assistant go to the director or to the city comptroller. This is sometimes required because he is outside the chain of command, and the official information flow, largely memos, often reaches him after it has been received in other offices. At times when he does not have complete information and is not certain who would have the necessary data, he checks with the public works superintendent. If the superintendent does not know either, he will track down the information for the administrative assistant.

Engineering and maintenance are the principal functions of the public works department and they are clearly represented in the official structure of the administration by the director and assistant director on the one hand, and by the superintendent and his assistant on the other. Such office services as are required to support these two sets of operations are distributed

throughout the organization and are officially -- but rather haphazardly -- represented in the administration by the administrative assistant.

That the administration is neither formally (i.e., by the table of organization) nor informally (i.e., by the functions of administrative incumbents) a separate division of the public works is evidenced in all of the administrative positions. The director is essentially an engineer; the assistant director must be both an administrator and an engineer. The public works superintendent and his assistant are only nominally administrators. The administrative assistant, whose position is the most functionally administrative of the five finds himself in the maintenance division, somewhere below the head of that division, the public works superintendent. In each of the administrative positions, the incumbent is called upon to divide his attention to a greater or lesser extent between the public works as a whole and one of its separate divisions, i.e., either engineering or maintenance.

These structural characteristics suggest that the public works department is not singular, but plural: they are a federation of independent divisions, with the administrative positions -- the embodiment of the idea of a single public works -- attached loosely to the engineering and maintenance divisions. This conclusion is also suggested by major reorganizations within several of the divisions and within the department itself. In 1963, for example, the building construction and maintenance section was formed from members of the engineering and maintenance divisions. Located initially as a section in the engineering division, it became a separate division of the public works late in 1964. Similarly, in 1963, the water utility was put together out of elements of the maintenance division. And in 1964, at the time the building construction and maintenance section was made a separate division, two other divisions, traffic engineering and building inspection, officially became autonomous departments, no longer responsible to the director of public works but directly to the city manager. The division of airports has been functionally -- and physically -- independent since its inception, although it has remained nominally a part of the public works.

The structure of the public works department is perhaps best understood, then, less as an entity in itself than as a comparatively loose federation of independent divisions. Under these circumstances the director of public works may necessarily have to allow his subordinates a greater degree of decision-making autonomy than would be required in a tighter organization. Similarly, the administration of such a loose organization may need to be part of its independent elements if it is to remain viable. The administration of the public works, thus, emerges out of the units which make it up as a kind of representative body, making decisions collectively rather than independently.

Engineering Division

The engineering division, headed by the assistant director of public works, is composed of four sections: survey, construction, design, and building construction and maintenance. Each of the sections is headed by a Civil Engineer III (civil service classification) who is responsible to the assistant director. The duties of the assistant director have already been

discussed, but his responsibilities as head of the engineering division have not. Following a brief description of his engineering activities, this section has been divided into four parts corresponding to the four sections within the division.

Like the director of public works, who sees his division heads daily, the assistant director as head of the engineering division tries to meet with each of the section heads every day. The assistant director is responsible for the hiring of all engineers in the division, and his relationships with them were described as generally amiable. He is, however, most friendly with one of the section heads, a man who functions, in fact, as the assistant director's "right-hand man." Evidence suggests that there may be some negative reaction among the other section heads in the engineering division with respect to the friendship ("Others would like to go out with the boss for coffee once in a while too," said one respondent), but additional data indicate that the relationship, although based on personal friendship, is largely concerned with departmental affairs. The assistant director is also a good friend of the engineer directly below this particular section head. This latter friendship, which the assistant director is scrupulous not to evidence during working hours, is the result of previous common work experience.

On the other hand, a strained relationship does exist between the assistant director and the head of one of the other engineering sections. This person has a reputation as a man who can accomplish a job but who often goes about it in a less than orthodox manner. His tendency to act first and seek permission afterward and, in at least some circumstances, to go directly to a higher office without informing his supervisor, have led to budgeting difficulties and to personal complications with the assistant director. That this section head is very competent only adds to the problem of dealing with him. He was described by a public works official in the following somewhat mixed statement:

He'll get things done and without going in the proper routes, so to speak. Sometimes he doesn't have the financial backing and he doesn't find this out until it's too late. Then we have to manipulate financially to get the job done. I'm not saying that what he did wasn't right. I mean that it was right but that the order of business wasn't. The financing should have been taken into consideration and then go to it, rather than do it first and find out how we do it later. . . . So in this case he is overstepping his bounds in the administrative and financial field. He's a great doer, great for getting the job done, but sometimes there's a great penalty for these things.

Outside the engineering division, the assistant director sometimes encounters similar problems with the chain of command. Two city officials (both located completely outside the public works) deviate at times from the official channels of communication and such actions complicate procedures and made difficult the completion of an assignment. As a result, the assistant director

has developed a personal means of dealing with these situations; after receiving orders or information from other than the official source, he traces the communication back to those who issued it in order to be certain of receiving accurate and complete data.

Members of the engineering division work closely with the city planning department, but their relationships are not always cordial. The perspective which the engineer is likely to take of a project is not always identical with that of the less technically oriented planning department. Thus, plans which appear feasible when population density and related factors are taken into account by the planning department may be for other reasons almost impossible for an engineer. These difficulties, however, are apparently professional in origin rather than the result of personal conflicts or of deviation from official procedures. With these exceptions, then, the relationships of the assistant director (as head of the engineering division) with persons within his division and with related personnel in other city offices are relatively free of interpersonal or formal complications.

Survey Section

The survey section includes from eight to ten persons in the winter months, and from fifteen to thirty during the peak summer months. These men are responsible for

control, topographic and construction survey/s/ for all construction programs within the Engineering Division; completion of the address change within the City; /and/ 50 100- and 500- scale maps for water and sewer lines, streets, house numbers, subdivisions, etc.²

During the summer building months, most of the survey personnel are deployed in the field; the head of the section, for example, spends about half his time during the summer outside the office supervising the work. The winter months are devoted to bringing the city maps up to date and to reproducing and filing these maps. The section is also responsible for providing public information, e.g., information concerning the house-numbering and address system. Other city organizations and other divisions within the public works rely on the survey section for the street and utility maps essential to the location and maintenance of public works installations.

Unofficially, the survey section usually produces the public works cartoonist. Personnel in the section are amenable to performing a number of favors for both their co-workers in public works and for the public. One member of the section described some of these favors.

The guys come over to you and they want a description of this or that. Then there's always somebody coming in who wants to know whether anybody ever surveyed his lot or where his corners are. If you can dig the information out, you give it to

him. . . . It isn't something you'd consider a normal function of the city engineer's office, but, on the other hand, it generates a certain amount of goodwill.

Like the public works superintendent who is also convinced of the usefulness of this goodwill, the head of the survey section normally encourages his men to provide these unofficial services. Indeed, he himself is frequently called upon unofficially, largely because he has been employed by the public works for many years. In this respect, he is one of a number of "old-timers" at the public works; as one of these men said:

I apparently end up being a source of information for many people here that . . . is not due to anything other than the fact that I've probably been with the city about as long as anyone else . . . and people come in and ask questions about this and that. . . . It's stuff that happened in the past or several years ago and if they have questions on it, they come in and see me.

The survey section head has structured the division of labor within his section to allow overlap among assignments. Thus, two men are assigned to the reproduction of city maps; their work overlaps to an extent with the work of those personnel responsible for making additions and corrections to the maps, and of those assigned to coordinating and filing of the maps. The ranking member of the section shares the work of the section head under the same rationale. "It's a matter," one member of the section explained,

. . . of one person handling all of one thing and that one person is gone, and you're out of business. And so what we do is to set up everything so that no one person makes any real difference to the organization as far as operation. The only difference he makes is in how much time has to be put in to accomplish his work.

Sharing of task responsibilities is reinforced by section informality. The section head and his assistant not only work closely with each other, but also are good personal friends. The section head, however, attempts to maintain some distance between himself and those others who work for him, to strike a balance between friendliness and formal authority. But the permanent members of the section are few enough to allow personal relationships to emerge among them; this friendliness probably has a positive effect on the official policy of sharing tasks.

The chain of command within the section is similarly informal. Members of the section refer either to the section head or his assistant whenever they have questions or problems. Indeed, one member of the section suggested that there is no real chain of command: "As far as I can determine, about ninety-five percent of the time they'll talk to the assistant; they could care less whether they talk to him or the section head."

The policies of the section are rather clearly established so that either the section head or the assistant can make most decisions. Directives from outside the section come from the director of public works or from his assistant, although occasionally something will come from the city attorney, port director, or planning director. As is generally true of the other sections of the engineering division, the public works administration allows the survey section considerable freedom of operation.

Typical of many of the divisions and sections of the public works is the professional relationships which city employees maintain with their private counterparts. Thus, the city surveyors know most of the private surveyors in Anchorage and are able to call on them periodically for advice and favors. According to a member of the section, "this informal interchange of information among the engineers and surveyors in town is a valuable asset." An analogous exchange has been established by the section head and his assistant with many of the other city organizations -- the city manager's office, planning department, building officials, taxation offices, city attorney, etc. This exchange has been facilitated by a conscious attempt on the part of the section head and his assistant to become personally acquainted with those who hold these positions and work in these departments. The advantages of this personalizing process were explained in the following statement:

/We/ try to know the people we're involved with personally so that rather than this memo bit where you just write a guy a letter and he doesn't know you've met him, we call him on the telephone and go to see him and spend a little time with him so that he knows who we are and what we do and when we ask for something, we have more cooperation.

In addition, it was suggested that there are certain disadvantages to the standard impersonal approach.

This tendency to regard everybody as just somebody in another building somewhere, this results in problems sometimes. It takes longer to get the job done and it may not get done the way you want it done. If you have verbal contact with the man and he understands what you want and you understand what he wants, this avoids a lot of problems.

Because the survey section has frequent cause to call on others outside the section for information -- and because the services the survey section provides are often required by others -- this emphasis on "first-name" relationships is likely to be virtually required, although certainly unofficially. From the perspective of the survey section, the entire public works organization takes on this informal character. Thus, one respondent indicated that about the only persons in the department who employ formal modes of address are the secretaries. For everyone else, from the public works director to the maintenance men, first names are sufficient. This observation, however, is probably colored by the inclinations and requirements of the members of