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Abstract As part of the efforts of an employee task force appointed to seek ways of improving communication within the Virginia Department of Transportation, nine focus group meetings were held for departmental employees. Participants were separated into the following groups: division administrators, district engineers, assistant division administrators, resident engineers, central office section heads, district section engineers, area superintendents, central office employees and field employees. These focus groups met for three to four hours away from Department facilities with specially selected group leaders, following a pre-arranged discussion guide. Because of demands on their time, directors were interviewed on a one-to-one basis, rather than in a group setting. This document summarizes the results of both the focus group meetings and the director's interviews. An executive summary of the report has been published separately.				

FINAL REPORT

IMPROVING COMMUNICATIONS WITHIN THE
VIRGINIA DEPARTMENT OF TRANSPORTATION

A report to

Assistant Commissioner
Albert W. Coates, Jr. and the Employee
Communications Task Force

by

Cheryl W. Lynn
Research Scientist

(The opinions, findings, and conclusions expressed in this
report are those of the author and not necessarily those of
the sponsoring agencies.)

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BACKGROUND

On February 27, 1986, Director of Administration Albert W. Coates, Jr. appointed a six-member Employee Communications Task Force and directed the group to "identify the Department's existing procedures and techniques for employee communication, assess their effectiveness, suggest ways in which they can be strengthened and better coordinated, and recommend other opportunities for improvement." The Task Force, which was originally chaired by Ms. Maribeth Brewster of the Department's Information Services Division, began its work immediately.

This interest in communication was ratified by employees at all managerial levels of the Department in two separate meetings. In mid-March, the eight directors of the Department met with the Commissioner at Wakefield to discuss management issues. Communication was identified as an issue of great importance. Shortly thereafter, at the Department's Spring Management Conference, the 200 participants, working in small groups, suggested seven major areas of opportunity for improving departmental creativity and productivity. Improving departmental communications was, in fact, one of these areas of opportunity.

Commissioner Ray D. Pethtel promised to report on the steps being taken to implement each of the suggestions that emerged at the spring meeting to attendees of the Fall Highway Conference. Notice of the formation of the Employee Communications Task Force was published in the May issue of the BULLETIN, and employees were asked to submit suggestions directly to the task force. Comments submitted, although few in number, expressed serious concern over several topics. In addition to the issues identified through submissions, the task group identified a large number of instances in which departmental interaction could be improved.

Subsequent to these developments, the Employee Communications Task Force approached the Research Council with the request that researchers gather data on employee perceptions of communication within the Department. The Council proposed to the Task Force a two-phased approach that would yield meaningful results by the target date: first, personal interviews would be conducted with members of the Department's top management to gather and synthesize their views on communication issues and concerns, and second, nine discussion groups composed of about 100 employees representing all levels of the organization would be held to examine views on departmental communication. The task force approved these recommendations. This report contains the results of the Council's two-phased study.

PURPOSE AND SCOPE

The purpose of this study was to obtain insight into the adequacy of departmental communication, to learn how communication is perceived by employees at various levels, and to learn how employees think that communications can be improved. Because of the limited time available, the report does not reveal the full content of the interviews or the focus groups.

Discussions, both in the focus groups and in the personal interviews, were oriented toward the identification of issues rather than toward closure and consensus. The study was not designed to include validity checks on participants' statements. Rather, it was assumed that participants' perceptions were of value either because they were accurate or because, even if inaccurate, they influence performance on the job. The report that follows was formulated from an extensive review of the audio tapes of the personal interviews, and from written summaries of the focus-group sessions prepared by the group discussion leaders.

METHODOLOGY

In order to identify concerns of the employees below the director's level within the Department, nine focus groups were established. It was believed that these groups had the potential of providing the information needed concerning true issues of interest, rather than simply re-emphasizing gripes about the system as is so often done in the committee setting.

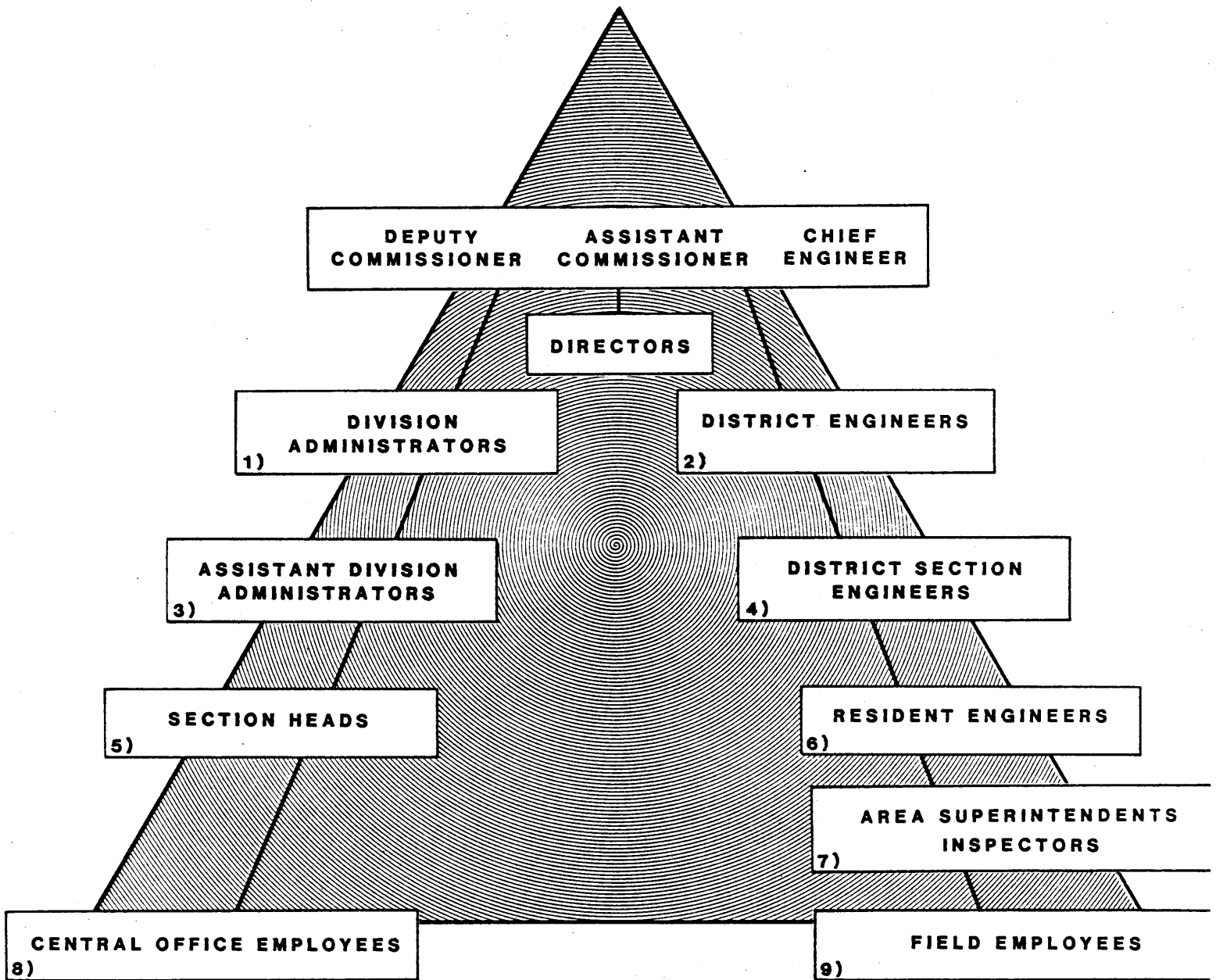
Focus groups have commonly been used in private industry to identify changes necessary in a given product to produce consumer approval. In the present case, the focus groups were established to identify

communication problems. Nine focus groups, one at each major organizational level, were called to meet on a one-time basis for three to four hours to discuss their particular communication needs and to suggest alternative ways of meeting them (see Figure 1). A focus group session was held for division administrators; district engineers; assistant division administrators; central office section heads; district section engineers; resident engineers; central office employees below section head; area superintendents (and construction inspectors); and field employees below the area superintendent level, including equipment operators and clerical personnel. The format was pseudo-structured to the extent that although the group would operate in the conversational style, it would be kept on track by a group facilitator and by the use of a discussion guide (see Appendix A).

To promote a free expression of views the groups were segregated by level of position. In interactive groups, individuals are often reluctant to express their views if they feel they have something to lose through the encounter. This would be the case if persons in higher positions attended meetings with subordinates. Since complete candor was essential to the success of each group, threatening situations were minimized. Thus, all members of a particular focus group were chosen from approximately the same organizational level, and for the most part, members had very little day-to-day contact with one another.

Several characteristics of focus groups must be considered when examining and using their results. First, since they use a small number of employees, they cannot be thought to represent the views of all members of a large organization. On the other hand, the information they generate is based on intensive discussion, rather than on paper-and-pencil results that may not represent the most thoughtful response to the question. Not only can opinions be generated and recorded in these groups, but the intensity of those opinions can be noted. Also, because serious discussions ensue, most issues of interest to a particular group can be considered in detail and new issues can result from brainstorming, thereby providing a more comprehensive list of issues for further study.

Because the success of focus groups depends in large part on the choice of unbiased and knowledgeable group facilitators, persons with considerable experience in the group process were selected to serve as facilitators for this project. For the field and central office employees and for the area superintendent groups, Dr. Gib Akin served as facilitator. Dr. Akin is on the faculty of the McIntyre School of Commerce at the University of Virginia and is well known throughout the managerial levels of the Department because he delivered an address at the Spring Management Meeting. Dr. Akin also has extensive experience in ethnographic studies involving worker level employees. Dr. Bruce Gansneder was selected as facilitator for the resident engineers,



**FIGURE 1: THE NINE FOCUS GROUPS
AND THE DIRECTORATE INTERVIEWS**

central office section heads, and district section engineers. Dr. Gansneder is with the University's Bureau of Educational Research and has experience in running groups designed to accomplish problem solving. Finally, for the upper level managerial groups (the division administrators, district engineers and assistant division administrators), Ms. Debra Ross was selected as facilitator. Ms. Ross is employed by IDM Research, Inc. in Montreal, and specializes in the conduct of focus groups. She has a masters degree in communication from the University of Southern California.

The second approach used in this study was one-on-one interviewing of the Department's directors. Ideally, a directorate level focus group would have been conducted, identical with those run for other departmental employees. However, because of the timing of the study (just prior to and during a special session of the legislature) and because of the demands placed upon the directors' time, this was not possible. As an alternative, one-hour interviews were conducted with individual directors. The content of the interviews was left largely open-ended, depending on the interests and orientation of the director. Issues similar to those covered at focus-group sessions were touched on in each director's interview.

Focus groups were held on September 11, 17, and 18, 1986, in Charlottesville. (It was thought that employees might be more candid if groups were held outside Department precincts.)

September 11:	Assistant Division Administrators District Section Engineers Area Superintendents/Inspectors
September 17:	District Engineers Central Office Section Heads Field Employees
September 18:	Division Administrators Resident Engineers Central Office Employees

Groups were scheduled to minimize the likelihood that group members would see someone from their immediate supervisory or immediate subordinate category on the day of their focus group. The group meetings were preceded the night before by a reception for attendees, at which time it was hoped that some icebreaking would occur. Unfortunately, the receptions were poorly attended and most group development had to be done at the actual group meeting. All group sessions began at 9:00 a.m. and none ran longer than 1:00 p.m. All sessions were audio taped for later analysis.

RESULTS

It was initially anticipated that the results from all groups would be sufficiently different to require individual analysis. However, the group facilitators noted that several of the groups produced results so similar that they are discussed in this report as a unit. Thus, the groups are discussed as follows: (1) area superintendents, central office employees and field employees; (2) resident engineers, district section engineers, and central office section heads; (3) assistant division administrators; (4) district engineers; and (5) division administrators. It can be seen from these groupings, and was confirmed through the directors' interviews, that the higher up in the organization employees are placed, the more variability there is in their perceptions of communications.

Each of the focus-group reports contains five sections:

1. Common themes. The themes used by all organizational members to organize their understanding of departmental communication. These themes, taken collectively, portray how communication is experienced by focus-group participants.
2. The elements of good communication. The commonly held image of good communication is described in this section. Even if it is rare, exemplary communication is known and provides a model for developing improvements.
3. Perceived barriers to communication. This section presents the factors believed to get in the way of effective communication.
4. Suggestions to improve communication. Each group listed ideas and changes they thought would improve departmental communication. This section presents a summary analysis of those suggestions.
5. Group contrasts. Each of the focus groups was comprised of a different organizational segment. In the first four sections, the common themes and findings were presented. In this section differences attributable to organizational position, if any, are described.

Part 1: Area Superintendents, Central Office Employees,
and Field Employees

Attendees at these focus groups included the worker level employees in both the central office and the field. These groups were considered to be critical to the study, since the bulk of the Department's employees fall into these categories. In the area superintendent's group, maintenance supervisors and construction inspectors were also represented. In the central office employees group, all employees below section head, including clerical and support staff, were included. In the field employee group, maintenance workers (including equipment operators A and B), technicians, and clerical staff were represented.

Common Themes

Eight common themes were continually used by all participants in each of the three groups to organize their understanding of communication. They appeared in the stories told about communication in the Department, and in the discussions about needed improvements. Collectively, the themes portray how communication is experienced by organizational members.

1. Prevalence of one-way communication. Departmental communication is most often seen as one-way, going only from higher up to lower down. Little information flows from below, and as a result, people believe that others above them know little about the demands of their work and what resources they need. An example cited was the use of radios designed so that Richmond could call the field at any time, but not the other way around.
2. Communication about problems only. The content of communication is seen to be dominated by problems. Most of the news is bad news. You only hear about what is going wrong. Some employees have come to think that management must believe that workers who are satisfied can't be productive, and thus they do things to make them unhappy.
3. The "grapevine". Often one receives information unofficially, not through the chain-of-command but through the "grapevine". This occurs by persons talking informally to others in different locations and by their interpreting associated events; for example, raises in pay are learned about through the Blue Cross representative. The "grapevine" is seen as working more quickly than official channels, but its use depends on having long experience and good connections. For most employees, it is not clear how to get something on the "grapevine." (An exception is in the Richmond offices, where there is a legendary mail room employee who is known to be able to get messages to anyone.)

4. Reliance on formal channels and the chain-of-command. The channels of communication officially follow the chain-of-command. One should not communicate laterally except by going up and then down the chain. In all communication, one needs to be aware of the demands of the chain and the consequences of violating it. Knowing the chain is essential to deciding with whom to communicate and how. A key to the interpretation of any communication is knowing where in the chain it originated.
5. Status and power. Integrated into the chain-of-command is the belief that all communication is interpreted with respect to how it expresses the status and power of the sender. Much communication is seen as only the expression of status and power. A common term used to refer to this is "ego," referring to the use of communications to express command and to enhance power and status. The design of communication procedures is believed to be in the service of preserving and enhancing power and status, not in the service of getting the work done. As a consequence, there is much reading between the lines to interpret the real meaning of communications, part of which is always the power and status message.
6. Commands without meaning. A large proportion of the communication received by people is in the form of commands to do one thing or another. What is missing in those commands is information about what the action is for or what the intended outcome is to be. This is often seen as the cause of the wrong work being done, which necessitates redoing things. Without giving the context in which they are to be interpreted, mere commands are insufficient to generate effective action.
7. Overloaded with data, but starved for information. Most people believe themselves to be overloaded with data in the form of memos, phone calls, bulletins, announcements, and all forms of written messages. But at the same time, they also see themselves as starved for the information they need to do their jobs well and to understand the Department. This is a selectivity issue, and reveals that what needs to be communicated is the information workers need to get their jobs done. Most workers believe that others do not know what that information is, perhaps because of the pervasiveness of one-way communication and a preoccupation with status issues.
8. Timeliness. Good communication requires that information be received in time for the employee to do something with it. People in the field are embarrassed when they learn something they need to know from the newspaper, radio, or TV. They are frustrated when they find out about things too late to make an effective response. The communication about the focus group meetings is an example of

this failing: the employees who were to take part in the meetings were not notified until the last minute.

The Elements of Good Communication

Much of the discussion of communication centered on things that go wrong. Group members were also asked to enumerate cases in which things go well. They were asked, "What is the image of effective communication, and what are the conditions that support it?" The answers come from interpretation of the stories generated, and from the accounts of actual episodes of effective communication witnessed by and participated in by focus group members. The variety of success stories recounted fell into the following four general forms, illustrating the employees perception of the characteristics of good communications.

1. Getting everyone involved. Many success stories told of situations where everyone who was concerned with an issue came together to talk, exchange information and ideas, and make decisions. The key was that all the people who had or needed information had been there. They came together on the basis of interest in an issue, not on the basis of status or position. The meetings of this type were usually described as having been informal, in the sense that the chain-of-command was ignored.

Sometimes episodes of good communication happened rather informally, without specific planning. People would gather, talk, and exchange important information. These meetings were not specifically problem-solving meetings, and they may or may not have been planned. At other times, these episodes were connected with a specific crisis: employees met in order to respond quickly and competently to a crisis. In these cases, the need to respond to the crisis brought the right people together and transcended some of the barriers to good communication.

2. Knowing each others territory. Several people described good communication between work units. The communication centered on how best to get something done that involved both units, and most important, on each unit learning and appreciating the resources, needs, constraints, and capabilities of the other unit. When this was done, units could learn to accommodate each other and thus work together without serious problems
3. Relaxed interaction with supervisors. Good communication with supervisors was characterized as being relaxed, which means that the supervisor listened to and treated the subordinate as a human being. There was two-way communication, and little of the

supervisor's ego was involved. Relaxed communication centered on issues and was egalitarian as opposed to expressing status differences.

4. Getting complete, meaningful information on time. Worker-level groups felt that good communication was having the information they needed to do their jobs in time to use it. Thus, when the context and the intent of the message are known, employees know how to use it.

Perceived Barriers to Communication

The following is a summary of what was generated when participants were asked to consider barriers to communication.

1. The chain-of-command blocks direct contact between those who need to exchange information.
2. Responding to organizational structure and hierarchy rather than the needs of the task reduces efficient communication.
3. The demand to do a lot in a short period of time (i.e., work pressure/time pressure) restricts good communication.
4. Most people had restricted informal interaction with others in other jobs and thus felt isolated.
5. Many people felt that being out of touch with the uses made of the products of their work made doing the job more difficult.
6. Other employee's ignorance about an employee's job situation results in that employee not receiving proper support.
7. "Ego." Refers to those who communicate primarily to enhance their status or position.
8. Many participants thought their jobs were always in jeopardy.
9. In the face of problems, the Department tends to focus on fixing the blame rather than remedying the situation.
10. The volume of paperwork reduces opportunities to improve communication and results in overload.

Suggestions to Improve Communication

Each group was asked to develop a list of suggestions for improving communication. The following summarizes the lists of all worker-level groups.

1. Employees should be included in decisions that affect them.
2. Employees should have knowledge of the intent of policies. This will help ensure appropriate application.
3. There should be more direct contact between management and workers.
4. Timely information should be provided to employees.
5. Employees should receive more positive feedback. They need to know about their good performances.
6. Management should back employees in the application of policies.
7. There should be more contact and coordination between divisions.
8. There should be more input by worker-level groups in defining needs.
9. There should be more and better listening by management.
10. There should be more meetings to share information, rather than to make announcements or assign tasks.
11. Supervisors should spend more time in the field where the work is actually going on.
12. Management should show more expression of appreciation.
13. There should be more sharing of influence.
14. Top management should make themselves more available for discussion. (It may be middle management that screens lower-level workers from top management.)
15. There needs to be an improvement in the selectivity of messages (which requires that those sending the messages know more about the needs and concerns of the receiver).

16. The writing skills of those writing the messages need to be improved.

Group Contrasts

The commonality among the three groups is substantial. The foregoing documents the aspects of internal communication that are clearly shared by each group. The themes were essentially the same for all groups, and there was remarkable similarity in perceived barriers and suggestions. Although the details of success stories were different depending on job level and location, all of them involve one or more of the four qualities previously described.

To try to elicit a portrayal of each group's general situation with regard to communication, the groups were asked to describe their situation with regard to Richmond, the other districts, and the "outside." The portrayals of the three groups show the differences quite nicely. It should be remembered, however, that even these differences are construed in terms of the common themes described in the first section of the report.

Superintendents and inspectors. People in this group see themselves as being at the fulcrum of several constituencies, all of which give and demand information. They act, in part, as a nerve center for field operations. Most of their communication is two-way, except for their interaction with Richmond, which is mainly one-way. The main concerns of this group centered on timeliness.

Field employees. People in this group experienced themselves as being the receivers of lots of negative messages. Nothing goes the other way. Their world is one of commands and criticism.

Central office staff. The picture generated by this group is of a sort of political storm: there is so much information around no can deal with it all; consequently, each person is essentially isolated so meaningful interaction is minimal. No one knows what anyone else knows. Most of the communication is political in the sense that it is for and about power, status, and organizational position.

Part 2: District Section Engineers, Central Office Section Heads, and Resident Engineers

Persons attending these three focus groups represent middle-to-lower-middle management in the Department. In the central office, there are approximately 80 to 90 section heads, a position five levels removed from the commissioner. In the field, there are approximately 65 to 70

district section engineers and 45 resident engineers, who are in charge of an average of three to four counties making up their residency.

Common Themes

Nine common themes, six of which were also mentioned by the worker-level groups, were discussed by the members of these three focus groups.

1. Prevalance of one-way communication. The majority of the Department's messages originate at the top and filter down. Very little structure exists for communication to travel in the other direction. Most two-way communication is horizontal, within work units or levels. This horizontal communication is perceived as being very effective.
2. Communications about problems only. Communication tend to be neutral at best; they are usually negative rather than positive. Written communication especially is seen as having a negative connotation. It is used to document: to show that activities have been done (so that no one can complain), or to show that activities have not been done (so that pressure can be brought to bear or personnel action can be undertaken). Oral communication is more positive and is used to get the job done. However, the higher its origin, the more likely it is to be negative.
3. The "grapevine". The Department possesses a very strong informal communication network; however, most of the informal communication is seen as occurring within work units or among persons on the same organizational level, rather than from above or from below.
4. Reliance on formal channels and the chain-of-command. Communication patterns generally follow the flow of the organizational chart. One aspect of this reliance on the chain-of-command that disturbed participants was the inability of their supervisors (or their supervisor's supervisors) to say "no" to an upper level directive or to ask why or how a task is to be done. This often leaves them in the untenable position of having to do an impossible task or having insufficient guidance to do the job right. Another inherent weakness in an organization which relies heavily on formal channels is the possibility that a single individual can impede or block the flow of communications.
5. Communications blockages. There seem to be "logjams" at points in the communication network. The group members believed these stoppages resulted from unintentional malfunctioning of the network or from attempts by individuals to build power bases. In the first cases, a clerical person may mistakenly file a document instead of passing it on, or a managerial person may not understand the

working of other units well enough to know who should receive the information. On the other hand, stoppages are also perceived as attempts to protect one's "turf" by either defensively withholding information that might one day be used negatively or by using the dissemination of information to "build an empire." This topic is closely related to the status-and-power issue discussed by the worker-level groups in which communication is used to express the sender's status.

6. Isolation of individual work units. Employees often do not understand how they fit into the organization. Therefore, they do not know how their work is connected with the work of other employees, and they may not understand how the work of other employees affects their work. Individual work units don't understand work of the other units and thus are often too quick to criticize this work. Cross-functional communication (safety to design to engineering to environmental to right-of-way to equipment, etc.) is rare, even among persons who work together on a task. This is seen as having a negative effect on job performance.
7. Field vs. central office isolation. In the central office, there is insufficient understanding of field functions or operations. Central office managers at all levels are going into the field less often (and field managers are going to the central office less often); therefore, they can't keep track of the work or understand how to better facilitate the work. Some policies seem to have been developed without an understanding of how they will affect field operations.
8. Overloaded with data, but starved for information. This was an issue with these three groups with relation to written rather than oral communication. They perceived that the paperwork they receive and are required to generate has increased dramatically and will increase even more dramatically if the pay-for-performance plan is fully enacted. They feel that a great deal of time is being spent documenting, instead of getting the job done.
9. Timeliness: This issue was mentioned with regard to decision making and interaction with the public. It was believed that employees need to be informed of impending events or changes in time to have some input as to whether or how the change will take place. Additionally, once a decision is made, principal actors in the change need to be informed before this information is released to the media and in time to prepare for the change.

The Elements of Good Communication

Although these groups carefully documented issues of concern, they thought that the Department was currently genuinely interested in enhancing and improving communication. The Natural Bridge meeting and the focus group meetings were cited as examples of this interest. They also cited both improved management training at lower levels and increased decentralization of responsibility as proof of this interest. They thought that the latest emphasis placed on improving management would increase the chances that innovative ideas would be discussed and/or implemented. Communication under crisis situations was also seen as very effective: "if it is an impossible task, we can do it in three days; if it is routine, it'll take a month." The mid-level management groups characterized good communication in some of the same ways as the worker groups, but with slightly different emphasis.

1. One-to-one interaction with supervisors and subordinates. Good communication between immediate supervisors and subordinates was characterized as being personal, with supervisors being easily approachable, easy to discuss problems with, generally understanding, and willing to help where possible.
2. Knowing each other's territory. Gaining a thorough understanding of both the operations of other work units and of where one's unit fits into the organization were seen as essential to good communication.
3. Personal vs. departmental communication. Good communication was perceived to be a personal or individual trait as opposed to a corporate quality. It was acknowledged that the Department had "many people at all levels who can communicate needs and desires with feeling and knowledge" as well as persons who create communication blockages. Oral communications were viewed as being more personal and thus more positive than written communication.

In addition to these qualities, good communication included providing sufficient guidance from management to give individuals an idea of what was expected of them, and with regard to impending changes in the Department, coming early enough so that affected personnel could contribute to the decision making.

Perceived Barriers to Communications

The following is a summary of items detrimental to communications:

1. The heavy reliance on the chain-of-command discourages direct communication between the sender and receiver of information.

2. Communication stoppages exist in the chain-of-command, either intentionally or unintentionally.
3. Upper-level managers are afraid to say "no" or to ask why or how a task is to be done.
4. Work groups are isolated from other work groups, even in cases where they must interact. Field units are isolated from central office management and work units.
5. Paperwork is increasing dramatically; written information needed to get the work done cannot be distinguished from mere documentation.
6. Staff meetings are rare and are too often devoted to directives and policies rather than to improving the ways the job is done.
7. The Personnel Division is seen as a unit that provides directives without explanation and without an understanding of their effect. The directives are also produced without consulting the employees whom they effect.
8. Most communications are one-way; thus, they prevent the affected employees from having input into decisions.

Suggestions to Improve Communications

The major focus of suggestions for improvement dealt with improving direct vertical communications and promoting the exchange of knowledge among different functional groups on the same level.

Departmental Meetings

1. Schedule more informal meetings that include people in different levels of the department. These might be similar to the Natural Bridge conference, or they might take the form of social events.
2. Schedule focus groups, which are like the present ones, that are designed vertically rather than horizontally. It may be that initially these will need to include people who are not directly related to one another so that people will not be afraid to talk to each other.
3. Initially, make the focus of cross-level, cross-section, cross-area meetings the identification of the type of information needed, the reasons for needing it, the depth of information needed, the frequency with which it is needed, etc. This will begin the process of defining ways individuals and units can work better

together. Once these ways have been defined, the timing and regularity needed for these meetings will be known, and the meetings can be scheduled in order to get the job done.

4. Have regular staff meetings that are oriented to getting the job done, instead of to policy and procedural directives.
5. Consider a team approach, especially on larger projects, so that units that serve different functions can communicate with each other.

Empathy

6. In order to promote understanding of the field environment and operations, increase the frequency with which people at each level get into the field. Mandate this as part of their work load and find ways to minimize their paperwork so that this is possible. The latter might include more efficient use of electronic mail, telex systems, etc. This paperwork problem may be more severe at the residency level. Many people may need to be trained to use the new electronic systems.
7. Consider an internship process that would put people in other peoples' jobs for short periods of time.
8. Since many of the barriers between units seem to come down in crisis situations, consider using the past crises as models for the kinds of communication that can occur.
9. Lengthen the time of orientation, and focus it on how new and old employees fit in the organization, how they relate to other parts of the organization, and how these parts relate to them.
10. Increase interaction between the central office and the districts; the personnel division and each unit; and section heads, section engineers, district engineers, assistant district engineers, and resident engineers.

Increased Upward Communication

11. Encourage communication from the employees. Everyone needs to listen more and talk less.
12. Inform personnel of impending events in time for them to prepare for them and before the media are informed.

13. Analyze the written communication flow downward to determine and correct patterns of stoppage.
14. Continue to endorse the need for and value of improved communication.

Miscellaneous

15. Increase communication between the personnel division and all units. This communication should be focused on what personnel can do for these units.

Part 3: Assistant Division Administrators

Common Themes

Six themes emerged from this group of mid-to-upper-level managers, four of which were common to the lower-level focus groups and two common to the upper-level ones.

1. Prevalence of one-way communication. This group gave several examples of commitments made at top levels that are then passed on for the rank and file to implement. For example, official policy requiring wide-ranging changes in procedures for overtime, compensatory leave, etc. from state agencies (such as the Fair Labor Standards Act) is passed along. There is, however, little indication given as to how this information should be collected, or what other uses it will serve. As a result, much time and effort is wasted. It was also thought that formal channels are used to inform and instruct, whereas informal channels are used to get the work done.
2. Communications about problems only. One-way communication is often focused on "things that go wrong" or on deadlines that are not met. As a result, it creates negative feelings.
3. The "grapevine". This group thought that the "grapevine" was the way to find out things that are happening that will affect one's job or the Department as a whole. The "grapevine" is often given as an example of successful communication, with mail room personnel being seen as the prime source of important, timely information: "If you want something known quickly and widely, put it on the 'grapevine'." Most of the assistant division heads knew who the new director of operations was to be months before it was announced. The "grapevine" is recognized as sometimes embellishing information;

however, its accuracy is "often uncanny." Others said that it is as if "the walls have ears" within the Department because the "grapevine" works so quickly.

With relation to the "grapevine," the often destructive effect of rumors was discussed. Recently, for example, rumors have been circulating concerning both decentralization and the possible end to flex-time (which is highly valued by employees). It was thought that more attention should be paid to the informal channels of information, and that these informal channels will not be made to "go away" by ignoring them or by simply focusing on formal channels. In order to establish the credibility of rumors (often to answer employee or public questions), the assistants check with their division head, often only to be told that the division head has been asked "not to say anything at this time," or that the division head himself would like more information about what is on the "grapevine."

4. Chain-of-command and the military atmosphere. The Department is seen as having a "military" atmosphere in several ways. The first is that many of the upper-level managers have military educational backgrounds or experience or both. Another aspect of the military nature of the Department is the strictness with which the chain-of-command is enforced in some instances. Although the chain of command is always followed up the line, it is rarely followed down. In terms of personality or managerial styles, some top management personnel are seen as being alienators because of their insistence on maintaining their control and on being "in charge."
5. Politics. "Third-floor" politics as well as state politics are seen as having an effect on the number and kind of requests that end up coming down the line. In addition, it is recognized that politicking adds another level of pressure on these individuals that eventually gets passed along to lower levels. This is related to the chain-of-command issue, in that pressures are passed on to lower levels without their direct communication with those creating the pressure.
6. The Department as family. In the past, there was a sense of family among employees. Many of the career employees have long-term work relationships with other employees at their managerial level. This familial relationship was seen as making communication easier.

The Elements of Good Communication

For this group, the product of effective communication is everybody knowing what is expected of them and why. Good communication is verbal

and horizontal, and it encourages feedback. Good communication also consists of a clear message and a careful explanation.

The annual or semiannual engineering conferences, in which several levels of employees were able to share information and problems and to interact face-to-face, were given as providing the occasion for successful communication. In addition, emergency situations such as floods are the center of more success stories, in which everyone is kept up-to-date and everyone "grabs a bucket" and pitches in to accomplish a task quickly and efficiently.

Lower-level staff are seen as having had little formal training in communication, but their years of experience in dealing with people are recognized as very important. Most supervisors are said to motivate staff by distinguishing between "those that need a pat on the back and those who need a kick in the pants!". Thus, assistant division administrators feel that with little formal training in counseling or communication, field staff communicate effectively in order to get the work done.

Perceived Barriers to Communications

1. Assistant division administrators said that they sometimes receive only partial information. Not knowing the purpose of requested information often causes confusion and wastes time because the job is done incorrectly the first time around and needs to be redone afterwards. The organization of the focus groups was given as an example of this: the letter that went out contained incomplete information and most people had to make several calls in order to find out the time, location, etc., of the meeting.
2. Another perceived barrier could be summarized as: messages sent, but not received. The listener is often not paying attention, and is then too scared to go back to their supervisor for additional or repeated information. In addition, there is often "some sort of twist," in the message, which the sender has not noticed, that leads to the information being misunderstood. The illiteracy at lower levels is seen as a problem in this regard, especially for complicated written material.
3. The formal channels of communication are seen as a barrier to communication. Often, information must pass through so many channels, the original meaning or intent of a message is lost. "The more people that are involved in getting something done, the fewer chances there are that the work will be done correctly." The chain-of-command also causes delays because people may be difficult to reach on the phone, or the task of finding out who to talk to may itself be difficult. In addition, going up the chain for

clarification, more information, or a decision means waiting for that information to come back down.

Suggestions to Improve Communication

Empathy

1. The assistant division administrators believed that more understanding of those actually doing the work (especially in the field) would be a primary step in improving communication within the Department.

"You have to understand these people [supervisors] are trying to get a day's work done, and the land is flooding, the hills are falling on the road, coal trucks are tearing up the pavement. Now, on top of everything else, these people are being loaded down with paperwork and managerial responsibilities and they are so frustrated -- we're going to drive them all home. We're asking too much for what they're being paid."

2. Although it is difficult to foresee all eventualities, more time should be spent addressing these possibilities and recognizing the limitations in resources of those who are being given a new task or request for information. For example, supervisors do not take into consideration the current work load of the Department before making a priority request, and they should realize the costs involved.
3. Administrators are too quick to promise something to their superiors. "It seems like the words--Let me check on that and I'll get back to you--are impossible for these guys to say!" It is recognized that everybody has pressures, but it is felt that this is one way to alleviate the unnecessary stress of commitments that are impossible to meet.

Repetition

4. One simple way of improving communication would be to increase the number of times that a message is repeated and to encourage feedback, which will ensure that the message is understood.
5. Similarly, if the objective of a request is communicated, those doing the actual work will have an easier time accomplishing the work and getting it right the first time.

Improved Training

6. Another suggestion for improving communication is to improve training within the Department. There is a need for professional trainers and communicators, and for more use of video equipment, etc.
7. Certain supervisory personnel require improved managerial skills; these people should be removed from field duties in order that they may devote time to training for management.

Increased Upward Communication

8. "If we were able to get things straight first it would make all our jobs a lot easier." Examples were given of the difficulty of getting different groups together in face-to-face situations to be able to "head off problems from the beginning."
9. Complicated policies and procedures should be developed with participation from all levels of employees to make sure everyone understands them and to make sure that the effects on the work at all levels are considered.
10. This group expressed the desire for more time for field visits. Although those in the field look forward to these opportunities for "hot news from Richmond," the division heads need to go out into the field to find out what is really going on.

Part 4: District Engineers

Members in this group included six of the nine district engineers. (In actual fact, an additional district engineer was interviewed as part of the directors' interviews, but those results are summarized elsewhere.)

Common Themes

The six common themes emerging from the district engineers' focus group are summarized below. It is interesting to note that five of the six concerns mentioned by the district engineers were also mentioned by the worker level employees.

1. Prevalence of one-way communication. Messages from upper-level management are formal, most often in written form, and often vague or containing insufficient background information (especially for requests). Often, it is the job of the next lower level to

translate these "mandates" into procedures, which must then be communicated in writing further down the line. Then, they must be followed up continually verbally. Again, pay-for-performance was mentioned as an example. It was reported that briefings had been held for groups of 200 or more people at a time. In turn, these people had been made responsible for holding training sessions for groups of 30 to 40 people. In addition, mass information had been distributed in written form to all departmental employees with their pay checks, with considerable backtracking, and verbal follow-up by supervisory personnel. Yet, the end result of all of this communication was tremendous confusion and misunderstanding; it also generated a lot of negative feelings throughout the Department. The vocabulary of the military is often used by this group in reference to official lines of communication: chain-of-command, top-level "gunslingers" (task setters), etc. The official chain-of-command channels are almost always used when communicating up the line, although these are often jumped or superceded when communication comes down the line.

2. Reliance on formal channels and the chain-of-command. Most written and some verbal communication flows through formal chain-of-command channels. Several incidents were described in which district engineers had sent letters to a division, with copies to their supervisors. In these cases, the district engineers were later told by supervisors that they should not have sent the letter directly to the division, but should "use their own judgment" in the future. The group (amid much laughter) said their first mistake was to send their bosses copies of the letter, and their second mistake was to put something in writing in the first place!
3. Status, power, and control. Status and power are integral to the message sent to others. Status differences are indicated by dress, segmented groups (male/female, central office/field, management/labor), and power plays with formal communication channels. Situations in which several people are talking at once are interpreted as loss of control, as is the inability to delegate efficiently. Loss of control is seen as a weakness. This group was only recently given permission to resume meeting together; this was previously "prohibited," presumably to "avoid plotting." The situation created by the inability to meet was handled by distributing copies of each district's regularly scheduled meetings so that everyone would still be aware of what was going on in the districts and problems would be shared, even though the district engineers would not get together to discuss them face-to-face.
4. Overloaded with data, but starved for information. This group defines communication as "keeping people in the know"; they think that "a little information can be a dangerous thing." This is related to an "overabundance" of formal written communication. For

example, the pay-for-performance information recently being disseminated has caused much turmoil and in many cases, much misinformation. In addition, it was felt that too little attention is being paid to the climate or environment in which messages are received as opposed to simply the "verbiage" of the message.

5. Timeliness. Delay in obtaining accurate information and receipt of important instructional information too late were cited as examples of the problems caused by the lack of timely communication. Several people gave as an example the coordination of the focus group discussions
6. "Oneness of voice". Among this group, it is not uncommon to have nine different opinions expressed by the nine district engineers, especially without previous discussion or sharing of information relating to a specific topic. In contrast, the group was able to meet and review certain topics before the Leadership Forum Conference and were thus able to present a unified voice, which was interpreted by the Commissioner as a positive sign of their interest and an efficient use of time at the meetings.

The Elements of Good Communication

For this group, the most important elements of good communication were said to be honesty, openness, and believability. These qualities were highlighted by examples of dealing with the press, with citizens during public hearings, and also with individuals within the Department.

Another important element of good communication was seen as including some explanation of why requests were being made or why certain policies and procedures were coming into force in order that these requests could be complied with more easily. It was felt that if some indication is made of how information is going to be used or what its purpose is, it would enable all employees to do the job quicker and with less need to redo tasks or to modify completed work.

Finally, good communication usually involves face-to-face interaction during the planning stage, during the actual work, and during any period of follow-up.

Perceived Barriers to Communication

Many of the common themes concerning the general culture of communication surfaced again as barriers to the communication process within the Department. These included the following:

1. Needed information is often received too late.

2. Written and verbal communications flowing through the chain-of-command can result in delayed, garbled, or blocked messages.
3. The district engineers felt that lower levels of management and particularly field personnel are not consulted on changes that will affect their work. This lack of feedback adversely affects job performance. For example, pay-for-performance policies change time-keeping functions, work procedures, and standard forms, but these changes are not addressed by broad upper-management mandates. In addition, the upper levels of management are removed from the results of the policy changes and rarely follow-up on their effect within the workplace.

The district engineers pointed out that their work crosses geographic boundaries, division responsibilities, and staff levels; thus, it is very important for them to be able to cut through the red tape to get the work done. This elimination of red tape happens, for example, in emergency situations in which a highly efficient system of procedures and priorities kicks in and in which all involved are kept "in the know" at all times.

Suggestions to Improve Communications

This group listed many of the same improvements mentioned by the assistant division administrators group. In addition, they made the following suggestions:

- o "Give good news out on Friday and save the bad news for Monday!"
- o Increase face-to-face interaction.
- o Increase input from lower levels in planning.
- o Institute follow-up feedback procedures.

Part 5: Division Administrators

Common Themes

According to their group facilitator, the division administrators seem to be less concerned with the problems of internal communication than either of the other two upper-level managerial groups. Both the assistant division heads and the district engineers were quite concerned about internal communication, and very interested in follow-up from these discussions groups.

The division administrators also yielded the fewest number of common themes or shared perceptions of the Department's internal communications. Of the following three themes, two were mentioned only by managerial level groups, whereas one was mentioned by other lower level groups.

1. The Department as a family. The Department had in the past, and to a certain extent continues to maintain, a feeling of solidarity against "outsiders." In addition, the fact that many upper-level people are career employees with the Department seems to smooth the process of communication in many instances because people know who to contact and informal communication is much easier among "old friends." These informal liaisons are also seen as the primary way in which things get done throughout the workday.
2. Politics: Like several of the other groups, the division administrators think that the internal political pressures in the Department are increasing. They believe that the Decentralization Committee, for example, was "stacked" with central office staff and that more field staff should have been included. They also felt quite strongly that the politics of upper-level management (including political actions taken by top management and others outside the Department) often compromised them personally and professionally.
3. The "Grapevine". The division administrators noted that the "grapevine" could be quite destructive: information is often inaccurate, rumors are started, etc.

The Elements of Good Communication

Good communication, according to this group, should mean "an exchange of understanding." The burden seems to be placed on the receiver in this regard.

Good communication also means getting enough timely information to do a job expeditiously.

Good communication also involves getting input from lower levels. For example, instructional memos should be sent out in draft form to the field to get input before they are sent out formally.

Perceived Barriers to Communication

The following summarizes the group's feelings concerning barriers to communication. It is interesting to note that this central office group dealt mainly with barriers for field personnel.

1. Staff working in the field often experience considerable delays (as much as three to four days) in obtaining information from the central office. These delays cause missed training opportunities, and some divisions felt they were left out of internal studies and discussions, or they did not receive standard equipment orders.
2. There is a perceived lack of awareness on the part of the central office concerning field operations. For example, one field facility still receives internal mail directed to the "Turnpike Authority," even though the unit changed its name 13 years ago!
3. Much of the misunderstanding of new policies and procedures is attributed to resistance on the part of lower-level staff members. The division administrators stated that they "don't care what Mary Sue or Joe want -- they just have to do their jobs." A prime example of this type of misunderstanding is the uproar caused by the pay-for-performance plan.
4. This group states that, in general, they are quite pleased with the amount of information they receive on a given topic, and they do not understand where things go wrong.

Suggestions to Improve Communication

General Communication

1. The division administrators are quite confident that the attention being paid to issues of communication will pay off in improvements.
2. Equipment that is either on order or being considered, such as telecopiers, videotape equipment, computers, and new telephones is also seen as a major attempt to improve internal communication.

Interpersonal

3. In terms of interpersonal communication, this group also felt that more interest should "be demonstrated to those in the field" of the work they do. Field visits are seen as a highlight for these people, and it is recognized that such face-to-face interaction is often the only way to find out how things are working and what problems are being experienced.

An example of good interpersonal communication was given by one division administrator who keeps all of his employees names in a box and draws out one each week and then calls that employee in for

"an informal chat about anything they want." Another stated that he tried to visit all employees at some point during the week of their birthdays.

Part 6: Directors

As mentioned earlier, the methodology used to interview the directors was, by necessity, different from that used for the other employees of the Department. On the average, interviews with Directors lasted 60 to 90 minutes, rather than 3 to 4 hours. Similar topics were covered during the directors' interviews, although they were not covered in the same order and were not repeated if they had come up spontaneously in previous conversation. Directors did not have the benefit of the frame-of-reference exercise used in the focus groups utilizing ambiguous photographs of business communication situations. Also, they did not have the benefit of each others' thinking nor did they have access to the group setting to expand their own ideas. On the other hand, since there are only eight directors, it was felt that they most likely had discussed communication among themselves in the past. In any case, it should be recognized at the outset that results of the directors' interviews may differ from focus group results solely because of the different interview methods used.

Common Themes

Clearly, the directors were the most diverse of all the groups with regard to concurrence on any given subject. In this respect (and in general), they were more like the division administrators than like any other group. As a group, they tended to wait to be questioned on the subject, rather than volunteer a statement concerning departmental communications. They agreed as a group on only one common theme, dealing with the internal world of the directors and the commissioner: on the third floor, the primary way you get or give information is to go to someone's office or have them come to yours. Thus, physical presence is the most important quality of successful communication. Those persons who do not "visit" tend to be less often included in information dissemination. Other qualities of successful communication often appear transparent to the directors. Good communication occurs when "things work the way they're supposed to." The use of old friends in informal communication was mentioned as promoting easy exchange of information by some directors. The major instance of successful communication mentioned was the crisis model discussed at the Spring Management Meeting. Very few other successes were mentioned.

A number of other themes did emerge from these interviews, which were mentioned by some, but not all, directors. It should be noted that there were some directors who did not mention any of these themes and

others who mentioned more than one. The themes summarized usually represent the views of three or more directors.

1. No Problem: Almost all of the directors felt that they did not have communication problems in their directorates: "if there is a problem, I'd like to know about it." A majority mentioned experiencing difficulties as a receiver of information from the "third floor," but felt they had few problems as a sender of information.

Several directors felt that the Department as a whole did not have any significant communication problems. Some directors saw communications as an obvious and somewhat superficial process of "I tell them what to do, and they do it." Others felt that if the Department had problems, they were due to one of two factors:

1. Information was being "sent" correctly but was not being received properly.
2. Information was being "sent" and "received" correctly, but receivers didn't like the information and were mistakenly calling the situation a communication problem. In this, their opinions were similar to those of the division administrators.

It seems that many directors agree with the statement made by one: "I don't believe that we've had the communications problem people perceive we've had; I think a lot of it's just perception and I don't believe a lot of it's reality. Maybe I've got my head in the ground."

Among many of the directors, the success of a communication effort is seen largely as the responsibility of the receiver. Again, this is similar to findings noted for division administrators, but not to those for lower-level groups. Thus, it appears that at some point in the hierarchy of the Department, the responsibility, or perceived blame, for poor communication reverts from the sender to the receiver.

2. Chain-of-Command: Most of the directors see the chain-of-command as an essential part of the Department and they follow it in their dealings with both subordinates and superiors. Most directors deal exclusively with division administrators, but some mentioned dealing with lower-level personnel. Usually, these dealings are either limited to one or two persons or occur when the division administrator is unavailable. Only one director mentioned deliberately and routinely violating the chain-of-command in order to simultaneously disseminate information and to determine whether previous communications had been received. In some cases, this was perceived by others to be a positive step, as was the possibility

of team building on projects utilizing personnel from various levels. In other cases, this was frowned upon. The commissioner was seen by some as a breaker of the chain-of-command, and he was not always applauded for it. Directors with small directorates and those with field experience are less likely to be overly concerned with the chain-of-command.

3. Powerlessness in Communication: Some of the directors stated that their ability to communicate with employees is curtailed by factors beyond their control, and that this is misunderstood throughout the Department. This is thought to be true in cases where employees have felt they should have been informed of imminent changes in order for them to prepare for or to have input into their implementation. This restricted ability to give others a chance for input or to disseminate timely information is sometimes the result of accountability outside the Department, particularly from the legislature, the secretary's office, or other state agencies; it is also sometimes due to the internal workings of the Department. Also, some directors feel they are being asked by their constituencies what the commissioner wants or expects when, in fact, that is still unknown. Thus, the directors are powerless to relay information that their constituents expect them to have and feel they are withholding. Finally, some directors noted that they are being held responsible for communicating information or statements made by the commissioner of which they were unaware. However, as a group, the directors felt that this is a problem that has occurred with every commissioner and is part of the job.

Whether or not the powerlessness mentioned by some directors is true, it should be noted that the feelings of powerlessness among a group holding the most powerful positions in the Department may indicate managerial or organizational problems beyond the scope of this study.

Minority Themes

Several of the themes mentioned in lower level groups were also discussed by a minority of directors as follows:

1. The "grapevine": The directors were about evenly split on the use of the "grapevine." Almost all perceived it as pervasive and as possibly more active than in other organizations. Their reactions to and use of the "grapevine" were very different. Some felt alienated from the rumor mill ("I never hear anything"); some ignore it; some try to use it to place accurate information in circulation or to make their constituency ready to receive written communication. Although almost all make some effort to defuse false rumors, not all are comfortable with this practice. Some

prefer to ignore false rumors because to deny one rumor is often to confirm another, which is seen as undesirable. At the other end of the continuum, some directors will attempt to find the source of the rumor and stop it at its origin.

2. Crisis Management: Although almost all directors cited increasing political pressure as a source of stress in their jobs, their reactions to the crisis management caused by politicization were quite diverse. Some believed that it was all part of the job. Others felt that crisis management should be minimized to allow the director time to look for opportunities to improve upward communication. Still others felt that crisis management was maximized in the Department as a way of controlling situations. This appears to be another version of the status, power, and control issues mentioned in lower level groups.

Perceived Barriers to Communications

Because so few actual communications problems were mentioned by the directors, very few barriers were mentioned. Those that are listed here are clearly minority opinions, each discussed by only a few Directors:

1. The Department's written policies, procedures, regulations, and standards are scattered throughout the organization. Thus, getting information depends on finding where the information is located. Procedures are sometimes repetitive or contradictory because as additions are made old procedures may not be deleted. Also, documentation is too voluminous to promote efficient use.
2. Situations in which the Department is held accountable by some outside agency for something perceived as a mistake are generally treated as crises. It is assumed that something actually is a mistake even before the facts are in. These so-called crises need to be prioritized, since not all of them require immediate attention.
3. There is little structured lateral communication between directors. Also, some directors feel that there is not enough communication between the chief engineer, the deputy commissioner, and their respective directors.
4. The chain-of-command interferes with vertical team building on projects. Persons of different ranks working on the same project rarely have the opportunity to meet and freely exchange ideas on how the project should be done. Instead, the same upper management people meet on most projects.

Suggestions to Improve Communications

1. Documentation: The Department should collect and "boil down" its standards, policies, procedures, and regulations into one concise document. Whenever an addition or change is made, the entire document should be revised.
2. Lateral Communications: More interaction should be arranged between directors at executive staff meetings.
3. Vertical Team Building: Teams should be created consisting of persons of all ranks working on a given project, including the highest level of management.
4. Office Automation: Every attempt should be made to speed the installation of and to promote the use of electronic mail, and electronic scheduling. This would make information immediately available to all levels of employees in the field and the central office.

DISCUSSION

Although many levels of employees perceive that there are a number of communication problems within the Department, it can also be hearteningly concluded that there is a clear model for good communication. The crisis situation model currently under such close scrutiny by management has helped all employees form a clear view of the qualities of good communication.

1. Involvement of all parties directly in the task and in communication, regardless of their rank or status. This requires the ability to talk directly to each person involved without having to go through the chain-of-command. Also, because everyone becomes involved in the task under crisis situations, interest in getting the job done at all levels seems genuine to the worker.
2. Keeping the message clear, uncluttered, meaningful, and timely. Good communication also implies sending employees only the messages that are pertinent to the crisis (or the project).
3. Providing employees with an explanation of how to perform a task, why the task has to be done, or why it has to be done in a certain manner. This involves communicating the intent of the project.
4. Being aware of the abilities of employees with whom one is dealing. This requires an understanding of the employees working situation, the operations of their work and the boundaries of their "territory."

This requires knowing about the employees with whom one communicates. Since most crisis communication takes place face-to-face, much learning about others takes place.

5. Providing and obtaining feedback, and repeating the message as often as needed to ensure that it gets through.

Interestingly enough, the employees' crisis model of good communication is very similar to one developed by Peter Drucker. According to this model, there are four fundamentals to communication.

1. Communication is perception: According to Drucker, since there is no communication unless there is someone to receive it, it is the recipient who should be thought of as actually communicating. It must be remembered that recipients can receive only that which they are capable of perceiving: "One can communicate only in the recipient's language, or altogether in his terms." What the recipient can perceive is also dependent on the culture in which he lives and on his experiences. In the crisis model, the recipient's frame of reference is taken into account during the communication in part by the speaker's being familiar with his abilities and situation. Additionally, since face-to-face meetings typify the crisis mode, information must be communicated verbally in the recipient's own work language.
2. Communication is expectations: We perceive, as a rule, what we expect to perceive. We see and hear largely what we expect to see or hear. That the unexpected message may be resented is not the important issue; it may not be perceived at all if the recipient is not expecting it or is expecting something else. Thus, prior to sending a message, one has to know what a person is expecting. If the message is an unexpected one, the sender must somehow alert the recipient that a new and extraordinary message is coming. One way in which this is done is to provide the individual with a shock or unmistakable signal that this is a new situation. Clearly, the presence of a crisis relays this message. Also, the use of repetition and feedback prior to sending an unusual message helps to prepare the individual to receive that message.
3. Communication is involvement: By and large, there is no communication unless the message fits in with the aspirations, values, and purposes of the recipient. When the message does key into these factors, communication is often direct and powerful. On the other hand, communication with persons who are alienated from or cynical about the organization are by and large going to be unsuccessful. Under the employees' model of good communication, individuals are told why an activity is to be performed, and thus are motivated to perform well (and to successfully receive messages about the activity). Additionally, in crisis situations the willingness of

all persons to do work, regardless of their rank or status, proves the genuine need of the situation, again keying into the employee's value system.

4. Communication and information are different: Information is simply pure data, without interpretation. Communication, on the other hand, is perception and, thus is eminently personal. With so much irrelevant information available, for communication to be successful, the recipient must be sent information needed to do the job. To send information non-selectively is to force recipients to discriminate between what is important and what is not, an interpretation which most people would make differently. Under the crisis model of communication only the information needed to deal with the problem is communicated, which makes the message clear and uncluttered.

The existence of a clear model for good communication implies that employees also have a clear idea of what typifies both good and poor communication. A number of the common themes mentioned in the focus groups lend themselves to the Drucker fundamentals discussed above. Over reliance on formal channels or on the chain-of-command violates the first of Drucker's fundamentals. It prevents direct communication between involved parties and increases communication between parties separated in the organizational structure. It creates a situation in which the sender, who lives in a world of top managers, will be unlikely to be familiar with the world of the employee, where the work is actually done; thus he will be unable to send a message in the employee's language or frame of reference. Isolation of work units operating on the same level, and isolation of field from central office units promotes a lack of understanding. The status, power, and control issues in which the sender uses communications mainly to convey his superiority over subordinates arbitrarily serves to separate the world of the sender from that of the receiver. In this instance, it is undesirable for the sender to use the recipient's language and frame of reference in communication.

Several of the other common themes illustrate Drucker's view of poor communication. Communicating only about problems creates false expectations among employees, who may come to expect criticism when they are actually being offered guidance. Also, constantly hearing solely about things going wrong (and not hearing about things going right) discourages the motivation and involvement necessary to good communication. Commands without meaning accomplish the same thing by removing consideration of the employees' values and aspirations from the job and reducing their motivation to receive messages. Just as timeliness in communication allows employees to prepare for change or to be involved in the decision making leading up to change, delays tend to reduce personal involvement. The real danger in this situation is that by multiple exposure to situations in which involvement is discouraged, the

employee will be made increasingly cynical, to the point where involvement is impossible.

The final Drucker fundamental illustrated by the common themes has to do with the difference between information and communication. The department disseminates an impressive amount of information; this, however, does not constitute communication, unless the recipient can actually use the information and it has meaning for him or her. A number of the focus groups felt inundated with information but starved for communication. This puts the burden of deciding what is important and what is not on the recipient, who may decide either that none of the information is important or that the process of sifting the wheat from the chaff is not worth the effort. Thus, too much of the wrong kind of information can be just as deleterious to good communication as not enough information.

CONCLUSIONS

One must be very careful in the interpretation of the results of the focus groups and director's interviews conducted for this study and in drawing conclusions from those results. Cross-group comparisons, except in the broadest sense, are discouraged for the following reasons:

1. The nine focus groups used different techniques to gain information from those used during interviews with the directors. The focus groups had three to four hours to consider communication issues and used the group process to encourage generation of new ideas. The directors did not have the benefit of each other's thinking and certainly did not have three to four hours to devote to the subject.
2. The nine focus groups were directed by three different group facilitators. Dr. Gib Akin conducted the field worker, central officer worker, and area superintendents groups. Dr. Bruce Gansneder conducted the resident engineer, district section engineer, and central office section head groups. Ms. Debra Ross conducted the assistant division administrator, division administrator, and district engineer groups. The findings summarized and discussed in the report are based upon the facilitators' summaries of the discussions. It is possible that differences noted between groups may be due to differences in facilitators, rather than to actual differences of opinion among departmental employees.

With these caveats in mind, one very broad cross-group comparison can be made. It would appear that the view of communication from the top of the organization down is significantly different from the view from the bottom up. Upper-level management, specifically the directors and the division administrators, perceive the communication issues existing within the Department very differently from managers and employees at lower levels. Although some reasons for this dichotomy seem obvious, exactly why such differences exist cannot be determined from this cursory analysis.

There are a number of alternative courses the Department may follow at this point. Additional information remains to be gleaned from analysis of the focus group tapes. Once all facilitators have reviewed all 33 hours of audio tapes generated by nine groups, cross-group comparisons can be made. A detailed analysis of the examples of both communication successes and problems given by employees would assist in "fleshing out" concerns and developing countermeasures to resolve communication issues. As a result of this detailed analysis, experimental intervention could be undertaken on a small scale to improve conditions. A number of the focus groups recommended conducting additional focus groups in the future, composed of persons at different

levels in the organization. This option could promote increased understanding of others positions. On the other hand, a traditional communication audit could be conducted. This audit would involve some of the same activities included in the current study, but would also (1) examine the organization's communications philosophy; (2) determine whether objectives are understood by recipients; (3) analyze internal affairs; (4) examine current and previous attempts to improve communications, and determine whether they actually worked; and (5) recommend concrete changes. At the same time, management may wish to review the suggestions to improve communication developed by each group with an eye toward implementing those recommendations that might have an immediate impact on current practices.

It is recommended that communications become the principle concern of additional study in the Department. It is further recommended that a communications advisory group be formed consisting of managers from both upper and middle levels, employees, and researchers. This group could consider future alternatives and advise the department as to its future course of action.

