

CITIZENS LEAGUE REPORT

No. 79

**City of Minneapolis
Inspection Services**

August 1957

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REPORT ON
MINNEAPOLIS CITY
INSPECTION SERVICES

79



CITIZENS LEAGUE

Minneapolis and Hennepin County

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We are pleased to transmit herewith a copy of a report on Minneapolis City inspection services prepared by the League's City Budget Committee and approved by the Board of Directors on August 7, 1957.

The report suggests that the City shift its emphasis to a limited inspection system, consolidate inspection organization, establish generalized inspectors, and take several other steps to improve Minneapolis inspections. In approving the report, our Board of Directors suggests considering the possibility of requiring performance bonds in connection with certain licenses and permits for the protection of the public. It also emphasizes that this report makes no recommendation for the extension of City licensing.

We wish to acknowledge with thanks the excellent cooperation given our committee by all administrative personnel contacted and especially the Building Inspector, Director of the Bureau of Environmental Hygiene and Chief of the Fire Prevention Bureau, whose agencies were most intimately involved in the study.

Members of our committee and staff will be glad to meet with you at your convenience to discuss this report.

Sincerely yours,

Walter S. Harris, Jr.
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S U M M A R Y O F R E C O M M E N D A T I O N S

The general principle of City inspections

The City should develop its program of inspections so as to minimize manpower requirements, improve enforcement and minimize the inconvenience of those regulated. To do this the City should further develop the use of selective inspection (1) by continuing investigation of complaints and (2) by starting to use scientific sampling methods for the scheduling of spot checks. Where practicable more reliance should be placed on the work of licensed tradesmen, reputable contractors and on inspections made by non-City inspection agencies. (pages 6 - 14)

Consolidation of inspectional organization

The Department of Building Inspection should be renamed the Department of Inspection and given the following responsibilities in addition to its present ones:

- . . . Housing inspections, including those now the responsibility of the Health Division and the Fire Prevention Bureau.
- . . . The activities of licenses, weights and measures inspectors.
- . . . Sewer, water, sidewalk and curb inspectional activities of the City Engineer's Department.

The Health Division and Fire Prevention Bureau should carry on only specialized and technical inspections in their fields, and from time to time their activities should be reviewed to assure that non-technical inspections are performed only by the Department of Inspection.

The License Inspection Bureau of the Police Department should continue to make morals investigations. (pages 15 - 22)

Generalized or composite inspectors

Generalized or composite inspectors should be used for housing inspection work.

Their use in inspecting new construction and in other fields, such as in license renewals, also should be thoroughly investigated. (pages 23-24)

Other recommendations

. The violator should be charged a fee for reinspections after he has been warned once. (pages 25 - 26)

. Issuance of certificates of competency should be centralized in the Department of Inspection. (page 26)

. Long run improvement of City inspection activity requires constant systems and procedures study. This can be done most effectively by an administrative analysis unit within the City government itself at the top staff level. (page 26)

BACKGROUND

1. Initiation and purpose of study

The City Budget Committee decided to enter upon this study after hearing from both official and lay sources of an interest in the possibility of consolidating inspections. As it developed, the study came to include other aspects of improving inspections besides consolidation.

In the broad sense, the purpose of the committee's study was to study all the inspectional activities of the government of the City of Minneapolis with a view to suggesting improvements. These activities include building and housing inspection, fire inspection, health, weights and measures, police and public works inspections.

2. Method

The full committee first held a series of meetings to hear descriptions of their departments' functions by the heads of the City's building inspection, fire prevention, licenses, weights and measures, police and environmental sanitation (Health Division) agencies. This series was followed by a talk by Alderman Frank Moulton, who had made public comments about the City's inspectional activities and had suggested from time to time that a study of them would be an appropriate task for the Citizens League.

After this background had been developed, the full committee decided to appoint a sub committee to go into the question of inspectional efficiency in a more intensive manner. First sub committee chairman was Ray Putman. Upon appointment as full committee chairman, he was succeeded by James Michael as sub committee chairman, but continued as a member of the sub committee. Other sub committee members were Mrs. Robert Tuve, Earl Herbst, Burton Meyers and Charles Shortley.

The sub committee conducted supplementary interviews with each of the inspectional administrators and the City Engineer in their offices and after developing a number of basic questions, met with the three major ones (Building, Health and Fire Prevention Bureau) as a group to discuss these questions. Finally, the sub committee met with Joseph Hadley, assistant city attorney in charge of prosecuting violations of the housing ordinance, to discuss the legal aspects of some of the questions that had been raised thus far.

Preceding and concurrent with this activity, the sub committee studied reports of administrative surveys of inspectional administration in the cities of Chicago, Philadelphia, New York and Milwaukee. The sub committee also consulted several persons experienced in quality control and other aspects of production inspection in private industry in Minneapolis.

4. Acknowledgements

The sub committee wishes to acknowledge the helpful cooperation of the Building Inspector, the Chief of the Fire Prevention Bureau, the Director of the Bureau of Environmental Sanitation and the City Engineer in providing information for this report.

PRESENT ORGANIZATION FOR INSPECTIONS IN MINNEAPOLIS

The subcommittee prepared detailed reports describing the organization and activities of Minneapolis' major inspectional agencies, which are filed in the League office. The tabulation on the next two pages is a summary picture of these agencies and their activities.

Selected Data on Inspectional Agencies

Table 1

| Agency | Chief administrator's title, how appointed | P e r s o n n e l | | 1956 salary Expenditures | Functions |
|---|--|-------------------|-------|-----------------------------|--|
| | | Inspectors | Other | | |
| Inspector of Buildings | Insp ector of Buildings, appointed by City Council with civil service tenure | 46 | 22 | \$453,777 | Responsible for safety of every bldg, new or existing, except for such accidents as result from fires maliciously set. 1) <u>New construction</u> : approves plans, issues permits , conducts inspections. 2) <u>Existing housing</u> : checks these according to housing code, mostly upon complaint. 3) <u>Other inspections</u> : checks for license renewal on certain business. 4) <u>Issues certificates of competency</u> for certain crafts and trades. 5) Maintains <u>testing</u> laboratory for building materials. |
| Fire Department: Fire Prevention Bureau | Chief of Bureau, appointed by Fire Chief with civil service tenure | 19 | 8 | 145,754 | <u>Inspects</u> for fire hazards in hotels, flats, apartments, commercial and industrial buildings, churches, schools and, when possible or on complaint, existing dwellings. Conducts <u>education</u> program in schools, etc. |
| Division of Health: Bureau of Environmental Hygiene | Bureau Director, appointed by Health Commissioner with civil service tenure | 28 | 5 | 181,966 | <u>Inspects</u> for compliance with hygiene requirements: dairy farms and pasteurization plants, some slaughter houses, sausage manufacturers, food establishments and existing housing. |
| City Clerk's Office: Division of Licenses, Weights & Measures | City Clerk, appointed by City Council for two year term | 7 | 6 | 66,938 | <u>Inspects</u> weights and measures, taxicab meters and truck loading. <u>Issues</u> over 120 kinds of licenses. |

(continued)

Table 1 (page two)

| Agency | Chief administrator's title, how appointed | P e r s o n n e l | | 1956 salary expenditures | Functions |
|--|--|-------------------|-------|-----------------------------|---|
| | | Inspectors | Other | | |
| Police Dept: Licenses Bureau | Licenses Inspector, appointed by Police Supt with civil service tenure | 5 | 2 | \$ 33,696 | <u>Investigates</u> applicants for new and re- newal licenses for beer and liquor, cab driving, rubbish hauling |
| City Engineer's Dept: Engineer's In- spection, Rat & Weed Control, Transportation Inspection, Sidewalk and Curb Inspection | Unit heads appointed by City Engineer with civil service tenure | 13 2/3 | 5 | 92,091 | <u>Engineer's Inspection</u> : inspects building connections to sewer and water mains, repairs of sewer and water pipes. <u>Rat and Weed Control</u> : enforces ordinance on private property when ordered by Health Commr or Bd of Pub Welfare, exterminates rats on public property. <u>Transportation Inspection</u> : Issues special permits for transporting unusual loads on city streets, checks bus routes and services. <u>Sidewalk and Curb Inspection</u> : inspects construction of side- walks, curbs, driveways; condemns and orders repairs. |
| | | 118 2/3 | 48 | \$974,222 | |

EXPLANATION OF RECOMMENDATIONS

1. The City should develop its program of inspections so as to minimize manpower requirements, improve enforcement and minimize the inconvenience of those regulated. To do this the City should further develop the use of selective inspection (1) by continuing investigation of complaints and (2) by starting to use scientific sampling methods for the scheduling of spot checks. Where practicable more reliance should be placed on the work of licensed tradesmen, reputable contractors and on inspections made by non-City inspection agencies.

A good governmental inspection system is one which meets three conditions:

- (a) It safeguards the public health, safety, welfare and convenience.
- (b) It is economical.
- (c) It imposes a minimum of inconvenience on people whose property or business is being regulated.

To accomplish these objectives, the inspection system can be built around either of two general theories. The first holds that the city itself must see, through its own inspectional staff, that all licensees follow the regulations set forth in law and ordinance. In other words, there is 100% city inspection of licensed activity. This is the theory that guides the City of Minneapolis' inspection policies now, even though in practice (for example, housing maintenance) it is unable to follow it out due to manpower shortages. In the field of new construction, the city follows this theory most closely, that is, it maintains, or comes closest to maintaining, 100% inspection of all regulated activity.

The second general theory of inspections holds that the city inspectional staff can be kept to a minimum and can place main reliance on licensees to meet standards

through filing of an affidavit and on work done by a licensed workmen who carries a license or certificate of competency. It holds that something short of 100% inspection is needed, and that checking performance by a method of scientific sampling is as effective, if not more effective, in detecting non-compliance with standards than 100% checking. It relies in part on the City's power to revoke licenses or permits of certificated personnel and contractors as a means of keeping their performance up to standard.

An excellent statement of the merit of this second theory is given in a report on inspections in New York City:

In the interest of economy, and yet with proper regard to adequacy of protection, it is important to start out with the assumption that the City does not have to spend money for inspection in order to get good regulation. A licensee can be required to swear that he has met City standards, and he can be held criminally liable for failure to meet them; or an affidavit can be secured from a licensed professional man, whose license can be revoked if standards are not met. Suppose the licensee or applicant is not sure whether he has met standards or not, then he could be required to secure the approval of some private inspectional agency accredited by the City.

In other words, regulation by City inspection is only one means to the desired end, and should be the way of last resort. In setting up for regulation, the backbone of the program should consist of means other than City inspection, with the City facility used only to fill in the loopholes.

Loopholes exist, of course. Regulation of building safety, health hazards, weights and measures, and the like cannot be carried on without some City inspection. It must be used:

- (a) To "check the checkers". Is the private inspectional agency doing a satisfactory job?
- (b) To analyze the results of enforcing the established standards. Do they properly protect the public?
- (c) To check the honesty of licensees when accredited inspection agencies cannot be used.
- (d) To detect failure to apply for a license.

(pp. 225, 226)

We believe that Minneapolis should shift to this theory of inspections. We believe this would result in at least as good, if not better, compliance with regulations, would be more convenient for conscientious licensees, and would permit the use of fewer inspectional personnel to maintain the same level of enforcement.

The basis for our recommendation is that (a) the City now regulates trades and industries through certificates of competency and licenses, (b) scientific sampling techniques in industry have been more effective in detecting product defects than 100% inspection, (c) non-City inspectional agencies already inspect certain areas now covered by City inspectional personnel.

a. Application to inspection of new construction

The City's Department of Building Inspection works mainly on the inspection of new building construction. It has the largest single group of inspectors in the City service (46 of 118). The application of the limited inspection theory would have the most marked effect in this inspectional area.

(1) Licensed and certificated occupations and industries. The Building Inspection Department conducts examinations and issues certificates of competency for persons who wish to work at such trades as sheet metal, steam and hot water heating systems, oil burners and refrigeration. It licenses a variety of trades, such as cement contractors, electricians, gas fitters, plasterers, plumbers, sign hangers, and a number of industries, such as cement contractors, concrete block manufacturers, house movers and wreckers.

The holders of these certificates and licenses have demonstrated their ability to perform their occupation or business according to the standards set forth in the law or ordinance, and as they fail to perform according to those standards, they open themselves to forfeiture of the privilege of practicing or doing business in the City.

If the certificates and licenses mean anything, the City should be able to place a good deal of reliance on the holders to perform according to standards. There is no need to have a City inspector check to see that every job is performed according to standards. To do so seems as uneconomical and inconvenient as requiring a surgeon to subject himself to an inspection by a public official on every surgical operation he performs, or similarly, to have a pharmacist's prescriptions checked in every case by a pharmacist's inspector. Their fields of service are no less concerned with the public health and safety than the construction of a building .

(2) Spot checking samples selected through statistical methods. Given the fact that the work of certified or licensed workmen and industries should not require 100% checking by the City, some system of spot checking is needed to police their performance. Business and industry have successfully applied statistical sampling techniques in their efforts to control quality.

Extensive study has shown that 100% inspection is not 100% effective in detecting a defective product. On the average, only about 80% of the defects are detected under a 100% inspection system, due to various human factors such as monotony, carelessness and forgetfulness. In sampling inspection the work is less tiresome and the inspector realizes that the inspection of a given sample will determine acceptance or rejection of a much greater amount of the product.

Sampling instead of 100% building inspection would have the very important advantage of relating the degree of inspection to the degree of risk. It is probably true that a large percentage of the notices for correction are going to a small group of contractors or to limited areas of the City. The plan could be set up so that contractors (or areas) which are responsible for most of the violations are inspected more frequently than those with good records. A contractor would have a real incentive to decrease the number of violations so that he would be bothered less often with inspections.

(3) Reliance on inspection by non-City inspectional agencies. A 1945

report on City of Chicago inspections said that many cities accepted insurance companies' periodic inspections of elevators, although they maintained an official agency to inspect periodically any non-insured equipment and in many instances to make the initial or installation inspection. The report said the Minnesota State Industrial Commission accepted insurance companies' certificates.

The New York report recommended that:

The State establish a board for examining and licensing all elevator inspectors, city and private, and that elevator insurance be made compulsory. The City should then accept casualty-insurance company inspections in lieu of City inspection. This would permit a 75 percent reduction in the present force, thus saving \$278,000. The remaining 25 percent would regulate new installations, inspect elevators lacking insurance for temporary or technical reasons, reinspect and prosecute owners on violations reported by casualty company inspectors, spot check casualty company inspectors' work and inspect amusement devices. The casualty companies would be required to furnish copies of reports of inspections at a nominal cost and to notify the City when insurance is cancelled or transferred.

About half of the large cities follow this practice, as do most of the larger states.

Why could Minneapolis not accept insurance company reports on elevators and escalator inspections and also get copies of notifications of cancellations or suspensions or insurance?

If insurance is not now compulsory, consideration should be given to making it so. This would make it possible for the City nearly to eliminate inspections of elevators and escalators by making use of insurance company reports. City inspections could be confined to those necessary to assure maintenance of City standards (spot checks) and to force into line those people whose reports indicate that they were violating the City ordinance.

If insurance is not compulsory and could not be made compulsory, the City could concentrate on inspection of the uninsured units. The competency of private ins-

pectors for insurance companies should be assured through a license or certificate based on passing of an examination by the City. Compliance could be assured by periodic sampling.

(4) Minimized inconvenience of those regulated. The inspectional process in the construction of a new building illustrates the value of selective inspection as a way of increasing the licensee's convenience as well as reducing the work for the City. One sub committee member counted as many as 11 inspections by various City inspectors on a residence from the time plans were first brought to the Building Inspection Department for checking and approval until final approval was given to the heating system.

An inspector must approve the condition of the ground before concrete footings are poured. Then he must come out after the pouring to see that the footings are according to specifications of the blueprints. Electrical work is inspected after rough work is put in, and after final installation. Plumbing is inspected in similar fashion. In addition there are sewer and water, lath and plaster and heating inspections, all of which must be inspected at various stages before the builder can go ahead to the next step.

Reliance upon the contractor and his certificated workmen makes complete inspection of every one of these steps unnecessary, time-consuming and costly for the reputable builder and of course adds to the final cost of the structure.

A system of spot checking by City inspectors, according to a statistically selected sampling, would minimize the inconvenience of the builder with resultant reduced costs and would uncover defects as well as 100% inspections. Experience over a period of time would indicate which builder and workmen were most consistently substandard in their performance, and the sampling would be adjusted to take this into account.

Consequently, reputable builders and workmen could look to being less inconvenienced by spot checks as they kept their standards up. In the final analysis, of course, consistent sub-standard performance should result in revocation of a certificate or license.

b. Application to other City inspections

(1) Housing maintenance. Heretofore City inspectional agencies have confined their inspections of existing housing largely to complaints, mostly due to a lack of adequate manpower. In a sense, this is selective inspection.

In some of the discussion about setting up the enforcement mechanics for the new housing maintenance ordinance, some department heads indicated that they would consider the inspectional force adequate only if 100% coverage were possible. For the reasons already stated, we disagree with this point of view, believing that at least as good compliance can be had under a selective inspection system.

However, partial vs. complete inspection is apparently an academic question in this case, since present financing arrangements will not support a staff to provide full coverage. It seems only logical such coverage as is possible be directed in the most scientific manner possible, which is the application of statistical sampling.

The City Research Engineer in effect suggested the use of rough sampling in housing code enforcement last year. In a memorandum to the City Council's ordinances and Legislation Committee dated March 27, 1956, he said:

If the claim heretofore made before your Committee that a staff of 20 men is needed, it seems obvious that a staff with lesser strength would require more selective Housing Code enforcement.

The basis of such selective enforcement might well be a concentration in housing areas where serious, undesirable or critical conditions are known to exist. Sources of information which might be drawn on to determine such areas include the Health Department, Planning Commission, Housing and Redevelopment Authority, Council of Social Agencies, and the University of Minnesota Housing Bureau.

A scientific sampling program based on these data would assure the most effective deployment of limited inspectional forces, that is, so that "serious, undesirable or critical conditions" would be covered in order of priority.

(2) Health Division inspections. The Bureau of Environmental Hygiene appears to have made attempts to adjust frequency of inspection to risk, but the frequencies may have been chosen on the basis of "guesstimates" rather than careful study of relative risks. For instance, grocery stores in slum areas are now inspected about four times per year and in better areas one to two times a year. Statistical studies to determine what the actual ratio of violations is between these two types of neighborhoods might indicate that slum neighborhoods should be inspected eight times for every inspection of a store in a "better" neighborhood, or that a two-to-one inspection ratio is adequate.

(3) Fire prevention inspection. Private insurance companies and the Fire Underwriters Inspection Bureau are gathering large amounts of data on conditions of buildings in areas in which the Fire Prevention Bureau is now neglecting inspection. These agencies as a group are probably able to cover existing buildings better than the Bureau, both quantitatively and qualitatively. This information should be obtained for the Bureau.

According to Chief Palmer, the Bureau does not inspect housing, except for complaints, and concentrates on commercial and industrial building. In most of the latter, however, the inspectors do not have time to cover their "check sheets" properly so that the only business properties getting thorough coverage are those whose operations involve high fire risk, such as cleaning plants.

While it is true that the Bureau has the enforcement function, the insurance and risk-covering agencies the rate-making/function, insurance company rates are based on carefully calculated risks, and inspections are made by private companies and the Fire Underwriters Inspection Bureau who have a high motivation to be careful. The enforcement function of the Bureau could be used where it would do the most good --

applied to bring into line with City requirements those buildings indicated by company reports as unsatisfactory.

Regarding theater inspections, the Chief of the Bureau indicated to the sub committee that he needed an additional man to maintain once-a-month inspection of theaters. Statistical studies, as suggested, would indicate whether that frequency could be dropped without endangering the public. 100% inspection could be reinstated for an area on which the monthly sample showed too high a percentage of violations as predetermined by the plan.

Sampling could also be used to check on the training programs which theatre owners conduct for their employees.

Specific sampling plans would have to be determined by a qualified statistical consultant.

The "once a year" checking of theaters by the Building Inspector is a perfunctory inspection which should and could be eliminated by amendment of the ordinance.

c. Offer to explain and demonstrate validity of limited inspection using scientific sampling.

We realize that the use of selective inspection based on scientific sampling may seem a strange, if not radical, concept. However, we are convinced from the experience of industry, and the comments of experts who have surveyed inspection systems in other cities, that it is the most effective system. We are prepared to enlist the services of experts in industrial quality control and statistical sampling to explain and justify the recommendations we have set forth above.

There may be some legal questions involved in the City's adopting the scientific sampling method. We have not had research done on this phase but do not believe these questions are insurmountable since other cities are shifting to this approach.

2. The Department of Building Inspection should be renamed the Department of Inspection and given broadened inspection responsibilities.

The specific advantages of consolidating inspections are:

- (1) Public convenience is increased since the citizen must contact fewer departments and fewer inspectors visit him.
- (2) Duplication of clerical work is eliminated.
- (3) In-service training of inspectors is more readily established.
- (4) Administrative expense is reduced and top supervisors can be released from the desk to guide the work out in the field.
- (5) A consolidated annual report is made possible.
- (6) Field inspection is more economical since one district inspector can handle visits formerly made by a number of inspectors all covering the same area.

The question of consolidation of inspections breaks down into several fairly independent problems - - organizational regrouping, developing a composite or generalized inspector and license issuance. The licensing process is not the same as the inspectional process, but it is closely related to it and in many people's minds is inseparable, so some comment is in order.

a. Organizational regrouping

One of the basic principles of administrative organization is that like functions and activities should be placed together to simplify direction and control from the top, avoid duplication of work and take advantage of mass production methods on routine procedures. To what extent can Minneapolis inspectional activities be regrouped for more effective operations?

Table 2 shows the way in which present inspectional activities are allocated among the departments and the way it is recommended that they be allocated.

Three major changes are suggested:

1. Consolidation of inspections of existing dwellings in a new unit under the Building Inspection Department.
2. Transfer of the inspectional functions of the Licenses, Weights and Measures Division to the Building Inspection Department.
3. Transfer of the inspectional functions of the City Engineer's Department to the Building Inspection Department, except for the checking of vehicle loads performed by the Transportation Section.

To reflect the broadened scope of its activities, the Building Inspection Department should have a new name. We suggest the Department of Inspection, and use the name hereafter.

(1) Centralization of housing inspection in a new unit under the Department of Inspection:

This is the same recommendation that the League's Board of Directors made about a year ago in connection with deliberations on the new minimum housing standards ordinance. We believe that the code can be more effectively administered by a single agency than by the present three agencies: Building Inspection, Fire Prevention and Health. We recognize that in large part the effectiveness of this consolidated administration depends on the use of generalized inspectors and urge that they be used (see below for further recommendations on this point).

The new housing maintenance ordinance passed last September by the City Council seemed to be striving for an effective centralized unit but did not accomplish the job, in our opinion, because of the uncertainty as to responsibility. Specifically, the ordinance said that the Health Commissioner had the duty to enforce the ordinance, but went on to say that "This shall not be construed so as to prohibit the Inspector of Building or his authorized representatives or the Chief of Fire Prevention Bureau or his authorized representatives from the

enforcement of this ordinance." The ordinance left responsibility basically as it now exists, except for the inference that the three major departments concerned try to cooperate closely in their separate housing inspection activities.

Apparently the basic reason for the unsatisfactory fixing of responsibility was the Council's unwillingness to turn responsibility over to the Health Commissioner who is responsible to the Board of Public Welfare; at the same time it lacked charter authority to require the Health Commissioner to subordinate his actions to the Council or its department heads. This lack of charter authority has now been remedied by the adoption of a special act at the 1957 legislature which permits the council to consolidate the enforcement of housing inspections into any agency it desires, charter provisions notwithstanding.

We believe that in the interest of keeping authority commensurate with responsibility the City Council rather than the Board of Public Welfare (which supervises the Health Division) should have the housing inspection agency under its direct charge. The Council is the body which gets the complaints of lax-or over-enforcement and it will be better able to do something about them if the Building Inspection Department rather than the Health Division administers the code.

There is nothing inherent in the job of inspecting existing housing which makes the Health Division a more logical place for the housing inspection agency than the Building Department. This is borne out by the evidence from other cities that indicates that about as many cities have the agency under the Building Inspection Department as under the Health Department.

Finally, it appears to us that the activities of the Building Inspection Department are more closely allied than those of the Health Division to the activities of other inspectional units which we believe should be consolidated, as indicated below. Some advantages of this consolidation would be lost if housing were put under the Health Division rather than the Building Inspection Department.

Table 2

City of Minneapolis

Allocation of Inspection Activities

| PRESENT | PROPOSED |
|--|---|
| <u>Department of Building Inspection</u> | <u>Department of Inspection (name change)</u> |
| New construction and alterations | New construction and alterations |
| Existing dwellings (building safety aspects) | Existing dwellings - all aspects |
| Renewals of certain licenses | Renewals of certain licenses |
| | Weights, measures, truck loading |
| | Sewer and water building connections |
| | Sidewalk and curb construction |
| <u>Fire Prevention Bureau</u> | <u>Fire Prevention Bureau</u> |
| Fire hazards, including existing dwellings other than private homes | Fire hazards - specialized only |
| <u>Division of Health</u> | <u>Division of Health</u> |
| Dairy farms, pasteurization plants, food establishments, slaughter houses, sausage plants, Existing dwellings (health aspects) | Dairy farms, pasteurization plants, food establishments, slaughter houses, sausage plants, other specialized health hazards. |
| Retail food establishments | Rat and weed inspection |
| Swimming pools, water, rodent control | |
| <u>Division of Licenses, Weights, Measures</u> | |
| Weights, measures | (Transferred to Department of Inspection) |
| Taxicab meters | |
| Truck loading - overloads only | |
| <u>Police Licenses Bureau</u> | <u>Police License Bureau</u> |
| Beer and liquor license applicants | Beer and liquor license applicants |
| Cab drivers | Cab drivers |
| Rubbish haulers | Rubbish haulers |
| <u>City Engineer's Department</u> | |
| Sewer and water building connections | Transferred to Department of Inspection |
| Rat and weed control, rat and weed extermination on public property | except for rat and weed control (to Health Division) and rat and weed treatment and extermination and permits for vehicle loads (kept in Engineer's Department) |
| Sidewalk and curb construction | |
| Permits for vehicle loads, inspection of bus routes and services | |

(2) Transfer of the inspectional functions and personnel of the Licenses, Weights and Measures Division to the Department of Inspection.

The advisability of this transfer is suggested by several considerations:

- . The unspecialized nature of the inspections involved.
- . The establishment of generalized inspectors in the Inspection Department whose work could be learned readily by weights and measures inspectors, thus providing opportunities for more effective performance of the tasks of the two groups.
- . The fact that inspections are much closer to the major activity of the Inspection Department than to that of the City Clerk's office. This will be especially true after establishment of the housing inspection agency in the Inspection Department.

Recommendation for this shift should not be construed as criticism of the administration of the weights and measures inspections under the Clerk's office. It is merely felt that organizational reasons are more in favor of having these inspectors under the Building Inspection Department than under the Clerk's office.

(3) Transfer of certain inspectional functions and personnel of the City Engineer's Department to the Department of Inspection and the Division of Health.

The reasons cited for transferring weights and measures inspection to the Department of Inspection apply generally here also. In this case they are: The unspecialized nature of most of the inspections, the close relationship to the work of the generalized inspectors suggested for the housing unit, and the closer relationship to the major work of inspections than to that of public works planning and operations.

The City Engineer is responsible by ordinance for seeing that sewer and water main connections to private property do not damage the overall systems, but general inspectors in the Inspection Department should be able to cover routine cases adequately. Also being in the same department with plumbing inspectors would give

them ready access to valuable counsel, should they need it. They would need to be trained, of course, to recognize unusual cases requiring the technical advice of Water Division and Sewer Division personnel.

The same general considerations apply to the sidewalk and curb inspectors. However, the City Engineer is charged by the City Charter (6.8, Sec. 6) with responsibility for seeing that all sidewalks and streets are "kept clear of obstructions and in such repair as to be safe and passable." Thus, a charter amendment will be needed to permit transfer of sidewalk and curb inspections to the Department of Inspection.

The sewer and water connection inspectors and sidewalk and curb inspectors spend a good share of their time in the field, as will the generalized inspectors in the Department of Inspection. Placing these activities under a single department head makes more likely the effective coordination of their field travel time, and thus better overall use of manpower.

The Transportation Inspection Section should be retained in the City Engineer's Department. This section issues permits for the transport of unusual loads on City streets and bridges. Issuance or denial depends on the structural condition of the surfaces to be traveled, information on which is recorded in the City Engineer's records and is familiar to the City Engineer's personnel. Aside from this, there would be little gained by transfer because the section does little field inspection.

Health inspectors in the Bureau of Environmental Hygien now check on rat infestation as does the rat and weed inspector of the Engineer's Department. This inspectional activity and the corollary one of weed inspection should be given to the Health Division.

To the extent that the rat and weed inspector actually conducts rat and weed control operations his work is probably closer to the operations type activity

of the City Engineer's Department than the regulatory type activity of the proposed Department of Inspection. Therefore, they should be kept in the Engineer's Department.

None of these allocations of activities is a black-or-white matter. There were no doubt good reasons for having established these activities in the City Engineer's Department at the outset. However, the factors cited, plus the already extensive operational and planning responsibilities of the City Engineer's Department, and the possibilities of further building up the concept and use of generalized inspectors in the Department of Inspection, combine to persuade us of the value of shifting the above-mentioned inspectional activities, now under the City Engineer, to the Department of Inspection. In all cases, of course, it is assumed that close cooperation will continue between major departments to assure that when necessary the trained specialists will be called in on special or non-routine inspectional problems.

(4) Retention of a separate agency for inspection of specialized health hazards, after transfer of housing inspection to Department of Inspection.

All things considered, we believe that it is to the City's interest to retain the separateness of the present health inspection agency, after the housing inspection function is transferred to the Department of Inspection. The specialized training required of the inspectors, and the sensitive area in which they operate, leads us to conclude that it is important to keep the environmental sanitation inspectors close to the officer responsible for health maintenance, the Commissioner of Health. On this point, the New York report says:

... A health inspector and a building inspector have organizations in back of them that are vastly different in purposes and experience. Consolidation here is virtually impossible - let alone uneconomical - and it might be dangerous even if it were possible.

At the same time, however, it is well to recognize that certain health inspection activities are closely related to some of the routine activities of the proposed Department of Inspection. (the housing inspection work would be handled in the latter Department). Therefore the activities of the health inspections agency should be examined from time to time so that those which do not necessarily require specialized training will be performed by non-specialized inspectors, which would mean essentially those in the Department of Inspection.

(5) Retention of separate agency for education and specialized fire prevention activities, after transfer of Fire Prevention Bureau's housing inspection activities to the Department of Inspection.

After transfer of the Fire Prevention Bureau's housing inspection activities to the Department of Inspection (the Research Engineer in March 1956 suggested two fire inspectors could be transferred to the new housing unit), the remaining inspectors, used for education activities and hospital and industrial inspections, should be retained in the Bureau. As in the case of the health inspectors, however, their activities should be reviewed from time to time to see that they do not perform inspectional duties which could be just as well handled by the generalized inspectors in the Department of Inspection. There seems to be a psychological advantage in having Fire Department personnel doing educational work on fire hazards and certain specialized fire hazards conditions in industry and on buildings need the attention of men with more specialized fire prevention training than would be expected of generalized inspectors.

(6) Retention of separate agency in Police Department for investigation of morals records.

Somewhat the same considerations apply to transfer of police inspectional activities as apply to the specialized health inspection activities. With criminal

records such an integral part of the source material used in making recommendations on license applicants' morals qualifications, the police are in the best position to perform the necessary investigations.

(7) Minneapolis' relative standing among large cities in the degree of consolidation of inspectional activities.

We believe that the foregoing suggestions for consolidation should be carried out in Minneapolis.

It is worth noting, however, that the City already rates well with respect to effective grouping of inspectional agencies. The movement for inspectional integration in city government throughout the country is directed first of all toward activities concerned with new buildings and existing housing. This was true at the time of the comprehensive survey of the city of Chicago in 1945 and the recommendations for charter revision in St. Louis in 1949. In neither of these cities had the separate activities relating to building construction, such as plumbing, electrical and heating inspection, been brought together on the basis of the similarity of function. In the 1950 report on Milwaukee, a major recommendation was the transfer of the Bureau of Plumbing Inspection of the Department of Public Works and the Bureau of Weights and Measures to the Department of Building Inspection and Safety Engineering.

The Department of Building Inspection of the City of Minneapolis for some time has combined the building inspection activities under one department. Although procedural consolidation can still be attained within this department, as indicated below, the organizational framework is already present to facilitate it.

b. Generalized inspectors

Inspections of an observational or visual character, not requiring a specialized technical background, should be performed by a corps of general inspectors assigned to relatively small districts. Specialized inspections would be made by inspectors trained expressly for the work, such as Building Inspectors, Electrical

Inspectors, Plumbing Inspectors, within the bureau or department, or Food, Sanitary and Fire Marshal Inspectors in other departments. Any problems turned up by the general inspector, requiring such experience, would be referred to the technical inspectors.

(Philadelphia, p. 8)

The excerpt from the study of Philadelphia's inspections summarizes well the theory of generalized or composite inspectors. Their value is that (1) the licensee is subjected to fewer visits from inspectors and (2) saving in travel time of the inspectional staff should reduce costs and/or increase services.

The City's new housing inspection unit is well adapted to the use of generalized inspectors and the use of anything but such inspectors would be a waste of the taxpayers' money.

Transfer of the weights and measures inspectors, who are able to make the visual type of inspection required of generalized inspectors, to the Department of Building Inspection opens up the possibility of close coordination of weights and measures inspections with housing inspections. Considering the vast task confronting the housing inspection function, there is little chance that this could bring reduced personnel, but it should result in greater coverage.

The possibility of using generalized inspectors in the inspection of new construction should also be explored. The sub committee felt that with additional training the gas, steam, hot water, warm air and oil burner inspectors could be made capable of inspecting any one of these systems. At the present time several of these specialized inspectors may be working within a block or two of one another. A composite inspector could make one trip out to the area and swing around it to cover all four inspections.

Recently the city of Columbia, S. C. began using composite inspectors in the inspection of new construction:

Columbia, South Carolina (99,374), has initiated a residential building inspection system for one-family and duplex dwellings using combination inspectors who check all phases of construction and installation work -- zoning, foundations, electrical work, plumbing, gas piping, structural strength and heating. Formerly five or six different inspectors were used to check each of the three stages of residential construction: when the foundation is laid; when the framework is up; and when the building is completed, before occupancy. Before the system was started all combination inspectors participated in a six months' training program. The training included actual field experience with specialist inspectors in residential buildings and lectures on city ordinance requirements and technical aspects of zoning, structural safety, gas, heating, electricity and plumbing. Specialist inspectors are still used to check multi-family residences, ~~apartments~~, commercial buildings and industrial plants and are also available for consultation when the combination inspectors meet an unusual or highly technical problem.

(Public Management, August 1956)
(p. 187)

Generalized housing inspectors are also used now in Philadelphia.

Other uses of the general inspector should be explored. The safest place for a composite inspector is in renewal inspection work as contrasted with the original inspection. If the initial inspection is done competently by skilled inspectors (even if several are required), it is possible that less highly skilled inspections (those that could be made by a sort of "general district inspector") would suffice to check on the renewal of the license each year. The benefit to be gained is the saving in travel time made by letting one general inspector cover the premises to check on the renewal of several different kinds of licenses.

The Fire and Health inspector make numerous inspections for license renewals among them lodgishouses, restaurants and other food purveyors. It is possible that the generalized inspectors of the Department of Inspection could be assigned to do these renewal inspections.

c. Centralization of license issuance.

The citizen associates city inspections with city licenses or permits, since in most cases one is a prerequisite to the other. He is as concerned with the conven-

ience of processing a permit or license as he is with getting his property or business properly and conveniently inspected.

Our study has not been concerned with the administration of licenses and permits. This area of city government has been under study by the League's Licensing Committee, principally from the standpoint of standardizing decisions on license applications. Our examination of reports from other cities and our limited knowledge of the Minneapolis situation leads us to suggest that the Licensing Committee or some other League committee study further the systems and procedural aspects of licenses and permits administration to the end that the simplest and most effective system can be developed.

3. Violaters of inspectional codes should be charged a fee for reinspection after they have been warned once

When a health inspector notifies a party of non-compliance with the health code, he makes only one recheck to see if compliance follows. If the violator has not complied, the inspector takes action to initiate court proceedings or fines.

In the Building Inspection Department and Fire Prevention Bureau, reinspections do not always cease after the first one. Perhaps this is because of the slowness of legal proceedings. At any rate, the second, third and following reinspections are costly.

The sub committee agrees firmly with the suggestion that has been made that violaters be charged fees for the cost of reinspections if they have not complied after the first warning. This should conserve inspection manhours, defray a good share of inspection cost and increase compliance.

The sub committee considered the possibility of using a system of "tagging" whereby the inspector would tag a violation upon first discovery, as in parking violations. Tagging was not considered fair in cases where the violation may not

be readily known by the violator, either because of the fact that he can not fairly be held responsible for knowing the provisions of all the codes or because the violation may be a matter of his judgment against the inspector's. In such cases the party should have a warning. After the first warning, however, he should be held responsible for compliance and if he has not complied by the time of the call back inspection, he should be made to pay for the cost of that and subsequent call-backs.

The elements of fairness and due notice do not apply in cases of obvious violations, such as rubbish in halls, and illicit wiring. However, it was felt that tagging would not be effective here because (a) people who deliberately want to avoid compliance, because of the expense or any other reason, probably would rather pay the fine than go to court; (b) the expense of setting up the administrative machinery for handling tags could offset receipts.

4. Have a single department issue certificates of competency

The Department of Building Inspection holds examinations and issues certificates of competency for a number of skilled occupations, such as sheet metal workers, steam and hot water technicians and refrigeration specialists. There are only two such certificates issued by the City not handled by this department. They are plumbing and gas certificates which are issued by the Water Department.

We concur in the suggestion made by the Building Inspector and the City Engineer that all these examinations and certificates should be administered by one Department, and believe that the Department of Inspection is the logical department, particularly in view of the importance of certification in the system of selective sampling we recommend.

5. Improvement of supervision, work assignment, clerical procedures and equipment records.

An administrative survey would be required to make a thorough analysis of the present inspectional agencies in the general area of management and supervision and systems and procedures, which are so intimately involved in inspectional improvement. A study such as ours is no substitute for the intensive, on-the-spot type of study which can be made by full-time consultants, either from outside the City service or inside the City service.

Regarding consultants from inside the City service, we have in mind an earlier League study of office machine applications, in which it was pointed out that for improvements in systems and procedures to be made in workable detail and put into effective application, they needed the careful study and follow-through such as can be furnished by an administrative analysis unit within the city government itself at the top staff level. We feel that such staff work is necessary in the city government, and that our study is just another demonstration of this necessity.

However, our limited observations have indicated some areas where more investigation is needed. Also, we are impressed with the suggestions for improvement which have been made in administrative studies in other cities. We are not in a position to say whether present inspectional administrators have studied these suggestions, but we recommend them highly.

a. Supervision productivity

A study of the organization charts of the various departments and studies of job descriptions for supervisors might help in determining the effectiveness of present supervision.

The New York City management study turned up some interesting information on this score in regard to the building department. The consultants recommended

reducing the inspection force and adding a few supervisors and clerks. This would result, they said, in improving inspection coverage from 50% to 100% and the reduced inspection force would also be able to take care of complaints, reinspections and special surveys.

The New York consultants also recommended raising the speed of making an inspection to that of the upper third of the force. Since it already keeps inspection time data, the Minneapolis Building Inspection Department is in a good position to try controlled experiments to improve inspection speed.

b. Clerical

A study of the reports and forms used by both clerks and inspectors might indicate ways in which clerical work could be speeded up.

For example, in the Building Department, permit forms are made out from the application permit forms. The application form could well become the permit itself by providing space on it for approval stamp or signature.

c. Work assignments

Some of the matters which appear to need further study:

Fire Department. Is the assignment of half of the 16 inspectors to special inspection the best way to get maximum protection with minimum manpower? Travel time for these eight men may be a considerable part of their work hours.

Building Department. Is the system of having each inspector do his own work planning the most efficient one? Each inspector spends about one hour a day (five hours a week), or about 12 - 15% of his time in the office, in order merely to make arrangements to make inspections. Travel time must be added to the time consumed in the office, since the inspector's time in the office is on a staggered schedule and must sometimes result in making a trip from the field to the office and back again in order to be there at his allotted hour.

Information should be obtained as to whether scheduling by the supervisor with assignment of inspectors on the basis of day-to-day distribution of work load (rather than on zone) would increase inconvenience to the public by reducing waiting time for inspections.

Where such things as dictaphones, typewriters, adequate transportation and office space are lacking, precious manhours may be lost in inefficient methods and procedures. Attention should be given to these problems in order to increase productivity.

7. Building Inspection Department should simplify sign inspection.

For example, allow the electrical inspector to make a simultaneous inspection for the proper hanging as well as wiring of a sign or let the sign inspector inspect for electrical connections where they are of relatively simple nature. Note the steps in getting a relatively small electrical window sign hung now:

- (1) Proprietor gets permit to have union sign hanger hang the sign.
- (2) Sign hanger with certificate of competency hangs it.
- (3) Inspection on 100% basis by Building Department sign inspector.
- (4) Proprietor gets permit to have sign connected to grounded electrical outlet.
- (5) Union electrician with certificate of competency makes connection.
- (6) Inspection of electrical connection on 100% basis by Building Department electrical inspector.

There are at least two possible solutions to the problem. They could be used singly or in combination:

- (1) Consideration should be given to classification of signs by size and degree of complication of necessary electrical work. For small signs involving simple electrical connections, the sign inspector could simultaneously check for proper

hanging and proper electrical inspection -- or the electrical inspector could simultaneously inspect for both. Probably either inspector would need only a small amount of additional training to inspect for the simpler aspects of the other's field.

For large signs requiring considerable knowledge of structural principles and for signs requiring a large amount of electrical know-how, the present system could be retained.

A little analysis of signs being hung might reveal that the majority of signs are small and electrically simple. If so, the Department might save many extra inspection trips.

(2) Sampling inspection for sign hanging should be considered if certificates of competency are to be retained and inspectors are doing their jobs. (See discussion of sampling in Building Department.)