



**SECOND
ANNUAL
REPORT**

**1957
1958**

**CITY OF PROVIDENCE
DEPARTMENT OF
BUILDING INSPECTION
VINCENT DIMASE
DIRECTOR**



January 27, 1959

Honorable Walter H. Reynolds, Mayor
and The Honorable City Council of the
City of Providence
City Hall
Providence, Rhode Island

Greetings:

It is my pleasure to present the Second Annual Report of the Department of Building Inspection. The report covers the work performed by the various Divisions of the Department for the calendar year of 1958.

The year's accomplishments reflect the results of continued vigilance on the part of the personnel of this Department in the enforcement of the Zoning Ordinance, the Building Code, and various other laws enacted for the purpose of promoting public safety in our community.

The consistent interest and splendid cooperation shown by His Honor the Mayor, members of the Honorable Council, the City Solicitor, the Fire Prevention Bureau, the Police Department, and other City Officials, has been of valuable assistance to this Department in the performance of our duties to the public. For this kind consideration I wish to express my wholehearted thanks.

Respectfully submitted,

VINCENT DIMASE,
Director

DEPARTMENT OF BUILDING INSPECTION

Before April 1, 1957, the task of making inspections and issuing permits of various types was scattered among a number of municipal agencies. The new Building Code sought to centralize all those functions in one agency. For that purpose it created the Department of Building Inspection, which is under the supervision and control of the Director.

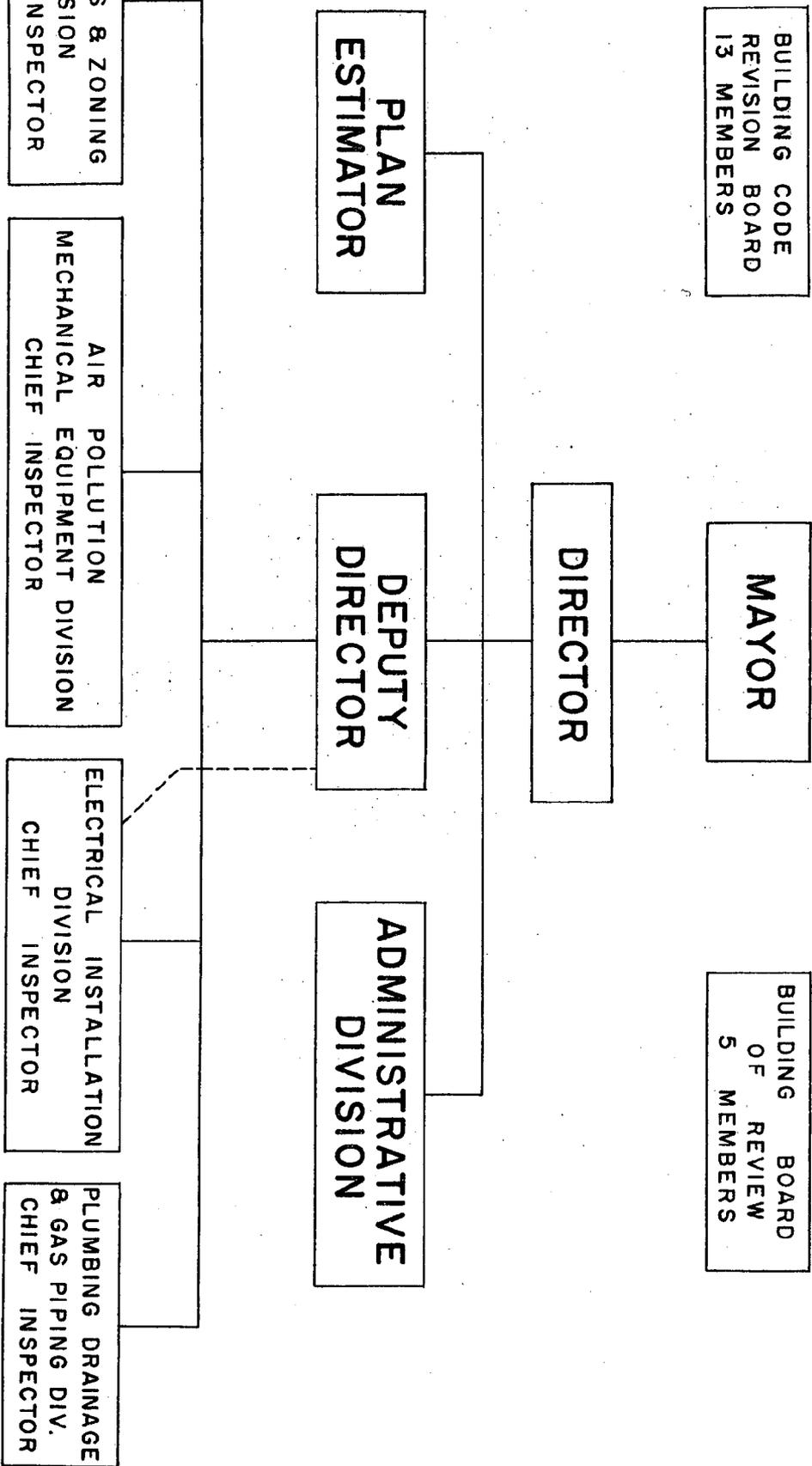
The Department of Building Inspection is comprised of a Division of Structures and Zoning, a Division of Plumbing, Drainage and Gas Piping, a Division of Electrical Installations, and a Division of Air Pollution, Mechanical Equipment and Installations, which includes heating, steam power, ventilation, air conditioning and refrigeration.

PRINCIPAL PERSONNEL OF THE DEPARTMENT OF BUILDING INSPECTION

The principal personnel of the Department consists of a Director, a Chief Inspector of Electrical Installations, a Chief Inspector of Structures and Zoning, a Chief Inspector of Plumbing, Drainage and Gas Piping, and a Chief Inspector of Air Pollution, Mechanical Equipment and Installations.

DEPARTMENT OF BUILDING INSPECTION

ORGANIZATION CHART



RESPONSIBILITIES OF THE DEPARTMENT

This Department is beginning to come of age: It still is growing. The infant organism has been nurtured by steps of trial and error, and now bringing it on its way toward maturity.

The task is not yet completed. But substantial progress has been made, it is believed, toward the goal of smooth and intelligent functioning. The Director has had the task of spotting imperfections shown up by past experience, devising improved methods, and developing greater strength and symmetry in the still youthful system.

Since the transfer and integration of these other divisions under the Department of Building Inspection, the Department offered larger opportunities for the improvement of organization procedures and techniques, and for rendering service to the city with inestimable benefits to the safety and health of its citizens.

DIVISION OF STRUCTURES AND ZONING

The activities of the Division of Structures and Zoning can be briefly summed up as follows:

- (a) Plan Examination.
- (b) Material Approvals.
- (c) Field Inspections of Dangerous Structures.
- (d) Routine Inspections of alterations and new buildings.
- (e) Conferences with Engineers, Contractors and Material Men.
- (f) Enforcement of the Building Code and the Zoning Ordinance.

Every plan of a building or structure for which a permit is necessary must be processed by this Division. During the past year this Division checked approximately 2760 plans of buildings and structures. It also checks plans for signs and billboards.

Other matters of importance handled by this Division are field inspections of dangerous structures, and the witnessing of piling tests as directed by the Director. This Division continued to maintain its rigid control on the quality of concrete being poured on the various large building projects throughout the city. The concrete test cylinders are prepared under the supervision of the project engineer and must meet the design requirements as specified by the Providence Building Code. These control samples are delivered to a recognized

laboratory and tested under standard A.S.T.M. procedures. Suffice is to say that the quality of concrete has been maintained.

The normal procedure of testing samples of hollow concrete masonry units was augmented by many routine checks on the quality of masonry materials delivered to the various construction jobs within the city. Under the new building code the minimum compressive strength requirement of hollow concrete masonry units was raised from 700 to 800 pounds per square inch of gross area.

There are many new things that our building inspectors have to learn to keep pace with modern building inspection. High tensile steel bolts, tightened to carefully predetermined pounds of tension or foot pounds of torque have replaced the conventional hot driven rivets in structural steel construction. The extensive use of arc welding for fabrication and connection of steel members has made it possible for the architect to incorporate many unusual and attractive features that were impossible with riveted type construction.

INSPECTIONAL ACTIVITIES PERTAINING TO SAFETY REQUIREMENTS IN BUILDINGS

The annual inspections of all licensed occupancies (hotels, assembly halls of all types, cafes, barrooms, restaurants, etc.) were carried on in the usual manner by checking:

- (a) The general structural conditions of the building;
- (b) The type, construction, protection and accessibility of exits, the swing of exit doors, exit signs and lights;
- (c) The type, condition and location of heating and cooking equipment, including their safety devices and controls;
- (d) The type, condition and location of fire protective equipment, such as automatic sprinkler system (wet and dry), fire extinguishers, fire hose and standpipe installations, fire alarm systems, etc.

This program of annual inspections, started many years ago and now considered routine, provides that type of inspectional service entirely devoted to the elimination or correction of hazardous conditions that come within the purview of the rules.

Annual inspections of all public and semi-public occupancies are made in order to maintain approved standards of safety. The License Bureau will not issue any license without first obtaining the approval of this office concerning the structural and fire-safety conditions of the premises. This type of inspectional service places an unusual burden on the field inspectors during the months of October and November every year - two months to complete inspections and submit reports for processing before the approvals or denials can be reported to the License Bureau.

The Department annually receives many complaints of unsatisfactory conditions, ranging from defective plumbing, electrical work, trash-littered open lots to reports that

the man next door keeps ponies in his garage. Every complaint is investigated.

The processing of complaints is another important function requiring inspectional services. During the past year, more than 14,000 inspections were made through this medium, checking and investigating complaints of hazardous conditions existing in residential, commercial, industrial, storage, educational, religious, institutional and mixed occupancy buildings. This effort has been bolstered, over the years, by the participation and cooperation of the members of the Fire Prevention Bureau. As a result of this type of service, thousands of buildings of all type of construction and occupancies have been made safer or razed. Structural, fire preventive and fire protective remedies applied as a result of this effort are as follows:

- (a) Repairs to and replacement of structural components of buildings;
- (b) General repairs to existing buildings for proper maintenance;
- (c) Installation of automatic sprinkler systems;
- (d) Erection of fire division walls;
- (e) Erection of fire-resistive partitions;
- (f) Erection of fireproof or fire-resistive enclosures around stairways and vertical shafts of all types;
- (g) Construction of fire-resistive ceilings for horizontal protection;
- (h) Installation of opening protectives on windows where exposure distances to lot lines and other buildings are below minimum requirements;

- (i) Erection of fire escapes;
- (j) Installation of fire alarm systems;
- (k) Installation of fire-hose and standpipe systems;
- (l) Installation of fire extinguishers;
- (m) Installation of fire dampers and automatic controls on ventilating and air-conditioning systems, etc.;
- (n) Construction of fireproof vaults and enclosures for the storage of flammable liquids and volatiles and dangerous chemicals.

Steady pressure has been maintained behind the program of dilapidated dwellings and the elimination of fire hazard and unsanitary conditions. Consistent progress has been made in the program of removing buildings in dangerous condition.

The Department's success in accomplishing this work is in a large measure due to the fine spirit and performance of the employees. To all the employees I extend my hearty appreciation for their loyal and faithful service, and to express my appreciation to other city officials for their cooperation extended this Department.

We look back with pride on the Department's ability to keep abreast of the ever increasing work-load, and at the same time increase the many services offered to the public. We anticipate still greater accomplishments in the year to come, for it is only by obtaining and keeping the good will of the Building Public and the Building Industry that the Department can function in a smooth manner and accomplish its purpose.

STRUCTURAL DIVISION

With the present rapidly expanding development in construction technology, it is more than ever necessary for the Structural Division to realize its responsibility for public service and to assure the construction of safe buildings that will serve their intended purpose throughout the lives of the structures. To accomplish this purpose a set of design and construction standards is established within the Building Code. These standards are conservative enough to be used by all practicing engineers and architects, and yet not so rigid that experimentation with new materials and methods of construction is discouraged.

Many functions of the Division that contribute to the safety, the health, and the welfare of the public do not come to the attention of those who are served, but are nevertheless of vital importance. In general, the public is not aware that the building plans are checked for safety of construction, for fire safety, for sanitation standards, and for many other necessary requirements of good construction. Few persons appreciate that under the Zoning Regulations plans are checked to see that there is no encroachment upon a neighbor's vested right in sunlight, air, and ventilation.

As we pause on the threshold of the atomic age, it is interesting to review the tremendous growth of technological development in building construction during the last decade.

The surging advances made in all lines of invention and manufacture are more apparent in the building industry. The most important instrument of progress in the building field is a modern Building Code, with a dynamic enforcement policy geared to meet the demands of a technological world. Our Division has fulfilled both of these requirements through leadership in developing and applying a modern code flexible enough to meet changes in architectural and engineering design while maintaining and increasing the safety afforded to the public.

ARCHITECTURAL DESIGN

The desire for individual expression and functional planning is more manifest in the modern architecture. During the years following the Second World War, great strides have been taken in discarding the dark, bulky structures of the past with their dimly lit corridors and thousands of tons of concrete and steel. Gone also are the gingerbread facades that posed a threat to pedestrians.

The renaissance was sparked primarily by the development of new materials, as well as ingenuity in the use of old materials through the creative skill of the Engineers and Architects. Added to this is the understanding and enthusiasm of an interested and responsible building official.

Of course, one of the most satisfying components of progress is the safety features contained in a modern Building Code. The Providence Building Code sets the scene for technological advance. For example, the use of fire sprinklers

that operate automatically to extinguish fires is now commonplace. Automatic fire alarm systems are now installed in hospitals, schools, nursing homes, and other structures where the hazard to life or probability of fire is great. Exits in our buildings of today are directed to corridors and stairway enclosures that are designed to resist penetration by fire for periods of from one to two hours, in order that a building may be safely evacuated. The walls, floors, ceilings, and roofs, as well as supporting beams and columns, are similarly fire protected to withstand the ravages of fire for periods varying from one to four hours, thus allowing firemen to extinguish the blaze and prevent a general conflagration.

Aside from the safety features now incorporated, building tenants are treated to a variety of convenient features, such as automatic elevators, air conditioning, diffused lighting, and many other such conveniences.

DIVISION OF STRUCTURES AND ZONING

Mr. Vincent DiMase, Director
Department of Building Inspection
112 Union Street
Providence, Rhode Island

Dear Sir:

I respectfully submit for your information and consideration a report of the work of the Division of Structures and Zoning, for the year of 1958.

Attached hereto are two tables setting forth by wards and types of occupancies, the number of buildings and miscellaneous structures, including the estimated costs, for which permits were issued. The table marked "New Work" contains data pertaining to the construction of new buildings and miscellaneous structures. The table marked "Additions and Alterations" contains data pertaining to building operations on existing buildings in order to provide additional space or to make interior changes to satisfy current and anticipated needs.

The estimated costs as set forth herein, taken from the accompanying tables, do not include the costs of heating, plumbing, and electrical installations.

From the tables, the estimated cost of construction for the year 1958 is as follows:

* Buildings Demolished for Public Improvements not
 Included in the List of Permits above -----

West River Project -----	8 Buildings
Huntington Avenue Freeway -----	<u>100</u> Buildings
TOTAL -----	108 Buildings

Note:

The above installations, not included in the tables, do not include estimated costs (not required by ordinances.)

149 Family Units have been added during the year 1958 as a result of building activities through private channels, as follows:

(a) New Buildings--One Family.....	105 Family Units
" " 2--Two Families.....	8 Family Units
(b) Conversions.....	<u>36</u> Family Units
TOTAL.....	149 Family Units

Total Inspections for the year 1958..... 14,320

** Total Fees collected during the year 1958.... \$39,903.36

** Note:

Total Fees given is for the calendar year of 1958. This is done because the U. S. Government and other agencies request it in this manner for statistical purposes. However, the fees collected by the Division of Structures and Zoning for the Fiscal Year---October 1, 1957 to September 30, 1958---\$43,080.77.

During the year 1958, this Department sent out 643 letters notifying the owners of Building or Zoning violations.

We also received 404 notices of violations from the Director of Minimum Housing Standards. Each one of these locations were inspected and notices were sent out notifying the owners. Of the above total, 199 of these violations were corrected.

New Work - 1958

	WARDS												NO.	EST. COST	
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII			XIII
Dwellings 1 Family	No. 1 Est. Cost 40,000	No. 11 Est. Cost 285,000	No. 7 Est. Cost 71,500	No. 11 Est. Cost 104,500	No. 48 Est. Cost 466,100	No. 15 Est. Cost 146,400	No. 7 Est. Cost 56,500	No. 4 Est. Cost 37,000	No. 1 Est. Cost 8,000	-	-	-	-	105	1,215,000
Dwellings 2 Families	-	-	No. 2 Est. Cost 28,300	-	No. 1 Est. Cost 14,000	No. 1 Est. Cost 11,000	-	-	-	-	-	-	-	4	53,500
Multi Families	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Churches, Homes, Etc	No. - Est. Cost -	-	-	-	-	No. 1 Est. Cost 25,000	-	-	-	-	-	-	-	1	25,000
Amusement & Recreation	No. - Est. Cost -	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Office Buildings and Banks	No. 2 Est. Cost 50,300	-	-	-	-	No. 1 Est. Cost 55,000	No. 4 Est. Cost 63,000	-	-	-	-	-	-	10	209,500
Public & Municipal Schools	No. - Est. Cost -	-	-	-	-	-	-	-	-	-	-	-	-	2	43,000
Gasoline Stations	No. - Est. Cost -	-	-	-	-	-	-	-	-	-	-	-	-	3	1,882,650
Garages	No. 2 Est. Cost 6,800	No. 4 Est. Cost 6,150	No. 1 Est. Cost 800	No. 6 Est. Cost 97,500	No. 19 Est. Cost 23,200	No. 7 Est. Cost 7,800	No. 11 Est. Cost 14,800	No. 5 Est. Cost 7,900	No. 3 Est. Cost 3,400	No. 2 Est. Cost 20,500	-	-	-	62	515,650
Stores	No. 1 Est. Cost 40,000	-	-	No. 4 Est. Cost 25,500	No. 3 Est. Cost 31,000	No. 1 Est. Cost 8,500	-	-	-	No. 1 Est. Cost 4,500	-	-	-	14	158,500
Storehouses	No. - Est. Cost -	-	-	-	-	No. 1 Est. Cost 5,500	-	-	-	-	-	-	-	4	24,000
Manufactories and Shpps	No. - Est. Cost -	-	-	-	-	-	-	-	-	No. 1 Est. Cost 10,000	-	-	-	4	92,900
Oil Burners	No. - Est. Cost -	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous	No. - Est. Cost -	-	-	-	-	-	-	-	-	-	-	-	-	5	1,100
Total Number by Wards	6	15	12	22	72	28	23	20	11	6	5	100	100	700	4
Estimated Cost by Wards	137,000	291,950	154,600	240,500	1,218,750	1,192,200	149,300	113,100	39,400	27,600	311,800	369,500	179,000		

Total Est. Cost - 4,253,600
Total Permits - 217

During the past year, this Division reviewed the design and plans for many major structures. The following are buildings for which permits were issued in 1958, with a declared estimated cost of \$50,000.00 or more:

City of Providence	\$933,000.00
School (New)	
48 Kossuth Street	
Providence College Corp.	684,450.00
189 Eaton Street	
Dining Hall-Dormitory (New)	
Roger Williams General Hospital	655,000.00
825 Chalkstone Avenue	
New Addition	
Mall Parking Terrace, Inc.	325,000.00
50 Exchange Terrace	
Parking Terrace (New)	
Brown University	309,000.00
21 Prospect Street	
Hope College Dormitory	
Interior Alterations	
Roman Catholic Diocese	265,200.00
128 Somerset Street	
School (New)	
Providence Gas Company	250,000.00
642 Allens Avenue	
Storage of Petroleum Products	
Temple Emanu-El	262,000.00
295 Morris Avenue	
New Addition	
Rhode Island Hospital	137,000.00
Jane Brown Memorial	
593 Eddy Street	
Hospital Alterations	
Coro, Inc.	109,000.00
167 Point Street	
Fifth Story Addition	

Boston Store Real Estate	100,000.00
239 Westminster Street	
Retail Store Alterations	
City of Providence	98,000.00
220 Blackstone Street	
Parking Meter Pit	
First Unitarian Church	91,400.00
1 Benevolent Street	
New Addition	
Gilbane Building Company	90,000.00
50 Houghton Street	
New Garage	
St. Ann's Church, Inc.	85,000.00
43 Greeley Street	
Nursery-Convent Alterations	
Lew Manufacturing Company	68,000.00
335 Bucklin Street	
New Building	
Citizens Savings Bank	55,000.00
2-14 Belmont Avenue & 270 Academy Avenue	
New Bank Building	
Central Congregational Church	55,000.00
296 Angell Street	
Rebuild Towers	
Wells V. Adams	50,000.00
150 Wayland Avenue	
New Building (Offices)	

The declared estimated costs of construction of the 19 buildings and structures listed above is \$4,622,050.00-- or 53% of the total estimated construction cost figures; while the number of permits issued for the construction of these buildings is only 19, or less than 1% of the total

number of permits issued for the construction of new buildings and alterations during the year 1958.

The declared estimated cost of construction figures in this report are fairly accurate since we have a Plan Examiner who prepared the cost data on all types of building construction for which a building permit was issued by the Department. These figures are revised and brought up to date every year. The average unit costs this year were slightly above those of last year.

Respectfully submitted,

NICHOLAS DiBENEDETTO,
Chief Inspector of
Structures and Zoning

BUILDING ACTIVITIES DURING THE YEAR 1958

Private building operations during the year 1958 in the City of Providence, with a total estimated cost of \$8,694,400.00, is \$2,770,861.00 less than the 1957 estimated cost of construction--a drop of 32%. This decrease in estimated costs of construction was due to the recession of 1958. Residential buildings accounted for approximately 24% of the total estimated cost figures. New one-family dwellings, with a total estimated cost of \$1,215,000.00 for 1958, accounts for 14% of the total declared estimated costs of building construction.

During the year 1958--1723 permits were issued for the construction of new buildings, additions and alterations to existing buildings--53 permits more than the number of permits during the previous year, 1957--an increase of 3%. Other permits separately listed in this report, issued in 1958, total 1037--a decrease of 129 over the 1957 figures--a decrease of 11%.

The estimated cost figures for additions and alterations to existing buildings during the year 1958 show a decrease of \$25,300.00, or a 12% decrease over the 1957 estimated cost figures, while the permits issued during the same period show an increase of 7% from the 1957 figures. A careful study of the tables will provide the answers to the great differences in percentages which arise from declared estimated cost

figures and the number of permits issued during the same periods.

A list of buildings, for which permits were issued in 1958 with a declared estimated cost of construction of \$50,000.00 or more, were set forth herein for purposes of clarification and information pertaining to those differences in percentages.

Under our new Building Code, one of the new features is that an Owner or Contractor may take out one permit for the entire job and pay one fee; (this includes structural, electrical, mechanical and plumbing work).

The following is a list of jobs for which one fee was paid during 1958:

<u>JOB</u>	<u>ESTIMATED COST</u>	<u>FEE PAID</u>
189 Eaton Street Providence College New Building	\$852,038.00	\$861.00
295 Morris Avenue Temple Emanu-El Alterations	385,470.00	570.47
1 Benevolent Street First Unitarian Church Alterations	121,000.00	306.00
167 Point Street Coro, Inc. Alterations	111,000.00	296.00
2-14 Belmont Avenue or 270 Academy Avenue Citizens Savings Bank New Building	67,300.00	195.00

95 Cedar Street Grinnell Corporation Alterations	47,000.00	176.00
979 Branch Avenue St. Edwards Parish Alterations	15,000.00	70.00
272 West Exchange Street Grinnell Corporation Alterations	12,000.00	58.00
42 Dodge Street Stillman-White Foundry, Inc. Alterations	11,000.00	54.00
243 Weybosset Street Rollma Realty Company Mechanical Lift	5,125.00	30.50

COMMENTS ON 1958 BUILDING ACTIVITIES

Providence College is moving at a rapid pace with the new Dining Hall-Dormitory Building.

Roger Williams Hospital continued to improve and expand its hospital facilities with the new addition to its present building.

The Mall Parking Terrace in the heart of the city was a great and forward step for our motoring populace; it answered an acute need.

Brown University is also moving at a rapid pace. The restoration of Hope College is nearly completed, and the Skating Rink and new Pembroke Dormitories are in the planning stage.

The Roman Catholic Diocese, with the new Somerset Street School and other proposed Diocese Buildings, will contribute greatly to the 1959 construction boom.

Temple Emanu-El also took a great step forward with the new addition and extensive alterations to its present building.

The City of Providence is by no means standing still concerning physical improvements, which are necessary and desirable. The Joslin Street School is well under way. The West River Project is moving rapidly, and the Point Street Re-development Project got underway. Buildings are being demolished at present, and all indications point to an early start for this project.

It appears that the recession of 1958 has vanished. Although some traces remain, and some may still persist, yet business activity in general and construction activity seem to be well on their way toward resuming the growth trends that have characterized the post-war period.

While the recovery in construction contracts that began in the spring was aided by government action, private construction contracts held their own very well, and they will probably close the year with a slight dollar increase over last year.

ECONOMISTS OPINIONS ABOUT 1959

The outlook for construction in the months ahead is of course closely related to the prospects for general business activity. A highly valuable look ahead is provided by the annual Dodge survey of the opinions of leading economists.

As reported in our review of this survey, the economists are overwhelmingly optimistic about 1959. This is a sharp contrast to their feeling about 1958, as reflected in last year's survey. While there is some difference of opinion about the degree of upward movement, practically all 212 economists participating in the survey think that gross national product and industrial production will rise next year. They expect modest increases in expenditures for new construction and for new plant and equipment.

CONSTRUCTION IN 1959

If our expectations are realized, construction contracts next year will again set a new record in dollar volume, and 1959 will mark the fifteenth consecutive increase and the twelfth consecutive record year.

DIVISION OF ELECTRICAL INSTALLATIONS

No one industry has seen greater development in this Atomic Era than the electrical industry. The desire for better lighting and automatically controlled heating, refrigeration, and other devices has more than doubled the amount of electrical wiring in the average building. Through the use of new and improved means of utilizing electrical energy, many of the appliances and conveniences now in common use were considered novelties a few years ago.

Air conditioning and high intensity glare free lighting are commonplace in the modern office building. Modern developments range from automatic pin setters in bowling alleys to entire building devoted to electronic computer systems. Increased use of frozen foods and pre-packaged meats have added greatly to the electric wiring in food markets. Developments of new machines and methods of manufacturing have resulted in rapidly expanding loads in industrial plants. The modern plant is really never completed as each new process requires additional wiring.

The higher distribution and utilization voltages used to supply today's demands have complicated the work of the plan checker and inspector in order to insure safe application of equipment. For example, many problems are encountered in the re-design of the wiring systems of large existing buildings.

ELECTRICAL INSPECTION DIVISION

Mr. Vincent DiMase, Director
Department of Building Inspection
112 Union Street
Providence, Rhode Island

Dear Sir:

I respectfully submit the following report of the Revenue, Expenditures and Operation of the Electrical Inspection Division for the period of the fiscal year 1957-1958.

REPORT

REVENUE: The Electrical Inspection Division received credit for fees collected by the Department of Building Inspection, as follows:

- | | |
|--|--------------------|
| 1. Eighty-seven (87) Limited Premises Permits | \$ 435.00 |
| 2. Three thousand nine hundred and ninety-six (3,996) permits for installations of electrical wiring and apparatus including alterations and repairs | |
| | <u>13,619.43</u> |
| | <u>\$14,054.43</u> |

OPERATIONS: A summary of the work done by the Electrical Inspection Division from September 30, 1957 to October 1, 1958.

Number of rough wiring inspections	668
Number of defective installations re-inspected	879
Number of Certificates of Approval issued	2,768
Number of inspections after fire	751
Number of investigations requested by the Narragansett Electric Company and Fire Department	185
Number of special investigations	2,495
Number of re-inspections	<u>1,734</u>
Total number of inspections	9,480

Letters to owners.....680
Number of disconnects..... 15

Note: Three requests for special permission were granted from October 1, 1957 to September 30, 1958.

The following comment is based on the increase in the number of inspections during the fiscal year 1957-1958 over the number of inspections made by the Electrical Division in the previous fiscal year 1956-1957.

COMMENT

At least one additional Electrical Inspector should be employed to maintain the credited high standards for competent and efficient inspection of electrical installations in the City of Providence for the following reasons:

1. The number of inspections made by the present staff of four field inspectors has actually increased by thirteen hundred and fourteen (1314).
2. It was not possible, with this limited staff, to make the number of inspections required in connection with the Minimum Housing Standards Division investigation requests. For this work, re-inspections are periodically necessary to encourage compliance and maintain good public relations.

In the case of Minimum Housing Standards Division work, which requires electrical inspection by the Electrical Installations Division of the Department of Building Inspection, as many as twenty-five hundred (2500) inspections could be necessary for the processing to be completed on the five hundred and eleven (511) buildings which are involved to date. Each building will require on an average of between four to five separate inspections as follows:

1. A preliminary inspection to determine the extent and nature of the violations of the Wiring Rules and Regulations contained in the Building Code.

2. An individual inspection of each occupancy where improperly used extension cords to extend permanent building wiring for the supply of additional electrical outlets were found.
3. An individual inspection of each occupancy, for which a permit is issued, to determine if the violations of the Rules and Regulations have been removed. There will usually be two or more such inspections per building, depending on the number of occupancies and the number of electrical contractors involved.
4. A re-inspection of each occupancy, where violations were not removed in a reasonable time, to determine whether the hazard involved has increased to the extent that the Power Company should be ordered to discontinue its service of electricity to the occupant and court action recommended to enforce the ordinance that was violated.

During the course of the year, the Electrical Division examined numerous plans and specifications, conducted many conferences with Architects, Engineers, General Contractors, Manufacturer's representatives, and Electrical Contractors, to encourage compliance with the Building Code's Rules and Regulations for the installation of wiring and apparatus; and acted as Consultants on Code problems to all that needed this service, including Architects, Engineers, Contractors, Manufacturer's representatives, Journeyman Electricians, property owners and the public in general.

This service complements the actual inspection work of the Electrical Division to the extent that the Department of Building Inspection enjoyed better public relations through the efforts of its Electrical Division.

Respectfully submitted,

PETER J. HICKS, JR.,
Chief Electrical Inspector

DIVISION OF PLUMBING, DRAINAGE AND GAS PIPING

The Atomic Age we are now entering has resulted in increased research for new materials and methods of installation to keep abreast with developments in related fields.

The industrial and architectural fields are two that have created new problems in the installation of plumbing. What will be the most sanitary and economical method of installation for streamlined kitchens and bathrooms in the homes of the future?

To protect the public the plans are always reviewed before the installation of construction is started. Correct sizing of water, gas (high and low pressure), soil, waste, and vent lines, house sewers, swimming pool filters and piping, softeners, fire sprinklers, wet and dry stand-pipes, pressure and gravity tanks, and the use of recognized standards for materials and protective devices are some of the many items investigated to assure the health and safety of our citizenry.

All plumbing installations, materials, and devices are inspected during construction and after completion.

DIVISION OF PLUMBING, DRAINAGE AND GAS PIPING

Mr. Vincent DiMase, Director
Department of Building Inspection
112 Union Street
Providence, Rhode Island

Dear Sir:

As requested this will show the activities and statistical record of the Plumbing Division of Plumbing and Drainage for the fiscal year October 1, 1957 to September 30, 1958.

Plumbing Inspections	6091	
Drain Inspections	1523	
Miscellaneous Visits	247	
Minimum Housing Visits	1285	Total 9146
Plumbing Plans Filed	3651	
Drain Plans Filed	515	Total 4166
Work on Old buildings	3510	
Work on New buildings	141	Total 3651
Sewer Connections	3634	
Cesspool Connections	17	Total 3651
Final Plumbing Plans Passed	3351	
Estimated Cost of Plumbing Plans		\$1,539,083.00
Estimated Cost of Drain Plans		\$100,364.00
	TOTAL	\$1,639,447.00
Limited Sprinkle Licenses Issued	1	
Limited Drainlayer Licenses Issued	6	Total 7
Fees for Plumbing, Drain and Limited Licenses....		\$14,346.24

APPROVAL OF PLANS

There were 317 Blue Prints and Specifications submitted to this Department for corrections and approval by architects and engineers, and 1037 questions in regards to Plumbing and Drainage. The work was necessary in order that the plumbing being installed comply with the City of Providence plumbing law.

COURT CASES

There were 85 illegal plumbing and drainage installations that were corrected and legalized without court action, by sending of legal letters to the owners of the properties and by investigations by inspectors of this Department.

AGED AND CONVALESCENT HOMES

At the request of the Social Welfare Department of the State of Rhode Island, this Department inspected 46 homes for the aged and convalescent. The inspectors were required under the Rhode Island State Law, Chapter 374, for approval of the plumbing installed in the building before a license may be issued by the State for an aged and convalescent home.

Respectfully submitted,

EDWARD F. DRUMM,
Chief Inspector of
Plumbing & Drainage

DIVISION OF AIR POLLUTION,
MECHANICAL EQUIPMENT AND INSTALLATIONS

The increase in the supply of steel during peace time has enabled heating appliance manufacturers to greatly increase their production during the past year of this much needed building equipment. The type of heating equipment placed on the market during the past year indicates a steady improvement in design, materials, and methods of fabrication, all of which serve to provide for better heating plants.

This indicates that industry is striving to raise the quality of heating equipment in spite of increased production.

Along with research, improved manufacturing facilities and better grades of steel have made possible the modern heating appliance which occupies less floor area, safely delivers more heat and has a more attractive appearance than heaters and furnaces of a decade ago. The heating industry itself has made a consistent effort to raise its standards through more stringent requirements enforced by appliance testing agencies which must approve new models prior to marketing.

Since 1947 engineers of the heating, refrigeration and appliance control industries have combined to provide comfortable air conditioning in many public assembly buildings, places of employment and residential buildings in a manner not even considered possible ten years ago.

Only a decade ago air conditioning was largely confined to air cooling of better class restaurants and limited areas in the larger stores. Automatically controlled plants of that era lacked many of the advantages available in true air conditioning.

The refrigeration industry has made significant technological advances during the past ten years. In 1947 the modern open, reach-in-food display case, extensively used in markets today, was being studied as an interesting experiment. The frozen food industry was just beginning a valiant campaign to promote public acceptance of frozen foods. Pre-cut meat packaged in cellophane was more of a topic for conversation among refrigeration engineers rather than an actual fact. Frozen orange juice was just being introduced in the markets. The sale of other fruit concentrates was yet to be introduced to the American public. However, 1947 was the year when much of the best engineering talent in the industry was busily engaged in the planning and development of the superior refrigeration equipment we are enjoying today.

Today, any thoughtful person is aware that refrigeration is the life blood of the modern food industry and has been responsible for a tremendous change in storage and merchandising. Ten years ago a considerable number of the food markets were equipped with only one or two pieces of refrigeration equipment, and a breakdown was a matter of considerable concern to the market owner.

The present day food market is equipped with numerous small unobtrusive refrigeration units designed to serve individual food boxes and display cases, an arrangement providing flexibility of operation and protection against food spoilage, two advantages unknown a few years ago.

Ten years ago the use of dichlorodifluoromethane was being promoted as a safety refrigerant to replace noxious and flammable refrigerants then in common use. The development of additional types of such fluorinated hydrocarbon refrigerants has proven to be one of the greatest industrial advancement in several decades, and has laid the groundwork for the refrigeration industry as it is today. These refrigerants have largely replaced noxious and flammable refrigerants in markets and public buildings where the escape of such gases was an ever present panic hazard. The past decade has witnessed removal of the underground ammonia lines serving buildings in the downtown area.

Boiler Inspection:

Providence has one of the lowest accident rates on fired and unfired pressure vessels in the country. This is in a large part due to the constant vigilance of the Inspectors who are continuously inspecting the installation, maintenance, repair and operation of all fired and unfired pressure vessels each year.

Much time is spent in the installation and re-inspection of existing installations. The safest pressure vessel may be the least safe unless it is properly installed, maintained and repaired. Although small boilers, air tanks, steam pressing equipment and similar types of equipment may appear rather harmless, this type of equipment, as well as the larger equipment, unless it is properly installed, can cause tremendous damage and loss of life.

DIVISION OF AIR POLLUTION,
MECHANICAL EQUIPMENT AND INSTALLATIONS

Mr. Vincent DiMase, Director
Department of Building Inspection
112 Union Street
Providence, Rhode Island

Dear Sir:

As requested by you, the following is the annual report covering the various activities, operation and revenue of the Division of Air Pollution, Mechanical Equipment and Installations, for the fiscal year October 1, 1957 to September 30, 1958:

Progress in the control of Air Pollution continued during the year. Several industrial plants installed or replaced air pollution control equipment. The largest single expenditure was made by the Brown and Sharpe Co. This plant spent more than \$50,000 for high-efficiency dust control equipment for their foundry. The new installation which is almost completed should successfully control dust emissions from that source.

An asphalt plant installed electrostatic collectors, at a cost of several thousand dollars, with greatly improved results.

Several industrial and manufacturing plants installed incinerators, all of which are equipped with either primary and/or secondary burners and water scrubbers.

The installation of smoke detectors and audible alarms is now mandatory in installations which burn more than 10 gallons of heavy oils per hour. Many plants have already

complied while others are taking steps to do so.

Cooking odors from restaurants have been controlled by the installation of activated charcoal filters, while fume emissions have been abated by the use of odor masking, gas washer equipment and high level dispersal, in several locations.

Dusts from many manufacturing and industrial processes were controlled by the installation of cyclone type, mechanical collectors, while dust from coal piles and open areas was suppressed by the use of an encrusting liquid, calcium chloride or some wetting agent.

Dust from trucks carrying materials which may be wind-blown, has been controlled, with the help of the Providence Police Department, by invoking a City Ordinance which requires that trucks carrying these materials shall have adequate covering.

Substantial progress was made during the year in enforcing the ban on all open fires. The refusal by members of a firm to extinguish an open fire on their premises resulted in successful prosecution. The Chief of this Division sincerely acknowledges the splendid cooperation of the Providence Fire Department in cases involving open fire burning.

A most favorable press has been a very potent factor in the progress achieved in the program to control air pollution.

The work of our dedicated staff of inspectors, who have worked so diligently during and after business hours, has been most effective in the progress of our air pollution program.

Civic groups such as the League of Women Voters, the Providence Chamber of Commerce, and the R. I. Medical Society, which have Air Pollution Committees, also contributed greatly to the progress made by our Air Pollution Division.

The continuing extensive modernization program for our City Schools has included the conversion of coal fired boilers to oil or gas, and much of the smoke and flyash from the schools was eliminated during the year.

Fumes from a precious metal refinery were abated by the installation of equipment utilizing secondary burners and gas washers.

Inquiries for information of our control methods were received from many cities and from two foreign countries.

The Chief of the Division spoke before several groups during the year, including the R. I. Fire Chiefs Club, the Providence League of Women Voters, the Providence Chamber of Commerce and the Kiwanis Club.

The Division Chief was elected a Director of the New England Section of the Air Pollution Control Association. Because of its record of achievement in the field of Air Pollution Control in New England, Providence was chosen as the site of the first annual dinner meeting of the New England Section of A.P.C.A. On that occasion, representatives from three states spoke on control problems in those states. The Chief of this Division was privileged to speak for this area.

The analytical results of our filter samples show that continuing progress is being made in cleaning up the air over Providence. Data from other cities, as reported during the Conference in Washington, November 18-20, 1958, compared to Providence data on sample analysis, shows that the air over Providence is much cleaner than that of the 12 other cities listed in the survey.

During the year, the Division has worked into the other functions required by the Providence Building Code. Permits have been issued for air conditioning, heating, ventilation and refrigeration equipment; flammable liquid storage tank; natural gas equipment and appliances; emergency generators; sprinklers; elevators, dumbwaiters and conveyor equipment.

The additional workload of inspections was handled, although the Division is still undermanned. The increasing popularity of gas as a fuel for heating and power resulted in 2768 permits being issued for gas burners, water heaters and unit heaters. These permits were for 3939 units.

Inspection of this gas equipment added greatly to the workload in the field.

There was also a substantial increase in the number of permits issued for the installation of oil burners; boilers; furnaces; ductwork; piping; ventilation and air conditioning equipment; and elevators.

Since becoming part of the Department of Building Inspection, the Division has been able to exercise better

control over equipment which might tend to contribute to air pollution, through examination of plans for suitability of performance.

A very competent staff continues to be engaged in research conducted by various private foundations and the U. S. Public Health Service.

The number of applications submitted for stationary engineer and boiler operators licenses continued at a high rate. Of the 161 applications made, 146 were granted after the applicants successfully passed the required examinations.

The following is an accounting of the Division of Air Pollution and Mechanical Equipment and Installations from October 1, 1957 to September 30, 1958:

REVENUE

Gas Burners	\$ 4,894.79	
Oil Burners	1,438.35	
Tanks	401.20	
Boilers	2,434.52	
Elevators	497.88	
Air Conditioners	1,110.74	
Ductwork	217.10	
Ovens	107.00	
Dryers	33.75	
Stoker	2.16	
Incinerators	38.00	
Radiation	369.65	
Emergency Generators	28.50	
Sprinklers	176.85	
Furnaces	664.45	
Gas Water Heaters	3,832.60	
Manlift	17.05	
Hydraulic Lift	22.00	
Unit Heaters	178.90	
Dumbwaiters	57.52	
Refrigeration	256.00	
Compressors	168.67	
Ventilation	249.75	
Conveyor	12.60	
Piping (Steam)	53.20	
	<hr/>	
	\$17,263.23	\$17,263.23
NEW LICENSES:		
Boiler Operator, Stationary Engineer and Refrigerating Machine Operator	\$ 730.00	
RENEWALS:	3,932.00	
	<hr/>	
	\$ 4,662.00	\$ 4,662.00
		<hr/>
Grand Total		\$21,925.23

There were 4,670 permits issued from October 1, 1957 to September 30, 1958 for the following equipment:

<u>EQUIPMENT</u>	<u>UNITS</u>
Gas Burners	2144
Oil Burners	468
Tanks	111
Boilers	264
Elevators	23
Air Conditioners	69
Ductwork	43
Ovens	5
Dryers	10
Stoker	1
Incinerators	3
Radiation	48
Emergency Generators	7
Sprinklers	12
Furnaces	80
Gas Water Heaters	1698
Manlift	1
Hydraulic Lift	7
Unit Heaters	87
Dumbwaiters	5
Refrigeration	4
Compressors	5
Ventilation	3
Conveyor	2
Piping (Steam)	1

LICENSES: Boiler Operator, Stationary Engineer,
Refrigerating Machine Operator

Number of Licenses Issued

New	Renewal
146	1966

INSPECTIONS AND INVESTIGATIONS

Annual Fuel Burning Equipment Inspections and Permits Issued	3152
New Fuel Burning Equipment Inspections	340
Gas Burner Inspections	2092
Oil Burner Inspections	780
Tank Inspections	60
Air Conditioning Inspections	89
Ductwork Inspections	52
Water Heater Inspections	2241
Sprinkler Inspections	12
Elevator Inspections	23
Emergency Generator Inspections	7
Incinerator Inspections	3
Compressor Inspections	5
Hydraulic Lift Inspections	7
Manlift Inspections	1
Dumbwaiter Inspections	5
Refrigeration Inspections	4
Ventilation Inspections	2
Conveyor Inspections	1
Piping Inspection	1
Violations Noted and Investigated	671
Complaints Received and Investigated	226
Investigations	897
Control Tests	361

11,032

The revenue of \$21,925.23 received during the year represents an increase of 29% over the income for the previous year. The increase was due mostly to permits issued for equipment for several large buildings, and permits for gas heating equipment.

Respectfully submitted,

GENARO G. COSTANTINO,
Chief Air Pollution and
Mechanical Inspection

MANAGEMENT AND ADMINISTRATION DIVISION

The management and administration of the Department of Building Inspection are the responsibilities of the Director. The varied activities of the Department include the enforcement of the Building Code as it relates to construction, alteration, repair, demolition of buildings and structures; the installation, alteration, repair, use and operation of all heating, plumbing, lighting, ventilating, refrigerating, electrical and mechanical equipment and appliances within or attached to buildings; and the enforcement of the City's Zoning Ordinance.

In order to establish and maintain uniformity in law enforcement and consistency in operating procedures, the Department has been organized under the separate Divisions. Through the Division Chiefs, the activity of each of these divisions is coordinated by the Director.

It also performs department-wide service relating to personnel, budget, analysis, fee collections, auditing and accounting operations, procurement of supplies and equipment, motor vehicles, statistics and records.

MANAGEMENT AND ADMINISTRATION DIVISION

REVENUE SUMMARY

The 1957-1958 departmental revenue totalled:

Division of Structures & Zoning	\$43,080.17
Division of Electrical Installations and Limited Premises Licenses	14,054.43
Division of Air Pollution and Mechanical Equipment	21,925.23
Division of Plumbing, Drainage and Gas Piping	14,346.24
	<hr/>
TOTAL	\$93,406.67

One cashier handled these revenues.

Fees Waived

Gratis permits were issued to governmental agencies in accord with the Building Code.

BUILDING CODE

The past year was our first full year of operation under the new Building Code. The advantages of our performance code over our old specification code becomes more apparent with the approval of new materials, construction assemblies, changes in existing uses of buildings, and safety precautions.

The American Concrete Institute adopted new standards in 1956. Under our old building code, the complete concrete section covering many pages would have become obsolete; now a mere change in the reference of our new code of the date approved by the City Council is all that is required to keep our code up to date.

BUILDING CODE REVISION BOARD

The Building Code Revision Board consists of thirteen (13) members, ten (10) of whom are appointed by the Mayor, subject to the approval of the City Council.

The Director, the Chief of the Fire Department, and the Chairman of the City Council on Ordinances are ex-officio members of the Board.

The Building Code Revision Board has the power to approve rules and regulations proposed by the Director for

the purpose of implementing the provisions of this code, and to secure the intent and beneficial effects thereof. This will provide a means of maintaining a modern, effective and flexible code which will be responsive to progress in architecture and engineering. It will also keep abreast of improvements in materials and techniques.

The Building Code requires the Director to submit to the Building Code Revision Board requests for Code revisions. These requests may be based on improvements in materials and methods of construction or design, and on investigations of fire and structural damage to buildings. The Director's requests may also be received from industry, other city departments, and interested individuals. Recommendations from the professional men of the building industry are continually solicited.

After the Revision Board has held public hearings on the proposed revisions to resolve the differences of opinions, the amendments are submitted to the Ordinance Committee for recommendations to the City Council for enactment into ordinance.

By this procedure the Department of Building Inspection will maintain one of the most modern, effective and flexible codes in the nation.

BUILDING BOARD OF REVIEW

The Building Board of Review consists of five (5) members appointed by the Mayor, subject to the approval of the City Council. The Director is the advisory member of the Board.

The Board by a concurring vote of four (4) members can vary or modify the provisions of the code in such a manner that the spirit of the code is observed and public safety secured, and substantial justice done where there are practical difficulties in the way of carrying out the strict letter of the code.

ZONING BOARD OF REVIEW

The Zoning Board of Review, comprising six (6) members, hears appeals in zoning matters where a citizen alleges an administrative official erred in interpreting the zoning laws. It also passes upon requests for special exceptions and variances to the Zoning Ordinance.

CERTIFICATES OF OCCUPANCY

Certificates of Occupancy were issued in compliance with the provisions of the Building and Zoning Codes. These certificates cover new building construction, additions and alterations to existing buildings, change of occupancy, use of land, use of equipment, etc.

MINIMUM HOUSING DEPARTMENT

The Department of Minimum Housing, in their course of housing code inspections, uncovered violations of the Building Code. From June 1958 to September 30, 1958, the Department of Building Inspection received 2300 reports on violations of the Building Code.

Through persuasion, education and continued vigilance of our inspectors, more than 1050 of the violations have been corrected. This Department has contributed to the City's Urban Renewal Program, not only by eliminating the most serious sub-standard conditions in our worst slum areas, but also by helping to prevent creeping deterioration in those neighborhoods where blight was just beginning to appear.

Upon a re-inspection by our inspectors, and by applying a little pressure and persuasion, more than 300 of these violations were corrected. The balance are in the process of being corrected.

SPECIAL ACTIVITIES

The Director is a member of Subcommittee No. 2 of the Building Officials Conference of America, Inc. This committee deals with requirements for light, ventilation, exits and structural load.

Also, the Director has been requested to speak before the New England Building Officials Conference, Inc., and the General Contractors of America.

Locally, the Director has appeared before various building industry groups and luncheon groups, in a discussion of the new Building Code, and the activities and operation of the Department.

The Director is a structural and civil engineer, registered in Rhode Island, and a member of the National Society of Professional Engineers. He has the opportunity to benefit from the Society's publications. The Director has also written several articles for the New England Building Officials Conference Magazine, and the Building Officials Conference of America News Magazine. The Director is also Editor of the New England Professional Engineer Magazine.

In the interest of better serving the public by keeping abreast of recent developments in engineering, construction, and in the field of public service, the Director, as a member, attended the annual Building Officials Conference of America meeting in Atlantic City, New Jersey. The Director was chosen as one of four members in the country to participate in panel discussion on Zoning, Steel Structures, Prestressed Concrete, Pile Foundations, etc.

NURSING HOMES

A program was instigated by the Director to investigate conditions in all nursing homes in Providence.

Subsequently, an inspection was made of all nursing homes, and about 90% were found to exist in violation of one or more codes or laws.

Consequently, many homes are trying to comply with the new ordinance.

As a direct result of this program, we expect conditions in nursing homes to improve and greater safety to the occupants provided.

* * * * *

Other matters of importance handled by the Director are field inspections of dangerous structures, the witnessing of piling tests, tests of open web joists, prestressed concrete girders, and other miscellaneous tests. Floor loading in old buildings for which there are no plans available present unusual problems.

COMMUNITY RELATIONS

A larger and general program for improving relations with the public, explaining the Department's purposes, handling complaints and promoting voluntary compliance, was launched during the year. The Director appeared before various civic organizations and neighborhood groups, delivering brief talks to explain the Department's operations and aims, and in building up cooperation with its objectives.

C O N C L U S I O N

Since the transfer and integration of these other divisions under the Department of Building Inspection, the Department offered larger opportunities for the improvement of organization procedures and techniques, and for rendering service to the city with inestimable benefits to the safety and health of its citizens.

The people of a city judge its government largely by their personal contacts with its representatives. The way officials, clerks and elevator operators deal with the public inevitably affects the citizen's attitude toward the municipal administration. The Director has stressed the importance of winning public good will. The Department's objective in 1958 was to obtain compliance by amicable agreement without incurring the expense of ill-will of legal actions.

The Department's major task is the enforcement of the Zoning Ordinance, the Building Code, and other related ordinances. In this battle the Department has at its command two weapons: Inspection and Enforcement. Both entail a struggle against public apathy and resistance. Landlords and tenants alike resent the intrusion of inspectors who they feel are prying into their privacy. Property owners, and in many cases even tenants, are unwilling to cooperate in the improvement of housing conditions. Coping with these problems

requires both diplomacy and firmness. The first recourse is to persuasion and education. Violators are told of the beneficent purposes behind the city's laws, and the advantages likely to result to their own property values from compliance. When amicable persuasion fails, they are prosecuted.

Our work is repetitive and unending. It is a very crucial fight in order to maintain order among buildings and land.

The best investment that Providence made was in a modern Building Code, and in a strong, honest, professional and competent building department--one that enforces sound building regulations uniformly and impartially. This Department is backed by an administration with enough courage to support its enforcement.

Respectfully submitted,
Vincent DiMase
VINCENT DiMASE, DIRECTOR
DEPARTMENT OF BUILDING INSPECTION

IN CITY COUNCIL
FEB 5 - 1959

READ:
WHEREUPON IT IS ORDERED THAT
THE SAME BE RECEIVED.

Everett Whelan
CLERK