

FIRST
ANNUAL
REPORT

1956
1957

CITY OF PROVIDENCE
DEPARTMENT OF
BUILDING INSPECTION
VINCENT DIMASE
DIRECTOR



January 27, 1958

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

Honorable Sirs:

In compliance with the provisions of the City Charter, I am pleased to submit the First Annual Report of the Department of Building Inspection. The report covers the work performed by the various Divisions of the Department, and presents a comprehensive review of our various functions and activities.

We were fortunate in receiving splendid and wholehearted co-operation by His Honor the Mayor, members of the Honorable Council, the City Solicitor, the Fire Prevention Bureau, and the Police Department. For their assistance throughout the year, in the performance of our duties and in the discharge of our responsibilities, I am exceedingly grateful.

IN CITY COUNCIL
FEB 6 - 1958

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

Everett Whelan
CLERK

Respectfully submitted,
Vincent DiMase
VINCENT DIMASE,
Director

DEPARTMENT OF BUILDING INSPECTION

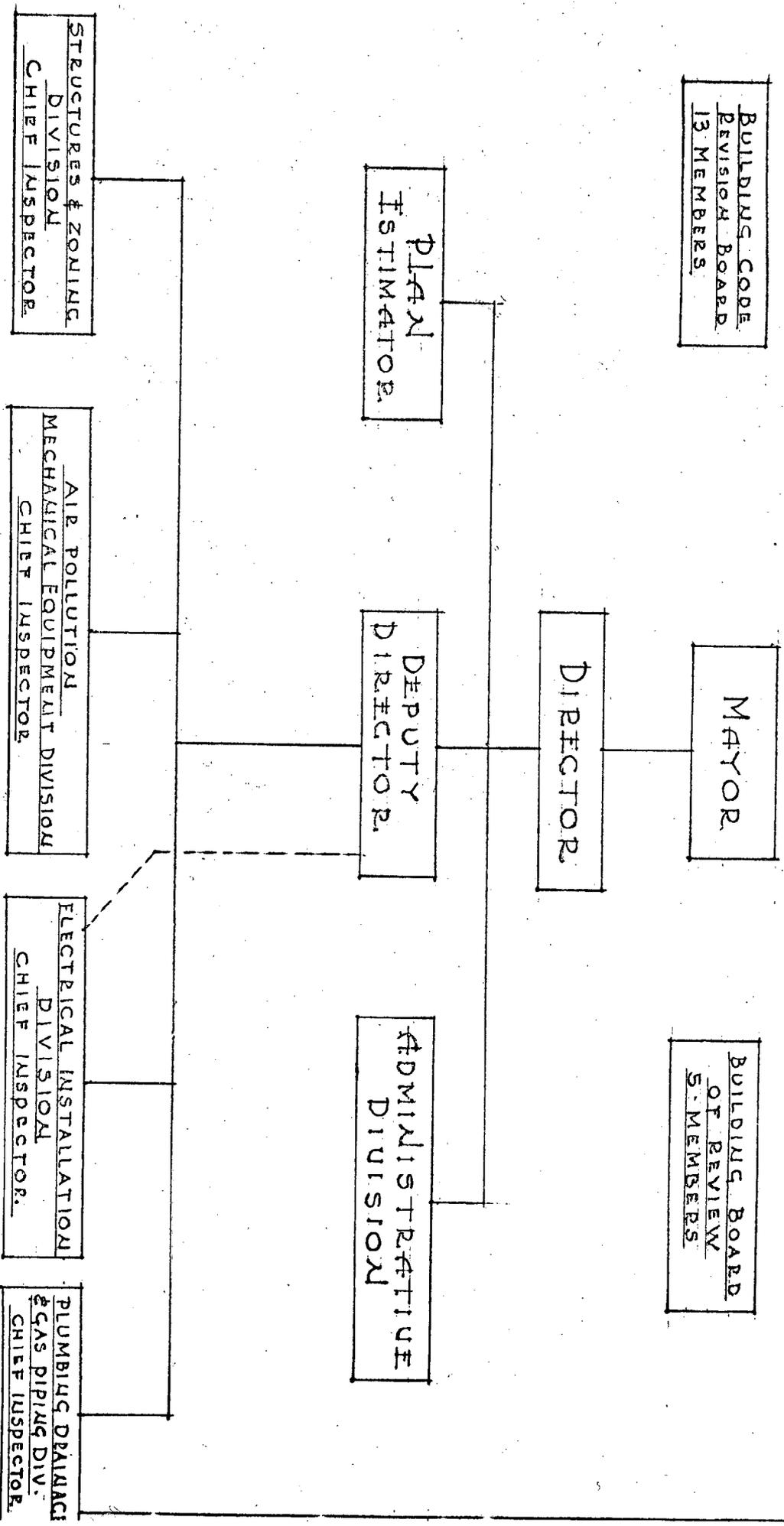
On April 1, 1957 when our new building code went into effect, the Inspector of Buildings Department--the Department of Sanitary Engineer of Plumbing and Drainage--the Public Service Engineer Section and the Air Pollution Division of the Department of Public Works were incorporated into one department called 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.

ORGANIZATIONAL CHART-DEPARTMENT OF BUILDING INSPECTION



FUNCTIONS OF THE DEPARTMENT

Providence contains some 60,000 buildings. Responsibility for their structural safety, their sanitation, legal use, freedom from fire hazards, the alteration, repair or demolition thereof is the charge of the Department of Building Inspection.

Its activities in enforcing the laws which regulate such matters are threefold.

(1) It investigates complaints of violations of these laws from private citizens and civic groups, and assures that field work complies with the approved plans and specifications and the requirements enumerated above.

(2) Its regulations control the use of all existing buildings and land, and it passes upon proposed new construction. All plans must be checked for conformity to provide the safety and quality of construction established by ordinance.

(3) It investigates disasters resulting from fire, building collapse and explosion.

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 8,000 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 co-operation 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 stand-pipe 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 co-operation 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.

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) Field Inspections of Dangerous Structures.
- (c) Routine Inspections of alterations and new buildings.
- (d) Conferences with Engineers, Contractors and Material Men.
- (e) 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 2785 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.

CENTRAL BUSINESS DISTRICT SURVEY

The Division of Structures and Zoning and the Director, in co-operation with the Plan Commission, contributed 500 hours in inspecting 446 buildings in the "Downtown Neighborhood", to develop an inventory of the condition of the downtown buildings and their uses.

This information, correlated with facts concerning their value, will indicate the buildings in the area which should be (1) Saved for future use, (2) Rehabilitated for an extended life, and (3) Demolished as slum buildings which have outlived their economic usefulness.

This Division has been handicapped due to the fact that we have not been able to fill the position of Building Inspector III. Because the requirements for this position are so high, it must be filled by a structural engineer. It is recommended that the salary be re-classified to a higher level in order to attract and compete with other engineering agencies in recruiting professional talent.

DIVISION OF STRUCTURES AND ZONING

January 27, 1958

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 1957.

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 1957 is as follows:

New Buildings.....	273 Permits
Estimated Cost.....	\$7,948,811.00
Additions & Alterations.....	1,397 Permits
Estimated Cost.....	\$3,516,450.00
Total Estimated Cost of Construction...	\$11,465,261.00

Permits (not included in tables) issued during
the year 1957, are as follows:

* Razing of Dilapidated Buildings.....	199 Permits
Sandblasting of Buildings.....	13 Permits
Moving of Buildings.....	18 Permits
Roofs Recovered.....	68 Permits
Erection of Billboards.....	83 Permits
Erection of Wall Signs.....	75 Permits
Erection of Signs over Sidewalks.....	305 Permits
Erection of Fire Escapes.....	247 Permits
Construction of Vaults.....	3 Permits
Use of Streets & Sidewalks.....	189 Permits
Erection of Fences.....	0 Permits
Storage of Dangerous Chemicals.....	63 Permits
Storage of Petroleum Products in Bulk...	3 Permits

TOTAL.....1266

Permits Issued During Year 1957.....2785

* Buildings Demolished for Public Improvements not
Included in the List of Permits above -----
West River Project ----- 497 Buildings

Note:

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

147 Family Units have been added during the year
1957 as a result of building activities through private
channels as follows:

- (a) New Buildings-One Family.....125 Family Units
- " " 2-Two Families..... 4 Family Units
- (b) Conversions..... 18 Family Units

Total Inspections for the year 1957.....16,324

* * Total Fees collected during the year 1957.....\$42,632.65

* * Note:

Total Fees given is for the calendar year of
1957. 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, 1956 to
September 30, 1957----- \$35,724.72.

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 1957 with a declared estimated cost of \$50,000.00 or more:

Howard Realty Co. 10-40 Dorrance St. Office Building.....	\$1,790,500.00
Rhode Island Hospital 593 Eddy St. Cancer Research Building.....	1,035,000.00
Brown University 87-89 Waterman St. Psychology Dept.....	697,000.00
Rhode Island School of Design 42-46 Waterman St. Dining Hall.....	643,868.00
Rhode Island School of Design 17-19-27-33 Angell St. Dormitory.....	586,395.00
Providence Journal Co. 75 Fountain St. Garage-News Paper Publishing.....	400,000.00
First Baptist Church North Main St. Alterations.....	335,000.00
Rhode Island School of Design 45-47 Angell St. Dormitory.....	293,198.00
Great Scott Realty Co. 539 Smith St. Addition and Loading Plat Form.....	200,000.00
Desitin Chemical Co. Veazie-Shilon St. Storage-Warehouse.....	140,000.00

Rollma Realty Co. 243 Weybosset St. Parking Garage.....	133,500.00
Rhode Island Hospital 593 Eddy St. Service Building.....	110,000.00
Roman Catholic Diocese of Providence St. Michael's Convent Oxford St.....	90,000.00
Bryant College 21-23 Cooke St. Dining Hall--Study Hall--Class Room.....	80,000.00
Rhode Island Hospital 593 Eddy St. Laundry Building.....	75,000.00
The Kinney Co. 123 Stewart St. Manufacturing	55,000.00
Yearly Meeting of Friends Moses Brown School 257 Hope St. School.....	50,000.00
Barry Hill Corp. Harbor Side Park #1 Washington Ave. Ticket Booths, Concession & Projection Booth	55,000.00

The declared estimated costs of construction of the 18 buildings and structures listed above is \$6,769,461.00, or 59% of the total estimated construction cost figures; while the number of permits issued for the construction of these buildings is only 16, or less than 1% of the total number of permits issued for the

construction of new buildings and alterations to existing buildings during the year 1957.

It is advisable to keep in mind, when using the declared estimated cost of construction figures in this report, that these figures are neither total nor accurate due to the usual reluctance on the part of some people to declare fair or true cost estimates, etc. However, the margin of error does not seriously affect the comparisons and the conclusions drawn from these figures, but the amount of money collected through fees based upon declared estimated costs of construction is considerably less than it should be.

Respectfully submitted,

NICHOLAS DiBENEDETTO,
Chief Inspector of
Structures and Zoning

BUILDING ACTIVITIES DURING THE YEAR 1957

Private building operations during the year 1957 in the City of Providence, with a total declared estimated cost of \$11,465,261.00, is \$4,228,489.00 less than the 1956 total estimated cost of construction--a drop of 36%. This decrease in estimated costs of construction is due to a steady downward trend of construction for all types of buildings, with residential buildings accounting for approximately 18% of the total estimated cost figures. New one-family dwellings, with a total declared estimated cost of \$1,388,900.00 for 1957, accounts for 12% of the total declared estimated costs of building construction.

During the year 1957--1670 permits were issued for the construction of new buildings, additions and alterations to existing buildings--251 permits more than the number of permits during the previous year, 1956--an increase of 15%. Other permits separately listed in this report, issued during 1957, total 1266--an increase of 174 over the 1956 figures--an increase of 13%.

The estimated cost figures for additions and alterations to existing buildings, during the year 1957, show a decrease of \$4,953,700.00, or a 140% decrease over the 1956 estimated cost figures, while the permits issued during the same period show an increase of 23% from the 1956 figures. A careful study of the tables will provide

the answers to the great differences in percentages which arise from the declared estimated cost figures and the number of permits issued during the same periods.

During the latter part of 1957, the number of permits on alterations increased, although the estimated costs do not show any increases in value over 1956. This was due to the fact that many of these alterations were small and were made by owners in order to comply with Minimum Housing requirements.

A list of buildings, for which permits were issued in 1957 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 these differences in percentages.

COMMENTS ON 1957 BUILDING ACTIVITIES

The new ten story Howard Building is now almost up to schedule, and it is expected to be completed by June of this year.

The Rhode Island School of Design is continuing to move at a rapid pace, expanding its physical plant by providing additional dormitories and dining hall for their students, male and female.

The Rhode Island Hospital continued to improve and expand its hospital facilities with the new Cancer Research Building, which is connected to the new modern eleven story hospital building.

Brown University is also moving at a rapid pace with the new Psychology Building and the restoration of Hope College, which will soon get under way.

The Providence Journal Co. is also increasing its facilities with a beautiful modern addition to the main building and a garage.

The City of Providence is by no means standing still concerning physical improvements, which are necessary and desirable. The Willard Avenue Project was completed and is now occupied. The South Providence Elementary School is expected to open very soon. The Joslin Street School will soon go out for bids, and construction is expected to start in two or three months. The West River Project, an industrial redevelopment project, has almost completed the demolition of all buildings, and all indications point to an early start for this project.

Private work in the state may stay still during 1958 due to the general business activity. However, in Providence, with the new Joslin Street School, the new five story wing at Roger Williams Hospital, Brown University and Pembroke College expansion program, School of Design

expansion program, the new Mall Parking Deck, and other parking garages under construction or in the planning stage,--construction activities for Providence seem hopeful and encouraging.

HOUSING IN 1957

Nationally, housing starts in 1957 were the lowest since 1949--10% behind 1956, with dollar volume off an estimated 6%.

Most industry leaders have been predicting more starts in 1958, some as many as 10% more. This view was echoed by builders attending NAHB's annual outlook session. Almost half of them said starts would go up.

Last year, prices of houses went up about 2% because of wage increases (materials prices stood still), but house buyers got nothing more for their money. Since 1949, hourly wages of building tradesmen have risen 56%. The cost of living is up only 21%. Building labor's pay has soared far above the wages earned by most of the people builders must sell homes to.

FORECAST FOR 1958

U. S. FORECASTS PREDICTS 1958 CONSTRUCTION RISE

The U. S. Department of Labor and Commerce last month predicted a five per cent increase in total new construction outlays in 1958 compared with 1957. This would mean that this year's \$47.2 billion expenditure would rise to an estimated \$49.6 billion next year. The 1957 increase over 1956 was two per cent, the 1956 figure being \$46.06 billion.

Private construction, said Commerce and Labor, should show a four per cent rise next year, whereas it is registering an increase of less than one-half per cent this year. Housing, the big segment of the private category, will reserve its expenditure trend next year, the government said, jumping six per cent from the relatively low outlay of \$12,125 million this year to an anticipated \$12,800 million. The dollars spent in 1957 were said to be 10 per cent under the 1956 level -- \$12,125 million against \$13,490 million.

Nationally, the consensus of the experts consulted by the "American Builder" say that business will go sideways.

Both the economy in general and the construction industry in particular, have reached a high plateau, and the objective is to try to keep them there, with no risk of inflation or recession. Home building, of course, has

some climbing to do before it gets a firm footing on the plateau.

The experts know that 1958 with a \$72-billion total market and 1.1 million housing starts, if things break right, it will be a big year for building. Even though no miracles may happen in 1958, it will be a year of steady growth and things will get back in stride.

SUMMARY OF WHAT'S AHEAD IN 1958

Private New Residential construction will go up 6% to \$17.7-billion next year.

Private New Non-Residential construction's share will drop, still take \$16.6-billion.

Public Construction will make the biggest gain: up 9% to \$15.3-billion.

Modernization, Alteration, Maintenance will boom to \$22.6-billion, largest share of market.

DIVISION OF ELECTRICAL INSTALLATIONS

The Electrical Division enforces all laws concerning the installation, alteration, reconstruction, repair, use and operation of electrical systems in the City; including all materials, devices, fixtures, appliances, apparatus and connected equipment.

The vastly expanded use of electricity for new and varied applications in industry and in the home requires frequent review of the Electrical Code to keep abreast of new developments.

The public depends largely upon the Electrical Division for assurance of a safe and adequate electrical installation. The benefit of good enforcement of the Electrical Code has been a factor keeping fire insurance rates low and has contributed measurably to the safe use of electrical energy in home and industry.

DIVISION OF ELECTRICAL INSTALLATIONS

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 and Operation of the Electrical Inspection Division for the period of the fiscal year 1956-1957, -- from April 1, 1957 to September 30, 1957.

REPORT

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

1. Seventy-eight (78) Limited Premises Permits.....	\$ 390.00
2. Two Thousand forty-nine (2,049) permits for installations of electrical wiring and apparatus including alterations and repairs.....	<u>8,815.26</u>
Total	\$9,207.26

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

Number of rough wiring inspections.....	703
Number of defective installations re-inspected.....	707
Number of Certificates of Approval issued.....	2471
Number of inspections after fire.....	798
Number of investigations requested by the Narragansett Electric Company and Fire Department....	173
Number of special investigations.....	1965
Number of re-inspections.....	<u>1349</u>
Total number of inspections.....	8166

Letters to owners..... 651

Number of disconnects.... 62

Note: Five requests for special permission were granted from April 1, 1957 to September 30, 1957.

COMMENT

The following comment is made to show the affect upon the number of permits issued for electrical installations, alterations and repairs under the new Building Code.

To demonstrate this affect, the periods from April 1 to September 30, of 1956 and 1957, have been compared. In 1956, no fee was required as the new Building Code was not in effect. On April 1, 1957, the new Building Code became effective and established a schedule of fees for permits. The fees have caused the following:

1. A decrease in the total number of all permits from 2,421 permits in the 1956 period, to 2,049 permits in the 1957 period.
2. A decrease in the number of sign permits from 437 permits in the 1956 period to 156 permits in the 1957 period.

It seems apparent that work is being done illegally. However, since there has been no substantial change in the number of inspections made during the two periods which were compared, nor in the number of inspectors, it should be evident that more inspectors are necessary to investigate illegal installations because the present force of four

inspectors in the field are now working to their greatest capacity.

Moreover, the additional inspections necessary under the Limited Premises Permits and Minimum Housing Standards Division notifications have increased the work of the inspector to the point of reducing the efficiency of his inspection. Illegal work cannot be avoided, unless there are enough inspectors, who are not overburdened with routine inspections, to investigate and obtain compliance with the Building Code electrical installation, alteration and repair regulations. If this Division is expected to maintain its present high standards for competent and efficient inspection, it will be necessary to employ at least one more inspector or compromise on the efficiency of enforcement.

Very truly yours,

PETER J. HICKS, JR.,
Chief Inspector of
Electrical Installations

DIVISION OF PLUMBING, DRAINAGE AND GAS PIPING

The responsibility for the enforcement of all requirements concerning plumbing fixtures, waste and vent piping, water piping, gas piping, gas water heaters, house sewers, private sewage disposal systems, swimming pool plumbing and fire sprinkler systems, rests with the Plumbing Division of the Department of Building Inspection.

The importance of the proper exercise of these responsibilities cannot be underestimated. Modern cities are founded upon adequate water supplies and sewage disposal systems. The delivery of water and removal of sewage in a sanitary manner permits a city to exist. Improper installation or a breakdown of water or sewage systems creates havoc and disaster through disease and epidemics.

The basic duty of the Plumbing Division is the enforcement of standards of plumbing construction and consequent protection of the citizens of the city from disease. In carrying out this duty, the Division enforces the Plumbing Code of the City by inspecting all applicable installations.

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, 1956 to September 30, 1957.

Plumbing Inspections	6139	
Drain Inspections	1616	
Miscellaneous Visits	246	
Minimum Housing Visits	259	Total 8260
Plumbing Plans Filed	3412	
Drain Plans Filed	602	Total 4014
Work on old buildings	3235	
Work on new buildings	198	Total 3433
Sewer Connections	3402	
Cesspool Connections	11	Total 3413
Final Plumbing Plans Passed	3225	Total 3225
Estimated cost of Plumbing Plans	\$1,187,546.00	
Estimated cost of Drain Plans	\$ 93,874.00	Total \$1,281,420.00
Limited Sprinkle Licenses Issued	4	
Limited Drainlayer License Issued	7	Total 11
* Fees for Plumbing, Drain and Limited Licenses		\$13,076.90

Approval of Plans

There were 446 Blue Prints and Specifications submitted to this Department for correction and approval by architects and engineers, and 714 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 79 illegal plumbing and drainage installations that were corrected and legalized without court action, by the sending of legal letters to the owners of the properties and by investigation 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 19 homes for the aged and convalescent. The inspections 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.

* Fees Collected: Oct. 1, 1956 to Dec. 31, 1956 - \$2,989.00
Jan. 1, 1957 to Mar. 31, 1957 - 2,843.00
Apr. 1, 1957 to Sept. 30, 1957 - 7,244.90
Total - \$13,076.90

Respectfully submitted,

EDWARD F. DRUMM,
Chief Inspector of
Plumbing & Drainage

DIVISION OF AIR POLLUTION,
MECHANICAL EQUIPMENT AND INSTALLATIONS

The enforcement of smoke abatement of air pollution through the co-operation of the public and governmental agencies continued to be the Division's primary objective. The installation of all heating equipment and the installation of all refrigerating plants and systems are under the control of this Division.

The modern trend toward more elaborate labor-saving appliances, and the complex products now being used in the manufacture of heating and refrigeration equipment, has resulted in marked increases in the number of inspections required and the number of items the inspector must consider on each inspection. Changes in materials and techniques used in manufacture will make it necessary to continually study and revise the Code.

DIVISION OF AIR POLLUTION,
MECHANICAL EQUIPMENT AND INSTALLATIONS

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

Dear Sir:

Following is the annual report covering the various activities, revenue and operation of the Division of Air Pollution and Mechanical Equipment Installations, for the fiscal year October 1, 1956 to September 30, 1957:

Continuing progress was maintained in the prevention and abatement of Air Pollution by the installation of several cyclone type of dust collectors in industrial plants which were discharging pollutants into the air.

The installation of gas scrubbers and after burners in several industrial and hospital incinerators, greatly lessened the amount of fly ash and smoke which was formerly discharged into the atmosphere from these sources.

The installations of electronic smoke detectors and controls by many plants have also contributed to the progress made during the year.

An asphalt company was found guilty on three charges of creating a nuisance as a result of excessive dust emissions, and was fined in Police Court. Because the company was in the process of installing electrostatic precipitators the fines were not imposed pending results

from the new equipment. Although results from this plant are much better than before, there is room for further improvement and several meetings with the precipitator company engineers have been held. Dust loading tests will be made to determine the efficiency of the unit and compliance with dust emission standards.

Deliberate burning of junked cars has been stopped with the fine co-operation of the Bureau of Licenses. Progress has also been made in stopping open fire burning. When complaints are received or burning is observed, the violator is told that papers and other waste materials will be picked up with the garbage, if properly wrapped. This does not include commercial or industrial violators, of course.

The fume and odor problem from the U. S. Rubber Company plant on Valley Street has been a source of complaints for many years. At my suggestion, in the early summer, the rubber company looked into the possibility of disposing of the fumes by catalytic burning. A pilot installation of this equipment was made at the plant, to determine if it would be economically feasible to install it on a wide-scale basis. The results observed by plant and city officials were excellent and tests are being continued at key points.

The Brown and Sharpe Mfg. Co. is contemplating the installation of more efficient abatement equipment at their

foundry at a cost of several thousand dollars to improve performance there.

A large smelting company is converting to gas fuel for the after burner to lessen the amount of smoke during the warm-up period.

During the year inquiries were received from several cities, including one from the Mayor of Sapporo, Japan, for help in air pollution problems. Regulations being drafted in this Japanese city will be patterned after the Providence ordinance and recommendations.

As a result of field research work by this Division on combustion safety controls, many of our recommendations for maximum timing on safety shutdown, have been included in the new national standards which became effective January 1, 1957. This should result in greater safety to life and property as well as in abating smoke conditions.

The air sampling which was discontinued in 1955, was resumed in January 1957, and Providence is once again part of the national air sampling network.

Several meetings were held during the year, with officials from Pawtucket, East Providence, Cranston, Johnston, and other communities present for the purpose of discussing air pollution problems. Co-operation was pledged by all present to set up area control on an unofficial basis. Monthly meetings are scheduled for the coming year.

The addition of one more air pollution inspector has resulted in a greater number of inspections being made of both annual and new equipment. In addition a "Saturday Morning Patrol" has been started to supplement our "Dawn Patrol".

The combining of the Air Pollution Section with the Mechanical Division should result in better source control of air pollution on new mechanical and fuel burning equipment, because it is the function of the new division to examine plans for suitability prior to the installation of the equipment.

A very competent staff continues to work conscientiously to keep the air over Providence as free from pollution as possible by continuous policing of stacks, inspections of equipment, and investigations of all complaints pertaining to air pollution.

The staff is also engaged in research of air pollution problems and the study of research conducted by various private foundations and the U. S. Public Health Service. In addition to its Air Pollution activities the new Division of Air Pollution and Mechanical Equipment and Installations now requires permits for and makes inspections of all new pressure vessels; flammable liquid storage tanks; natural and liquified petroleum gas equipment and appliances; heating, ventilation, air

conditioning and refrigeration equipment and machinery; emergency and auxiliary generators; sprinklers; elevators, dumbwaiters and conveyor equipment.

Gas and Oil Burner Equipment and Appliances:

The unprecedented popularity of gas as a fuel for heating and power has resulted in a tremendous increase in the amount of permits issued for this type of installation. The 5359 permits issued for the installation of gas fired equipment and appliances is an increase of more than 400% over the previous years total of 986. This has added greatly to the work-load in the field.

Air Conditioning, Ventilation and Refrigeration:

The increasing number of new air conditioning ventilation and refrigeration installations have also contributed heavily to the work-load of the new Division.

Elevator, Dumbwaiter and Conveyor Equipment:

Although the Mechanical Division has issued some permits for elevators, this section of the Division is still in the process of being set up. Much preliminary work has been done and meetings held with the elevator installation companies and the State Division of Industrial Safety in order to set up a good working program and schedule. Although the division is still understaffed considerable progress has already been made in this field.

Licenses for Stationary Engineers and Boiler Operators:

The number of applications submitted for stationary engineer and boiler operator licenses continued at a high rate and showed a gain--91 over the previous year. 168 applications were made for these licenses and 147 licenses were granted to applicants who were successful in passing the required examinations.

The Division has been gradually working into the new phases of its work-load and has made excellent progress during its short period of activation.

During the first six months of the fiscal year, and while the Air Pollution was a section of the Public Service Engineers Division of the Department of Public Works, the following number of permits were issued and revenue obtained:

October 1, 1956 to March 31, 1957:

REVENUE

Heating Equipment.....	\$ 460.00
Oil Burners.....	3813.00
Gas Burners.....	79.50
Oil Storage Tanks.....	490.00
	<hr/>
	\$4842.50

NUMBER OF PERMITS ISSUED

Oil Burners and Tanks.....	475
Gas Burners.....	3813
New Equipment (Heating).....	35
	<hr/>
	4323

Annual Inspections	210
Corrections Requested	20
Annual Permits to Operate Issued	210
Inspection of New Heating Equipment	35
Return calls after corrections	190
Violations noted and investigated	231
Complaints received	54
Complaints investigated	679
Oil Burner Inspections	460
Gas Burner Inspections	1590
Tank Inspections	490
Special Investigations	54
Control Tests	58

During the first six months of the fiscal year licenses for Boiler Operators, Stationary Engineers and Refrigerating Machine Operators were also issued under the supervision of the Public Service Engineer. During that period the following learners permits and licenses were issued:

	<u>Number</u>	<u>Revenue</u>
Learners Permits	39	---
New Licenses	95	\$ 475.00
Renewals	<u>417</u>	<u>834.00</u>
Total	551	Total \$1309.00

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

REVENUE

Gas Burners	\$ 3334.33
Oil Burners	1098.73
Boilers	752.58
Elevators	268.03
Air Conditioners	1638.72
Ductwork	136.70
Ovens and Dryers	63.50
Stoker and Pumps	18.35
Incinerators	11.00
Radiators	16.00
Generators	6.00
Total	<u>\$ 7343.94</u>

INSPECTIONS AND INVESTIGATIONS

	<u>Inspections and Investigations</u>
Annual Fuel Burning Equipment Inspections and Permits Issued	2078
New Fuel Burning Equipment Inspections	107
Gas Burner Inspections	3399
Oil Burner Inspections	228
Reinspections after corrections	503
Violations Noted and Investigated	247
Complaints Received and Investigated	182
Investigations	592
Control Tests	152
Air Conditioning and Ventilation Inspections	59
Elevator Inspections	6
Generator and Pump Inspections	3
	<hr/> 7656

The revenue of \$4842.50, received during the first six months of the fiscal year was an increase of 40% over the \$3417.00 received during the entire previous fiscal year. This increase was due mostly to increased gas equipment permits issued.

The revenue of \$10,725.94, received by the New Division during the last half of the fiscal year, plus the \$4842.50 taken in by the Air Pollution Section during the first half adds up to a grand total of \$15,568.44, for the year, which is an increase of more than 300% over the previous year.

Respectfully submitted,

GENARO G. COSTANTINO,
Chief Inspector of Air
Pollution, Mechanical
Equipment and Installations

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.

The Plan Estimator, in addition to checking plans, also prepared the Cost data on all types of building construction for which building permits were issued.

The average unit cost rose about 5.09 above the preceding year. Materials and labor have been a major factor in this rise.

REVENUE SUMMARY

The 1956-1957 departmental revenue totalled:

Structures & Zoning	\$35,724.72
Air Pollution	15,568.44
Plumbing	13,076.90
Electrical	<u>9,207.26</u>
Total	\$73,577.32

One cashier handled these revenues.

Fees Waived

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

BUILDING CODE

On April 1, 1957 our new Building Code became effective, having been adopted by the City Council on December 20, 1956. Our new performance code replacing the old specification type of code was well received. The Building Code in as far as possible sets forth the purpose to be accomplished rather than the method to be followed; thus, it anticipates the use of many discoveries and advances in technology and science that are developed to make buildings more attractive and safe.

Many engineers and architects commented very favorably on the new trend; a more realistic approach, fire ratings being specified for the component parts of buildings, permitting the engineer or architect the freedom of use of materials with the only stipulation, namely, the ability of these materials to meet the required fire resistance. The reference to national standards to meet the required fire resistance is an excellent feature. Our old code went to great length in copying verbatim sections from the American Concrete Institute, American Institute of Steel Construction, and others. When changes were made by these institutes, it meant that large portions of our old code were obsolete. Under our new code, all that is required is a change of the date of the standard involved. Space does not permit delving into many of the other desirable features of our new code.

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, have uncovered violations of the Building Code. From June 1957 to September 30, 1957, the Department of Building Inspection received 1270 reports on violations of the Building Code.

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 American 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.

All of these activities might be termed extra curricular, but they certainly come under the heading of "Public Relations", and apparently serve a useful purpose in the public interest.

C O N C L U S I O N

Providence is an old city with old homes and neighborhoods. Because of inadequate laws or poor enforcement, former fine residential neighborhoods were destroyed; single homes were transformed into neglected, crowded tenements; factories and businesses moved in next door to private residences; buildings were crowded on every foot of available space, cutting off light and air.

As soon as the automobile came into use people started to move into the green country atmosphere of outlying neighborhoods and suburbs.

The consequence has been that each year many families move out of older sections. The homes they leave behind fall into the hands of absentee landlords and transient tenants who too often neglect them.

Neighborhoods slide downhill rapidly as poorer and poorer elements successively become their inhabitants, each with fewer resources to create attractive surroundings.

Today, however, individuals and groups are aware that slum blight is a threat to the entire city's life

and health, and that good sections, new and old, must be protected, and worn-out, salvageable neighborhoods eliminated. The team that is fighting the danger comprises civic groups, as well as Federal, state and local government agencies.

The role of the Department of Building Inspection is a crucial one in the fight.

Its activities maintain order among buildings and land, just as the Police Department maintains order among people. Communities in which there is lack of its order become slums. This Department is constantly vigilant of landlords who maintain substandard tenements, the tenant who is willfully destructive, the builder who tries to build unsafe structures, and the business operated illegally in a residential zoned neighborhood.

Our work is repetitive and unending. Without it, the fight for a better Providence would be lost before it is barely begun.

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