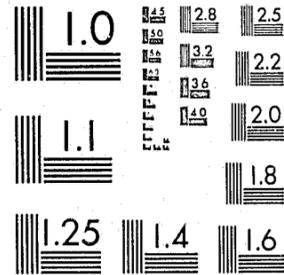


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A STUDY OF GOVERNMENT SUBSIDIZED HOUSING
REHABILITATION PROGRAMS AND ARSON:
ANALYSIS OF PROGRAMS ADMINISTERED IN NEW YORK CITY, 1978-1981

Prepared by the New York City
Arson Strike Force

September 2, 1983

92372

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THE CITY OF NEW YORK
 ARSON STRIKE FORCE
 51 CHAMBERS STREET
 5th Floor
 NEW YORK, NEW YORK 10007
 566-1332

PATRICK T. HOEY
 Coordinator

Angelo Pisani
 Dpty. Coordinator

JOHN F. KEENAN
 Criminal Justice
 Coordinator
 ANTHONY B. GLIEDMAN
 Commissioner
 Department of
 Housing Preservation
 & Development
 JOSEPH E. SPINNATO
 Commissioner
 Fire Department
 JACK KRAUSKOPF
 Administrator/Commissioner
 Human Resources
 Administration
 JOHN LoCICERO
 Special Advisor
 to the Mayor
 ROBERT J. McGUIRE
 Commissioner
 Police Department

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Abstract

This report examines government subsidized housing rehabilitation programs and arson in an attempt to discern possible relationships between the two. The study discusses possible methods, patterns and motives associated with suspicious fires in such programs and reviews the effectiveness of programmatic anti-arson policies and measures. Finally, the report offers recommendations with regard to arson prevention policies, statutes, and regulations. While utilizing as its sample certain programs administered in New York City from 1978 to 1981, the study should be of assistance to all levels of government participating in the administration of such programs. Bi-variate and regression analysis were employed to compare the suspicious fires rates of over 14,000 buildings in New York City between 1978 and 1981. Approximately 900 of these buildings received rehabilitation assistance under the Federal Section 8 Program, New York's J-51 tax exemption, Participation Loan, and Article 8 Programs. The study found that, after controlling the various factors, Section 8 buildings had fewer suspicious fires than controls but that specific categories (NSA submissions, privately owned buildings and buildings in specific neighborhoods) within the program displayed an elevated incidence of suspicious fires. Receiving a Participation Loan did not itself appear to increase a buildings susceptibility to suspicious fires; however, two classes of program buildings (those located in one neighborhood and those with particular ownership) did experience a greater than expected incidence of suspicious fires. Although residential buildings that received J-51 benefits experienced a greater incidence of suspicious fires than controls, it was not possible to accurately determine statistical significance, nor to discern causality, due to the small size of the J-51 sample. After controlling for buildings size there was no significant relationship between Article 8A loan program inclusion and suspicious fires. Recommended arson prevention measures include requiring review of the conditions under which buildings being substantially rehabilitated became vacant, ensuring thorough project and applicant screening, and establishing explicit selection criteria prohibiting those found to have harassed tenants by any means (including fires and arson) from receiving program benefits.

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SUMMARY

I. Background and Statement of Intent

The commitment to "a decent home and suitable living environment for every American family,"^{<1>} first stated in the National Housing Act of 1949, resulted in a multitude of Federal, state and local initiatives to attain that goal. Aside from the host of public housing programs a broad sepectrum of housing strategies have been implemented to stimulate the private sector production of housing. Despite modifications, the mechanism used to pursue this policy was, and remains, the guarantee of an adequate return on investment for housing providers.

The condition of rental properties in New York has been declining, in recent years, mainly because of their age. Sixty-two percent were constructed prior to 1947 and 38 percent before 1929. Many now require systems replacement and more intensive maintenance to remain habitable. It is estimated by the Department of City Planning that almost fifty percent of New York City's existing housing is in need of improvements ranging from moderate to substantial. Many owners, however, confronted by rising operating expenses (particularly fuel and utility cost), are finding it increasingly difficult to perform repairs and adequately maintain their properties.

Concurrent with the diminishing inventory of rental units and their generally declining condition, has been an increased demand for apartments. In 1981 the overall vacancy rate in New York City was only 2.1 percent.

In areas such as the Upper West Side of Manhattan, Clinton/Chelsea, Brooklyn Heights, and Park Slope (areas undergoing rapid changes over the past few years) there has been an increasing willingness to pay high rents for conveniently located apartments. Many property owners have been unable to realize profits commensurate with this increased demand, however, because of continuing rent regulation and the condition of their properties. In such cases, it may be in the owners best interest to convince the existing tenants to leave, rehabilitate the building and receive market level rents which could pay for rehabilitation.

In recent years market dynamics, the prohibitive cost of new construction and available financial benefits succeeded in stimulating rehabilitation. Tenants benefited from superior living accomodations and neighborhood stabilization; owners profited from increased rental income, tax benefits, and property value appreciation. One group, however, that might not have benefited was the occupants of buildings

<1> Subcommittee on Housing and Community Development, Committee on Banking, Currency and Housing, House of Representatives, on: Evolution of Role of the Federal Government in Housing and Community Development, U.S. Government in Housing and Community Development, U.S. Government Printing Office, 1975, p.25.

about to undergo substantial rehabilitation. These tenants sometimes faced eviction, displacement, and relocation in order to allow substantial rehabilitation to proceed.

Legal eviction and relocation tend to be slow or expensive propositions. An illegal method of moving tenants out, which tends to be expeditious and inexpensive, is displacement through harassment. Such displacement can be achieved by several methods including: diminishing services, renting to rowdy tenants, and harassment fires. All three methods are sometimes used and may be said to have a synergistic effect as they produce a climate of fear.

With increased emphasis on government-assisted rehabilitation by private developers, harassment fires as a means of tenant displacement has become an increasingly serious issue. An influx of government funds into specific neighborhoods generated concern among community groups that arson was being used to displace tenants to facilitate rehabilitation. Conversations with police and fire department investigators echoed these fears.

Arson, is not employed to vacate buildings in the vast majority of cases. However, even when arson is not a factor, a risk of fire may still be present. An owner about to rehabilitate his property has few incentives to provide ongoing maintenance and repairs. The resulting neglect may encompass the heating system, elevators, plumbing, janitorial services, building security, etc. Poorly maintained systems may malfunction, potentially causing fires in the boiler, incinerator, and electrical systems. If janitorial services are discontinued rubbish accumulates providing an opportunity for fires to start. The lack of security or failure to seal vacant apartments may allow vagrants, as well as other types of firesetters, to enter. Tenants using their ovens to provide heat also increases the risk of fire.

When arson is employed to vacate a building, it is believed to take the form of "harassment type" fires which are designed to create a climate of fear as well as severe inconvenience through the cessation of services. In addition, larger fires may result in extremely hazardous building conditions which may necessitate an ordered vacating of building.

Although the literature on this subject is sparse <2>, there are few references to the relationship between arson and housing rehabilitation assistance. A San Francisco study refers to "conversion" or "gentrification" arson-for-profit and states that "(s)uch arson is present when land values are rising, and when a property use (e.g., residential hotel) is not as profitable anymore as perhaps a condominium or commercial office would be." <3> That study also found a relationship

<2> A computerized literature search at the John Jay College of Criminal Justice in New York failed to find a single source.

<3>Goetz, Barry,

The San Francisco Early Warning System Summary of Research San

between residential arson and the granting of Federal housing rehabilitation subsidies.

Because of the lack of research in this area, the New York City Arson Strike Force requested and received a grant from the National Institute of Justice to study the relationship between government assisted housing rehabilitation and arson. The current research is the result of that grant. Its objectives include: (1) to determine whether arson has been used to profit from Federal, State, and local housing rehabilitation programs; (2) to understand the methods, patterns, and motives associated with such acts; (3) to evaluate the effectiveness of existing arson prevention policies; (4) to develop more effective arson prevention policies and procedures; and (5) to suggest regulatory and statutory changes to existing and future programs to lessen arson susceptibility.

2. Methodology

Four housing rehabilitation programs administered in New York City were selected for study: (1) the Section 8 Substantial Rehabilitation Rent Subsidy Program, (2) the Participation Loan Program; (3) The J51 Tax Exemption and Abatement Program, and (4) the Article 8A Rehabilitation Loan Program. They were selected because they represent rehabilitations from moderate to substantial, encompass a variety of benefit formats (rent subsidies, tax benefits, and rehabilitation loans), and because records were readily available.

Each program was reviewed for; (1) enabling legislation; (2) rules and regulations governing the selection of properties, disbursement of funds, and scope of work allowed; (3) applicant processing; (4) applicant disclosure and screening procedures; (5) tax implications; (6) geographical clustering of benefits; (7) administrative management; and (8) programmatic anti-arson procedures. In most cases the program director was interviewed at length and, whenever possible, procedures were discussed with staff involved in the process. Program overviews were prepared, and a review of the literature was done. Also an analysis of possible methods by which these programs could be manipulated for profit using arson was conducted. Specific buildings were also selected for case study to further refine hypotheses.

Sample Selection

In order to discern if a relationship existed between Government rehabilitation and arson, a comparative analysis was conducted whereby program and control samples were compiled for each program. Each control sample is comprised of every multiple dwelling on a tax block in

the boroughs of Manhattan, the Bronx, and Brooklyn <4> which contained at least one building in its particular program. This selection procedure was employed to limit wide fluctuations in buildings size and other neighborhood factors (such as an inferior housing stock, neighborhood decay, etc.) which contribute to fires.

Program samples are made up of buildings involved in the respective programs. The percentage of program buildings studied for each program is described in the text of this report.

Variables

The independent variables in this study were the four rehabilitation programs mentioned above.

The dependent variable "suspicious fires," was culled from the New York City Fire Department's Battalion Chief Structural Fires File and represents a compilation of several preliminary cause determination classifications. The blanket term "suspicious fires" was used to describe these four fire classification in the analysis of aggregate data. It should be remembered that the dependent variable is not arson, but rather the surrogate measure described above.

Statistical Analysis

Generally, analysis included two steps; first, program and control groups were examined to determine whether program buildings experienced more suspicious fires than controls. Second, analysis was performed to determine whether any specific groups based on neighborhood, processing type, or physical/ demographic characteristics experienced more fires than other buildings in the same program. Specific methods included bi-variate and regression analysis<5>

Control Variables

Since the samples could not be selected randomly due to the nature of the research, there existed the possibility that the program and control samples had different susceptibility to arson. One way to overcome this problem would have been to match the samples (program and control) for each program. Matching, with regards to factors such as building size, vacancy rate, tax arrears (all factors involved in arson) would have proved an impossible task. The method chosen to protect the internal validity of this research design was to identify these extraneous variables and control for them by including them though regression and

<4> Only three of the City's five boroughs were included because the remaining two boroughs, Queens and Staten Island, contained too few program-assisted buildings for meaningful analysis.

<5> All significance tests in this report will be least at the .05 level for a Two Tail Test unless it is specifically stated otherwise.

bi-variate analysis.

Several control variables were used in both the bi-variate and regression analyses. These variables were selected because they generally serve to predict arson rates, as demonstrated by their use in arson prediction indices in a number of cities.

New York<6> San Francisco<7>, and New Haven<8> demonstrated that a building's economic condition is an important risk factor. In a New York study it was found that "...only 15% (or the 10,000 buildings in their sample that did not experience arson) had an outstanding tax bill, while 48% of the arson cases were in arrears.<9>

The New York and New Haven studies also found that occupancy influenced risk. In New York the mean occupancy rate for buildings that did not experience arson was 96%, while mean occupancy for arson buildings was 76%. They concluded that "...Low occupancy or total vacancy attracts vandal arsons, and that arson may be the last step of an owner's successful attempts to evict tenants by harassment." <10>

In New York, building size was also found to be related to arson incidence and is included in the current study as a control variable.

A final control was imposed by the sample selection criteria. Because only buildings on blocks with a program-assisted structure were studied, the effect of unique neighborhood characteristics was held constant.

3. Limitations of the Study

Research Design

The nature of the study precluded an experimental design, the random selection of samples, and the random assignment of treatments to samples. The problems were overcome to a large degree by the sample selection criteria used and by controlling, through regression and bi-variate analyses, for extraneous variables.

Variables

Although, the literature is rich with factors found to be related to intentional fires, this study was constrained by the limited number of control variables available through existing data bases. This

<6>Pesner, R., et al., Arson Analysis and Prevention Project; Final Report N.Y.C. Arson Strike Force under a LEAA grant, 1981.

<7>Goetz, Barry, The San Francisco Arson Early Warning System Summary of Research: 1979-1981.

<8>United States Fire Administration, Anti-Arson Implementation Kit, 1981.

<9>Pesner, op.cit., p. 14.

<10>ibid., p.14.

limitation manifested itself in low-r-square values when regression analysis was performed. As a result, doubt remains about what the analytic outcome would have been had additional controls been available.

The dependent variable (suspicious fires) used in this study is a composite of those classes of fires that could not be attributed to a known accidental cause. The majority of these fires were found to be suspicious by the fire chief directing extinguishment, but were not necessarily incendiary. While arson apparently played a role in most of these fires, it should not be assumed that every fire was deliberately set.

Analysis

In part, this research project was designed to ascertain if program buildings experienced more fires than controls with regards to each program. Caution is advised that:

a. Comparisons made prior to controlling for extraneous variables say little about any relationship between arson and rehabilitation programs due to the differences in the samples.

b. When the data shows that more suspicious fires occurred in a group of program buildings than in the control sample it should not be assumed that the owners were responsible, nor should it be assumed that the motive was tenant harassment.

Alternative explanations for each of the fires in the samples studied include revenge, vandalism, juvenile mischief, tenant discontent, pyromania as well as others. Therefore, when "relationships" are discerned it should be understood that these data do not demonstrate causality, establish responsibility, nor do they confirm such relationships.

4. Housing Rehabilitation Programs

Section 8 Substantial Rehabilitation Rent Subsidy Program

Analysis of the Program and Risk Factors

Section 8 of the Housing and Community Development Act of 1947 was promulgated to encourage the maintenance and production of low to moderate income housing through rent subsidies and tax shelter sales. Although Section 8 encompasses subsidies for tenants in place without rehabilitation (Section 8 existing), moderate rehabilitation, and substantial rehabilitation or new construction, this report focuses on the substantial rehabilitation component.

Section 8 subsidized the difference between the rent level necessary to ensure a predetermined operating profit and the rent tenants could afford (25% of gross annual income). Developers also benefited from tax

shelter sales which often provided much of the initial capital needed for rehabilitation.

Developers were invited to submit proposals to the Federal Department of Housing and Urban Development (HUD) through a Notice of Fund Availability (NOFA). Funding decisions were made by HUD.

The Neighborhood Strategy Area (NSA) NOFA was used experimentally in 1978-79. The processing of NSA NOFA (or just NSA) applications was similar to regular NOFA applications, with the following exceptions:

- a. Rather than HUD allocating Section 8 Funds directly, allocative authority was granted to municipalities, which selected target zones (NSA), and advertised the availability of funds.
- b. Proposals were evaluated by the municipalities with input from HUD and selected in accordance with criteria outlined in the mandated Housing Assistance Plan (HAP); requirement for cities receiving Federal Community Development Block Grant (CDBG) funds from HUD.

The policy of HUD and New York City's Department of Housing Preservation and Development (HPD) was to prevent displacement of existing tenants. Thus, a significant criterion in determining project eligibility was occupancy. HUD ruled that "in the evaluation and selection of proposals consideration shall be given to whether there are site occupants who would have to be displaced... Greater weight shall be given proposals which do not require displacement, or where displacement is required, which will involve the least amount of hardship." <11> The City's selection criteria for proposals submitted in response to the NSA NOFA closely paralleled those of the 1979 NOFA. The policy of the NSA was to "focus on... rehabilitating the abandoned vacant buildings." <12>

Few developers chose to submit buildings that were not vacant. They were aware that such proposals would not be considered as highly as those for vacant sites and that occupied projects were subject to relocation costs of up to \$4,600 per family. Moreover, vacant properties were immediately ready for rehabilitation and free of delay.

The City also directed, in its 1978-79 HAP, that "City-owned housing-- particularly that with the potential for being restored to private ownership and the tax rolls--should be given preference for

 <11> 24 CFR (Code of Federal Regulations), Section 881
 <12> The New York City HPD Crown Heights Neighborhood Strategy and Application, 1978, p. 12.

Section 8 assistance." <13> The targeting of these units to City-owned properties limited the opportunity to vacate buildings through diminished services and neglect/harassment. These buildings were under City management which prevented the manipulation of service and maintenance levels if they were occupied.

Some of the Neighborhood Strategy Areas contained either too few, or too few appropriate, City-owned buildings to permit Section 8 projects composed exclusively of such properties. One-half of the buildings selected for rehabilitation under the NSA program were privately owned. If the owners of some of these buildings knew that they could apply for Section 8 benefits 15 months in advance (when areas were selected), this would have afforded ample time to ensure that their properties would be vacant by the time applications were submitted. Analysis of case studies suggests that a few developers exploited this situation by attempting to illegally evict tenants through a pattern of purposeful neglect and harassment. The developer of two Section 8 buildings was fined \$40,000 in conjunction with two findings of harassment and forced by HPD to divest himself of his interest in the Section 8 project. Several case studies indicated instances of neglect and suspicious fires apparently leading to vacant buildings shortly before the submission of the Section 8 application. These case studies, however, merely confirm that harassment was a factor in emptying buildings in a small number of cases. They do not address the extent or frequency of these occurrences.

In the above cases it is clear that applications processing was not sufficiently sensitive to detect all such acts. The submission of NOFA proposals between 1977 and 1980 initiated no review by HUD to determine the conditions under which vacant buildings achieved that status. HUD projects were reviewed only for the developer's experience, financial status, prior participation in HUD programs, and compliance with HAP criteria. There was no investigation of harassment allegations or findings.

The City, in its selection of NSA projects, required applicant disclosure information, but no determination was made of when the building became vacant and under what circumstances. After becoming aware of this problem the City immediately, in its 1980 HAP, adopted a formal policy that no rehabilitation assistance (under Section 8 or other programs) would be awarded to individuals against whom harassment or displacement charges were alleged until such charges were dismissed or settled.

Findings

1. General Fire Rate (Pre-Controlling for Extraneous Variables)

Although buildings in the Section 8 program had a higher incidence of suspicious fires than control buildings this comparison was made prior

<13> 1978-79 HAP, p. 46.

to controlling for several extraneous variables which affect a building's susceptibility to fire and arson.

After controlling for some of those factors (tax arrears, building size, vacancy rate, etc.) it was learned that specific categories of Section 8 buildings (rather than all) had an elevated incidence of suspicious fires. Specifically, NSA submissions, privately-owned buildings, and Section 8 buildings in specific neighborhoods demonstrated increased suspicious fire activity. After these factors (and building size, tax arrears, and occupancy rate) were held constant statistically through regression analysis, program buildings had fewer fires than control buildings.

2. Suspicious Fire Incidence Among Specific Categories of 8 Buildings

Buildings that were privately-owned prior to the submission of a Section 8 application had more fires than other Section 8 and control buildings after neighborhood, building size, tax arrears, occupancy rate, and program status were held constant. Regression analysis demonstrated that private ownership of a Section 8 building added .9 suspicious fires to the number of fires predicted. This is not a trivial increment given that the mean number suspicious fires in all buildings in the sample was .7.

City-wide, the 98 privately-owned Section 8 buildings in the sample were 1.5 times as likely as the 246 City-owned buildings to experience at least one suspicious fire and more than twice as likely to experience more than one such fire. Sixty-five percent (64) of the privately-owned Section 8 buildings had more than one suspicious fire compared to 18% (45) of the 246 City-owned buildings.

Ninety-two of the 98 privately-owned buildings in the sample were submitted for funding in 1979. These buildings represented 34% of the 263 properties that received Section 8 subsidies in 1979. Fifty-four percent (54%) of these 263 buildings experienced suspicious fires. In 1980 New York City's HPD adopted a policy giving virtual priority to in-rent buildings largely because of a concern about tenant harassment. As a result the percentage of privately-owned Section 8 buildings awarded grants dropped to 4% with a concomitant 44% drop in the percentage that experienced suspicious fires.

These findings suggest that some building owners, sensing the opportunity to profit from Section 8 assistance may have promoted fires through neglect or intent to force tenants to vacate and prepare their buildings for substantial rehabilitation.

A more dubious relationship between NSA status and fire incidence was found. Fifty-eight percent (106 buildings) of all NSA submissions had suspicious fires, while 39% (62 buildings) of the NOFA submissions had suspicious fires. After regression analysis was applied to control for the effects of building size, tax arrears, occupancy rate, program status, and Crown Heights, Sunset Park, and West Harlem locations, the effect of NSA status and fire incidence was due to the fact that these

buildings were more likely to be privately-owned and in areas where Section 8 buildings had more fires.

In general, Section 8 buildings in Crown Heights, NSA buildings in Sunset Park, and privately-owned Section 8 buildings in West Harlem experienced a greater number of suspicious fires than could be attributed to the effect of NSA status and private ownership alone. Each of these neighborhoods were Section 8 target areas, received large Section 8 awards, and had a high percentage of privately-owned Section 8 buildings. The data suggests relationships exists; however, it cannot answer what it was about these specific categories that increased the suspicious fire incidence.

Recommendations

Section 8

Recommendation S8-1: The City should continue to adhere to its policy of granting substantial rehabilitation assistance to City-owned properties, as should other municipalities containing large inventories or publicly owned residential structures.

Recommendation S8-2: Programs that target subsidies and loans to vacant buildings within specific areas should restrict approval to buildings that are vacant when neighborhoods are selected, or when it can be demonstrated to be a special case under predetermined criteria.

Recommendation S8-3: If the selection of target areas for substantial rehabilitation is long standing, project approval should be contingent on a determination that the owner did not intentionally cause tenant abandonment.

Recommendation S8-4: Federal, state and local housing agencies should require documentation that buildings selected for substantial rehabilitation programs, whether funded under categorical or block grants, have not been vacated through arson and other forms or harassment prior to or subsequent to selection.

Recommendation S8-5: If an applicant is the subject of a judicial, criminal, or administrative harassment proceeding, no project approval should be given until a thorough investigation is completed. This policy should be explicitly included in Federal, state and local housing regulations.

Recommendation S8-6: A judicial, administrative, or criminal determination of harassment against an individual should result in the exclusion of that individual and any corporate entity of which he or she is a principal from government housing rehabilitation assistance.

Recommendation S8-7: Federal, state, and local housing agencies should require disclosure statements (similar to those described in Chapter 7) from all applicants for government housing rehabilitation assistance and should verify all disclosed information. Individuals who knowingly provide false information or disclosure statements should be prosecuted to the fullest extent of the law and excluded from loan and/or subsidy programs.

Recommendation S8-8: Submission of vacant privately-owned buildings for subsidized substantial rehabilitation should initiate a thorough review by the granting agency to determine when the building became vacant and under what conditions.

Recommendation S8-9: No elected or appointed public official who was involved in the selection or approval of buildings to receive subsidized substantial rehabilitation, nor an individual who held the position within the previous three years, nor his/her immediate family should be allowed to act as general or limited partner, corporate stockholder,

developer, contractor or sponsor of a Section 8 project in their own city.

Participation Loan Program

Analysis of Program and Risk Factors

The Participation Loan Program provides benefits directly through low interest rehabilitation loans and indirectly through J51 and rent restructuring. The City uses CDBG funds to finance up to 60 percent of the total mortgage on the property at nominal interest rates, usually one percent. When combined with a market level private sector loan this arrangement decreases below market level the cost of financing the project. The developer may also benefit from tax shelters available to developers of low income housing.

Participation Loan projects range from moderate to substantial rehabilitation, although the program encourages moderate rehabilitation with tenants in place. Under the CDBG HAP, priority is given to projects targeting: (1) the elimination of slums and blight and/or for the benefit of low to moderate income people, (2) buildings in Neighborhood Preservation or Neighborhood Strategy Areas or transitional areas, (3) buildings with ten or more units, (4) buildings in proximity to past or planned public or private investment, and (5) buildings located on blocks where other occupied privately-owned buildings exist.

Unlike Section 8, which targeted City-owned properties, the focus of the Participation Loan Program is privately-owned buildings. The purpose of this policy is to prevent the existing buildings from degenerating to such a degree that City in-rem take over becomes inevitable. The program differs from the Section 8 program in another important way as well. Moderate rehabilitation with tenant in place is both allowed and encouraged. Section 8 substantial only allowed the gut rehabilitation of vacant structures. As a result, there is no immediately apparent programmatic need to vacate a building.

As with Section 8, there were, during the period studied (1978-81), problems in the screening of applicants. In several cases applicant review did not commence until a few days before the Participation Loan closed as a result of the policy of allowing approval of a current loan based on investigations conducted with regard to previous applications.

Findings

Receiving a Participation Loan does not itself appear to increase a building's susceptibility to suspicious fires. While it can be shown that buildings that received Participation Loans experienced more fires than control buildings during the period studied, part of this increased fire incidence was related to the fact that such buildings tended to be larger than average. Additionally, after controlling for neighborhood, building size, and tax arrears, only two classes of Participation Loan buildings experienced a greater than expected incidence of suspicious

fires. These two buildings categories were PLP buildings in Flatbush and those owned by three specific developers.

Two thirds of the Participation Loan buildings in Flatbush experienced at least one suspicious fire from January 1, 1978 to December 31, 1981. More than half of the Participation Loan buildings in Flatbush experienced more than one suspicious fire during that period. Regression analysis demonstrated that even after controlling for the base level of fires in Flatbush, building size, tax arrears, etc., being in Flatbush increased the expected number of fires in loan buildings by .9 fires.

Fifty percent of all suspicious fires (36 of 72) in Participation Loan buildings in Brooklyn were in six buildings (12% of the Brooklyn PLPs) owned by three developers. Even after controlling for building size, tax arrears, neighborhood (all of their buildings were in Crown Heights or Flatbush), and the effect of being in the Participation Loan Program in these neighborhoods, ownership by one of these developers was related to an increase in the number of suspicious fires.

Although ownership of a program building produced an effect on the number of suspicious fires it experienced, this finding was based on the actual number of fires in only eight buildings.

While being in Flatbush increased the observed number of suspicious fires a program building experienced, this finding was also based on a small number of cases (15 buildings) and does not answer the questions that remain: What was it about Flatbush that increased the suspicious fire incidence in buildings that received Participation Loans? As with the Section 8 regression model, the r-square value of the PLP model (r-square=.246) was somewhat low, indicating that many sources of variation in how suspicious fires occur are possible, and that additional control variables would have been helpful.

Recommendation PLP-1:

All pending government subsidized rehabilitation loans should be forwarded to the appropriate investigative unit of the local housing agency for screening at the earliest possible time to ensure that adequate time is allowed for review and clearance procedures, as is current policy in New York. Loan approval should be contingent on the positive evaluation of an applicant by the local housing agency.

Recommendation PLP-2: Municipalities should develop guidelines for applicant evaluation detailing general grounds for loan denial.

J51 Tax Abatement and Exemption Program

Analysis of Program and Risk Factors

This program neither provides rent subsidies (like Section 8), nor low interest rehabilitation financing (like Participation Loans).

Instead, it provides tax abatement and exemptions for privately financed rehabilitations.

During the period studied J51 benefits were available for (1) substantial rehabilitation and major capital improvements, (2) moderate rehabilitation with tenants in place, (3) commercial and industrial conversions to residential use, and (4) the conversion of hotel or single room occupancy (SRO) buildings to regular residential use. Changes in the law in 1983 removed SRO conversions from benefit eligibility.

Although benefit eligibility extended to a wide range of renovations, the analysis in this report was restricted to the rehabilitation of Class A multiple dwellings where total certified rehabilitation costs (CRC exceeded \$100,000). This limit the sample of properties studied to less than ten percent of all buildings that received J51 benefits (the majority of J51 projects include only moderate repairs), but it focused research on those projects which are more likely necessitate a vacant building by virtue of the scope of work contemplated. Ofcourse, this assumption might not always be true. While the \$100,000 CRC may necessitate vacancy of a smaller building, it may be insufficient to require vacancy in a large building.

During the period studied, tenant harassment was not statutory grounds to deny benefits. Consequently, and as a result of the as-of-right nature of the program, there was not background investigation conducted to determine whether the owner had harassed tenants into leaving. 1983 amendments to the law, however, made harassment statutory grounds to deny benefits. As a result, owner screening will now occur.

Findings

Residential buildings that received J51 benefits between July 1, 1980 and June 30, 1981 for rehabilitation with CRC over \$100,000 experienced a greater incidence of suspicious fires than control buildings from January 1, 1978 to December 31, 1979, the period immediately prior to rehabilitation. Because this sample only included 97 buildings, however, it was not possible to accurately determine statistical significance.

Twelve of 97 buildings that received J51 (12.4 percent) experienced at least one suspicious fire during the period reviewed compared to 71 of 1661 control buildings (4.4 percent). Eight J51 buildings (8.3 percent) experienced more than one suspicious fire. Only 11 of the controls (.7 percent) had more than one suspicious fire. The relationship was similar in each of the three boroughs studied and held after controlling for building size.

This finding should not be misconstrued to mean that suspicious fires were rampant in the J51 sample. The vast majority of buildings in the J51 (87.6 percent) and control groups (95.7 percent) did not experience a single suspicious fire.

All indication were that fires in properties that received J51 benefits for substantial rehabilitation generally occurred in buildings that were not economically troubled. J51 buildings were slightly more than twice as likely as controls to be vacant in 1978 (37% versus 15.8 percent), but vacant J51 buildings did not have more than vacant control buildings. Partially occupied J51s were more likely than partially occupied controls to have experienced multiple suspicious fires, as were J51s that were fully occupied.

Suprisingly, an examination of tax arrears points to the fact that those J51 buildings exhibiting the least tax arrears had the most fires. 10.6 percent of the J51s with four or less quarters of tax arrears had more than one suspicious fire, while among those with more than four quarters of arrears only 3.6 had more than one suspicious fire.

Recommendations

Recommendation J51-1: Findings of tenant harassment and owner instigated arson should be statutory grounds to deny government rehabilitation benefits, as is now the case with J51 benefits in New York.

Recommendation J51-2: Owners should be required to submit notification of their intent to perform substantial rehabilitation prior to the start of such work to allow the municipality time to determine whether grounds to deny benefits exist, as is currently mandated by the new J-51 in New York.

Recommendation J51-3: Such notification should trigger a complete review by the local housing agency to determine whether harassment or arson occurred as is current policy in New York City.

Article 8A Rehabilitation Loan Program

Analysis of Program and Risk Factors

Under this program rehabilitation is always performed with tenants in place and is limited to the upgrading or replacement of major building systems. The work may not total more than \$5,000 per dwelling unit, although the actual average is closer to \$2,000. Unlike programs that provide funds for more substantial work, there is usually no change in rent levels. Rehabilitated properties also receive J51 moderate rehabilitation benefits.

The Article 8A Loan Program provides virtually no economic benefits that may be obtained through fire, neglect, or harassment because it is HPD's policy to award Article 8A loans for moderate rehabilitatin with tenants in place only. It would be self-defeating for an owner to damage or cause tenants to leave his building.

Findings

After controlling for building size, there was no significant relationship between the receipt of an Article 8A loan and suspicious fire.

5. New York's Experience

One of the goals of this study was to develop more effective arson prevention policies and procedures and to suggest regulatory and statutory changes to lessen arson susceptibility. The review of the administration of the four housing assistance programs in New York City disclosed that significant efforts have been made to address the issue of tenant displacement through neglect, fire and arson, which it is believed is sometimes used to obtain government housing assistance benefits.

With regard to the Section 8 program, New York City's Department of Housing Preservation and Development initiated a policy in 1979 of selecting in-rem (City-owned as a result of tax foreclosure proceedings) properties. Under this policy, the City attempted to provide rehabilitation housing for low income tenants, and decrease its inventory of City-owned buildings. Limiting Section 8 substantial benefits to City-owned buildings also eliminated the potential for vacating these buildings through diminished services and maintenance because these buildings were under City management. As a result, opportunities to exploit the program through harassment and intentional fires were reduced.

During the period of this study, the City's HPD reviewed the fire histories of every building with an NSA application as part of its evaluation process. This was done through information supplied by the New York City Fire Department's Division of Fire Investigation. However, the information reviewed was insufficient to adequately inform HPD of the true picture of the building's history.

Upon learning of the ineffectiveness of this process, HPD in 1980 revised its policy at the time of its next NOFA offering to require that the Arson Strike Force provide complete fire profiles on buildings under application for Section 8 and other housing assistance programs.

Finally, the City in its selection of NSA projects, during the period studied, required applicant disclosure information. However, no determination was made of when the building became vacant and under what circumstances. The NSA concept was unique in its design and the City was not yet aware of its possible impact on the frequency with which fires and harassment would occur. Once this was recognized HPD, in its 1980 HAP, adopted a formal policy that no rehabilitation assistance (under Section 8 or other programs) would be awarded to individuals against whom harassment or displacement charges had been alleged until such charges were dismissed or settled.

In the Participation Loan Program it is apparent that New York City's HPD made efforts to eliminate the problems associated with the

disclosure/ investigation process during 1978-79. This has been the result of greater cooperation between the Inspector General and program staffs. The outgrowth of this cooperative effort has been the submission of clearance requests by program staff prior to commitment.

These policies adopted by HPD in recent years appear to have prevented problems due to the submission of clearance requests immediately prior to closing and clearing applicants based on past applications.

The purpose of the Inspector General's review is to ensure that applicants have not committed acts which would prevent them from receiving Participation Loans. The basis for this determination is the disclosure statement submitted by applicants prior to commitment. This document furnishes the City with information on the applicant's real estate holdings, previous loan defaults, tax arrears, harassment charges, and other factors which may be detrimental to a loan request. Resources drawn upon to supplement these disclosures are extensive; information is requested from the Commissioner on Human Rights, Department of Investigation, and the appropriate District Attorney. Additionally, complete fire profiles of the applicant's properties are requested from the Arson Strike Force. The I.G.'s recommendation for pending loans, submitted at closing, is based on analysis of this information.

Applicant screening is particularly important for the Participation Loan Program. As demonstrated in Section IV, buildings owned by some developers experienced more fires than buildings owned by others. While this may be due to factors outside of the owner's control, it underscores the necessity to evaluate carefully the backgrounds of all PLP applicants. HPD has attempted to do this through implementation of applicant screening.

In the J51 program the City and State of New York have recently instituted measures intended to ensure the safety and well-being of tenants in buildings about to be renovated or converted.

The 1983 amendments to Section 489 of the Real Property Tax Law have been passed by the State legislature and signed into law by the Governor. Included are several anti-harassment provisions. Most importantly, the law specifically denies benefits to "every owner of record and owner of substantial interest in the property or entity owning the property or sponsoring the conversion, alteration, or improvement... (who) has been found to have harassed or unlawfully evict tenants (by) judgement or determination of a court or agency (including a non-government agency having appropriate legal jurisdiction) under the penal law, any state or local law regulating rents or any state or local law relating unlawful eviction..."

Equally important is the fact that the law now requires owners to file an affidavit of non-harassment 30 days before construction begins in order to convert or rehabilitate a building. The new law requires that every owner of record or substantial interest be listed on the affidavit and that it contain a statement that they had not "within the

five years prior (to the affidavit) been found to have harassed or unlawfully evict tenants..." The local housing agency is required to review these affidavits. To facilitate such review, HPD has made a commitment to provide resources to screen such applicants.

This measure will deny J51 benefits on the basis of harassment and will hopefully be a deterrent in cases where harassment is found.

Additionally, Section D16-101 of the NYC Administrative Code, which was enacted in September 1982, amends the Code with respect to unlawful eviction in any residential building in the City. Unlawful eviction is defined under the law as:

- using or threatening force to induce the occupant to vacate;
- interrupting or discontinuing essential services; and/or
- engaging or threatening to engage in conduct which prevents or is intended to prevent a tenant from the lawful occupancy of their apartment, or which is intended to induce the tenant to vacate.

Such actions include removing the occupant's possessions, removing the door, and locking the tenant out.

This section classifies such acts as Class A misdemeanors and provides a penalty of up to \$100 per day for failure to make such a good faith effort to restore an unlawfully evicted tenant to occupancy.

CHAPTER ONE: INTRODUCTION

I. Background and Statement of Intent

The commitment to a "decent home and suitable living environment for every American family,"^{<1>} first stated in the Federal housing Act of 1949, resulted in a multitude of Federal, state, and local initiatives to attain that goal. Since then a broad spectrum of housing strategies has been implemented to stimulate private sector production of housing. Despite modifications, the mechanism used to pursue this policy was, and remains, the guarantee of an adequate return on investment for housing providers.

While lucrative financial benefits succeeded in stimulating renovation, they also produced conflicts. New tenants benefited from superior living accommodations and neighborhood stabilization; owners profited from increased rental income, tax benefits, and property appreciation. The group, however, that may not have benefited was the occupants of buildings about to undergo rehabilitation. These tenants faced the risk of eviction or displacement to allow rehabilitation to proceed.

One potential displacement technique that has received insufficient attention is arson, which is defined as an intentionally set (incendiary) fire causing damage to a structure used for commercial or residential use. Arson comprised 17 percent of New York City's 39,133 structural fires in 1982 and was responsible for the widespread destruction of housing in the South Bronx and other neighborhoods (during the early and mid 70's). Because 60 percent of all incendiary fires in New York occur in occupied buildings (1982), it has left many people homeless and resulted in the death of at least 87 civilians in 1981 and 1982.^{<2>}

The motives for arson are quite varied. "The U.S. Fire Administration (USFA), in an attempt to facilitate the understanding and identification of motivational patterns, has developed 24 various classifications with their own respective characteristics and motivational aspects. These types of arson have been systematized into five major headings: (1) organized crime (loan sharking, extortion, strippers, and other crime concealment); (2) insurance/housing fraud (over-insurance, anti-preservation, blockbusting, parcel clearance, gentrification, stop loss, and tax shelters); (3) commercial (inventory depletion, modernization, and stop loss); (4) residential (relocation, redecorating, public housing, and automobile); and (5) psychological

 <1> Subcommittee on Housing and Community Development, Committee on Banking, Currency, and Housing, House of Representatives, Evolution of the Role of the Federal Government in Housing and Community Development, U.S. Government Printing Office, 1975, p.25

<2> N.Y.C. Fire Department, Bureau of Fire Investigation

(children and juveniles, pyromania, political, and wildlands)."^{<3>} A Department of Justice study attributes arson to six causes: (1) revenge, spite, jealousy; (2) vandalism; (3) crime concealment; (4) profit; (5) intimidation, extortion, sabotage; and (6) psychological afflictions."^{<4>}

Traditionally, arson-for-profit has been attributed to an owner's desire to reap insurance proceeds before walking away from a bad investment. Arson-for-profit has rarely been associated with housing rehabilitation programs except to acknowledge that such programs repair the damage arson causes. Even then, arson is attributed to non-economic factors, such as revenge, or factors not related to the rehabilitation (diminished operating profits). Although it is almost impossible to arrive at an exact figure, it is estimated that 25 percent of all incendiary fires are motivated by profit.^{<5>} It is within this category that an unknown amount of harassment fires (intended to displace tenants) fall.

With increased emphasis on rehabilitation by private developers, arson as a means of tenant displacement has become an increasingly serious issue. Over the past twenty years, an influx of government funds into specific neighborhoods generated concern among community groups that arson was being used to displace tenants and prepare properties for renovation. Their fears were echoed by police and fire department investigators who witnessed the destruction of buildings by arson, and their subsequent rehabilitation with government assistance.

Although the literature on this subject is almost non-existent^{<6>}, there are a few references to the relationship between arson and housing rehabilitation. A San Francisco study called such acts "conversion" or "gentrification" arson-for-profit and states that "(s)uch arson is present when land values are rising, and when a property use (e.g., residential hotel) is not as profitable anymore as perhaps a condominium or commercial office would be."^{<7>} In Hoboken, New Jersey it was found that "an unusual number of buildings with suspicious fires were all slated for condo conversion. Some had legal sales agreements requiring buildings to be delivered empty..."^{<8>} Such occurrences are acknowledged by the USFA, which includes gentrification arson in its

^{<3>} Rider, Anthony Olin, et. al., The Firesetter: A Psychological Profile, FBI Report, p. 27

^{<4>} Boudreau, J.F., et. al., Arson and Arson Investigation, National Institute of Law Enforcement and Criminal Justice, 1977, pp.19-21

^{<5>} *ibid.*

^{<6>} A computerized literature search performed at the John Jay College of Criminal Justice failed to turn up a single source.

^{<7>} Goetz, Barry, The San Francisco Early Warning System Summary of Research: 1979-1981, San Francisco Fire Department Arson Task Force, 1981, pp.82-83

^{<8>} Cohen, Harriet, "Arson on the Hudson", City Limits, May 1982, p.9

insurance/housing fraud category.^{<9>}

As a result of these observations, the New York City Arson Strike Force requested and received a grant from the National Institute of Justice to study the relationship between housing assistance programs and arson. This report is the result of that grant. Its objectives include:

- to determine whether arson has been used to profit from Federal, State, and City housing assistance programs;
- to understand the methods, motives, and patterns associated with such acts of arson;
- to evaluate the effectiveness of existing arson prevention policies;
- to develop more effective arson prevention policies and procedures; and
- to suggest regulatory and statutory changes to existing and future programs to lessen arson susceptibility.

II. The Development of Housing Assistance Programs

Since the enactment of the first National Housing Act in 1934, both the Federal strategies to produce better housing and groups targeted by these approaches to receive such housing have undergone major transformations. State and city initiatives have also changed during recent decades as the Federal government, constrained by funding limitations, attempted to involve the private sector in housing production. Although policy goals have expanded, the thread woven through all policy aimed at private housing development has been the provision of adequate profit for housing providers through rental and mortgage subsidies, and more indirectly through tax benefits.

The primary impetus for the Housing Act of 1934, which authorized the direct Federal construction of low rent housing projects in slum areas, was the need to stimulate the construction industry and the economy as a whole, and only secondarily to attain better housing.^{<10>} Housing programs have continued to be used to spur economic recovery.

The 1934 Act was superseded by the Housing Act of 1937 which gave localities direct control over the development, ownership and management of public housing.^{<11>} More importantly, the Federal government for the first time initiated subsidies to lower rents in these projects, a

^{<9>} Rider, *op. cit.*, p.27

^{<10>} Subcommittee on Housing and Community Development, *op. cit.* p.4

^{<11>} *ibid.*, p.9

concept that has endured despite other policy changes.

The inability of public housing to meet totally the nation's housing needs was acknowledged in the Housing Act of 1949 which, in addition to the commitment to "a decent home and suitable living environment," stated that "governmental assistance shall be utilized where feasible to enable private enterprise to serve more of the total need."^{<12>}

Under the Housing Act of 1961,^{<13>} the primary inducement for private investment was Federally subsidized mortgage interest payments for profit-motivated developers. Additional legislation was enacted in 1965 to expand opportunities for developers to gain financially from housing investment. The Rent Supplement Program and Section 23 of the 1965 act created subsidies similar to those granted public housing residents. Rent Supplements were given to the landlord based on the tenant's need instead of total project cost. Tenants contributed 25 percent of their income; the government subsidized the difference between that amount and the rent (which was controlled to preclude owners from making excessive profits). Section 23 permitted local public housing authorities to subsidize the rents of existing units.^{<14>}

The concern over adequate housing and living conditions became more acute during the late 1960s as social unrest swept the country. The problem was particularly severe in the inner city where substandard housing promoted community destabilization and increased dissatisfaction with government efforts to improve housing conditions.

To address these issues, President Lyndon B. Johnson in 1968 targeted the production of 26 million housing units (apartments) over a ten year period, including six million units for low to moderate income tenants. This policy was significant for several reasons. First, it provided a comprehensive approach to inner city housing problems. Second, increased emphasis was given to rehabilitation because of limited available space in urban areas, high construction costs, and the abundance of sound yet deteriorating existing housing. To ensure a guaranteed return on investment a series of incentives were developed, including rent subsidies, mortgage insurance, interest rate reductions, and accelerated depreciation of rehabilitated buildings inhabited by low to moderate income tenants.

National housing policy underwent major revisions again in the early 1970s. There was uncertainty over the direction and effectiveness of policies and programs in effect since the 1930s. As a result of these uncertainties, a moratorium on housing programs was announced in 1972 to enable housing experts to evaluate the country's housing needs and to formulate appropriate responses. Its outgrowth was the Housing and Community Development Act of 1974.^{<15>} Through Section 8 of this act,

^{<12>}ibid., p.25
^{<13>}ibid., p.75
^{<14>}ibid., p.97
^{<15>}ibid., p.201

the administration attempted to encourage the private development of low income housing by once again guaranteeing the economic soundness of the investment. Cities were allocated Section 8 subsidies for developers of low income housing. Tenants of these projects contributed 25 percent of their income for rent, and the Federal government subsidized the difference between that amount and a reasonable market level rent. The subsidies could be applied to tenants of existing and newly constructed buildings as well as moderately and substantially rehabilitated buildings. The Section 8 program has since become the major Federal housing rehabilitation program.

The 1974 act further recognized the importance of addressing each locality's diverse housing needs and resources through the authorization of Community Development Block Grant (CDBG) funds. These funds, which were targeted to eliminate slums and blight or benefit low to moderate income people, were available to cities upon submission of a Housing Assistance Plan (HAP), which contained an assessment of each community's housing problems, priorities, and strategies, and specified how CDBG funds would be used.

III. Rehabilitation in New York City

New York City is considered by many to be the leader in developing local initiatives to meet its housing needs. Although the City has continued to rely on Federal rehabilitation programs, the allocation of CDBG funds has enabled it to implement diverse strategies for its unique housing needs.

The City's willingness to develop new approaches may be attributed to the numerous and, at times, conflicting housing needs of its inhabitants. New York contained in 1981 2,789,000 apartments dispersed throughout its five boroughs. Sixty-nine percent (1,933,000) of these units were renter-occupied; 746,000 were owner-occupied 1 and 2 family homes, co-operatives, or condominiums. Due to the increasing desirability of home ownership and the abandonment of multiple dwellings, the number of available rental units had been declining during the past decade.^{<16>}

Furthermore, the condition of rental properties is slowly declining, mainly because of their age. Sixty-two percent were constructed prior to 1947 and 38 percent before 1929. Many now require systems replacement and more intensive maintenance to remain habitable. It is estimated by the Department of City Planning that almost fifty percent of New York City's existing housing is in need of improvements ranging from moderate rehabilitation to replacement.^{<17>} Many owners, however,

^{<16>} HPD Handbook of Programs, NYC Department of Housing Preservation and Development, Office of Program and Management Analysis, P. 1.1, 1981.
^{<17>} ibid., p. 1.1.01.

confronted by rising operating expenses (particularly fuel and utility costs), found it increasingly difficult to perform repairs and adequately maintain their properties.

Concurrent with the diminishing inventory of rental units and their generally declining condition has been an increased demand for apartments, which has not been met. In 1981 the overall vacancy rate in New York City was only 2.1 percent. In Manhattan, where the proximity to cultural, social, and business centers has made it desirable to the more affluent, the vacancy rate is 1.9 percent.^{<18>} These rental levels fluctuate according to the desirability of New York's varied neighborhoods, creating several distinct rental housing markets.

In areas such as the Upper West Side of Manhattan, Clinton/Chelsea, Brooklyn Heights, and Park Slope (areas rapidly undergoing change) there has been an increasing willingness to pay high rents for conveniently located apartments. Many property owners have been unable to realize profits commensurate with this increased demand, however, because of continuing rent controls and the condition of their properties. It is not uncommon for a rent controlled tenant to pay \$200 a month for an apartment that would command \$1,000 on the open market. It might also be the case that a building's location allows high rents, but its condition does not. Both factors may exist simultaneously as well.

In such instances it is in the owner's best interest to convince existing tenants to leave, rehabilitate the building, and receive market level rents. The owner may also benefit from as-of-right, or automatic, tax benefits available in most parts of the City. However, tenants of cheap rentals in desirable parts of the City are unlikely to vacate without a struggle and the conflicting benefits discussed earlier may surface.

In less desirable areas high operating costs combined with the inability of tenants to pay sufficient rents to cover operating costs may make ownership of residential properties unprofitable. Rehabilitation in such areas, in the absence of government subsidies, is not a practical way to improve income for two principal reasons. First, neighborhood income is insufficient to support the rental level needed to cover the cost of rehabilitation, and second, individuals who are able to pay higher rents are unwilling to live in marginal neighborhoods.

The City's response to the disparate needs and demands of the various segments of its population has been the application of various housing programs and tax policies. In neighborhoods where market forces encourage private rehabilitation, the City spurs such activity by providing real estate tax benefits for projects ranging from moderate rehabilitation to new construction. This policy encourages the production of better housing and satisfies the demand of middle and

^{<18>} Stegman, Michael A., The Dynamics of Rental Housing in New York City, HPD publication, 1982, p. 96.

upper middle income people for apartments. In areas where abandonment is increasing, maintenance declining, and unsubsidized private investment unlikely, subsidized housing programs are available which range in scope from moderate rehabilitation to substantial renovation.

Moderate rehabilitation prevents deterioration from progressing to the point that more extensive renovation is necessary, and is usually performed with tenants in place. Generally, the City provides low interest loans or participates with banks in arranging loans. Federal rent subsidies for income eligible tenants are also available.

Substantial rehabilitation involves the complete reconstruction of a building's interior, and is necessary for severely damaged or neglected properties. The City has relied on Federal rent subsidies to encourage developers to produce this type of housing. All Federal, State and City rehabilitations are eligible for some tax incentives. By layering local tax benefits on Federal or City housing benefits, potential profits are further enhanced.

Once again, conflicts may arise between competing interests. Faced with an unprofitable investment, a developer may envision a subsidized gut rehabilitation as the only hope of realizing a profit. Real estate speculators may also purchase or obtain an option to purchase a property in the hope of profiting from rehabilitation. Although moderate rehabilitation funds are available, it may be in the developer's best interest to perform a substantial rehabilitation to obtain maximum benefits, potentially creating tension between the owner and existing tenants.

IV. Why the Risk of Fire May be Present

If substantial rehabilitation is contemplated, regardless of whether the building is in a transitional or marginal area, eviction of existing tenants is difficult under City laws. One potential displacement technique is harrassment, including arson. It is an expeditious way to empty a building.

Arson is not employed to vacate buildings in the vast majority of cases. However, even where arson is not a factor in a building, a risk of fire may still exist. An owner who is about to renovate his property has few incentives to provide ongoing maintenance and repairs. There are few economic reasons to perform a minor boiler repair if it is expected that the heating system will be overhauled or replaced during a subsidized rehabilitation. If the owner wants to remove tenants, the lack of heat and hot water is an excellent inducement for residents to leave. Neglect of this nature may encompass the heating system, elevators, plumbing, janitorial services, building security, etc.

Building neglect may by itself create a risk of fire. Poorly maintained systems are likely to malfunction, which can cause fires in the boiler, incinerator, or electrical system. If janitorial services are withheld, rubbish will accumulate providing an opportunity for fires

to start. The lack of security or failure to seal vacant apartments may allow vagrants (or other types of firesetters) to occupy unused apartments. Tenants using their ovens to provide heat increases a building's vulnerability to fire. Although neglect of this nature may be the result of poor management or financial constraints, it may also be intentional in order to empty a building. This pattern, with only minor variations, was seen in case studies prepared for the report that follows.

CHAPTER TWO: METHODOLOGY

I. General Strategy

A. Selection of Programs to Review

Programs were categorized by level of assistance, type of funding, and eligibility criteria in order to select a manageable number of rehabilitation programs to review encompassing as wide a range of significant factors as possible. Counterbalancing this need were practical considerations. The first of these considerations was geography. While it would have been beneficial to look at housing programs nationally to capture regional trends, this scope was unrealistic due to the problem of obtaining accurate case material and gaining access to records. It was decided instead to focus on housing programs in New York City.

It was also necessary to choose programmatic selection criteria. After extensive review of the programs available in New York the following criteria were chosen:

- benefit structure
- amount of work involved
- target group

Benefit structure involves the way in which government attempts to induce private enterprise to rehabilitate housing through financial incentives. The most common financial incentives are low interest rehabilitation loans, rental or operating subsidies to ensure a steady cash stream from the ongoing operation of the building, and the exemption from, or abatement of, taxes. Each of these benefits may be applicable to moderate or substantial rehabilitation and may be targeted to single family residences, small owner-occupied buildings, large apartment complexes, etc.

The final consideration in selecting programs to review was the availability of data. Although each program illustrates important aspects of government assisted rehabilitation, programs for which data were not readily available were excluded from analysis.

Thus, the focus of this report is: (1) rehabilitation rather than new construction, (2) programs aimed at multiple dwellings rather than one and two family residences, and (3) programs intended to encourage private sector funding. Rehabilitation was emphasized because it is undertaken far more frequently than new construction, making it relevant to a larger audience, and because it is often impossible to obtain useful information on a previous structure once a new one is erected. Multiple dwellings (3 or more apartments) were stressed because it is

likely that one and two family homes are owner-occupied, which reduces potential arson-for-profit. More practically, these buildings are not included in the City's multiple dwelling data base, restricting the information available. Programs to encourage private sector investment were highlighted because of the potential for arson-for-profit and the fact that government has not attempted to build housing directly for decades.

Taking these factors into account, and after much discussion with housing and law enforcement officials, the following programs were selected for intensive review:

- The Section 8 Substantial Rehabilitation Rental Subsidy Program, which subsidizes rentals to ensure ongoing maintenance;
- The Participation Loan Program, which combines private and City subsidized rehabilitation mortgages (using Federal Community Development funds) to lower interest rates;
- The J51 Tax Exemption/Abatement Program, which provides reduced real estate taxes following a range of conversions and rehabilitations and often accompanies Section 8 and Participation Loans; and
- The Article 8A Loan Program, which offers low interest City subsidized moderate rehabilitation loans (using Federal Community Development funds).

Complete descriptions of these programs are provided in the following chapters.

B. Sequence of Analysis

1. Operational/Regulatory Review

After the selection of programs to be reviewed the operational and regulatory format of each program was examined, including:

1. Enabling legislation;
2. Rules and regulations governing the selection of properties, disbursement of funds, and scope of eligible work;
3. Application processing;
4. Applicant disclosure requirements and feasibility determination;
5. Tax implications;
6. Geographical clustering of benefits (i.e., which neighborhoods benefit and why);
7. Administrative management; and
8. Programmatic anti-arson procedures.

Each program was analyzed before performing rigorous quantitative tests. In most cases the program director was interviewed at length and, whenever possible, application procedures were discussed with staff involved in the process. HPD community staff were also consulted. It was felt that extensive interviewing early in the research effort allowed analytical staff to become sufficiently familiar with the rehabilitation process to discern the difference between what the regulations prescribed and what actually transpired. In cases where processing differed significantly from formal policy or procedures this has been noted in the text. This approach was chosen to include as many aspects of program operations as possible and to avoid making uninformed interpretations of the data. It also allowed the fullest range of plausible hypotheses to be tested by drawing upon data elements that would have been overlooked had the data base been developed prematurely.

2. Hypothesis Generation

Following the preparation of program overviews and review of the literature relating to arson patterns, methods by which housing programs could be manipulated by arson were identified through analysis of benefit structure, operating procedures, selection criteria, anti-arson measures, applicant review methods, etc. Once risk factors were identified, buildings in specific neighborhoods were selected for intensive case study. Fire, housing, code enforcement, insurance, and other appropriate records were reviewed. These case studies, while not randomly selected, provided an impressionistic overview of the relationship between rehabilitation and the occurrence of fires for which no known accidental cause was apparent. A number of these cases are presented in the text. They are intended to illustrate the interplay of risk factors. It should not be assumed that they are representative of all program-assisted buildings, or even those buildings that experienced fires. It must be remembered that in the absence of arson convictions it is impossible to determine who was responsible for any fires that occurred. It should not be assumed that all or even any of the fires were necessarily owner induced. The hypotheses generated through this process are presented in Chapters 3-6.

3. Data Base Development

After working hypotheses were developed a data base of program and non-program buildings was compiled. This data base included every multiple dwelling with or without program assistance on every tax block in the boroughs of the Bronx, Brooklyn, and Manhattan. Only three of the City's five boroughs were examined because the remaining two boroughs, Queens and Staten Island, contained too few program-assisted buildings for meaningful analysis.

In analyzing each individual program, the control sample included all multiple dwellings on blocks with at least one building in that particular program. Buildings in other rehabilitation programs were deleted from the sample. In cases where J51 was combined with other benefits the building was included as part of the non-J51 program sample. The principle advantage of this sampling method was to provide a control for unique neighborhood conditions contributing to the baseline level of fires in each neighborhood containing program buildings. Table 2-1 shows the composition of program and control samples.

Table 2-1: Composition of Program and Control Samples

<u>Program</u>	<u>Number of Program Buildings in Sample</u>	<u>Number of Control Buildings in Sample</u>
Section 8	344	4877
Participation Loan	121	1968
J51	97	1661
Article 8A Loan	321	5753
TOTAL	934	14,259

The City Planning Department housing programs and multiple dwelling data bases were used to select the buildings shown in Table 2-1 and provided basic program status and housing (e.g., number of apartments, census tract, address, etc.) information.

In addition to basic building information and program characteristics, specialized fire, vacancy rate, tax arrears, and other data were required. There exists, however, no single source of data containing all necessary building, fire, and program information. As a result, data elements from other computer files were identified for inclusion in the master data base. In all, seven computer files contributed to the master data base, including:

- Fire Department Battalion Chief Structural Fires File;
- Department of City Planning Housing Programs, Multiple Dwelling, and Vacancy Rate Files;
- Department of Finance Tax Abatement File;
- Con Edison Vacancy Survey (1978); and
- HPD Section 8 files.

Even after identifying data sources the process of creating a unified data base remained problematic. There is no uniformity in the way each department identifies buildings. The Department of Finance uses tax block and lot, HPD and City Planning use a special coded Street

Address Matching System (SAMS), and the Fire Department uses regular street address. To overcome this problem it was necessary to convert each address to the coded SAMS address employed by HPD. Approximately 15 percent of the potential control and program samples were lost as a result of this process and sometimes faulty addresses, but the omissions appeared to occur randomly across both samples and were not believed to be a factor in subsequent analysis.

4. The Dependent Variable: Suspicious Fires

The dependent variable used in this study, suspicious fires, was taken from the computerized Fire Department Battalion Chief Structural Fires File.

At the scene of every structural fire, the battalion chief completes form BF-24, "Report-Structural Fire". This form contains a variety of useful information, including the address of the fire, the date and time the alarm was received, the location of the fire (e.g., in an apartment, basement, etc.), the amount of damage that occurred, and a preliminary cause determination. Preliminary cause determinations, while subject to the discretion of the battalion chiefs, are fairly consistent due to internal Fire Department guidelines, as well as the considerable experience of the battalion chiefs. This is borne out by the fact that approximately 90 percent of the fires called suspicious by the battalion chiefs are ultimately determined to be incendiary<1>.

The battalion chief is not, however, empowered to make an official determination that the fire was incendiary; such a determination can only be made by a fire marshal. If the chief believes that a fire is incendiary he classifies it as "suspicious" and summons a team of fire marshals.

Occasionally, the battalion chief indicates on the BF-24 that a fire is incendiary. Although he may be (and probably is) correct in his judgement, such fires are still technically suspicious pending fire marshal investigation. For purposes of this study, battalion chief incendiary determinations are categorized as suspicious.

Prior to 1980 some fires were listed as being caused by malicious mischief. This term was used to describe what would otherwise be a suspicious fire in a vacant building. In 1980 the category malicious mischief was collapsed into the suspicious fire category.

These three categories of fires, suspicious, incendiary, and malicious mischief, form the nucleus of the dependent variable (suspicious fires) used in this study. Also included in the dependent

<1>Nova Institute, Manpower Needs for the Investigation of Arson in New York City, 1979, p.14

variable are fires attributed to unknown causes. Less than 15 percent of the fires included in the dependent variable were attributed to unknown causes, and it is believed that between 25 and 50 percent of these fires are really due to arson.<2> These fires were included to capture the universe of fires that could not be attributed to known accidental causes.

The blanket term "suspicious fires" was used in describing these classes of fires in the analysis of aggregate data. It should be remembered that the dependent variable used in this study is not arson, but rather the surrogate measure described above. This treatment was employed as a result of the inability to utilize the actual arson determinations.

5. Development of Control Factors

Determining whether assisted buildings suffered significantly more suspicious fires than non-assisted buildings required that conditions associated with elevated fire rates be controlled to ascertain whether it was the program or other possible factors that were related to an increased fire incidence. It was to be expected that buildings in need of rehabilitation would be fire-prone because of advanced disrepair, vacant apartments, and proximity to other such buildings. In order to make a fair comparison between the program and control samples, a number of variables were controlled for. Most of these variables were used in the New York City Arson Risk Prediction Index (ARPI) <3>, a statistical model used by the New York City Arson Strike Force to assign buildings to arson risk categories.<4> According to this model, buildings most at risk are those:

- with tax arrears
- with high vacancy rates
- with a history of suspicious fires
- located on the corner of a block

<2>National Institute of Law Enforcement and Criminal Justice, Law Enforcement Assistance Administration, Arson and Arson Investigation, 1977, p. 4

<3> R. Pesner, et. al., Arson Analysis and Prevention Project: Final Report, N.Y.C. Arson Strike Force under a grant from the Law Enforcement Assistance Administration, 1981.

<4>In developing ARPI the pool of buildings selected for analysis was divided into two groups. One group was used to calculate ARPI, while the second group was used to assess its reliability. Using the second group, ARPI accurately predicted the occurrence of arson in 64 percent of the buildings that experienced arson. It identified correctly 89 percent of the buildings that did not experience arson. The specific technique used in preparing ARPI was factor analysis.

- in Manhattan and Brooklyn.

Conversely, one and two family homes, small walk-ups, large elevator buildings, and non-residential structures exhibit diminished risk.

ARPI could not be applied directly to the current sample. The anticipated period of time during which assisted buildings are most vulnerable to fire is prior to the submission of a program application. It is during this time that the ARPI score is most crucial. The bulk of program buildings included in the sample entered programs in 1978-1980, making the critical time period 1977-1979. In many cases historical records for that time are unavailable. It should also be remembered that ARPI is a predictor of arson, while the dependent variable used in this study is suspicious fires.

The control factors derived from ARPI were employed largely because of their availability. They do not, by any means, exhaust the list of all possible factors found to contribute to, or precede arson or suspicious fires. Other factors identified in the literature include the presence of vacant unsealed apartments and open roof or entrance doors^{<5>}, a history of prior fires of any cause^{<6>}, changing economic conditions^{<7>}, and a variety of other factors. The importance of these "missing" and possibly intervening variables is discussed in Section III (Limitations of the Study) of this chapter. Nonetheless, ARPI provided clues as to what control variables were important. As a result, the independent variables used in this study include some ARPI variables and some "ARPI-related" variables.

a. Building Size

ARPI reflects building size, but uses dichotomous variables (small walk-up, large elevator building) to account for its effect. That treatment, while taking building size into account, is sensitive to qualitative differences. The relative scarcity of elevator buildings in the current sample prohibited such treatment. Thus, building size is an "ARPI-related" variable, but not an ARPI variable.

The data analysis contained in Chapters Three and Four tend to reaffirm the importance of building size as a control variable. The reason for this relationship is not difficult to understand. Apart from any qualitative factors, each apartment represents an opportunity for a fire to occur. A 30 unit building has ten times as many places in which a fire can start as a three unit building.

^{<5>}Flatbush Development Corporation Arson Prevention Project, ARSON, p. 9

^{<6>}ibid, p. 9

^{<7>}U.S. Department of Commerce, The Psychology of Firesetting: A Review and Appraisal, 1979, p.4

b. Tax Arrears

A building's economic condition is an important predictor of arson. In developing ARPI, researchers found that "...only 15% of (the 10,000 buildings in their sample that did not experience arson) had an outstanding tax bill, while 48% of the arson cases were in arrears. The average length of time of tax arrears for all controls was one quarter... Among arson cases the average time of arrears was 4.8 quarters..." ^{<8>} Tax arrears were also found to influence arson incidence in San Francisco, California^{<9>} and New Haven, Connecticut^{<10>} and are included in arson predictive indices in both cities.

Because most sample properties entered programs between 1979 and 1981, 1978 tax arrears were used as a control for subsequent fires based on the assumption that the period immediately prior to application submission is a high risk period for buildings entering housing programs.

c. Occupancy

The last major control factor is occupancy. ARPI researchers found that the mean occupancy rate for buildings that did not experience arson was 96 percent (i.e., 4 percent vacancy rate), while the mean occupancy for arson buildings was 76 percent. They concluded that "...low occupancy or total vacancy attract vandal arsons, and that arson may be the last step of an owner's successful attempts to evict tenants by harassment." ^{<11>} The New Haven Arson Early Warning index also includes occupancy as a predictor of arson.^{<12>}

d. Neighborhood/Geography

In addition to building size, tax arrears, and occupancy, geography or location is an important factor in determining which buildings will experience arson or incendiary fires. Buildings in some neighborhoods will be more prone to fires because of factors unique to that area, such as an inferior housing stock, a large number of vacant buildings, a

^{<8>} Pesner, op. cit., p. 14

^{<9>}Goetz, Barry, The San Francisco Arson Early Warning System Summary of Research: 1979 to 1981, San Francisco Fire Department Arson Task Force, 1981, p. 3

^{<10>}United States Fire Administration, Federal Emergency Management Agency, Anti-Arson Implementation Kit, 1981, p. 3,1

^{<11>} Pesner, op. cit., p. 14

^{<12>} Anti-Arson Implementation Kit, op. cit., p. 3,5

generally high crime rate, the presence of juvenile gangs, etc. To control for these factors the sample was designed to include only buildings on blocks containing a program-assisted building. In this way it was assured that the program buildings would be compared only to similar buildings.

II. Data Analysis

Because of differences in program structure, data availability, and fire patterns, it was not possible, nor was it desirable, to use one statistical method in evaluating each of the programs chosen. Generally, analysis included two steps: first, program and control groups were examined to determine whether program buildings experienced more suspicious fires than other buildings under controlled conditions; second, analysis of program buildings was performed to determine whether any specific groups based on geography or neighborhood, processing type, physical or demographic characteristics, etc., experienced significantly more fires than other groups. Statistical methods are outlined below.

The first step, determining whether program buildings experienced more fires than other buildings, was conducted by applying ARPI-related control factors to program and control samples, and used bi-variate methods and chi-square tests. <13>

Bi-variate analysis is limited by the necessity to treat categories of buildings (e.g., over 30 apartments versus under 30 apartments), rather than being able to address the actual distribution of the attribute under scrutiny directly. It is also difficult to control for more than one or two factors simultaneously. Regression analysis was used to overcome these limitations when possible. <14>

<13>One of the outcomes of such an analysis is a probability or P value, which may be interpreted as the probability that an observed difference in the number of fires could have occurred by random chance. A P value of 0.05, for example, indicates that the observed differences would have occurred by chance alone five times out of 100. All significance tests in this report will be at the .05 level for a two-tail test unless it is stated otherwise.

<14>Regression analysis is a method for ascertaining the simultaneous influence of a number of variables on a dependent variable. The analysis yields regression coefficients, which represent the effect of a given independent variable when all other independent variables are controlled (held constant statistically). Inferential statistics were computed for the various effects estimated in the different models, but their meaningfulness should not be exaggerated. These statistics are generally used to determine the probability that a relationship found in a sample would be the same in the universe from which the sample was drawn. However, the theory of inferential statistics is based on the assumption of simple random sampling from a larger universe and that is not the case here. Consequently, greater attention is paid to the

The J51 program posed special methodological problems and required unique treatment. Because J51 applications could be submitted up to three years after rehabilitation began during the period studied, it was virtually impossible to ascertain when rehabilitation began. A search of Department of Buildings records indicated that plans for rehabilitation of properties receiving J51 benefits during Fiscal 1981 (July 1, 1980 to June 30, 1981) were generally submitted for approval during 1978 or 1979. Because of this, the sample was restricted to buildings that received J51 benefits during Fiscal 1981 (7/1/80-6/30/81) in order to test fire rates prior to rehabilitation. This procedure, while highlighting the period of greatest risk, also had the effect of decreasing the size of the sample. The sample of residential multiple dwellings that received J51 during Fiscal 1981 and met other selection criteria, for example, contained only 97 buildings. This small sample size prevented the use of regression methodology and yielded statistical distributions that were too sparse to accurately determine statistical significance.

III. Limitations of the Study

A. The Dependent Variable

The dependent variable used in this study is a composite of three classifications of fires that could not be attributed to a known accidental cause. The majority of these fires were found to be suspicious by the fire chief directing extinguishment, but were not necessarily incendiary in origin. While arson apparently played a role in a substantial proportion of these fires, it should not be assumed that every fire was deliberately set. Nor should it be assumed that every fire was caused by the landlord's neglect, malfeasance, or criminal intent. Alternative explanations for each of the approximately 5,000 fires in the samples studied include revenge, vandalism, tenant discontent, pyromania, etc. The analysis also suggests that some fires may have been caused by neglect or intent, but the motive and cause of any individual fire must be considered an unknown absent considerably stronger data.

B. Adequacy of Control Variables

The literature is rich with factors found to be related to, causing, and contributing to the possibility that intentional fires will occur. Unfortunately, this study was constrained by the limited number of potential control variables that were available in existing data bases. For example, as mentioned above, it was not possible to control for other factors previously identified such as: the presence of vacant unsealed apartments and open roof or entrance doors, a history of prior fires, changing economic conditions, and also a variety of other factors. In addition, buildings which require substantial rehabilitation

strength of relationships than to their statistical significance.

may be distinct from buildings which do not. The reasons for this may be that buildings in need of rehabilitation are generally in poorer condition and, due to their accessibility, may be more susceptible to vandalism, juvenile mischief, pyromania, tenant discontent, revenge, as well as others.

As a result, doubt must remain about what the outcome of the analysis would have been had additional controls been available. It is appropriate to say that the data suggest that participation in the programs reviewed appears to be related to the incidence of suspicious fires in some cases. It is not appropriate to say that these data demonstrate causality, establish responsibility, discern motives or confirm such a relationship.

CHAPTER THREE: SECTION 8 SUBSTANTIAL REHABILITATION
RENT SUBSIDY PROGRAM

I. Program Description

A. Program History

Section 8 of the Housing and Community Development Act of 1974 was promulgated to encourage the maintenance of existing housing and the production or renovation of low and moderate income housing.

Rent control and stabilization laws, rising fuel costs, and inflation during the 1970s fostered reluctance on the part of developers to invest in low income housing. These factors presented the possibility of minimal increases in rental income and substantial increases in operating expenses. Housing programs created to encourage construction or rehabilitation had to address these concerns in order to persuade developers of the soundness of their investment.

The Section 8 program accomplished this directly through housing assistance payments to eligible tenants of qualifying properties. Three types of property were eligible for Section 8 assistance: existing housing not in need of rehabilitation, buildings requiring moderate improvements, and substantially rehabilitated or newly constructed housing. This chapter focuses on the substantial rehabilitation component. Qualifying work for the substantial rehabilitation program included "gutting and extensive reconstruction to cosmetic improvements coupled with cure of substantial accumulation of deferred maintenance." <1>

Furthermore, accelerated depreciation under Federal tax laws provided additional profits and indirectly encouraged developers to produce low income housing. While Section 8 did not subsidize construction or permanent financing, rental subsidies guaranteed developers an assured income for 20 to 30 years, and combined with tax benefits, provided a sound investment opportunity.

Section 8 allocations were awarded to localities based on a Department of Housing and Urban Development (HUD) "fair share" formula. Each community receiving Federal housing assistance had to prepare a Housing Assistance Plan (HAP) which set housing priorities and designated areas eligible for assistance. In 1979, New York City received 3500 units of new construction and substantial rehabilitation subsidies for eligible neighborhoods. Additionally, as a result of participation in the Neighborhood Strategy Area (NSA) program, the City was awarded in May 1978 a special allocation of 5000 units for substantial rehabilitation in designated areas with boundaries similar to those in the HAP. The City was given direct control over the solicitation, evaluation, and selection of these projects. In effect,

<1> 24 CFR 881 (Administrative Regulations for the Leased Housing Assistance Payments Program), Sections 881.105 and 881.106

between 1978 and 1979, 8500 units of Section 8 assistance were awarded within narrowly defined geographic areas.

The outlook for the program's future is uncertain as the Federal government re-evaluates its housing policy. The last large scale Section 8 allocations by the Federal government were in 1980.

B. Benefits Structure

1. Rent Subsidies

A contract rent was established for each apartment according to the HUD schedule for substantially rehabilitated units. The contract rent included the amount an eligible tenant contributed for rent plus the Federal subsidy (also referred to as the Housing Assistance Payment) which provided the developer with the difference between the contract rent and the tenant's share. Qualifying tenants generally contributed twenty five percent of their income for rent, although tenants with exceptional medical expenses or several dependents paid approximately 15-20 percent of their income.

2. Syndication and Tax Benefits

Under Federal tax law, a developer may sell interest in a rehabilitation project and accompanying tax losses to investors to recoup his "start-up" capital. This process is called syndication and is a lucrative investment vehicle for developers and investors. It is "considered one of the principal benefits of ownership of a Federally assisted rehabilitation project." <2>

Section 167(k) of the 1969 Internal Revenue Code greatly increased both tax losses generated by rehabilitation and the value of syndication. It allows owners of multi-family rental buildings to depreciate property improvements up to \$20,000. per unit on an accelerated straight line basis over 5 years if the property was rented to low and moderate income tenants.

The tax losses generated by accelerated depreciation are usually in excess of the amount a developer can use to offset his taxes on other income. By syndicating a project, a developer sells the tax shelter to investors in need of a tax shelter. A limited partnership is generally formed in which the developer as general partner sells the tax shelter to limited partners.

The benefit of syndication to the developer far exceed the 10% equity investment required of a developer or a general partner of an FHA insured project. Thus the general partner can more than recoup his equity investment by the time of the project's completion. In addition

<2> Utilization of Tax Incentives by Non-Profit Organizations, Federal Department of Housing and Urban Development, p. 14

to the proceeds from syndication, the general partner is allowed to claim the Builder Sponser's Profit and Risk Allowance which equals 10% of the mortgageable amount. In other words the Federal government requires a 10% equity contribution, but refunds most of that requirement through the BSPRA. When the syndication proceeds are added to the BSPRA, the general partner may nearly triple his original investment by the completion of construction. Assuming a \$1,000,000 project cost with \$100,000 in equity.

Investment	Return on Investment
\$100,000 (equity)	\$90,000 (BSPRA) (10% of \$900,000 mortgage)
	\$200,000 (Syndication)
<u>\$100,000</u>	<u>\$290,000</u> (total)

Investors may depreciate over time not just their equity investment, but the full value of the property less the land and the salvageable value of the building. Section 8 projects usually have very low land acquisition costs and thus a high percentage of total project costs are depreciable. For example, assume a project cost of \$1,000,000 of which \$900,000 may be depreciated. The syndication proceeds from a Section 8 Substantial Rehabilitation may be as high as 22% of the total mortgage or \$200,000 of the \$900,000 mortgage (assuming an FHA insured 90% loan to value mortgage). A limited partner purchasing 10% of the property for \$20,000 would be able to depreciate \$90,000 over time. Assuming a 20-unit building with depreciable improvements of \$45,000 per unit in the period of this study the 10% limited partner would be able to deduct the following amounts:

Year	5 Year Straight Line (Sec) 167 (k)	Double Declining Balance (40 yr. life)	Total
1	\$8,000 +	\$2,500	= \$10,500
2	\$8,000 +	\$2,375	= \$10,375
3	\$8,000 +	\$2,256	= \$10,256
4	\$8,000 +	\$2,143	= \$10,143
5	\$8,000 +	\$2,036	= \$10,036
	<u> </u>	<u> </u>	<u> </u>
Total	\$40,000	\$11,310	\$51,310

Year	Depreciation	Taxpayer 70% Marginal Tax Rate
1	\$10,500	\$7,350
2	\$10,375	\$7,263
3	\$10,256	\$7,179
4	\$10,143	\$7,100
5	\$10,036	\$7,025
Total		\$35,917

In this hypothetical project for a \$20,000 investment, a limited partner in the 70% bracket would be able to deduct \$51,310 from his income over a five-year period for total tax savings of \$35,917.

3. Other Sources Of Income

This tax savings is in addition to his 10% share of the 8% return on equity for the project which is permitted under Section 8. In this hypothetical example cash return on equity would equal .10 (.08) (\$100,000) or \$800 per year. Thus, the five year value of the cash return on equity to the limited partners equals \$4,000. In the first five years the ten percent limited partner earns \$39,917 on his \$20,000 investment.

The general partner may also earn additional income above that garnered from the BSPRA and syndication proceeds. If he acts as the project manager after construction he may earn up to 5% of the rent collected as a management fee. Depending upon how well the building is managed, this could further add to the general partner's profit.

Since the period of this study, the Economic Recovery Tax Act (ERTA) of 1981 has changed the tax laws in two ways. First, the maximum marginal tax bracket has been reduced from 70% to 50%. This reduces the incentive for investors strictly looking for a tax shelter. Second, while the 167(k) benefits remained essentially unchanged as a result of the ERTA, the useful life for residential property was reduced to 15 years.

* * *

The profits from syndication and the Section 8 contract have been more than sufficient to overcome reluctance to produce low income housing. Rental subsidies minimize the chance of default or foreclosure and increase the economic viability of Section 8 projects. These financial benefits have created intense competition among developers for

Section 8 awards.

C. Application Processing

1. Application Intake

Developers were invited, in 1978-1979, to submit proposals to HUD through a Notice of Fund Availability (NOFA) which set parameters for proposals. Proposals contained information on the scope of rehabilitation, previous experience, and project site. They also specified whether the proposed project would displace tenants and whether relocation would be feasible. HUD reviewed the proposals for content, ranked them, and selected the best proposals. Developers were then invited to submit final proposals containing cost and expense estimates, financing and management plans, and any modifications. After approval by HUD, an agreement was signed stating that upon satisfactory completion of rehabilitation, a Contract for Housing Assistance Payments would be executed (see Section B).

A second type of NOFA was used experimentally in 1978-79, the Neighborhood Strategy Area (NSA) NOFA. The processing of NSA applications was similar to regular NOFAs except that:

1. Municipalities advertised the NOFA which specified target areas approved by HUD, number of units, type of building, and submission deadline.
2. Proposals were evaluated by the municipality according to HAP criteria and each area's strategy for housing development.
3. HUD reviewed proposals for technical evaluation and compliance with Federal environmental and fair housing laws. The final decision as to which projects would be funded was made by the local housing agency.

2. ULURP Processing

In New York City Section 8 proposals requiring the transfer of properties from the City to private developers underwent an additional processing step. According to Section 197-c(a) (10) of the New York City Charter, the sale, lease, or other disposition of City-owned property is subject to the Uniform Land Use Review Procedure (ULURP), when such actions require Board of Estimate approval. Acquisition of land by the City through purchases, condemnation, gift or other method, is also subject to the procedure. The ULURP action on disposition focuses only on the use of the property. The terms of the sale or the lease are authorized separately by the Board of Estimate subsequent to

the completion of the ULURP. <4> Each City-owned property submitted as part of a Section 8 package was subject to this review.

3. Developer Disclosure Procedures

Under New York City Department of Housing Preservation and Development (HPD) regulations, developers submitting NSA applications were required to complete disclosure forms as part of the application. Regular NOFA submissions to HUD, not involving city owned property, did not have this requirement. HUD reviewed proposals solely for the developer's prior experience and technical factors.

The first component of the HPD disclosure process, form DEV-2A, requested information on the project and its principals. DEV-2B (required of all individuals specified on DEV-2A) contained information on corporate affiliations and holdings, financial status, property tax and loan arrears, and previous City loans. DEV-2B also asked if "the participant or any entity in which the participant is or was a principal (has) ever been the subject of any tenant harassment proceeding?"

An abbreviated DEV-2B was filed by developers who submitted the long form for another project within six months. Although the short form (DEV-2B(R)) requested financial and corporate information, it did not directly ask developers to disclose their involvement with past or existing harassment proceedings. It did, however, require applicants to certify that the information disclosed on the initial DEV-2B for the previous project was true and unchanged. Due to lengthy delays in approval, applicants had to file a reaffirmation affidavit every six months certifying that the information contained on the DEV-2B(R) was correct.

The purpose of the sequential disclosure statements and reaffirmation affidavits was to ensure that during the time the project proposal was being processed, any new developments would be disclosed to HPD, thereby initiating the proposal's re-evaluation.

D. Selection Policy

HUD and HPD were reluctant to select projects for Section 8 awards which would displace existing residents. Both agencies were aware that the relocation of occupants to facilitate substantial rehabilitation might produce negative social consequences. Therefore, the Federal and City governments set selection criteria that they believed would minimize this possibility.

<4> City of New York, Office for Economic Development, Uniform Land Use Review Procedure (ULURP): A Guide, 1981, p. 13

A significant selection criterion was occupancy. As the agency responsible for the approval of proposals submitted under the 1979 NOFA, HUD ruled that "in the evaluation or selection of proposals, consideration shall be given to whether there are site occupants who would have to be displaced... Greater weight shall be given proposals which do not require displacement or where displacement is required which will involve the least amount of hardship." <5> In the event that an occupied building was selected for rehabilitation, HUD required that "the local government be responsible for relocation payments and services...to all tenants displaced by rehabilitation." <6> New York City required that large developers pay relocation costs. HPD's selection policy as detailed in the HAP was also stringent. The HAP clearly stated that "Building(s) shall be vacant or substantially vacant to minimize the economic and social costs of displacement and to expedite rehabilitation." <7> Furthermore, the City directed that "city-owned housing--particularly that with the potential for being restored to private ownership and the tax roll--should be given preference for Section 8 assistance." <8> By selecting in rem (City-owned as a result of tax foreclosure proceedings) properties, the City attempted to provide rehabilitated housing for low income tenants, bolster its tax revenues, and decrease its inventory of city-owned buildings.

The vast majority of the 3,500 units of new construction and substantial rehabilitation that comprised New York City's 1979 fair share allocation went to in rem buildings, substantially following the policy of targeting vacant in rem properties.

Supplementing the fair share allocation were 5,000 units awarded to the City as a result of its participation in the Neighborhood Strategy Area Program. Under HUD NSA regulations, municipalities were required to target rehabilitation to specific neighborhoods to ensure that areas in need of planned revitalization received Section 8 assistance. In compliance with this provision the City awarded NSA units to projects in ten neighborhoods. These neighborhoods were:

- Manhattan

Gateway to Harlem
Hamilton Heights
Manhattan Valley
Washington Heights

- Bronx

Kingsbridge / Bedford Park

- Queens

<5> 24 CFR 881, op. cit., Section 881-113

<6> Ibid., Section 881

<7> CD V Housing Assistance Plan, p. 46

<8> Ibid., p. 46

Far Rockaway

- Brooklyn

Crown Heights

Flatbush

Sunset Park

Bedford Stuyvesant

The City's selection criteria for proposals submitted in response to the NSA NOFA closely paralleled those of the 1979 Fair Share NOFA. The overall policy was to "focus on...rehabilitating the abandoned vacant buildings." <9> Many of the buildings that received NSA funds, however, were not in rem; thirty-seven percent of all NSA buildings City-wide in the sample selected for this research project were privately owned. This was due to the absence of a sufficient number of in rem properties in some neighborhoods with which to assemble Section 8 projects. Sunset Park, which is discussed subsequently, is one such neighborhood.

II. Risk Factors

A. Policy-Related Factors

HUD regulations, the HAP, and NSA applications forewarned developers as early as May 1978 that vacant properties would receive selection priority. Although owners had the option to propose occupied properties, few exercised that option, probably because they were aware that such proposals would not be regarded as highly as those with vacant properties and that occupied projects were subject to the Relocation Act which required payments to displaced tenants of up to \$4,600 per family. Finally, vacant properties were immediately ready for rehabilitation; renovation of occupied buildings might have been delayed by administrative problems associated with relocation. It is also difficult to evict tenants to allow rehabilitation. A developer's attempt to obtain certificates of eviction may be contested. If the tenants are well represented, legal challenges may delay the eviction process by up to two or three years, interfering with the developer's ability to vacate a building in time to comply with the deadline for Section 8 submissions.

Instead of obtaining eviction certificates, developers have traditionally offered tenants money in exchange for their agreement to vacate. "Buying out" tenants is relatively inexpensive compared to the financial benefits of Section 8. Many tenants are, however, reluctant to accept a "buy out." The City's extremely low vacancy rate makes it difficult to locate a comparable yet affordable apartment. In view of the City's tight housing market and eviction laws, some owners may have resorted to illegal tactics to force tenants to move. This is not to

suggest that the protection afforded tenants is misdirected. It is only to acknowledge that an effective means of illegally expediting the removal of tenants may be through harassment.

Arson is not a factor in the majority of buildings undergoing rehabilitation. Arson as a form of harassment, however, is particularly effective; it creates an atmosphere of fear which generates a willingness among tenants to abandon the property. Additionally, the knowledge that a building is about to be rehabilitated may act as a disincentive to invest money in ongoing maintenance. This may lead to diminished maintenance and essential services, although in some cases the withholding of services may have been intentionally motivated to force out tenants. As conditions decline a building becomes more susceptible to fire. If stoves are used for heat because the boiler is inoperable, this presents a fire hazard. Accumulated rubbish, unlocked vacant apartments, and a poorly maintained boiler also present a risk of fire. The following case study illustrates what appears to be these patterns.

Case Study 1; Buildings A001-A005.

This project was submitted to HPD in 1979. It included six vacant properties; four owned by the applicant and two under purchase option.

Although the six buildings were vacant at the time of submission, available records indicate that the majority had been occupied in 1978. Three of the six became vacant in 1979, according to HPD Office of Code Enforcement records. City vacate orders were issued for two of the properties in late 1978. Data was unavailable for the remaining building.

The code violations, tenant complaints and fire profiles were examined, when possible, to determine the extent to which poor service delivery and fires contributed to tenant abandonment.

Building A001 was a 27 unit, four story walk-up. In the three years prior to 1978, there was one complaint for lack of heat and hot water, and six for vermin. A fire in December 1977 was determined to be incendiary.

In 1978, the building deteriorated rapidly. In March, the ownership changed. The principal of the new realty company was an individual subsequently indicted for arson. In July 1978, the location of the building was designated a Neighborhood Strategy Area. Shortly afterwards, the partially occupied property experienced the following fires:

<u>Date</u>	<u>Cause</u>	<u>Time</u>	<u>Damage</u>	<u>Location</u>
8-23-78	Incendiary*	4:00 AM	Light	Vacant 4th Floor Apt
9-29-78	Incendiary*	4:14 AM	Heavy	Vacant 4th Floor Apt
10-23-78	Incendiary*	5:21 AM	Moderate	First Floor

* official fire marshal cause determination

HPD records indicate that seven of the 28 units were occupied in October 1978. By December the building was vacant.

This building was one of the two properties on which the applicant had a purchase option. Because there is no legal requirement to file sale documents, the date and terms of the agreement could not be determined. The property was transferred to the applicant upon positive preliminary evaluation of the proposal.

In building A002 (owned by the applicant) three violations were filed against the property in 1975, two for rubbish accumulation and one for rodent infestation. HPD's Office of Code Enforcement records indicate that the building was reasonably well maintained and in good condition. There is no record of fires during this year.

A fire in early 1977 was determined to be suspicious. It caused no damage to the building. No complaints or violations were recorded during this year.

In July 1978, shortly after the designation of neighborhoods to receive NSA units, the ownership of the property changed. In the last six months of 1978 there was one fire attributed to cooking carelessness (which caused no damage), and one heat and hot water complaint. In December 1978 the regular Section 8 NOFA was advertised, further alerting developers to benefits available.

During 1979 basic services and the property's physical condition appeared to decline markedly. Sixteen heat and hot water violations were filed with HPD's Office of Code Enforcement. Paralleling the increase in violations was a significance increase in suspicious and incendiary fires, as shown below:

<u>Date</u>	<u>Cause</u>	<u>Time</u>	<u>Damage</u>	<u>Origin</u>
1-18-79	Mal. Mischief	9:16 AM	Light	Third Floor
2-28-79	Incendiary*	6:34 AM	Light	Third Floor
2-28-79	Suspicious**	8:54 AM	Light	Third Floor
3-19-79	Mal. Mischief	12:48 AM	Light	---
3-29-79	Mal. Mischief	1:17 PM	None	Fourth Floor
4-5-79	Incendiary*	11:39 AM	Light	Fourth Floor
4-13-79	Incendiary*	4:04 AM	Light	Third Floor

* official fire marshal determination

** no record of fire marshal cause and origin investigation

As a result of these fires and the lack of heat and hot water, the building went from being partly occupied and in good condition to being

partly occupied and deteriorating. A vacate order issued in September 1980 indicated that the property was vacant by May 1979 within one month of the last fire, and three months before submission of the Section 8 proposal.

Complete code enforcement records for the remaining four properties could not be obtained. HPD records indicate, however, that one building (A003) became vacant in May 1978; another (A004) became vacant in December 1978, and another (A005) in January 1979. Although no fires occurred in Buildings A004 and A005, Building A003 experienced an incendiary fire in March 1978 at which time Fire Department records indicate the property was partially occupied. Although complete files were unavailable, the vacate orders issued for these three buildings indicated the need to protect tenants from unsafe building conditions, and the need for substantial rehabilitation.

The proposal to rehabilitate the six buildings was submitted in September 1979. Review of the applicant's disclosure statements revealed several questionable items. First, a project principal was under review by the Department of Investigation in connection with allegations of tenant harassment. Second, this individual and two others had served on and recently resigned from the local Community Board, presenting potential conflict of interest, although there were no legal or regulatory restrictions prohibiting this. Third, real estate arrears, water and sewer charges, and Emergency Repair arrears were owed on four properties. The \$6,325,000 rehabilitation project received approval in April 1981.

B. Processing Factors

The submission of NOFA proposals between 1977 and 1980 initiated no review by HUD to determine the conditions under which vacant buildings achieved that status. HUD projects were reviewed solely for the developers' experience, prior participation in HUD programs, and compliance with HAP criteria. There was no investigation of harassment allegations or findings.

The City, in its selection of NSA projects, required applicant disclosure information, but no determination was made of when the building became vacant and under what circumstances. The NSA concept was unique in its design and the City was not yet aware of its possible impact on the frequency with which fires and harassment would occur. Once this was recognized, the City, in its 1980 HAP, immediately adopted a formal policy that no rehabilitation assistance (under Section 8 or other programs) would be awarded to individuals against whom harassment or displacement charges had been alleged until such charges were dismissed or settled. Prior to 1980 review focused on the applicant's record, not the history of the building about to be rehabilitated. At that time community-based HPD staff may have been aware that a building had recently been vacated, but they would not necessarily have been aware of the precipitating factors. Although building surveys were conducted by HPD Neighborhood Preservation Program staff or City

Planning Department staff in preparing the original applications for Section 8 units, the focus of these surveys was on building condition, rather than occupancy. It was the primary purpose of these surveys to identify areas that would benefit from substantial rehabilitation, not to identify individual buildings. While occupancy strongly influences building condition, it is only one of many factors.

HPD did, however, review the fire history of every NSA building. Addresses of Section 8 buildings were forwarded to the Fire Department Division of Fire Investigation (DFI) which provided HPD with the dates of any fires of which they were aware. The information generated by this procedure was flawed. First, fire dates without information on the cause of the fires, damage, etc. precluded full analysis of the role of arson or intentional fires in vacating the property. Second, DFI has data on fires only of a suspicious or incendiary nature. Fires that could be attributed to negligence or poor maintenance were not available. Third, no data were requested on an applicant's other properties which might have demonstrated consistent patterns.

Cognizant of the ineffectiveness of this process, HPD revised its policy in September 1982, at the time of its next NOFA offering, to require that the Arson Strike Force provide complete fire profiles on buildings under application for Section 8 and other housing assistance programs. The exclusion of significant fire data from the earlier process, however, appears to have allowed program abuses to go undetected prior to that date, as illustrated below.

Case Study 2; Buildings A006-A008

The consequences of incomplete fire data during the processing of the projects under this study can be demonstrated by examining one of these projects. This project was submitted to HPD in August 1979. It included a total of 11 four story walk-up tenements. ULURP documents indicated that three of the eleven buildings were City-owned at the time of submission. The remaining 8 properties were privately-owned. The total rehabilitation cost for the 114 rehabilitated units was to be \$5.7 million, or \$50,000 per apartment.

The ULURP submission for these eleven buildings indicated that "the buildings are currently vacant and no relocation is required." A review of additional records suggests that the majority of these buildings may have become vacant <10> immediately prior to submission.

During 1978 eight of the eleven buildings were at least partially occupied as shown below.

<10> Con Edison Annual Vacancy Survey, HPD Code Enforcement records, Fire Department records

1978 Occupancy <11>

<u>Occupancy Level</u>	<u>Number of Buildings</u>	<u>Percent of Buildings</u>
vacant	3	27.3
1-25%	2	18.2
26-50%	2	18.2
51-75%	1	9.0
76-100%	3	27.3
Total	11	100.0

Between May 1978, when the building's area was designated an NSA, and August 1979, when the application was submitted, these eleven buildings experienced no less than 30 fires, at least 18 of which were determined to be incendiary. These fires accompanied diminishing occupancy and ultimately tenant abandonment in a number of cases.

Building A006, a privately-owned, 16 unit tenement, was the most fire prone of the eleven buildings. During September, October, and November of 1978 it experienced 16 fires, 11 of which were found to be incendiary. Fire Department Battalion Chief reports indicate that the building was partially occupied but deteriorating during that three month period.

The building's problems apparently pre-date that period. In early 1977, according to HPD inspection records, 4 of the building's 16 apartments were vacant and heat and hot water were inadequate. By March of 1977 Con Edison had discontinued electrical service to the public areas of the occupied building due to the owner's failure to make payments.

Few additional violations were placed until the latter part of 1978. Between September and November of that year additional violations mounted. Rubbish accumulated in the public hallways, courtyard, and vacant apartments. Dead and decaying dogs and cats in the rear yard and fire passage attracted rats. During these three months the following fires occurred:

<11> Con Edison Vacancy Survey, 1978, HPD Code Enforcement records

<u>date of fire</u>	<u>time</u>	<u>cause</u>	<u>damage</u>	<u>building occupancy</u>
9-16-78	2:09 am	incendiary*	light	partly occupied
9-16-78	9:43 pm	incendiary*	light	partly occupied
9-17-78	10:51 pm	incendiary*	light	partly occupied
9-20-78	6:10 pm	incendiary*	light	partly occupied
9-24-78	9:02 pm	incendiary*	light	partly occupied
10-25-78	11:51 pm	incendiary*	light	occupied
10-26-78	1:58 am	unknown	light	occupied
10-28-78	9:35 pm	incendiary*	heavy	partly occupied
10-29-78	8:37 pm	incendiary*	none	partly occupied
11-4-78	5:46 pm	mal. mis.	light	partly occupied
11-5-78	10:12 am	incendiary*	light	partly occupied
11-6-78	2:47 pm	incendiary*	light	partly occupied
11-6-78	5:21 pm	unknown	light	partly occupied
11-7-78	5:55 pm	incendiary*	light	partly occupied
11-7-78	11:06 pm	suspicious**	none	partly occupied
11-7-78	11:58 pm	suspicious**	none	partly occupied

* official fire marshal determination

** no record of fire marshal cause and origin investigation

By May 1979 the building was vacant.

Building A007 had a similar history. During December of 1977 a few violations were placed for rubbish in the cellar and courtyard. The following month, January 1978, several more violations were placed for inadequate heat and hot water. The building was substantially occupied at the time. By May 1978 several more violations for rubbish and refuse, insufficient hot water, and deficient lighting of public areas were placed. During that same month a rash of fires began, as shown below:

<u>Date of Fire</u>	<u>Time</u>	<u>Cause</u>	<u>Damage</u>	<u>Building Occupancy</u>
5-20-78	2:51 am	incendiary*	light	partly occupied
5-28-78	4:39 am	unknown	light	partly occupied
6-2-78	2:45 am	incendiary*	light	partly occupied
6-8-78	2:07 am	suspicious**	light	partly occupied
9-12-78	3:14 pm	incendiary*	none	vacant

* official fire marshal determination

** no record of fire marshal cause and origin investigation

By June 1979, the building was vacant according to HPD inspection records.

Building A008 experienced three incendiary fires during a two week period in August 1978. Two of the fires caused substantial damage to the building. By the end of the month it too was vacant. The pattern of fires is shown below.

<u>Date of Fire</u>	<u>Time</u>	<u>Cause</u>	<u>Damage</u>	<u>Building Occupancy</u>
8-8-78	12:55 pm	incendiary*	none	occupied
8-18-78	1:02 am	incendiary*	heavy	occupied
8-22-78	2:14 pm	incendiary*	moderate	vacant

* official fire marshal determination

One of the general partners in this project was a general partner in at least two other Section 8 projects. He was also a respondent in a harassment case brought by HPD involving several non-Section 8 buildings under his management. His co-respondents in that case included an individual convicted of arson in Queens and two individuals under indictment for arson in Brooklyn. The allegations of harassment made in that case included the following:

- "The respondents have evidenced an intention to cause the subject buildings or individual housing accommodations therein, to become or to remain vacant and have decreased, discontinued, interrupted or interfered with services at the subject premises.
- "The respondents have intentionally interrupted or decreased certain essential services at the subject premises.
- "The respondents or their agents attempted to evade the Rent Law and Regulations by causing the tenants to vacate their rent-controlled housing accommodations or to waive their rights under the Rent Law and Regulations."

Attempts by this same general partner to disassociate himself from the actual management of the properties were dismissed by the judge as "not believable and incredulous." The judge found that he and his management firm were "in effective control of the management, operation, and control of the subject buildings," and stated that the "manner of (the) respondents' operation of (the) premises was inconsistent with normal businesslike operation of multiple dwellings, and was consistent with speculation associated with intent to force tenants out and to then sell the premises as vacant space at a great profit." Fines of \$28,000 were levied as a result.

Although hearings on the case were held as early as July of 1980, the applicant stated on his Section 8 applicant disclosure statements (dated December 1980) that he was not involved in any harassment cases. Although this was true at that time, it was not true in April 1981 and June 1981 when he filed reaffirmation affidavits stating that his original disclosure remained unchanged. As a result of these findings, he was barred by HPD from being a general partner in any NSA projects.

Case Study 3; Buildings A009 and A010

A similar set of circumstances was also evident in another Section 8 project. This project was comprised of two buildings with 93 apartments. The properties were purchased and remained under the ownership and control of a not-for-profit corporation, although separate corporations were formed for management purposes. The principals of these three corporations were accused of harassment by the tenants of both buildings shortly after the Section 8 application. An HPD administrative proceeding was held to determine the validity of the complaint. The conclusions of the proceeding are presented below.

Building A009, a 38 unit apartment building, was purchased by the applicants in April 1977. According to testimony presented, it was in good condition at the time of purchase. Regular maintenance and repairs were performed, and basic services were provided.

After April 1977 the building's condition and level of essential services declined noticeably and "caused the utter deterioration of a building that was in good condition and fully occupied in 1977 when the landlords took title. This was part of a course of conduct designed to drive the rent controlled tenants from occupancy." <12>

Tenants testified that the owners had frequently requested that they relocate and that "their continued occupancy interfered with the owners' plans for alteration and renovation of the premises." HPD found that to encourage relocation efforts, the owners "embarked upon a campaign of decreasing, interrupting, (and) interfering with the services to which the tenants were entitled." The tactics are too numerous to detail, but included the cessation of repairs, painting, plastering, exterminating services and security.

An examination of Building A009's fire history revealed that although incendiary fires were few, fires that might be attributed to a lack of maintenance were not:

<u>Date</u>	<u>Time</u>	<u>Cause</u>	<u>Damage</u>	<u>Floor</u>
2-23-78	7:10 PM	Oil Burner	Light	Cellar
2-8-79	6:12 AM	Oil Burner	Light	Cellar
4-5-79	12:37 PM	Incendiary*	Light	4th Floor
10-24-80	6:17 AM	Electrical	Light	Cellar

* official fire marshal determination

Although all 38 units were occupied in April of 1977, 24 were vacant by July of 1979. By the time of the administrative hearings, only 4 apartments were still occupied.

The second building in the project (Building A010) was a six story property with 55 apartments and several stores. It exhibited a pattern similar to Building A009--the steady decline of basic services and repairs.

<12> HPD Division of Rent Control and Maintenance files

Building A010 was purchased by the applicants in June of 1975. Prior to that time the essential services of heat and hot water, cleaning of public halls and areas, repairs, services, and exterminating had been provided for the occupied property.

Under the new management, "there was a very noticeable and serious diminution...in the quality, quantity and regularity of the essential services of interior and exterior public area repairs, painting, lighting, heat and hot water, and security." The lack of security allowed vagrants to enter unlocked vacant apartments, creating a serious danger to the tenants' safety.

It was determined by HPD that the impetus for these actions was the owners' plan to rehabilitate the property as indicated by alteration plans filed with the Department of Buildings in March 1978. Shortly thereafter, fourteen separate complaints of harassment were filed. The property was vacant by March 1979.

Findings of harassment were issued as a result of the administrative proceedings. Based on the remedies available, civil penalties of \$26,400 were assessed for Building A009 and all apartments subject to rent control in April 1977 returned to that status. Additionally, it was ordered that civil penalties of \$14,400 be assessed against the owners of Building A010 and all apartments returned to rent control status.

Concurrent with the administrative proceedings was the evaluation of the Section 8 application for the two properties. After lengthy delays, final approval was granted in January 1981 after HPD demanded that one of the project principals be removed.

Although the City attempted to minimize harassment through fines, a developer could well afford the financial penalties for harassment if the end result was the building's profitable rehabilitation. Moreover, the penalty of a return to rent control status is not a cogent penalty against developers of Section 8 projects. Federal regulations require that buildings rehabilitated with federal funds bear market level rent to allow adequate building maintenance. Therefore, the city-levied penalty of rent control status is removed by a Section 8 award. The current policy against awarding housing assistance funds to developers who have been found guilty of harassment, as stated in the 1980 HAP, is a much stronger deterrent.

Additionally, cases such as those presented in this section pose a dilemma for agencies administering Section 8 funds. Although harassment may have contributed to a building's decline, the destructive pattern shown in the case studies is likely to make these buildings a blighting influence on the block. Substantial rehabilitation may be necessary to save the rest of the block. The solution to this problem, as strongly suggested in this section, is more stringent pre-approval review and acceptance criteria explicitly prohibiting developers whose tenants consistently suffer from harassment tactics from receiving program benefits.

III. Section 8 in Other Cities

New York was only one of many cities that received authorization for Section 8 subsidies. Generally, the procedures for NSA proposal evaluation were similar to New York's except that each city formulated criteria for NSA projects according to their own housing priorities.

Studies by the Massachusetts Arson Prevention Task Force <13> and the San Francisco Arson Task Force <14> have suggested that incendiary fires in Section 8 buildings may have occurred to prepare properties for rehabilitation and, more specifically, were a harassment technique to encourage tenant abandonment.

After analyzing the fire histories of several Boston Section 8 buildings, the Massachusetts report uncovered a pattern which included:

- the diminution of essential services followed by increasing tenant abandonment;
- the milking of the property (i.e., collecting rents but putting little money into building maintenance and repairs);
- an announced plan to purchase and substantially rehabilitate the property;
- approval of the Section 8 proposal; and
- a series of small incendiary fires result in vacancy and allow rehabilitation to start immediately.

A similar pattern was found in San Francisco. In 1981, the San Francisco Arson Task Force analyzed the rate of fire activity and five variables (conversions, sales, dollar losses, etc.) in three neighborhoods. A sixth variable, the rate of change yearly in HUD Section 8 and other housing assistance, was added for the third community "to obtain data that might support an association between Section 8 contracts in particular and the number of vacant properties due to fire." It was demonstrated that, in this neighborhood, as HUD contracts increased from 1978 to the first six months of 1980 by 600 percent, so did those properties that became vacant due to fire." The report suggested that this relationship "may involve arson-for-profit, mainly in the form of 'scare fires' to get tenants out of the building."

<13> Report of Massachusetts Arson Prevention Task Force, May and December 1979, profile of Section 8 type arson scenario. Office of Lt. Governor O'Neill, United States Fire Administration.

<14> The San Francisco Arson Early Warning System. Summary of Research: 1979 to 1981 San Francisco Fire Department, Arson Task Force, Barry Goetz, 1981.

<15>

These observations, while admittedly encompassing a limited number of other cities, tend to strengthen the argument that the availability of lucrative housing rehabilitation grants may potentially foster fires. Additional research is required, however, before this relationship can be said to exist nation-wide.

IV. Data AnalysisA. Sample Characteristics

The sample used in this analysis contained 5,221 buildings, 344 of which were in the Section 8 Substantial Rehabilitation Rental Subsidy pipeline as of May 1982. It included almost all Section 8 buildings submitted to HPD between December 1978 and June 1981. A few buildings, most of which were 1979 NOFA submissions, were omitted due to the absence of a submission date in the computerized HPD Section 8 roster. The omissions represented about 10 percent of the total number of Section 8 buildings in the pipeline during the time period reviewed. One hundred eighty-three (53.2 percent) of the Section 8 buildings were submitted through the NSA process. The remaining 161 buildings (46.8 percent) were NOFA or special NOFA submissions. See Appendix A (Table 3-1) for the distribution of NSA and NOFA buildings by borough. All but one NSA building was submitted during August or September 1979.

B. Suspicious Fire Determinants1. Effect of Program Inclusion (Pre-Controlling for Extraneous Variables)

Section 8 buildings experienced significantly <16> more suspicious fires than controls from January 1978 to December 1981 as shown in Table 3-2.

<15> *ibid.*, p. 101.

<16> All significance tests in this report will be at the .05 level in a two-tailed test unless stated otherwise.

Table 3-2: Percent of Suspicious Fires (1/1/78-12/31/81) in Section 8 and Control Buildings City-wide

<u>Suspicious Fires</u>	<u>Section 8</u>	<u>Control</u>
none	51.2% (176)	71.7% (3498)
one or more	48.8 (168)	28.3 (1379)
total	100.0% (344)	100.0% (4877)

chi-square=65.2 P=.0001 DF=1

City-wide, Section 8 buildings were 1.7 times more likely than controls to experience at least one suspicious fire. The pattern was similar in Brooklyn and Manhattan (Appendix A, Tables 3-3 and 3-4). Section 8 buildings in Brooklyn were 2.2 times more likely than control buildings to have experienced at least one suspicious fire. Manhattan Section 8 buildings were 1.8 times more likely. In the Bronx the proportion of Section 8 buildings that experienced suspicious fires was statistically indistinguishable from the proportion of control buildings that experienced similar fires (Appendix A, Table 3-5).

An examination of buildings with more than one fire sheds additional light on the pattern. Section 8 buildings City-wide were twice as likely as controls to have experienced multiple suspicious fires and 3.1 times as likely to have experienced five or more suspicious fires (Appendix A, Table 3-6). The pattern was most pronounced in Brooklyn and Manhattan (Appendix A, Tables 3-7 and 3-8). In Brooklyn Section 8 buildings were 2.9 times as likely as controls to have experienced more than one suspicious fire. Moreover, Section 8 buildings accounted for 7.8 percent of the Brooklyn sample, but these buildings included 34.3 percent of the buildings that experienced five or more suspicious fires. In Manhattan Section 8 buildings had twice as many instances of more than one fire.

While Section 8 buildings suffered more suspicious fires than control buildings, the argument can be made that the buildings that ultimately received Section 8 subsidies are dissimilar to the control buildings. It is possible that factors such as the larger size of the Section 8 buildings, more severe physical deterioration, their location on specific streets, and the presence of other such buildings nearby may have been primary reasons for the greater number of suspicious fires. Therefore, in order to make a fairer comparison, the control variables culled from the literature in Chapter Two were applied to determine if the relationship still held true.

2. Effect of Building Size

Section 8 buildings were, on the average, larger than control buildings (Appendix A, Table 3-9). In order to determine whether the elevated fire incidence in Section 8 buildings was related to their larger size, an analysis of suspicious fires in program and non-program samples controlling for size was performed. Section 8 buildings of 16 or fewer apartments were considerably more susceptible to suspicious fires than controls (Appendix A, Table 3-10). These City-wide data, however, obscure more powerful relationships that can be demonstrated by using smaller geographic groupings.

For example, although the frequency with which suspicious fires occurred is similar for program and control groups in the large building category, these figures are heavily influenced by the Bronx where 55 of 59 (93.2 percent) Section 8 buildings were in the larger category. Only 49.1 percent (27) of these buildings experienced suspicious fires compared to 67.0 percent (282 buildings) of the control group.

Smaller Brooklyn Section 8 buildings were five times more likely than their controls to have experienced more than one suspicious fire (Appendix A, Table 3-11). In large part, this reflects the experience of the Sunset Park NSA, which contained small buildings. Approximately three-quarters of all Section 8 buildings in Sunset Park experienced at least one suspicious fire.

In Manhattan the smaller Section 8 buildings had about the same number of occurrences of more than one fire as controls, but the larger Section 8 buildings were slightly more likely to have experienced more than one suspicious fire (Appendix A, Table 3-12).

3. Effect of NSA Status

It was found that NSA submissions had significantly more fires than NOFA submissions as shown in Table 3-13.

Table 3-13: Percent of Suspicious Fires (1/1/78-12/31/81) by Type of Submission (NSA or NOFA)

<u>Number of Fires</u>	<u>Type of Submission</u>	
	<u>NSA</u>	<u>NOFA</u>
none	42.1% (77)	61.5% (99)
one	28.4 (52)	18.6 (30)
more than one	29.5 (54)	19.9 (32)
total	100.0% (183)	100.0% (161)
chi-square = 12.9 P=.002 DF=2		

NSA submissions were 1.5 times as likely as NOFA submissions to have had at least one suspicious fire. This relationship was most pronounced in Brooklyn, where NSA submissions were twice as likely as NOFA submissions to have had at least one suspicious fire (Appendix A, Table 3-14). There were too few NSA buildings in the Bronx to conduct meaningful analysis. In Manhattan, the number of NSA buildings experiencing one suspicious fire was 1.4 times greater than NOFA buildings, although the proportion of NSA and NOFA buildings that experienced more than one fire were about the same.

4. Effect of Neighborhood

In order to determine whether the abnormally high Section 8 suspicious fire incidence was City-wide or restricted to specific neighborhoods, an analysis of fires was prepared by neighborhood (based on Community Board). This analysis included only Community Boards with 20 or more Section 8 buildings. The results are shown in Table 3-15:

Table 3-15: Percent of Section 8 and Controls With Suspicious Fires, by Community Board

<u>Community Board</u>	<u>Percent of Buildings With Suspicious Fires:</u>	
	<u>Section 8</u>	<u>Control</u>
All Bronx	47.5	44.5
<u>Manhattan</u>		
7. Upper West Side	64.8	29.2
9. West Harlem	46.1	21.9
10. Central Harlem	30.0	29.2
12. Washington Heights	45.0	37.7
Other Manhattan	36.4	23.9
<u>Brooklyn</u>		
7. Sunset Park	73.0	13.8
8. Crown Heights	54.0	23.0
Other Brooklyn	29.8	27.7

In Brooklyn it was found that Section 8 buildings in Sunset Park and Crown Heights experienced substantially more suspicious fires than their controls. The proportion of Section 8 and control buildings that experienced such fires in the rest of the borough were approximately the same. In Manhattan, Section 8 buildings in West Harlem and the Upper West Side experienced more suspicious fires than their controls, although other Manhattan Section 8 buildings not in Central Harlem or Washington Heights also demonstrated an increased incidence of fires.

5. Effect of Economic Factors

a. Tax Arrears

In general, increased real estate tax arrears is a predictor of suspicious fires. In Section 8 buildings the reverse was true. Among buildings less than 9 quarters in arrears, Section 8 buildings experienced significantly more suspicious fires than controls. For buildings more than 8 quarters in arrears there was no significant difference between program and control buildings at the .05 level. Additionally, a direct relationship between arrears and suspicious fires existed among control buildings. Greater arrears predicted significantly more fires. Among Section 8 buildings, however, greater tax arrears was associated with fewer suspicious fires (Appendix A, Table 3-16).

These findings are consistent with the relative frequency of suspicious fires found in different groups of buildings receiving Section 8 subsidies. In comparing the incidence of suspicious fires in

buildings that were privately owned prior to rehabilitation versus those that were under City ownership it was determined that privately owned buildings had more suspicious fires than in rem buildings. Table 3-17 illustrates this.

Table 3-17: Percent of Suspicious Fires by Ownership.
Section 8 Sample Only

<u>Suspicious Fires</u>	<u>Private Ownership</u>	<u>City Ownership</u>
none	34.7% (34)	57.7% (142)
one	23.5 (23)	24.0 (59)
more than one	41.8 (41)	18.3 (45)
total	100.0% (98)	100.0% (246)

chi-square=22.8 P=.0001 DF=2

City-wide, privately owned Section 8 buildings were 1.5 times as likely as City-owned Section 8 buildings to have had at least one suspicious fire. Privately owned Section 8 buildings were more than twice as likely as City-owned Section 8 buildings to experience more than one suspicious fire, although the incidence of a single fire was similar.

It should be noted that 92 of the 98 (93.9 percent) privately-owned buildings in the sample were submitted to HPD in 1979. These 92 buildings represented 34 percent of the 263 properties that received Section 8 subsidies in 1979. Fifty-four percent of these buildings experienced the type of fires described above. In 1980 only 3 of the 76 (3.9 percent) buildings that received Section 8 grants were privately-owned. Thirty percent of those 76 buildings experienced suspicious fires.

b. Occupancy

With the exception of buildings that were completely vacant, Section 8 buildings experienced more suspicious fires than controls regardless of occupancy (Appendix A, Table 3-18).

To continue this analysis a sub-sample of Section 8 buildings was drawn which included only NSA buildings and controls. All but one of the NSA applications were submitted during August and September 1979. To focus on fires prior to the submission of applications, fires were limited to those occurring from January 1, 1978 to September 30, 1979, a

21 month period. Almost three-quarters of the 183 buildings selected from this sample of NSA submissions were at least partially occupied in 1978, and 51.6 percent were more than half occupied (Appendix A, Table 3-19).

Ownership of these buildings in conjunction with occupancy prior to submission also appeared to be a factor in determining which buildings experienced fires. Although the number of buildings is too small to draw firm conclusions from, almost two thirds of the partially occupied privately-owned buildings experienced more than one suspicious fire prior to applying for NSA funds, compared to less than one quarter of the City-owned properties. Overall, only 15.4 percent of the partially occupied privately-owned buildings did not have at least one fire, compared to 38 percent of the partially occupied city-owned buildings (Appendix A, Table 3-20).

C. Regression Model

While it has been shown that some Section 8 NSA buildings, privately-owned Section 8 buildings, and Section 8 buildings in specific neighborhoods had more suspicious fires than non-program buildings, questions remain unanswered. For example, Section 8 buildings averaged more fires than similar buildings, but are fires endemic to the program, or reflective of specific characteristics? NSA buildings demonstrated increased susceptibility to fire, as did Section 8 buildings in Crown Heights and Sunset Park. Which of these factors, NSA or neighborhood, is more strongly related to the increased incidence of fires? Private ownership was related to suspicious fires, but the majority of privately owned buildings were NSA submissions. Are the results found due to each of the relationships or to the combination of both?

Because the sample included virtually every building selected for the Section 8 Program during a specific time period it represents the universe of Section 8 submissions. As a result, significance tests, which normally are used to indicate the degree of certainty with which a relationship found in a sample reflects similar relationships in the population, are irrelevant. Of greater importance are the regression coefficients which indicate how substantially the dependent variable is affected by each of the independent variables after all independent variables identified in the model are controlled. The dependent variable in each of the models that follows is the number of suspicious, incendiary, malicious, and unknown origin fires in each building in the sample from January 1, 1978 to December 31, 1981.

Model 1 tests whether Section 8 buildings in general had more fires than other buildings after building size, arrears status, and rate of occupancy are controlled. Although it has been shown that Section 8 buildings had more fires after each of these factors was controlled separately, it remains possible that it was the combined effect of these factors rather than program inclusion which caused fires in Section 8 buildings.

The variables included in Model 1 are:

Variable	Variable Description
MDWDUS	actual number of apartments, continuous
QTRS3	June 30, 1978 quarters of real estate tax arrears, uncoded, although the variable has been truncated at 16. More than 16 quarters coded as 17.
OCCURATE	1978 percent of apartments that are occupied, continuous
PGM	Dummy for Section 8 program building; Section 8 building=1, not a Section 8 building=0

The unstandardized regression coefficients associated with these variables are shown in Figure 1:

Figure 1: Effect of Program Inclusion on Suspicious Fires Controlling for Building Size, Tax Arrears, and Occupancy (N=4478)

Parameter	Parameter Estimate
Intercept	0.279 (0.063) * <17>
MDWDUS	0.017 (0.001) *
QTRS3	0.025 (0.004) *
OCCURATE	-0.001 (0.001)
PGM	0.405 (0.090) *
r-square=.111	

The regression coefficients can be interpreted as follows. Each additional apartment (MDWDUS) added .017 fires to the model. Each additional quarter of tax arrears (QTRS3) added 0.025 fires, and for every percentage of greater occupancy buildings had .001 fewer fires. Inclusion in the Section 8 program contributed an additional .405 fires. These figures should be viewed in comparison to the average number of fires for all buildings, .7, in order to gauge their relative importance.

<17> Parenthetical figures are the standard errors associated with each coefficient. An asterisk (*) indicates T significance at the .05 level.

Although this model demonstrates a relationship between the number of suspicious fires and Section 8 Program inclusion, NSA status and private ownership were also found to be related to fire incidence in prior analysis. In order to determine the importance of these factors a second model was formulated, which included the four variables in Model 1 plus two additional variables:

NSA	dummy for Section 8 NSA building; Section 8 NSA building=1, not a Section 8 NSA building=0
OWNERSHP	dummy for privately owned Section 8 building; privately owned Section 8 building=1, not a privately-owned Section 8 building=0

Figure 2: Effect of Program Inclusion, NSA Status, and Private Ownership, Controlling for General Risk Factors (N=4478)

Parameter	Parameter Estimate
Intercept	0.253 (0.062) *
MDWDUS	0.017 (0.001) *
QTRS3	0.031 (0.003) *
OCCURATE	-0.001 (0.001)
PGM	-0.226 (0.132)
NSA	0.300 (0.168)
OWNERSHP	1.487 (0.187) *

r-square=.126

As shown above, after controlling for NSA and ownership status, program inclusion actually accounted for .226 fewer fires. Being an NSA submission contributed .3 fires, while private ownership is responsible for 1.487 fires.

By applying this model it was possible to estimate the number of fires a building in the sample was expected to have under certain conditions. The equation represented by model 2 is:

number of suspicious fires =

$$0.253 (\text{constant}) + .017\text{MDWDUS} +$$

$$0.031\text{QTRS3} - .001\text{OCCURATE} - .226\text{PGM} +$$

$$0.300\text{NSA} + 1.478\text{OWNERSHP}$$

Assuming average building size (19 apartments), average tax arrears (5 quarters), and an average occupancy rate (75 percent), the expected number of fires for a City-owned Section 8 building which was not an NSA submission was:

$$0.253 + .017(19) + .031(5) - .001(75) - .226(1)$$

$$= .43 \text{ suspicious fires.}$$

If the building was a privately owned NSA submission the expected number of suspicious fires was:

$$0.253 + .017(19) + .031(5) - .001(75) - .226(1) + .300(1) + 1.487(1)$$

$$= 2.22 \text{ suspicious fires.}$$

Thus, although Section 8 buildings had more fires than other buildings, the reason was not that all Section 8 buildings had more fires, but that two specific categories of Section 8 buildings, NSA submissions and privately owned buildings, had more fires. Section 8 buildings not in either of these two categories had fewer fires.

In addition to NSA and privately-owned Section 8 buildings having high fire rates, Section 8 buildings in Sunset Park, Crown Heights, and West Harlem demonstrated a high incidence of fires. These factors were added to the model with the following variables:

- SUNPK dummy for Sunset Park; building in Sunset Park=1, Not in Susset Park=0
- CRHTS dummy for Crown Heights; Crown Heights=1, not Crown Heights=0
- WHAR dummy for West Harlem; West Harlem=1, not West Harlem=0
- PGMSUNPK interaction term PGM * SUNPK
- PGMCRHTS interaction term PGM * CRHTS
- PGMWHAR interaction term PGM * WHAR

The model obtained by adding these variables is shown in Figure 3.

Figure 3: Program by Neighborhood; Interaction Terms Added (N=4478)

Parameter	Parameter Estimate
Intercept	0.319 (0.065)*
MDWDUS	0.017 (0.001)*
QTRS3	0.030 (0.004)*
OCCURATE	-0.001 (0.001)
PGM	-0.271 (0.133)*
NSA	0.159 (0.186)
OWNERSHP	1.181 (0.225)
SUNPK	-0.163 (0.088)
CRHTS	-0.143 (0.069)*
WHAR	-0.304 (0.076)*
PGMSUNPK	1.048 (0.345)*
PGMCRHTS	0.319 (0.284)
PGMWHAR	0.718 (0.363)*

r-square=.131

With the exception of NSA, which dropped from .3 to .16, each variable carried over from Model 2 retained most of its strength. The drop in the regression coefficient associated with NSA can be explained by the fact that a substantial proportion of Section 8 buildings in Sunset Park and Crown Heights were NSA submissions. Because of this factor, a portion of the variance in suspicious fires that had been attributed to NSA is assumed by CRHTS and PGMSUNPK. Similarly, OWNERSHP drops somewhat because a substantial proportion of the Section 8 buildings in these neighborhoods were privately owned. This can be shown more clearly by adding two additional variables to the model. These variables are:

- NSASUNPK interaction term NSA * PGM * SUNPK
- PRIVWHAR interaction term OWNERSHP * PGM * WHAR

Figure 4, which shows the effect of these two variables is shown below:

Figure 4: NSASUNPK and PRIVWHAR Added
(N=4478)

<u>Parameter</u>	<u>Parameter Estimate</u>
Intercept	0.320 (0.065)*
MDWDUS	0.017 (0.001)*
QTRS3	0.030 (0.004)*
OCCURATE	0.001 (0.001)
PGM	-0.210 (0.134)
NSA	0.043 (0.193)
OWNERSHP	1.019 (0.238)*
SUNPK	-0.163 (0.088)*
CRHTS	-0.143 (0.069)
WHAR	-0.304 (0.076)*
PGMSUNPK	-0.744 (0.712)*
PGMCRHTS	0.455 (0.286)
PGMWHAR	0.136 (0.460)
NSASUNPK	2.291 (0.742)*
PRIVWHAR	1.582 (0.700)*

r-square=.134

The addition of NSASUNPK and PRIVWHAR causes two meaningful changes in the model.

First, after controlling for the interaction term NSA * PGM * SUNPK (NSASUNPK) the interaction term PGM * SUNPK (PGMSUNPK) no longer contributed an additional 1.048 suspicious fires, but rather predicted .744 fewer fires. This happened because of two opposite effects. NSA buildings in Sunset Park (31 buildings, 86 percent of the total) had more suspicious fires, while the five non-NSA program buildings had

fewer fires. Prior to including NSASUNPK in the model these effects were subsumed under PGMSUNPK, which generally predicted more fires, but not as many more as NSASUNPK. It was the NSA buildings in Sunset Park, and not the Section 8 NOFA buildings in that area that were fire prone.

Second, after controlling for the interaction of OWNERSHP * PGM * WHAR (PRIVWHAR) the regression coefficient for the interaction of PGM * WHAR (PGMWHAR) drops from .719 to .136. Within the total number of Section 8 buildings in West Harlem it was those buildings that were privately owned that accounted for most of the fires. Private ownership of Section 8 buildings in West Harlem, however, added 1.582 fires. After controlling for this factor, PGMWHAR contributes only .136 fires.

It would have been possible to follow the same type of procedure in Crown Heights to isolate the independent effects of NSA and OWNERSHP, but this would not have been practical. In Crown Heights the majority of Section 8 buildings were NSA submissions and privately owned. There was no one factor that accounted for the increase in fires in Crown Heights. Rather, it is the additive effect of NSA and OWNERSHP on all Crown Heights buildings that combine to predict more fires.

Model 5 eliminated the weaker effects of PGMSUNPK, NSA, and PGMWHAR, while including the much stronger effects of the interactions found to contribute most strongly to fire (PRIVWHAR and NSASUNPK). An additional variable,

OCCUPGM interaction term PGM * OCCURATE

was added. The final model is shown in Figure 3-5:

Figure 5: Interaction of Program and Occupancy Added
(N=4478)

<u>Parameter</u>	<u>Parameter Estimate</u>
Intercept	0.370 (0.067) *
MDWDUS	0.017 (0.001) *
QTRS3	0.030 (0.004) *
OCCURATE	-0.001 (0.001)
PGM	-0.508 (0.154) *
OWNERSHP	0.869 (0.228) *
SUNPK	-0.166 (0.087)
CRHTS	-0.143 (0.069) *
WHAR	-0.303 (0.075) *
NSASUNPK	1.684 (0.337) *
PGMCRHTS	0.557 (0.261) *
PRIVWHAR	1.816 (0.545) *
OCCUPGM	0.006 (0.002) *

r-square=.136

The addition of OCCUPGM suggests a relationship between suspicious fires, program inclusion, and occupancy. In program buildings an increased occupancy signalled more suspicious fires. For non-program buildings increased occupancy was associated with a decrease in the number of fires. For each additional percentage of occupancy, control buildings had .001 fewer suspicious fires. The effect of occupancy on program buildings was quite different. Each additional percentage of occupancy in Section 8 buildings added .006 suspicious fires. This is consistent with the hypothesis that fires in occupied Section 8 buildings drove tenants out.

The regression coefficient of -0.508 associated with PGM indicates that Section 8 buildings in general were less susceptible to suspicious fires than other buildings, except under several conditions. Private ownership prior to application more than counterbalances the decrease in suspicious fires among program buildings in general by adding .869 fires

if the building was privately owned. Given that 97 of 331 buildings in the sample (29 percent) were privately owned and that the average number of fires was .71, this is not a trivial effect. Private ownership more than doubled the expected number of fires.

The general equation for model 5 is:

Number of Suspicious fires

$$= 0.370(\text{INTERCEPT}) + .017 \text{ MDWDUS} + .030 \text{ QTRS3} - .001 \text{ OCCURATE} - 0.508 \text{ PGM} + .869 \text{ OWNERSHP} - .166 \text{ SUNPK} - .143 \text{ CRHTS} - .303 \text{ WHAR} + 1.684 \text{ NSASUNPK} + .557 \text{ PGMCRHTS} + 1.816 \text{ PRIVWHAR} + .006 \text{ OCCUPGM}$$

By applying average building size, tax arrears, and occupancy, a City-owned Section 8 building not in any of the three neighborhoods specified had an expected number of fires of:

$$0.370 + .017(19) + .030(5) - .001(75) - 0.508(1) + .006(75)$$

$$=.71 \text{ suspicious fires.}$$

If the building was privately owned the expected number of fires was:

$$0.370 + .017(19) + .030(5) - .001(75) - 0.508(1) + .869(1) + 1.684(1) + .006(75)$$

$$=3.26 \text{ suspicious fires.}$$

Although statistically significant relationships between the program-related variables and the occurrence of suspicious fires are suggested, a cautionary note is necessary. The R-square values obtained by the five models shown are low, indicating that only a small portion of the variability in the number of suspicious fires can be associated with the variables and interaction terms employed. There are many sources of variation in why fires occur, but these models only account for some of these sources. This is not to say that program-related effects are spurious, but rather to acknowledge that such factors are only some of the many causes of suspicious fires, and not necessarily the most important.

V. Findings, Conclusions, Recommendations

A. Comparative Fire Incidence

1. Although Section 8 buildings experienced more suspicious fires than control buildings, this relationship was not due to a common propensity among all Section 8 buildings to have an elevated incidence of suspicious fires, but rather to a predisposition among specific classes of buildings within Section 8 to have more fires.

Although buildings in the Section 8 Program averaged more fires than other buildings (before controlling for extraneous variables), this effect was associated with specific classes of buildings--those that were NSA submissions, privately owned, or in specific neighborhoods. After these factors were controlled, buildings in the Section 8 Program that were not in any of these categories had 0.508 fewer fires than other buildings.

2. Buildings that were privately owned prior to the submission of a Section 8 application showed a higher incidence of suspicious fire activity than both other Section 8 buildings and non-Section 8 buildings after neighborhood, building size, tax arrears, occupancy, and program status were held constant.

Private ownership of Section 8 buildings added .869 to the number of fires expected. This is not a trivial increment given that the average number of fires in all buildings in the sample was .7. It suggests that owners of privately owned buildings, sensing the opportunity for substantial profits from Section 8, may have promoted fires to empty their buildings to prepare them for Section 8.

In 1979 New York City's HPD initiated a policy of selecting in-rem (City-owned as a result of tax foreclosure proceedings) properties. Under this policy, the City attempted to provide rehabilitation housing for low income tenants, and decrease its inventory of City-owned buildings. Limiting Section 8 substantial benefits to City-owned buildings also eliminated the potential for vacating these buildings through diminished services and maintenance because these buildings were under City management. As a result, opportunities to exploit the program through harassment and intentional fires were reduced.

3. NSA submissions were more susceptible to fire.

This finding is not a clear-cut as findings one and two above. Although being an NSA submission added .3 fires prior to the addition of PGMSUNPK, PGMCRHTS, and PGMWHAR, the variable NSA lost most of its

strength after controlling for these factors. This was due to the fact that more than half of the NSA buildings City-wide were in these areas (see Finding 4 below). This can be demonstrated using Sunset Park as an example. Model 3 attributes .3 additional fires to NSA status. In model 4, after controlling for the effect of NSA buildings in Sunset Park that effect drops to 0.04. Thus, while NSA status added fires generally, the effect was most strongly seen in Sunset Park, which had 31 NSA buildings, and where the interactive effect of NSA status plus being in Sunset Park added 1.7 fires per NSA building above the .04 fires generally attributed to NSA status. In general, being an NSA submission created additional arson susceptibility because these buildings were more likely to be privately-owned and in Crown Heights and Sunset Park.

4. Program buildings in Crown Heights, NSA buildings in Sunset Park, and privately-owned Section 8 buildings in West Harlem demonstrated increased suspicious fire activity above and beyond the increase associated with private ownership or NSA status alone.

As model 4 demonstrates, even after controlling for the general effects of NSA and private ownership, these three classes of buildings had more fires than other buildings.

5. Although increased occupancy generally (but not to a statistically significant extent) is associated with fewer suspicious fires, it is associated with an increased incidence of suspicious fires in Section 8 buildings.

Non-Section 8 buildings had .001 fewer fires for each additional percentage of occupancy. Section 8 buildings, however, had .006 more suspicious fires for each additional percentage of occupancy, a much stronger effect. If fires were related to the emptying of Section 8 buildings, then it seems reasonable to believe that as occupancy increased so did the incentive to promote fires. If more fully occupied Section 8 buildings were more susceptible to the pattern of harassment/eviction discussed previously, and if fire was a part of that pattern, it explains the increase in fire incidences as occupancy increases.

B. Selection Policy

1. The targeting of NSAs 15 months prior to the deadline for submitting Section 8 applications alerted some developers that buildings they wanted to rehabilitate would have to be vacant. Such targeting was required by HUD regulations, but it afforded some developers time to ensure that their properties were vacant.

2. Limiting Section 8 substantial benefits to City-owned buildings

eliminated the potential to vacate these buildings through diminished services and maintenance because these buildings were under City management. As a result, opportunities to exploit the program through harassment and intentional fires in City-owned buildings was limited.

3. Although the policy of selecting vacant in rem structures was adhered to in NOFA selections, half of the NSA selections were privately owned, partly because of the dearth of in rem buildings in some of the target areas. Owners in this situation had little incentive to continue regular repairs if they believed their buildings were about to be substantially rehabilitated. This, too, may have contributed to the increased number of fires.

4. The belief that HUD and HPD would prefer vacant buildings, the level of rehabilitation the program was designed to assist, and the inability to adhere to the in rem selection policy, each may have contributed to tenant displacement.

Developers became aware of neighborhoods that would receive NSA funds as early as May of 1978 (and possibly earlier), although proposals were not required until September of 1979. Additionally, City documents made public that year stipulated that vacant buildings would receive priority. Owners of occupied properties were forewarned at least fifteen months prior to the submission deadline that, it would be preferable, in order to receive funds, for the buildings they proposed for rehabilitation to be vacant.

Removing tenants from occupancy is not an easy or immediate process. One illegal method of doing so is to persuade tenants that living conditions will deteriorate, and to create the fear that continued residence is dangerous. As has been illustrated, some owners apparently encouraged the physical destruction of their properties through withdrawal of rudimentary services which may have resulted in suspicious fires. In some buildings incendiary fires caused substantial damage.

In essence, the policy designed to protect tenants from displacement may have inadvertently resulted in forced displacement. This may be attributed to unavoidable deviations from the policy of awarding Section 8 allocations to in rem properties. Selecting City-owned properties might have prevented owners from profiting by harassment and intentional fires. Instead, an insufficient inventory of City-owned buildings in some target areas necessitated the acceptance of privately owned properties for Section 8 awards. This created strong incentives to produce vacant buildings which were eligible for program entry and in need of substantial rehabilitation.

Recommendation S8-1: The City should continue to adhere to its policy of granting substantial rehabilitation assistance to City-owned properties, as should other municipalities containing large inventories of publicly-owned residential structures.

The Section 8 Program demonstrated some of the pitfalls of awarding large substantial rehabilitation grants to privately-owned properties. In 1979 34 percent of the buildings in the sample studied that received Section 8 substantial rehabilitation assistance were privately-owned. More than half of these buildings experienced suspicious fires. In 1980 only four percent of the buildings that received Section 8 for substantial rehabilitation were privately-owned. Only 30 percent of the 1980 submissions had suspicious fires.

Recommendation S8-2: Programs that target subsidies and loans to vacant buildings within specific areas should restrict approval to buildings that are vacant when neighborhoods are selected, or when it can be demonstrated to be a special case under predetermined criteria.

Recommendation S8-3: If the selection of target areas for substantial rehabilitation is longstanding, project approval should be contingent on a determination that the owner did not intentionally cause tenant abandonment.

C. Applicant Screening

1. HUD guidelines for evaluating NOFA submissions did not require review of tenant harassment allegations or fire histories. This procedural omission potentially allowed owners to exploit the program's goals and promoted its arson susceptibility.

2. Although applicants for NSA funds submitted disclosure statements, approval was given to individuals whose buildings had numerous intentional fires, and who were the subject of harassment proceedings. This problem was subsequently addressed by the City policy of not granting government rehabilitation funds to individuals found guilty of harassment.

3. Fire history reviews prior to 1982 did not detect arson abuse.

4. Applications were not reviewed to determine if the owner's actions caused tenant abandonment or deterioration of their buildings.

Applicants who submitted privately-owned buildings for rehabilitation in response to the HUD NOFA were not subject to the disclosure process. Instead, HUD evaluated proposals based on the developers' prior experience, financial status, etc. There was no examination of project principals' involvement in harassment proceedings, or of the buildings' fire histories.

The City required form Dev-2, the disclosure statement, from sponsors and principals of NSA projects. The forms provided information on corporate affiliations, harassment proceedings, and other indicators of an applicants eligibility. Completed statements were reviewed by the

Inspector General of HPD. As indicated by case studies, applicants with questionable records of ownership and management received Section 8 approval. This was due in part to the absence of selection criteria addressing this problem prior to 1980.

It may also be attributed to procedural weaknesses in the disclosure process. Developers were required to indicate past or present involvement in harassment proceedings on the Dev-2. Subsequent forms did not refer specifically to harassment, but requested only affirmation of previous admissions. Harassment is an important indicator of an individual's mode of operation and a potential indication of attempts to exploit the program. It is critical that an applicant be questioned explicitly about harassment in both the loan property and other buildings. Another shortcoming was the cursory examination of fire histories. The information provided by DFI was inadequate to permit analysis of the role of arson in vacating a property.

The withholding of heat, hot water, security, and repairs is an effective means of coercing tenants to vacate. It also engenders fire by neglect through negligence in maintaining the incinerator, elevator, boiler, and allowing vagrants entry to unlocked buildings. Harassment may also entail suspicious and incendiary fires designed to force tenants to vacate quickly and to increase the level of renovation needed. Harassment takes on added significance when an individual who has engaged in such actions applies for rehabilitation assistance. Questions must be raised to determine if the harassment was an attempt by the owner to force tenant abandonment.

HPD's evaluation of NSA submissions did not address "harassment evictions", primarily because proposals were reviewed solely for compliance with HAP criteria. In the June 1980 HAP, after HPD became aware of the problem, a formal policy was made that no rehabilitation assistance would be given to individuals against whom harassment or displacement charges had been alleged until such charges were dismissed or settled. The lack of criteria addressing these factors prior to that date allowed some owners to benefit from illegal and unethical practices.

Recommendations S8-4: Federal, state, and local housing agencies should require documentation that buildings selected for substantial rehabilitation programs, whether funded under categorical or block grants, have not been vacated through arson or other forms of harassment prior to or subsequent to selection.

Recommendation S8-5: If an applicant is the subject of a judicial, criminal, or administrative harassment proceeding, no project approval should be given until a thorough investigation is completed. This policy should be explicitly included in Federal, state, and local housing regulations.

Recommendation S8-6: A judicial, administrative, or criminal

determination of harassment against an individual should result in the exclusion of that individual and any corporate entity of which he or she is a principal from government housing rehabilitation assistance.

Recommendation S8-7: Federal, state, and local housing agencies should require disclosure statements (similar to those described in Chapter 7) from all applicants for government housing rehabilitation assistance and should verify all disclosed information. Individuals who knowingly provide false information on disclosure statements should be excluded from loan or subsidy programs, and be prosecuted to the fullest extent of the law.

Recommendation S8-8: Submission of vacant privately owned buildings for subsidized substantial rehabilitation should initiate a thorough review by the granting agency to determine when the building became vacant and under what conditions.

Recommendation S8-9: No elected or appointed public official who is, or has been, involved in selection or approval of buildings to receive subsidized substantial rehabilitations, nor an individual who held the position within the last three years, nor his/her immediate family should be allowed to act as general or limited partner, corporate stockholder, developer, contractor or sponsor of a Section 8 project in their own city.

Some housing officials indicated that they believed that community support was very important in the development of low income housing projects. They also indicated that involving members of the community boards was one way of eliciting such support. They felt that the opportunity for misfeasance was limited by the requirement that such individuals had to receive City Board of Ethics approval.

Although the value of achieving community support is recognized as being extremely important, the problems inherent in awarding lucrative housing assistance grants to individuals involved in the selection and approval process are obvious. Persons with direct involvement in the decision making process are in a position to exploit their inside knowledge for personal gain, conceivably to the detriment of the community at large. Other methods should be considered to elicit community support. >G>

CHAPTER FOUR: THE PARTICIPATION LOAN PROGRAMI. Program DescriptionA. Program History

The Participation Loan Program (PLP) was created in 1976 to reverse the process of private sector disinvestment in New York City neighborhoods. Authorized under Article XV of the New York State Private Housing Finance Law, it was designed to attract private funds for housing rehabilitation by utilizing federal money to leverage private rehabilitation loans.

The concept of combining private and government funds has produced a significant number of rehabilitated apartments. The 1982 Mayor's Management Report^{<1>} indicated that the program has generated almost \$100 million dollars in rehabilitation loan commitments using only \$28.7 million in public funds.

Participation Loan Projects range from moderate to substantial rehabilitation and have been cost effective both in terms of dollars spent and social costs. The average PLP construction cost per apartment is currently about \$16,000, compared to \$40,000-\$55,000 per unit for Section 8 substantial rehabilitation.^{<2>} Moreover, because City funds are used to leverage private funds from savings banks, savings and loan companies, and insurance companies the cost in government funds is reduced. Social costs are minimized because the program encourages moderate rehabilitation with tenants in place, although some loans for gut rehabilitation and loft conversion have been approved.

The program has grown steadily since its inception. In Fiscal 1980, rehabilitation began on 1904 apartments, compared to 277 units during the first year of the program, 1977. A total of 6643 units were started during Fiscal 1981 and 1982.^{<3>}

B. Benefits Structure

The Participation Loan Program provides benefits directly through low-interest loans, and indirectly through J51 exemptions (see Chapter Five) and rent restructuring.

Under J51 moderate rehabilitation is eligible for a 32 year exemption from increases in real estate taxes resulting from rehabilitation plus a tax abatement equal to 100% of the HPD certified cost of improvements. If the building is less than 60% occupied during construction, the

^{<1>} Mayor's Management Report, published semi-annually by the Mayor's Office of Operations to report on agency achievements and performance problems.

^{<2>} ibid., p. 169

^{<3>} ibid., p. 169

exemption is for 12 years and the abatement is equal to 90% of the certified cost of improvements. In some cases, benefits are limited by statutory provisions reducing unnecessary J51 tax incentives in prime neighborhoods.

Under PLP the City uses Community Development Block Grant (CDBG) funds to finance up to 60 percent of the rehabilitation cost at nominal interest rates, usually one percent. When combined with a market level private sector loan, this arrangement decreases total financing costs. Additionally, the developer may take advantage of tax benefits generated by project syndication, which provides increased profits for investors. To guarantee the building's economic life, rents are restructured to permit adequate ongoing maintenance, management, and debt service coverage, and become rent stabilized.

C. Selection Policy/Criteria

All applications are subject to review to determine whether public financing is necessary to make the project economically feasible and whether it contributes to the accomplishment of the City's Community Development priorities outlined in the HAP.

Under HAP guidelines priority is given to projects targeting the following:

- elimination of slums and blight and/or for the benefit of low to moderate income people,
- buildings in Neighborhood Preservation or Neighborhood Strategy Areas or transitional areas,
- buildings with ten or more units,
- buildings in proximity to past or planned public or private investment, and
- buildings located on blocks where other occupied or privately owned buildings exist.

D. Application Processing <4>1. Application and Intake

Once an application for a building in a Neighborhood Preservation Area (NPA) is submitted, it is examined with respect to its suitability to the neighborhood. If it is not in a NPA, it is reviewed for planning

^{<4>} PLP Processing Package specification. Department of Housing Preservation and Development, 1981.

approval which, when given, initiates an examination of the building by an HPD rehabilitation specialist. The rehabilitation specialist's report is the basis for negotiations concerning the scope of work between the owner and HPD.

2. Pre-Commitment

Preliminary review and acceptance of the proposal must be completed prior to commitment. For this purpose, a pre-commitment package containing the Article XV Loan Submission form (Pre-Commitment), approved planning review, PLP application, and applicant disclosure statements is submitted to the Program Director to obtain a feasibility letter. The feasibility letter summarizes the proposal to be presented to the Commissioner, and indicates the date for which funds should be budgeted pending formal commitment.

After the PLP Director receives the pre-commitment package from the developer he forwards the Disclosure items to the HPD Inspector General (I.G.) for review, investigation, and standard clearance. Upon completion of this review, findings are presented to the Program Director.

3. Commitment

A Final Submission Package is prepared for evaluation by the Program Director, Loan Coordinators, Director of Housing Supervision and Assistant Commissioner for Development. The package contains updated versions of all items in the Pre-Commitment package, as well as the Article XV Loan Submission form (Commitment), and letters of intent or commitment from the permanent and construction lenders.

4. Construction Loan Closing

Once the commitment for a permanent long-term (usually 15-25 years) mortgage is obtained from HPD and the participating lender, a package consisting of necessary letters of commitment, a current financial schedule, a construction contract, and HPD documents is prepared to close the construction loan. The Inspector General's evaluation of the applicant's suitability is required at this point.

5. Construction Monitoring

The property is inspected weekly by HPD's Division of Engineering and Architectural Services, and bi-monthly by the lending institution's Supervising Engineer to verify compliance with the scope of work specified in the loan agreement, to estimate progress, and if necessary, to amend the original scope of work.

6. Permanent Loan Closing

Once construction is completed, the City's funds are released from escrow and combined with the private lender's funds to form a joint permanent mortgage on the property.

II. Risk Factors

A. Applicant Screening

The applicant's disclosure statement furnishes information on all properties owned by the applicant, including code violations, tax arrears, financial history, corporate relationships, past City rehabilitation projects, and fire insurance claims.

The I.G.'s office reviews the information and requests supplementary reports from the Department of Investigation, the Arson Strike Force, relevant District Attorney, and the City Commission on Human Rights. The I.G. then submits his recommendation, which is required before the loan closes. Applicant screening has generally been effective due to the fairly extensive information required from applicants and supplementary reports obtained from other sources.

The review and clearance schedule as outlined in the PLP processing manual is a matter of concern. In the majority of cases there is nothing disclosed that would indicate the need to reject the loan application and clearance is fairly routine. If the determination of an applicant's merit is more complicated, requiring the I.G. memo at the construction loan closing could pose problems, and has in the past. During 1978-79 pending loans were cleared on the basis of prior loan reviews within the past six months if no additional information had been received. The problem with this process stemmed from the fact that because clearance was almost a certainty, the program director sometimes delayed submitting clearance requests to the Inspector General until shortly before the scheduled closing. Although this may have been a practical policy for applicants with unquestionable backgrounds, it presented problems for screening individuals with dubious records and a history of fires in their properties. Such screening was also effective only if the previous review was thorough.

The processing of one PLP illustrates how the review and clearance schedule was ineffective:

9-13-79 PLP application submitted

- 3-4-80 Letter issued stating that Community Preservation Corporation <5> loan committee approved loan at 2-26-80 meeting
- 6-4-80 Joint Commitment letter from HPD and CPC states that construction loan will close by 8/1/80
- 7-25-80 Memo from program director to HPD Inspector General requests expedited clearance
- 7-28-80 Inspector General issues verbal approval pending DFI (Fire Department Division of Fire Investigation) report of fire history
- 7-29-80 Construction loan closed
- 8-18-80 Memo from investigator to Inspector General; details fire history of buildings and applicant's involvement with indicted arsonists. Inspector General recommends "we (HPD) not do business with (owner)"
- 10-23-80 Affidavit submitted by owner denying knowledge of accused arsonists' activities
- 7-23-81 Permanent loan closing

The request for clearance on July 25, 1980, only six days before the scheduled loan closing, prevented an extensive investigation at that time. When a thorough investigation was completed subsequent to the loan closing it resulted in a recommendation that the loan not be granted.

The processing schedule in this illustration was not unique. A partial search of the remaining PLP sample revealed 4 additional instances in which the program director requested I.G. clearance less than 15 days before the construction loan closing date, 2 other instances in which the clearance request was made after loan closing, and two further instances in which there exists no record of a request for an I.G. clearance. Additionally, it appears likely that the clearances on two of the loans in this group were based on the reviews of two prior loan applications also within this group.

An additional twenty-three PLP's were randomly selected and referred to the I.G. in order to obtain clearance request dates. The majority of these properties received commitment in 1980. Twenty of the 23 properties were submitted for clearance an average of three and a half months prior to closing, indicating that sufficient time was available for applicant screening. Two properties did not undergo the screening process because the applicants were not-for-profit corporations, a

<5> A private not-for-profit corporation created in 1974 to provide residential mortgages and rehabilitation financing.

policy which has since been discontinued. The review process had not yet been implemented in 1978 when the remaining loan closed.

It is apparent that HPD has made efforts to eliminate the problems associated with the disclosure/investigation process followed during 1978-79. This has been the result of greater cooperation between the Inspector General and program staffs. The outgrowth of this cooperative effort has been the submission of clearance requests by program staff prior to commitment, a policy which is not mandated or present in formal regulations, but which is viewed as necessary to provide adequate time for background screening.

B. Guidelines

Effective applicant screening is dependent on clearly defined guidelines upon which loan evaluations can be based. Increased time for investigation is futile unless criteria for granting or denying a loan are understood and adhered to.

Discussions with housing officials revealed that although factors that negatively effect an evaluation are recognized informally, there are no formal review criteria. Factors taken into account include tax arrears, the repayment of past loans, and harassment allegations. None of these factors in and of themselves are viewed as sufficient to reject an application. HPD does require, however, each applicant to fulfill all existing tax and loan obligations prior to loan commitment.

C. Construction Monitoring

Fires during construction are not brought to the attention of the Inspector General, precluding the possibility of investigation. This occurs, in part, because program officials are often unaware of fires. An example of this was a PLP which experienced seven fires during construction. Although two were tenantrelated, construction negligence may have been responsible for several others and should have caused concern among those overseeing the project.

Inspections of PLP's under construction are performed weekly by HPD's Division of Engineering and Architectural Services to confirm that the negotiated scope of work is being complied with and to ensure its quality. Additional bi-monthly monitoring is provided by the Supervising Engineer who represents the lender and whose main task is to make certain that approved plans and specifications are adhered to. Buildings that experience fires that are incendiary or suspicious or caused by construction negligence do not receive special attention, but continue to be routinely monitored. Insurance claims are signed off on by the City and participating lender and transferred to the developer to repair fire damage. This has occurred in at least two cases in which fires caused considerable damage in nearly completed rehabilitations and

resulted in insurance payments of approximately \$10,000<6> and \$70,000.<7> Because insurance claim investigations are the jurisdiction of the insurer, the City is often not apprised of the pertinent facts of claims resulting from the fires.

III. Anti-Arson Measures by New York City

The City has demonstrated its awareness of the problem of fires in rehabilitated buildings by implementing procedures designed to uncover suspicious fire patterns in an applicant's properties. The process entails an exchange of information between the Inspector General and agencies mandated to investigate and prevent arson. Prior to September 1982 the dates of fires at each address under loan application were provided by the Fire Department's Division of Fire Investigation (DFI). Because of the relative ineffectiveness of fire dates without cause or damage codes, the procedure was revised. The Arson Strike Force now furnishes complete and detailed information to the I.G. at HPD. Currently, the address of each building under application as well as the addresses of the applicant's other real estate holdings are submitted to the Arson Strike Force which compiles a complete fire profile of each.

IV. Data Analysis

A. Sample Characteristics

The sample of properties used in this analysis contained 2,089 buildings, 121 of which received Participation Loans. It included all Bronx, Brooklyn, and Manhattan buildings that obtained loan commitments during Fiscal 1979, 1980, and 1981 and remained in the pipeline as of May 1982. There were only five Participation Loans granted in the Bronx during this period.

B. Suspicious Fire Determinants

1. Effect of Program Status

Participation Loan buildings experienced significantly more suspicious fires than control buildings in Brooklyn and slightly more (but not significantly more at the .05 level) in Manhattan. The total number of Bronx loans (five) was too small for statistical analysis. In Brooklyn, PLPs experienced 1.5 times as many occurrences of suspicious fires as controls (Appendix A, Table 4-1) and were more likely to have

had multiple suspicious fires (Appendix A, Table 4-2). This general relationship between program status and suspicious fires in Brooklyn disappears, however, after additional controls are applied, as is shown below in the sections on the effect of neighborhood and ownership. In Manhattan the general relationship between program inclusion and fires (Appendix A, Table 4-3) was not very strong (chi-square=4.63, P=.098).

2. Effect of Neighborhood

The frequency with which any building suffers suspicious fires is, in part, a function of the surrounding neighborhood. In order to ascertain the extent to which location was associated with the number of suspicious fires in buildings that received Participation Loans, an examination was made of fires in program and control buildings by neighborhood (defined by Community Board). It was found that program buildings, while widely dispersed, experienced the same number of suspicious fires as non-program buildings in each Community Board examined, with the exception of two neighborhoods in Brooklyn.

In all, 23 of the 48 (47.9 percent) Participation Loan buildings in Brooklyn experienced at least one suspicious fire. Seventeen of the 23 (74 percent) buildings, however, were in Crown Heights or Flatbush (Appendix A, Table 4-4). Ten of 15 PLP buildings in Flatbush (67 percent) and 7 of 9 PLP buildings in Crown Heights (78 percent) experienced at least one suspicious fire. Only 4 of 24 buildings (16.7 percent) that received Participation Loans in the rest of Brooklyn experienced suspicious fires, a rate equivalent to control buildings.

Each of the buildings that received a Participation Loan in Crown Heights was fairly large, making it appropriate to compare these buildings to other buildings of similar size. After controlling for building size, however, the relationship between the program and fires disappeared, suggesting that larger buildings in Crown Heights generally suffered a rash of fires during the period examined, not just PLP buildings (Appendix A, Table 4-5).

<6> Confidential Source

<7> Interview with Program Officials, June 1982.

Such is not the case in Flatbush as Table 4-6 demonstrates.

Table 4-6: Flatbush Participation Loan and Control Buildings by Fire Incidence (1/1/78-12/31/81) and Building Size

<u>Suspicious Fires</u>	<u>3-16 Units</u>		<u>Over 16 Units</u>	
	<u>PLP</u>	<u>Control</u>	<u>PLP</u>	<u>Control</u>
None	40.0% (2)	63.3% (19)	30.0% (3)	40.9% (36)
One	20.0 (1)	23.3 (7)	10.0 (1)	26.1 (23)
more than one	40.0 (2)	13.3 (4)	60.0 (6)	33.0 (29)
Total	100.0% (5)	99.9% (30)	100.0% (10)	100.0% (88)

Although the incidence of one suspicious fire was about the same in the smaller buildings and larger control buildings had more than twice as many single occurrences of one suspicious fire, PLP buildings in Flatbush that received Participation Loans experienced a higher incidence of multiple suspicious fires regardless of size. No determination of statistical significance was possible because of the small number of PLP buildings in Flatbush. The analysis of PLP buildings in Flatbush was considered ambiguous pending regression analysis.

3. Other Factors

Analysis of applicant screening suggested that it might be possible for developers, whose buildings had histories of suspicious fires, to receive Participation Loans during the period examined. Ownership patterns were reviewed wherever possible to explore this possibility. It was not possible to determine ownership in most cases because of interlocking corporate ownerships. It did, however, appear that buildings owned by three developers in Brooklyn experienced what seemed to be a disproportionately high number of fires. Six of the 23 Brooklyn Participation Loans that experienced suspicious fires were in buildings owned by three developers with 9 buildings in the sample, 8 of which were in Brooklyn. These 8 buildings represented less than 17 percent of the total buildings in the Brooklyn Participation Loan sample. Fifty percent (36 of 72) of all fires in Participation Loan buildings in Brooklyn during the time period studied were in these 8 buildings.

Table 4-7 shows the distribution of fires in Brooklyn Participation Loan buildings of more than 25 units when one of these 3 developers was the owner.

Table 4-7: Percent of Suspicious Fires (1/1/78-12/31/81), Buildings in Brooklyn PLP Over 25 Units, by Ownership

<u>Suspicious Fires</u>	<u>Three Owners</u>	<u>Other Owner</u>
None	25.0% (2)	50.0% (7)
One	12.5 (1)	28.6 (4)
more than one	62.5 (5)	21.4 (3)
Total	100.0% (8)	100.0% (14)

Even within this group of larger buildings that experienced quite a few suspicious fires, properties owned by these 3 developers stand out. Three quarters of their buildings had at least one suspicious fire, compared to half of the buildings with other owners. Almost two thirds of their buildings experienced more than one suspicious fire, a rate almost three times as high as for other owners. The average number of suspicious fires per building owned by these developers was 4.5, compared to 1.5 fires per building among others of comparable size. Once again, however, the number of PLP buildings in Brooklyn is too small to make an accurate determination of statistical significance. It should be remembered that these data are insufficient (see Limitations of the Study, Chapter Two) to state that these fires were caused by the owners actions. Alternative explanations, including landlord/tenant disputes, vandalism by other parties, and juvenile mischief are possible. As a result, uncertainty as to how to properly interpret these patterns remained, pending analysis using regression methods.

C. Regression Model

A regression model was formulated to account for the number of suspicious fires from 1/1/78 to 12/31/81 by:

- whether it received a Participation Loan,
- who the owner was,
- whether the building was in Flatbush or Crown Heights,

- how many apartments the building contained, and
- how far behind on its tax payments it was in 1978.

Variables representing these factors were:

<u>Variable Name</u>	<u>Variable Description</u>
MDWDUS	number of apartments
QTRS3	cumulative quarters of tax arrears (6/30/78); more than 16 quarters coded as 17
PGM	dummy for program building (in program=1, not in program=0)
OWNER	dummy for three developers (program building owned by one of three developers=1, all other buildings=0)
FLATBUSH	dummy for building in Flatbush (building in Flatbush=1, building not in Flatbush=0)
CROWNHTS	dummy for building in Crown Heights (building in Crown Heights=1, building not in Crown Heights=0)
PGMFLAT	dummy for building with participation loan in Flatbush (program building in Flatbush=1, all other buildings=0)
PGMCRHTS	dummy for building with Participation Loan in Crown Heights (program building in Crown Heights=1, all other buildings=0)

The variables included in the model were selected on the basis of the arson risk factors described previously, the ARPI-related control factors discussed in Chapter Two, and the general analysis of fire patterns.

MDWDUS and QTRS3 were included because they appear to predict the number of suspicious fires a building will have in general. Additionally, Participation Loan buildings were found to be larger, on the average, than other buildings. If the model did not control for building size the increase in suspicious fires due to size would have erroneously been attributed to program inclusion.

FLATBUSH and CROWNHTS and their interactions with PGM (PGMFLAT, PGMCRHTS) were included because Flatbush and Crown Heights were neighborhoods where the incidence of suspicious fires among buildings that received Participation Loans differed markedly from the suspicious fire incidence among other buildings.

The variable OWNER stems from analysis suggesting that fire rates may vary by owner.

The dependent variable in this analysis is the actual number of suspicious, incendiary, malicious and unknown origin fires each building experienced between January 1, 1978 and December 31, 1981.

In order to determine the unique contribution of each of these factors, an additive model was employed. Such a model tells how much each variable contributes to the number of fires expected in a building when all other variables are held constant.

The sample contained every building with at least three apartments on every tax block on which a building received a Participation Loan between July 1978 and June 1981. It included 1,925 buildings, 119 of which received a Participation Loan in the Bronx, Brooklyn, or Manhattan. The results obtained from applying the model to this sample are shown below in Figure 4-2. These are not, however, the final results.

CONTINUED

1 OF 2

Figure 4-2: Preliminary Participation Loan
Regression Model
(N=1925)

<u>Parameter</u>	<u>Parameter <8> Estimate</u>
Intercept	-0.088 (0.039) *
MDWDUS	0.017 (0.001) *
QTRS3	0.026 (0.006) *
PGM	-0.062 (0.127)
OWNER	2.391 (0.492) *
FLATBUSH	0.627 (0.115) *
CROWNHTS	0.541 (0.096) *
PGMFLAT	0.808 (0.355) *
PGMCRHTS	0.178 (0.500)

r-square=.246

Analysis of the residual values generated by the above model revealed that the model predicts the number of fires in program buildings fairly well, with one exception--a building in Crown Heights that was owned by one of the three developers mentioned which experienced 19 suspicious fires. Given the small number of buildings in the program in Crown Heights, it was cause for concern that a single building whose pattern was highly unusual might have contributed so strongly to the results. That building was eliminated from the sample for this reason. The results obtained from applying the model to the revised sample of 1,924 buildings are shown below in figure 4-3.

<8> The standard error of the parameter estimate is given parenthetically. Estimates that are significant at .05 are marked with an asterisk.

Figure 4-3: Final Participation Loan
Regression Model
(N=1,924)

<u>Parameter</u>	<u>Parameter Estimate</u>
Intercept	-0.089 (0.038) *
MDWDUS	0.017 (0.001) *
QTRS3	0.028 (0.007) *
PGM	-0.038 (0.122)
OWNER	1.175 (0.480) *
FLATBUSH	0.631 (0.110) *
CROWNHTS	0.541 (0.092) *
PGMFLAT	0.945 (0.340) *
PGMCRHTS	-0.972 (0.487) *

r-square=.236

After removing the outlier (the extremely discrepant value), the contribution from being in a program building in Crown Heights changes drastically. In the preliminary model PGMCRHTS added .178 more fires. In the final model, however, the same variable accounts for .972 fewer fires. That the contribution of PGMCRHTS changes so much when a single case is deleted makes one reluctant to place too much weight on either effect. By removing that building it is possible that a building where program inclusion has an especially powerful effect was removed. Alternatively, the unexpectedly high number of fires might have been associated with an entirely different set of factors.

The mean number of fires per building in the sample was .5. The equation to predict the actual number of fires in a given building according to this model is:

The number
of suspicious
fires = $-.089 + .017(\text{MDWDUS}) + .026(\text{QTRS3}) - .038(\text{PGM}) +$
 $1.175(\text{OWNER}) + .631(\text{FLATBUSH}) +$
 $.541(\text{CROWNHTS}) + .945(\text{PGMFLAT}) -$
 $.972(\text{PGMCRHTS})$

The .017 coefficient for MDWDUS indicates that each additional apartment in a building increased the number of fires by .017. Each additional quarter of tax arrears increased the number of fires by .026, while being in Flatbush or Crown Heights (but not in the program) increased fires by .631 and .540 fires respectively.

In the following discussion all examples assume mean building size (25 apartments) and tax arrears (4 quarters). Among program buildings the three factors that influenced fire incidence were being in Flatbush (PGMFLAT) or Crown Heights (PGMCRHTS) or being owned by one of three developers (OWNER). The following table summarizes the effect these factors have on the predicted number of fires.

	Non-OWNER	OWNER
FLATBUSH	$-.038 + .945 =$.907 Fires	$-.038 + .945 + 1.175 =$ 2.082 Fires
CROWN HEIGHTS	$-.038 - .972 =$ -1.01 Fires	$-.038 - .972 + 1.175 =$.165 Fires

Being in the program in Flatbush increased the number of fires by .907, while being in the program in Crown Heights actually decreased fires by 1.01. In either case, if the building was owned by one of three specific developers fires increased by 1.175. Thus, the combined effect of OWNER and FLATBUSH increased the fires in program buildings by more than 2 fires.

As an example of the effect of the various regression terms, a 25 unit Participation Loan building with four quarters of real estate tax arrears in Flatbush would be expected to have:

$$-.089 + .017(25) + .026(4) - .038(1)$$

$$+ .631(10) + .945(1)$$

$$= 2.013 \text{ suspicious fires.}$$

If that same 25 apartment building was owned by one of three developers whose buildings had more fires than the average, the expected number of fires would increase to:

$$-.089 + .017(25) + .026(4) - .038(1) + .631(1) +$$

$$.945(1) + 1.175(1)$$

$$= 3.188 \text{ suspicious fires.}$$

A non-program building in Flatbush would only be expected to have:

$$-.089 + .017(25) + .026(4) + .631$$

$$= 1.068 \text{ suspicious fires.}$$

Several cautions are in order regarding the interpretation of these data. First, although ownership of a program building produced an effect on the number of suspicious fires it experienced, this finding was based on the actual number of fires in only eight buildings (after the outlier was omitted from the sample). Moreover, this may or may not be related to program status. No attempt was made to determine which of the control buildings were owned by these individuals. It is possible that all their buildings, and not just those that received Participation Loans experienced more fires than was expected. It is also possible that "missing" control factors were responsible for the elevated fire incidence. It would thus be a mistake to state that the effect seen was necessarily a result of either the program or the owners' actions. Second, while being in Flatbush increased the observed number of suspicious fires a program building experienced, this finding was also based on a small number of cases and does not answer the questions that remain: What was it about Flatbush that increased the fire incidence in buildings that received Participation Loans? The number of buildings in this category (PGMFLAT) was too small to test additional interactive effects. As with the Section 8 regression models, the R-square value of the PLP models indicated that many sources of variation in how suspicious fires occur are possible, and that additional control variables would be desirable.

V. Findings, Conclusions, and Recommendations

A. Comparative Fire Incidence

1. Receiving a Participation Loan does not appear to increase a building's susceptibility to suspicious fires in and of itself.

While it can be demonstrated that buildings that received Participation Loans experienced more fires than control buildings during the period examined, part of this exaggerated fire incidence is related to the fact that Participation Loan buildings tended to be larger than average. Larger buildings normally experience more fires than smaller ones for reasons explained in Chapter Two. Additionally, after controlling for neighborhood, building size, and tax arrears status, only two groups of PLP buildings experienced a greater than expected incidence of suspicious fires. These two groups of buildings were those in Flatbush and those owned by three specific landlords. After controlling for these factors there was no discernible effect on the number of fires a building experienced by whether it received a Participation Loan.

2. Buildings that received Participation Loans in Flatbush demonstrated an increased incidence of suspicious fires even after neighborhood, building size, tax arrears, and program inclusion status were held constant. Buildings that received Participation Loans and were owned by three developers appeared to have an increased incidence of suspicious fires. It was also found that larger buildings and those with tax arrears were more likely to experience suspicious fires.

Two thirds of the Participation Loan buildings in Flatbush experienced at least one suspicious fire from January 1, 1978 to December 31, 1981. More than half of the Participation Loan buildings in Flatbush experienced more than one suspicious fire during that period. As the regression model demonstrates, even after controlling for the base level of fires in Flatbush, building size, tax arrears, etc., being in Flatbush increased the expected number of fires in loan buildings by .945 fires.

Fifty percent of all fires (36 of 72) in Participation Loan buildings in Brooklyn were in six buildings (12 percent of the Brooklyn PLPs) owned by three developers. Even after controlling for building size, tax arrears, neighborhood (all of their buildings were in Crown Heights or Flatbush), and the effect of being in the Participation Loan Program in these neighborhoods, ownership by one of these developers was related to an increase in the number of suspicious fires.

This affect, however, may or may not be program related. Further, the buildings in the program owned by these individuals may have experienced fires for reasons totally unrelated to any actions on their part. None the less the presence of this pattern underscores the need to screen program applicants thoroughly.

In addition to these program-related variables, building size and tax arrears were significantly related to suspicious fires. For each additional apartment a building could be expected to have .017 more fires. For each additional quarter of real estate tax arrears (up to 16 quarters) a building could be expected to suffer .028 additional fires.

B. Applicant Screening

1. Submission of clearance requests immediately prior to closing in 1978 and 1979 weakened the screening process by preventing I.G. staff from conducting the most thorough investigation possible.

2. The approval of pending loan applications based on a previous clearance within the past six months diminished the effectiveness of the screening process during 1978 and 1979.

3. The policies adopted by HPD in recent years appear to have prevented problems due to the submission of clearance requests immediately prior to closing and clearing applicants based on past applications.

The purpose of the Inspector General's review is to ensure that applicants have not committed acts which should prevent them from receiving Participation Loans. The basis for this determination is the disclosure statement submitted by applicants prior to commitment. This document furnishes the City with information on the applicant's real estate holdings, previous loan defaults, tax arrears, harassment charges, and other factors which may be detrimental to a loan request. Resources drawn upon to supplement these disclosures are extensive; information is requested from the Commission on Human Rights, Department of Investigation, and relevant District Attorney. Additionally, complete fire profiles of the applicant's properties are requested from the Arson Strike Force. The I.G.'s recommendation for pending loans, submitted at closing, is based on analysis of this information.

Applicant screening is particularly important for the Participation Loan program. As demonstrated in Section IV, buildings owned by some developers experienced more fires than buildings owned by others. While this may be due to factors outside of the owner's control, it underscores the necessity to evaluate carefully the backgrounds of all PLP applicants. HPD has attempted to do this through implementation of applicant screening.

Past City policy allowed individuals to be cleared for pending loans without thorough review, if the applicants received I.G. approval within the previous six months. There were two disadvantages to this policy. One, the initial review may have been requested immediately prior to closing thus preventing a thorough investigation. Subsequent applicant approval based on the initial review may have allowed problems to go undetected. Second, this policy may have been feasible for individuals

with exemplary backgrounds, but it was inappropriate for owners of properties with multiple fires or questionable management practices.

Thorough review of applicants without prior clearances was forestalled by the submission of clearance requests within days of closing in certain cases during 1978 and 1979. This occurred even though disclosure statements were submitted to program staff at pre-commitment. The delay in requesting clearance resulted in expedited efforts to clear loans by closing or lose the financial institution's commitment. As a result of agreements between I.G. and program staffs, clearance requests are now submitted to the I.G. at commitment.

Recommendation PLP-1: All pending government subsidized rehabilitation loans should be forwarded to the appropriate investigative unit of the local housing agency for screening at the earliest possible time to ensure that adequate time is allowed for review and clearance procedures, as is current policy in New York. Loan approval should be contingent on the positive evaluation of an applicant by the local housing agency.

Recommendation PLP-2: Municipalities should develop guidelines for applicant evaluation detailing general grounds for loan denial.

The lack of formal guidelines setting forth factors that should be considered in the determination of an applicant's fitness to receive rehabilitation loans may have several undesirable consequences. Among them are: (1) uncertainty as to what information should be considered and obtained, (2) the inability to make consistent recommendations based on objective criteria, (3) difficulty in applying informal review standards consistently, (4) the inability to evaluate recommendations on the basis of a fair and uniform standard, and (5) difficulties in justifying why a loan was denied.

Adequate investigative time is of limited use unless investigative staff know the type of information that will ultimately be taken into account in determining the applicant's fitness to receive housing benefits. In the absence of such knowledge it is hard to know which aspects of an applicant's background should be considered and highlighted in investigative reports.

Formulating review guidelines would address these problems by ensuring that clearance is based on a uniformly applied review of objective factors. Review standards would improve the quality and effectiveness of applicant screening which appears to be a critical factor in deterring programmatic abuse. Finally, it would diminish opportunities for legal challenge and encourage owners to refrain from actions that would negatively affect future applications.

Review standards should outline what factors are to be taken into account in determining an applicant's fitness to receive a loan. Such guidelines should be geared to detect developers who have consistently defaulted on their responsibilities as landlords. Indicators of such actions include findings of harassment or discrimination, the intentional withdrawal of building maintenance or services, and fires

resulting from arson, lax security, minimal or no property maintenance, or owner negligence in keeping public areas free of rubbish, and other causes as indicated in Chapter 7.

In discussing this recommendation with the HPD Deputy Commissioner for Development and the Inspector General reservations were expressed about its feasibility. They believe such guidelines would impair their ability to grant or deny loans based on their past experience with the applicant. They further believed that it would be inappropriate and constraining to detail exactly when a loan should or should not be granted.

These reservations appear well founded and it should be noted that dangers exist if guidelines are overly inclusive. Because of the wide variations in developer experience, the areas in which they are active, the type of rehabilitations they perform, etc., it would be inappropriate to set absolute threshold criteria. A large number of fires in one area may be quite normal in another, building deterioration and subsequent violations may have occurred under a previous owner, and there are always factors unique to that particular rehabilitation. Nonetheless, it would be helpful to explicitly indicate the factors (or minimal factors) that should be considered so that discretionary authority can be exercised within a fair and consistent framework. Rigid threshold criteria are not recommended.

CHAPTER FIVE: THE J51 TAX EXEMPTION AND ABATEMENT PROGRAMI. Program DescriptionA. Program History

Section J51-2.5 of the New York City Administrative Code was enacted in 1955 to "eliminate unhealthy or dangerous conditions in (residential multiple dwellings) or to replace inadequate and obsolete sanitary facilities..." It has since become known as the J51 Program (or simply J51) and has been amended to encompass:

- substantial rehabilitation of Class A multiple dwellings, <1>
- moderate rehabilitation of substantially occupied Class A multiple dwellings,
- major capital improvements to Class A multiple dwellings,
- conversion of commercial or industrial buildings to Class A use,
- conversion of Class B <2> buildings to Class A status, and
- rehabilitation of Class B multiple dwellings.

The State law (Section 489, N.Y. State Real Property Tax Law) under which J51 was originally enacted expired in June 1982. The New York State Legislature has since passed new enabling legislation. The analysis that follows was conducted under the now-expired law. Significant differences between that law and the current law will be discussed as they appear in the text.

<1>The New York State Multiple Dwelling Law defines a multiple dwelling as "a dwelling which is either rented, leased, let or hired out, to be occupied, or is occupied as the residence or home of three or more families living independently of each other." A Class A multiple dwelling is described as a "multiple dwelling which is occupied, as a rule, for permanent residence purposes." (Multiple Dwelling Law, Section 4, Chap. 713)

<2>A Class B multiple dwelling "is occupied, as a rule, transiently, as the more or less temporary abode of individuals who are lodged with or without meals." (Multiple Dwelling Law, Section 4, Chap. 713)

B. Benefit Structure

Qualifying properties become exempt from real estate tax increases resulting from improvement, alteration, or conversion for 10, 12, or 32 years depending on the type of work performed. These properties also receive an abatement of real estate taxes of up to 100 percent of the HPD certified cost of the work. The amount abated is determined by the type of job and its location.

J51 was, during the period studied, granted as-of-right. This means that eligible work performed in any part of the City not excluded by statute received benefits regardless of other factors (including a history of tenant harassment) if the building was not delinquent in its taxes and was free of liens. Amendments to Section 489 of the Real Property Tax Law now prohibit owners who have been found guilty of harassment from receiving benefits, an important difference between the old and current laws.

J51 can be combined with several loan and subsidy programs, including Section 8, Participation Loans, and Article 8A loans. Benefits may also be available to government-assisted projects during this construction period. However, all apartments must remain either rent controlled or stabilized throughout the J51 period.

1. Major Rehabilitation of Class A Units, Including Major Capital Improvements (MCI)

Substantial rehabilitation of a Class A property, the focus of this chapter, entitles the owner to a 12 year exemption from property tax increases resulting from rehabilitation, as well as an annual abatement of existing taxes of up to 8.33 percent of the HPD certified reasonable cost (CRC) of the work (which may not exceed 90 percent of the total CRC). As a result of statutory changes made by the City Council and supported by the City administration in 1981, J51 projects beginning construction after January 1, 1982 in central Manhattan (roughly 34th to 96th Streets and 8th Avenue to the East River) are no longer eligible for abatement benefits. Projects in a larger portion of Manhattan encompassing the Upper East Side, Central Manhattan, and Tribeca are required to pay a minimum tax equal to the taxes attributed to the assessed value of the land on which the building is situated (i.e., in these buildings taxes can no longer be reduced to zero as a result of J51). These changes reflect the efforts of the Mayor and the City Council to adjust the J51 program to fluctuations in the real estate market.

As an example of how these benefits work, assume that a property outside of the special benefit zone in Manhattan is assessed at \$1 million prior to rehabilitation. The prevailing real estate tax rate was, in 1980, \$8.95 per \$100 in assessed value, yielding an annual tax bill of \$89,500. After rehabilitation, for which the CRC is determined to be \$1,500,000, the assessed value increases to \$2 million. The following chart shows benefits this property would receive.

Year	Tax Without Exemption Abatement	Tax After Exemption Before Abatement	Tax Abatement	Final Tax Bill
1	\$179,000	\$89,500	\$89,500	\$0
2	179,000	89,500	89,500	0
3	179,000	89,500	89,500	0
4	179,000	89,500	89,500	0
5	179,000	89,500	89,500	0
6	179,000	89,500	89,500	0
7	179,000	89,500	89,500	0
8	179,000	89,500	89,500	0
9	179,000	89,500	89,500	0
10	179,000	89,500	89,500	0
11	179,000	89,500	89,500	0
12	179,000	89,500	89,500	0
13	179,000	179,000	124,950	54,050
14	179,000	179,000	124,950	54,050
15	179,000	179,000	26,100	152,900
16	179,000	179,000	0	179,000
17	179,000	179,000	0	179,000
18	179,000	179,000	0	179,000
19	179,000	179,000	0	179,000
20	179,000	179,000	0	179,000

In this hypothetical case the total exemption amounts to \$1,074,000 over 12 years and the total abatement is \$1,350,000. Total benefits equal \$2,424,000 over 15 years. It should be noted that this chart does not reflect any future tax increases due to reassessment based on the possible increase to the land value of the building as a result of non J51 eligible improvements.

2. Conversion of Class B Properties to Class A Status

Legislative amendments during the 1960s extended J51 to conversions of Class B housing to Class A housing. Such conversions are exempt from property tax increases that result from improvements for 12 years and receive an annual 8.33 percent (of CRC) abatement for up to 20 years. Due to the recent changes in Section 489 of the Real Property Tax Law, the conversion of single room occupancy (SRO) hotels to Class A housing is no longer eligible for J51 benefits. Class B or SRO to Class A conversions are not examined in this report because of the relatively small number of Class B to Class A conversions from July 1980 to June 1981.

3. Commercial or Manufacturing Conversions

Conversions of commercial or manufacturing facilities to Class A residential use receive a 12 year exemption from property tax increases resulting from improvements, plus a 20 year, 8.33 percent annual abatement of the certified cost of conversion. Under legislation passed in 1979 commercial or manufacturing conversions in Manhattan receive only a 50 percent abatement, and benefits are unavailable in certain manufacturing districts. Commercial or manufacturing conversions are not addressed in this report due to the absence of a valid control group.

4. Moderate Rehabilitation

In 1979 moderate rehabilitation of substantially occupied buildings became eligible for J51 benefits. Such buildings had to remain at least 60 percent occupied immediately prior to, during, and after rehabilitation to be eligible for a 32 year exemption and abatement of 100% of the certified reasonable cost of rehabilitation. The scope of work must, however, have a CRC of at least \$2,500 per apartment. Moderate rehabilitation under J51 is not addressed in this report because of the scarcity of J51 buildings that underwent moderate rehabilitation and also met the \$100,000 inclusion criterion.

C. Application Procedure

Because J51 benefits were as-of-right, processing focused on the accurate assessment of costs to be abated rather than the project's impact on the neighborhood or the developer's qualifications (as happens with Section 8 or Participation Loan Projects). In the absence of regulatory or statutory requirements that the project or developer be screened during the period examined, there was no reason for contact with HPD on the part of the developer until the project was completed except in moderate rehabilitations and government assistance programs eligible to receive J51 benefits during construction, where owners had to certify in advance that the building was at least 60 percent occupied, and in certain government projects which receive J51 benefits during construction. Under the recently-enacted amendments to Section 489, owners are now required to notify HPD of their intent to rehabilitate 30 days before construction begins, and must attest to the fact that they have not been found guilty of tenant harassment, which is now grounds to deny benefits.

After the rehabilitation is completed the actual J51 application is filed. The Itemized Cost Schedule requires the owner to indicate the unit cost and quantity of construction materials used.

The CRC is computed on the basis of this and the maximum amount allowed for each item as specified in the J51 Rules and Regulations. Also taken into account are physical inspections by HPD and proof of payment contained in the application. If there are discrepancies between these and the applicant's claimed costs, then the maximum amount of CRC may be reduced. While HPD reviews the information, it forwards to the

Department of Buildings a request for certification of the property's structural soundness and compliance with the New York City Building Code. Along with Building Department approval, applicants are also required to clear any outstanding violations issued by the Division of Code Enforcement. When all requirements of the J51 Rules and Regulations have been met including meeting specific time requirements and submitting appropriate documentation, the Certificate of Reasonable Cost is issued.

II. Risk Factors

In some instances it might be advantageous to rehabilitate run-down properties so that they can be converted to more profitable use. If this is the case, the first step will be to leave empty apartments vacant and to offer payments to tenants who leave voluntarily. While this may persuade some tenants to leave, others may refuse. If vacant rooms are properly sealed and adequate maintenance continues, the risk of fire remains minimal. This is the case during the early stages of many rehabilitation projects. The presence of remaining tenants may however, prevent substantial rehabilitation, which cannot proceed until the property is vacant. Given the strong economic incentives to rehabilitate such properties, some owners may employ unethical means to accelerate the emptying of their buildings. The detrimental nature of such measures are acknowledged by Section D16-101 of the New York City Administrative Code, which states that "it is economically advantageous for certain landlords to attempt to evict occupants without proper judicial proceedings in order to convert their buildings to more profitable uses...and that the methods of unlawful eviction by such landlords often involve the use of force and violence..."

As the building becomes increasingly vacant rental income declines more rapidly and becomes insufficient to support building maintenance. It is at this stage that the risk of fire becomes greater. Maintenance declines or ceases altogether, rubbish accumulates, and vacant apartments may remain unsealed. This creates a risk of fire. Arson may also be used at this stage as a direct means of forcing tenants to vacate.

If arson or neglect fires are used to empty a building and facilitate rehabilitation, it is difficult to determine whether the availability of program benefits or increased post-rehabilitation rental or cooperative sale income is responsible because virtually every substantial rehabilitation during the period studied was eligible to receive J51.

It is, however, conceivable that the threat of denying J51 benefits could have been a deterrent to harassment and fires, but there were no legal grounds for the City to refuse J51 benefits during the period studied. Consequently, there was no project screening for these occurrences.

Two case studies follow which appear to illustrate the pattern described above. It should be reiterated that the fires mentioned in these case studies have not been determined to be the result of

intentional actions on the part of the buildings' owners, and that other parties may have benefited from the fires. It is further possible that these fires were the result of vandalism, acts of insurance fraud, revenge, etc.

Case Study C001

Building C001 is a five story tenement. During late 1975 violations were placed for non-compliance with the Housing Maintenance Code. In October and November violations were issued for rubbish in the southeast and southwest air shafts, water leaks from the roof into top floor apartments, and necessary plastering and painting in two apartments.

During 1976 similar violations were reported. An inspection in March found three additional apartments in need of paint and plaster. On July 13 the building suffered a two alarm fire in a flower shop on the first floor. When the Fire Department arrived at 1:00 a.m. it found a serious fire condition in the first floor store with "...extension into the 2nd floor." During the course of the fire five civilians and two fire fighters were injured. The cause of the fire was listed as unknown.

Another inspection was performed by HPD in late August. The public halls were found to be in need of cleaning and paint and plaster. Hot water was lacking in several apartments, which were also found to be in need of paint and plaster. Additional violations were placed for exposed electrical wiring in the second floor hallway and an inoperative bell and buzzer system.

By April of 1977 none of the existing violations had been removed, although violations were added for concealed leaks in the roof, rubbish accumulating in the west courtyard, and missing windows. In May an immediately hazardous condition, structural defects in the load bearing wall between two vacant second story apartments, was noted.

On October 2, 1978 the building suffered a three alarm incendiary fire at 4:20 a.m. The building was partially vacant according to the Fire Department report. Upon arrival the Department "found fire venting four windows north side, one window west side 2nd floor; three windows north side, one window west side third floor of north-west corner of fire building. Fire was extending via missing flooring 3rd and 4th floor north-east corner apartments to 4th, 5th floors and cockloft of building." In short, the entire building above the first floor was engulfed in fire. Before the fire had been extinguished 10 fire fighters and one civilian were injured. Both the building and its contents were severely damaged, and only the commercial tenants, a florist, a restaurant, and newsstand remained in occupancy.

Five months later, on March 2, 1979, another fire occurred at 4:30 a.m. This fire was less severe than the previous one and started inside the florist shop on the first floor. It too was found to be incendiary, although it was extinguished before major damage occurred.

In May of that year the building was sold for approximately \$200,000. Shortly after, the building suffered its third incendiary fire in seven

months at 2:12 a.m. The fire originated in a vacant top floor apartment and had engulfed the entire top floor and roof by the time the Fire Department arrived. The building was vacant except the three commercial tenants on the first floor.

In August, 1979 the building's owner filed plans for the rehabilitation of the property. A rehabilitation permit was subsequently issued in November. During the rehabilitation the owner tried unsuccessfully to evict the three commercial tenants citing a clause in their leases automatically giving him possession of commercial space in the event of a substantial fire. Upon the recommendation of the court and the owner's attorney, the owner renegotiated the existing commercial leases and submitted an amendment to the construction permit accommodating the three stores.

During rehabilitation, one of the tenants who was forced to move because of the fire filed charges with the HPD Rent Control Division against the owner who refused to allow her to regain the apartment she had occupied since 1957. In his response to the tenant's charges the owner cited the case of Chung v. Altman <3> and maintained that the fires had been severe enough to void existing leases. The Rent Control Division case was finally settled out of court when the owner paid the tenant \$5,000 in return for a release from her lease. The rehabilitation was completed in October 1980 and a new Certificate of Occupancy was issued for 14 apartments (8 duplex, 6 single) and three stores.

As a result of the rehabilitation, \$147,000 of the total assessed value of \$600,000 was exempted annually from taxation by a J51 certificate. Other sources of improved profitability included the removal of some apartments from rent control status and the ability to set all rents at market levels.

Case Study C002

Building C002 is a seven story residential structure. The building began to show signs of deferred maintenance between the latter part of 1974 and the end of 1976. A review of code enforcement records revealed a series of violations for minor maintenance items such as loose faucet handles, missing radiator control knobs, defective plastered surfaces, and illegal window gates, although inspectors also noted an accumulation of rubbish in the cellar and central courtyard and several loose ceiling fixtures. During the 26 month period from August 1974 until December

 <3> In the case of Chung vs. Altman (N.Y.S. Ct., 7863/72) the court cited an opinion of the HPD General Counsel which stated that "although a tenant of a fire damaged apartment has a right to be restored...when and if that unit is made habitable, and the landlord is not entitled to...demand an increase (in rent)...this procedure cannot be extended to cover the situation where the res (unique character of the apartment) has ceased to exist."

1976 only 5 of 52 violations placed were deemed immediately hazardous, and those were for two broken flushing apparatus, a loose ceiling fixture, exposed ceiling wires, and a defective plaster surface. There were no heat or hot water complaints during that period.

From January 1977 until October 1979 increasingly serious violations were added. In January 1977 violations were placed for defective mail boxes, a broken front door and lock which diminished building security, and broken marble steps. Later in the year inspectors issued violations for concealed ceiling leaks, a defective fire escape, sagging floor and ceiling beams, broken windows, accumulated rubbish in the cellar, vermin (fleas throughout the building), etc.

On September 28, 1978 the building suffered a serious fire at 10:57 PM in a vacant first floor apartment. Although it caused only light damage to the building, fire marshals determined that the fire was incendiary. The building was found by the fire chief to be partly occupied and deteriorating at the time.

In October of 1978 the owner applied to the Department of Buildings for approval of plans to rehabilitate the building. Approval was granted in April of 1979.

In July, 1979, ten months after the first fire, the building experienced another incendiary fire shortly after midnight. Again, the building was found to be partly occupied and deteriorating.

Violations continued to mount through the winter of 1978-79. In October and December of 1978 three tenants filed charges of harassment (with HPD's Division of Rent Control) against the owner of the property, alleging that:

- "for more than two years, the services in (the) building have steadily deteriorated....,
- the janitor does little if anything to maintain the building....,
- fires occur in vacant apartments...
- the vacant apartments in the building have not been boarded or locked and have become filled with garbage. Garbage and dog feces are strewn about the halls, which worsens the infestation problem....,
- little or no heat has been provided...., and
- vagrants enter (the) building at night."

One tenant also indicated that the landlord had offered her \$2,000 to leave the building "so that he can renovate it."

In his response to the harassment charges the landlord acknowledged offering the tenant \$2,000 to vacate, but contended that the building received adequate heat and hot water and was well maintained.

A review of HPD records indicated that such might not have been entirely true. An inspection of the property in November 1979 resulted in an order to "abate the nuisance consisting of device present on central heating system which is capable of causing an otherwise operable system to become inoperable." Three months later the landlord was ordered to "provide an adequate supply of heat." In July and August of that year a tenant's rent had been decreased under rent control regulations for roach and rodent infestation and the lack of a required paint job. During that period violations were issued for rubbish accumulation and other conditions which tend to support the tenants' charges.

During January 1979 the harassment case was closed when the tenants withdrew their charges in exchange for a cash settlement.

It is impossible to determine exactly when the building became completely vacant, but the last recorded complaint was made in October 1979, and a vacate order was issued in February 1980. In June of 1980 the owner applied for and received a permit to completely rehabilitate the property. A final Certificate of Occupancy was granted in November 1980. During 1981 \$403,000 of the \$570,000 total assessed value of the building was exempted from taxation as a result of J51 benefits. As with the other case study, the owner benefited from the removal of apartments from rent control status and the ability to charge higher rents on all apartments.

III. City Anti-Arson Measures

The City and State of New York, in response to the type of abuses and tenant harassment described above, has recently instituted measures intended to ensure the safety and well-being of tenants in buildings about to be renovated or converted.

A. Changes in Scope of J51 Benefits

The 1983 amendments to Section 489 of the Real Property Tax Law have been passed by the the State legislature and signed into law by the Governor. Included are several anti-harassment provisions. Most importantly, the law specifically denies benefits to "every owner of record and owner of substantial interest in the property or entity owning the property or sponsoring the conversion, alteration, or improvement... (who) has been found to have harassed or unlawfully evicted tenants (by) judgement or determination of a court or agency (including a non-governmental agency having appropriate legal jurisdiction) under the penal law, any state or local law regulating rents or any state or local law relating unlawful eviction..."

Equally important is the fact that the law now requires owners to file, in order to rehabilitate or convert, an affidavit of non-harassment 30 days before construction begins. In the old law there was a lack of a pre-filing requirement. The new law requires that every owner of record or substantial interest be listed on the

affidavit of non-harassment which should contain a statement that they had not "within the five years prior (to the affidavit of non-harassment) been found to have harassed or unlawfully evicted tenants..." The local housing agency is required to review these affidavits. To facilitate such review, HPD has made a commitment to provide resources to screen such applicants.

These measures will deny J51 benefits on the basis of harassment and will, hopefully, be a deterrent in cases where harassment is found.

The new law limits the construction costs that can be abated to a maximum of \$15,000 per apartment except under special circumstances, and, generally, limits exemption benefits to buildings with an average assessed value per apartment of \$38,000 after renovation. Finally, SRO conversions are eliminated from receiving benefits.

B. Unlawful Eviction Law

Section D16-101 of the N.Y.C. Administrative Code, which was enacted in September 1982, amends the Code with respect to unlawful eviction in any residential building in the City.

This new law establishes criminal penalties for unlawful eviction and classifies such acts as a class A misdemeanor and establishes penalties of up to \$100 per day for failure to make a good faith effort to restore an unlawfully evicted tenant to occupancy. Unlawful eviction is defined under the law as:

- using or threatening force to induce the occupant to vacate;
- interrupting or discontinuing essential services; and/or
- engaging or threatening to engage in conduct which prevents or is intended to prevent a tenant from the lawful occupancy of their apartment, or which is intended to induce the tenant to vacate. Such actions include removing the occupant's possessions, removing the door, and locking the tenant out.

IV. Analysis of Data (refer to methodology chapter)

A. Sample Characteristics

The sample of properties used to analyze the J51-assisted substantial rehabilitation of Class A properties contained 1758 buildings, 97 of which received benefits in Fiscal 1981, and was limited to properties with a total Certified Reasonable Cost (CRC) of at least \$100,000. It does not include properties which received J51 in conjunction with Section 8 or other rehabilitation benefits, nor does the control sample include buildings that received J51 between 1978 and 1980. These selection criteria limited the sample to less than ten percent of the

total number of properties receiving J51 during Fiscal 1981, although it did permit research to focus on properties undergoing a sufficiently substantial rehabilitation to necessitate a vacant buildings during construction. However,, the assumption that a \$100,000 CRC necessitates building vacancy is not always true. While a \$100,000 CRC may require vacancy is a smaller building, it may not in a large building. Consequently, the small number of J51 buildings in the sample prevented the effective use of regression methodology. Additionally, bi-variate tables generally yielded expected cell frequencies of less than five observations in some cells. Under these conditions chi-square is not very accurate. Chi-square values are presented for the sake of the reader. They should be interpreted with extreme caution.

B. Suspicious Fire Determinants

1. Program Inclusion

Buildings in the sample that received benefits for rehabilitations with CRCs of over \$100,000 during Fiscal 1981 experienced more suspicious fires during the period 1/1/78-12/31/79 than control buildings as shown below in Table 5-2.

Table 5-2: Suspicious Fires (1/1/79-12/31/79) in J51 and Control Buildings City-wide

<u>Suspicious Fires</u>	<u>J51</u>	<u>Control</u>
none	87.6% (85)	95.7% (1590)
One	4.1 (4)	3.6 (60)
more than one	8.3 (8)	0.7 (11)
Total	100.0% (97)	100.0% (1661)
chi-square=49.5	P=.0001	DF=2

The percentage of buildings experiencing one suspicious fire was similar for both the J51 (4.1 percent) and control (3.6 percent) samples. However, 8.3 percent of the J51 buildings had more than one suspicious fire, compared to .7 percent of the control buildings. Cumulatively, twelve of the 97 buildings which received J51 (12.4 percent) experienced at least one suspicious fire compared to seventy-one of 1661 control buildings (4.4 percent). The pattern was similar in each of the three boroughs studied. Because it was possible that this elevated incidence of suspicious fires was due to the over-representation of J51 buildings in high risk categories not related to the program, the control factors identified in Chapter Two were applied.

2. Building Size

Buildings studied that received J51 tended to be larger than other buildings. J51 buildings averaged 50 apartments, while non-J51 buildings averaged 25 apartments. Even after controlling for building size, J51 buildings experienced more fires than control buildings (Appendix A, Table 5-2).

3. Occupancy

Among buildings studied that were at least partially occupied in 1978, those that received J51 benefits experienced more fires than other buildings. There was virtually no difference between the number of fires in completely vacant J51 buildings and other vacant structures. Only 4.4 percent of the controls which were fully occupied in 1978 had any suspicious fires, while 23.1 percent of the J51 buildings which were fully occupied in 1978 had such fires. Moreover, the percentage of control buildings that suffered multiple suspicious fires declined as occupancy increased, while the percentage of J51 buildings that had multiple suspicious fires increased with greater occupancy (Appendix A, Table 5-3).

4. Tax Arrears

Less than ten percent of the buildings in the sample (J51 and control) were more than four quarters in arrears during June 1978, indicating that blocks containing J51 buildings were not suffering substantial financial hardship. 92.3 percent of the control buildings and 69.5 percent of the J51s were less than five quarters in arrears. Control buildings that were in arrears for longer than a year were slightly more likely than those less than a year in arrears to have experienced suspicious fires (Appendix A, Table 5-4). J51 buildings with less than a year of tax arrears were more likely than those with more than a year of tax arrears to suffer more than one suspicious fire. Additionally, J51 buildings experienced more suspicious fires regardless of arrears.

5. Scope of Work

Among class A buildings that received benefits for substantial rehabilitations the incidence of suspicious fires increased as the rehabilitation cost per apartment became greater (Appendix A, Table 5-5).

V. Findings, Conclusions, Recommendations

1. Existing Class A residential buildings that received J51 benefits and had certified rehabilitation costs over \$100,000 between July 1, 1980 and June 30, 1981 experienced a greater incidence of suspicious fires than control buildings from January 1, 1978 to December 31, 1979, the period immediately prior to rehabilitation. Because of the limited number of J51 buildings in the sample, it was not possible to determine accurately whether this relationship was statistically significant.

All of the findings and conclusions in this chapter should be viewed with extreme caution. The small number of J51 buildings in the sample prevented the effective use of regression methodology. Additionally, bi-variate tables generally yielded expected cell frequencies of less than five observations in some cells. Under these conditions chi-square is not very accurate. Chi-square values are presented for the sake of the reader.

Twelve of 97 buildings which received J51 (12.4 percent) experienced at least one suspicious fire during the period reviewed compared to seventy-one of 1661 control buildings (4.4 percent). Eight J51 buildings (8.3 percent) experienced more than one suspicious fire. Only eleven of the control buildings (.7 percent) had more than one suspicious fire.

This finding should not be misconstrued to mean that suspicious or incendiary fires were rampant in the J51 buildings in the sample studied. The majority of buildings in the program and control groups did not experience suspicious fires. Moreover, it was not possible to accurately determine statistical significance nor discern causality. Only 5.5 percent of the total buildings in the sample (J51 and control) received J51 for major rehabilitations during the period specified. This 5.5 percent of the buildings were responsible for almost 47 percent of all suspicious fires on those blocks.

2. The higher than expected incidence of suspicious fires prior to rehabilitation in existing Class A residential buildings that received J51 for rehabilitations with CRCs over \$100,000 may be indicative of an owner's attempt to empty a building in order to allow conversion to more profitable use. It is impossible, however, based on these data, to determine validity or strength of any relationships discerned.

All indications were that these fires (fires in properties that received J51 benefits for substantial rehabilitation) generally occurred in buildings that were not economically troubled. J51 buildings were slightly more than twice as likely as controls to be vacant in 1978 (37.1 versus 15.8 percent), but vacant J51 buildings did not have more fires than vacant control buildings. Partially occupied J51s were more likely than partially occupied controls to have experienced multiple suspicious fires, as were J51s that were fully occupied.

An examination of tax arrears points to the fact that those J51 buildings exhibiting the strongest economic position (i.e., those with

the least tax arrears) had the most fires. 10.6 percent of the J51s with four or less quarters of tax arrears had more than one suspicious fire, while among those with more than four quarters of arrears only 3.6 percent had more than one suspicious fire. Fires were also more frequent in the J51 sample regardless of building size.

3. The absence of statutory authority to withhold J51 benefits even if harassment and intentional fires were linked to illegal evictions during the period studied denied the City of a potential tool to prevent harassment and intentional fires.

Recommendation J51-1: Findings of tenant harassment and owner-instigated arson should be statutory grounds to deny government rehabilitation benefits, as is now the case with New York's J51 benefits.

Recommendation J51-2: Owners should be required to submit notification of their intent to perform substantial rehabilitation prior to the start of such work to allow the municipality to determine whether grounds to deny benefits exist, as is currently mandated by the new J51 law in New York.

Recommendation J51-3: Such notification should trigger a complete review by the local housing agency to determine whether harassment or arson occurred as is current policy in New York City.

CHAPTER SIX: ARTICLE 8A LOAN PROGRAMI. Program Description

Article 8A of the New York State Private Housing Finance Law, as amended in 1975, authorizes municipalities to make loans to the owners of multiple dwellings to facilitate the elimination of substandard or unsanitary conditions which are in violation of local housing codes.

Pursuant to this law, the City of New York makes available to property owners who are unable to obtain other financing because of the building's age, location, or other factors rehabilitation loans at a below market interest rate of 3 percent. Work is always performed with tenants in place under this program. Rehabilitation is generally limited to the upgrading or replacement of major building systems such as the heating, plumbing, or electrical systems, and may not total more than \$5,000 per dwelling unit. Loans are restricted to buildings occupied by persons of low income, and are secured by a mortgage on the property. Unlike programs that provide funds for more substantial work there is usually no change in rent status after work is completed, except in specific cases where rent restructuring is necessary to ensure economic viability. Rehabilitated buildings also receive J51 benefits.

II. Analysis of Arson Risk

The Article 8A Program provides virtually no economic benefits that could be obtained through arson or allowing building conditions to deteriorate to the point where fires become a logical consequence.

Because it is HPD's policy to award Article 8A loans for moderate upgrading with tenants in place, it would be self defeating to engage in a course of action designed to vacate the building. Moreover, rent levels usually remain the same before and after rehabilitation eliminating increased rental profits as a motivation for forcing existing tenants out. Finally, other benefits such as depreciation or tax exemption status remain unaffected by occupancy. J51 benefits, in fact, are greater for moderate rehabilitations with tenants in place than for gut rehabilitation.

III. Arson Prevention Measures

As with other discretionary programs, applicants are required to submit a disclosure statement as part of the application. This statement requires applicants to disclose:

- other real estate holdings
- other construction projects in which they are involved
- corporate structure
- other corporations in which they have been involved

- partners' names
- any loans for which they are currently in arrears
- any harassment suits to which they have been a party
- any crimes for which they have been indicted or convicted
- any other City-administered housing programs for which they have applied

In addition to financial and feasibility evaluations, each application is checked by the HPD Inspector General, who reviews each property held by the applicant for tenant harassment proceedings and fire history. The Inspector General also contacts the City's Department of Investigation and relevant District Attorney to determine whether the applicant has a history of criminal activity.

IV. FindingsA. Sample Characteristics

The sample of properties used in this analysis contained 6,074 buildings, 321 of which received Article 8A loans. It included all Bronx, Brooklyn, and Manhattan buildings that obtained loan commitments during Fiscal 1979, 1980, and 1981 and remained in the loan pipeline as of May 1982.

Buildings that received 8A loans tended to be larger than other buildings, averaging 44 apartments per building compared to 21 apartments for control buildings. They were also slightly more fully occupied. The mean 1978 occupancy rate for buildings that received Article 8A loans was over 85 percent compared to 82 percent for control buildings.

B. Analysis of Fire Incidence

Buildings in the program experienced significantly more suspicious, incendiary, malicious, and unknown origin fires than control buildings as shown below in Table 7-1.

Table 7-1: Percent of Suspicious Fires (1/1/78-12/31/81) by Program Status

<u>Suspicious Fires</u>	<u>8A</u>	<u>Control</u>
None	57.9% (186)	72.0% (4,144)
One	21.8 (70)	16.1 (925)
More than one	20.3 (65)	11.9 (684)
Total	100.0% (321)	100.0% (5,753)
chi-square=31.79	P=.0001	DF=2

The greater number of fires in properties that received Article 8A loans, however, is primarily due to the fact that these buildings are larger than control buildings. The relationship disappears when building size is controlled as Table 7-2 demonstrates.

Table 7-2: Percent of Suspicious Fires by Building Size

<u>Suspicious Fires</u>	<u>Building Size</u>			
	<u>8A</u>	<u>3-21 units</u> <u>Control</u>	<u>8A</u>	<u>Over 21 units</u> <u>Control</u>
None	77.4% (65)	82.8% (3069)	51.0% (121)	52.6% (1075)
One	19.0 (16)	11.9 (442)	22.8 (54)	23.6 (483)
More than one	3.6 (3)	5.3 (197)	26.2 (62)	23.8 (487)
Total	100.0% (84)	100.0% (3708)	100.0% (237)	100.0% (2045)
	chi-square=4.2 P=.12 DF=2		chi-square=.641 P=.73 DF=2	

C. Findings

It does not appear that any relationship exists between the receipt of Article 8A funds and an increased incidence of suspicious fires.

CHAPTER SEVEN: CONCLUSIONS

The purpose of this report was to study whether a relationship existed between arson and government subsidized housing rehabilitation programs. This chapter addresses the extent to which the stated objectives of this research have been met.

The initial objective was to determine whether arson has been used to profit from government housing assistance programs. Based on the research conducted on four programs administered in New York City, it did not appear that, overall, arson was used as a method to profit from these programs. However, it is appropriate to say the data suggests that, in some instances, participation in the programs reviewed appears to be related to the incidence of suspicious fires. It is not appropriate to say that these data demonstrate causality, establish responsibility, or even confirm such relationships.

With regard to Section 8 buildings, although they experienced more suspicious fires than control buildings (prior to controlling for extraneous variables), this relationship was not due to a common propensity among all Section 8 buildings to have an elevated incidence of suspicious fires, but rather to a predisposition among specific classes of buildings (NSA submissions, privately owned buildings, and buildings in specific neighborhoods), to have more fires. After controlling for these three classes of Section 8 buildings, Section 8 Program buildings had fewer fires.

Privately owned Section 8 buildings showed a higher incidence of suspicious fire activity than both other Section 8 buildings and non-Section 8 buildings. This suggests that some owners of privately owned buildings may have promoted fires to empty their buildings to prepare them for the Section 8 program. This finding is supported by the fact that, although increased occupancy is generally associated with fewer suspicious fires, it is associated with an increased incidence of suspicious fires in Section 8 buildings.

If fires were related to the emptying of Section 8 buildings, then it seems reasonable to believe that as occupancy increased so did the incentive to promote fires. If more fully occupied Section 8 buildings were more susceptible to the pattern of harassment/eviction discussed previously, and if fire was a part of that pattern, it explains the increase in fire incidences as occupancy increases.

Receiving a Participation Loan does not appear to increase a building's susceptibility to suspicious fires in and of itself. Buildings that received Participation Loans in Flatbush demonstrated an increased incidence of suspicious fires even after neighborhood, building size, tax arrears, and program inclusion status were held constant. Buildings that received Participation Loans and were owned by three developers appeared to have an increased incidence of suspicious fires.

Although the J51 buildings studied which received J51 benefits between July 1, 1980 and June 30, 1981 experienced a greater incidence of suspicious fires than control buildings prior to rehabilitation, it was not possible to determine accurately whether this relationship was statistically significant because of the limited number of J51 buildings in the sample. Based on the data available for this study it is impossible to determine whether J51 was a causative factor.

Finally, it does not appear that any relationship exists between the receipt of Article 8A funds and the incidence of suspicious fires.

The second objective of this study sought to understand the possible methods, patterns and motives associated with arson in government housing assistance programs. To the degree that the incidence of suspicious fires has been found to be related to such programs, the following methods, patterns and motives were discerned.

The patterns observed showed that, at least in the Section 8 and PLP programs, the incidence of suspicious fires was higher for certain categories (mentioned above) of buildings within these two programs, after controlling for certain extraneous variables.

In the categories where the study suggests that owners may have promoted fires to empty their buildings, the overriding motive would appear to be to gain entry into programs (which either required or preferred vacant buildings) in order to profit from them.

The methods believed to be used in these categories were several tenant displacement techniques. Although there are many ways for an owner to displace tenants this report is restricted to methods involving fire and arson.

Arson is not employed to vacate buildings in the vast majority of cases. However, even where arson is not a factor in a building, a risk of fire may still exist. An owner who is about to renovate his property has little incentive to provide ongoing maintenance and repairs. There are few economic reasons to perform a minor boiler repair if it is expected that the heating system will be overhauled or replaced during a subsidized rehabilitation. To the contrary, it may be advantageous not to repair the boiler. If the owner wants to remove tenants, the lack of heat and hot water is an excellent inducement for residents to leave. Neglect of this nature may encompass the heating system, elevators, plumbing, janitorial services, building security, etc.

Building neglect, itself, may be creating a risk of fire and arson. Poorly maintained systems are likely to malfunction, which can cause fires in the boiler, incinerator, or electrical system. If janitorial services are withheld, rubbish will accumulate providing an opportunity for fires.

The lack of security or failure to seal vacant apartments may allow vagrants (as well as other types of firesetters) to enter the building. These factors create a risk of fire and arson. Tenants using their ovens to provide heat increase a building's vulnerability to fire.

Although neglect of this nature may be the result of poor management or financial constraints, it may also be intentional in order to empty a building.

When arson is employed to vacate a building, it is believed to take the form of "harassment type" fires which are designed to create a climate of fear, as well as severe inconvenience, through the cessation of services. In addition, larger fires may result in extremely hazardous building conditions which may necessitate an ordered vacating of the building.

In evaluating the effectiveness of arson prevention policies existing during the period of the study, the research focused on the selection policy and applicant screening for the programs mentioned.

With regard to Section 8, the required targeting of the program to specific areas prior to the deadline for submitting Section 8 applications, alerted some developers that buildings they may have wanted to rehabilitate within the targeted area would have to be vacant. Targeting also greatly increased the probability of a buildings selection. Although there was a program policy of preferring vacant in rem structures half of the NSA selections studied were privately owned, partly because of an inadequate supply of in rem buildings in some of the target areas. Owners in this situation had few incentives to continue regular repairs if they believed their buildings were about to be substantially rehabilitated. This may have contributed to an increase in the number of fires.

Further, research suggests that each of the following may have contributed to tenant displacement: the belief that HUD and HPD would prefer vacant buildings, the level of rehabilitation the program was designed to assist, and the inability to adhere to the in rem selection policy.

HUD guidelines for evaluating NOFA submissions did not require review of tenant harassment allegations or fire histories. This procedural omission potentially may have allowed some owners to exploit the program's goals and may have promoted its arson susceptibility.

Although applicants for NSA funds submitted disclosure statements, approval was given to individuals whose buildings had numerous intentional fires, and who were the subject of harassment proceedings. This problem was subsequently addressed by the City policy of not granting government rehabilitation funds to individuals found guilty of harassment.

Further, fire history reviews prior to 1982 did not detect arson abuse, nor were applications reviewed to determine if the owner's actions caused tenant abandonment or deterioration of their buildings.

Within the Participation Loan Program, submission of a number of clearance requests immediately prior to closing in 1978 and 1979 weakened the screening process by preventing HPD's Inspector General's staff from conducting the most thorough investigation possible. Also,

the approval of pending loan applications in certain cases based on a previous expedited clearances within the past six months diminished the effectiveness of the screening process during 1978 and 1979.

The policies adopted by HPD in recent years appear to have prevented problems due to the submission of clearance requests immediately prior to closing and clearing applicants based on past applications.

The J51 program was unique in that its benefits were granted as-of-right. There was no statutory authority to deny benefits for any reason under J51. The absence of statutory authority to withhold J51 benefits, even if harassment and intentional fires were linked to illegal evictions during the period studied, denied the City of a potential tool to prevent harassment and intentional fires.

The final objectives of the study were to develop more effective arson prevention policies and procedures and to suggest regulatory and statutory changes to lessen arson susceptibility. The review of the administration of the four housing assistance programs in New York City disclosed that significant efforts have been made to address the issue of tenant displacement through neglect, fire, and arson, which it is believed is sometimes used to obtain government housing assistance benefits.

With regard to the Section 8 Program, New York City's Department of Housing, Preservation and Development initiated a policy in 1979 of selecting in-rem (City-owned as a result of tax foreclosure proceedings) properties. Under this policy, the City attempted to provide rehabilitation housing for low income tenants, and decrease its inventory of City-owned buildings. Limiting Section 8 substantial benefits to City-owned buildings also eliminated the potential for vacating the buildings through diminished services and maintenance because these buildings were under City management. As a result, opportunities to exploit the program through harassment and intentional fires were reduced.

During the period of this study, the City's HPD reviewed the fire histories of every building with an NSA application. This was done through information supplied by the New York City Fire Department's Division of Fire Investigation. However, the information reviewed was insufficient to adequately inform HPD of the true picture of the building's history.

Cognizant of the ineffectiveness of this process, HPD revised its policy at the time of its next NOFA offering to require that the Arson Strike Force provide complete fire profiles on buildings under application for Section 8 and other housing assistance programs.

Finally, the City in its selection of NSA projects, during the period studied, required applicant disclosure information. However, no determination was made of when the building became vacant and under what circumstances. The NSA concept was unique in its design and the City was not yet aware of its possible impact on the frequency with which fires and harassment would occur. Once this was recognized, HPD, in

its 1980 HAP, adopted a formal policy that no rehabilitation assistance (under Section 8 or other programs) would be awarded to individuals against whom harassment or displacement charges had been alleged until such charges were dismissed or settled.

In the Participation Loan Program it is apparent that New York City's HPD made efforts to eliminate the problems associated with the disclosure/investigation process during 1978-79. This has been the result of greater cooperation between the Inspector General and program staff. The outgrowth of this cooperative effort has been the submission of clearance requests by program staff prior to commitment.

These policies adopted by HPD in recent years appear to have prevented problems due to the submission of clearance requests immediately prior to closing and clearing applicants based on past applications.

The purpose of the Inspector General's review is to ensure that applicants have not committed acts which would prevent them from receiving Participation Loans. The basis for this determination is the disclosure statement submitted by applicants prior to commitment. This document furnishes the City with information on the applicant's real estate holdings, previous loan defaults, tax arrears, harassment charges, and other factors which may be detrimental to a loan request. Resources drawn upon to supplement these disclosures are extensive; information is requested from the Commissioner on Human Rights, Department of Investigation and the appropriate District Attorney. Additionally, complete fire profiles of the applicant's properties are requested from the Arson Strike Force. The I.G.'s recommendation for pending loans, submitted at closing, is based on analysis of this information.

Applicant screening is particularly important for the Participation Loan Program. As demonstrated in Section IV, buildings owned by some developers experienced more fires than buildings owned by others. While this may be due to factors outside of the owner's control, it underscores the necessity to evaluate carefully the background of all PLP applicants. HPD has attempted to do this through implementation of applicant screening.

In the J 51 program the City and State of New York have recently instituted measures intended to ensure the safety and well-being of tenants in buildings about to be renovated or converted.

The 1983 amendments to Section 489 of the Real Property Tax Law have been passed by the State Legislature and signed into law by the Governor. Included are several anti-harassment provisions. Most importantly, the law specifically denies benefits to "every owner of record and owner of substantial interest in the property or entity owning the property or sponsoring the conversion, alteration, or improvement... (who) has been found to have harassed or unlawfully evict tenants (by) judgement or determination of a court or agency (including a non-government agency having appropriate legal jurisdiction) under the penal law, any state or local law regulating rents or any state or

local law relating unlawful eviction..."

Equally important is the fact that the law now requires owners to file an affidavit of non-harassment 30 days before construction begins in order to convert or rehabilitate a building. The new law requires that every owner of record or substantial interest be listed on the affidavit and that it contain a statement that they had not "within the five years prior (to the affidavit) been found to have harassed or unlawfully evict tenants..." The local housing agency is required to review these affidavits. To facilitate such review, HPD has made a commitment to provide resources to screen such applicants.

This measure will deny J 51 benefits on the basis of harassment and will hopefully be a deterrent in cases where harassment is found.

Additionally, Section D16-101 of the NYC Administrative Code, which was enacted in September 1982, amends the Code with respect to unlawful eviction in any residential building in the City. Unlawful eviction is defined under the law as:

- using or threatening force to induce the occupant to vacate;
- interrupting or discontinuing essential services; and/or
- engaging or threatening to engage in conduct which prevents or is intended to prevent a tenant from the lawful occupancy of their apartment, or which is intended to induce the tenants to vacate. Such actions include removing the occupant's possessions, removing the door, and locking the tenant out.

This section classifies such acts as Class A misdemeanors and provides a penalty of up to \$100 per day for failure to make a good faith effort to restore an unlawfully evicted tenant to occupancy.

Suggestions for Regulatory, Statutory, and Procedural Anti-Arson Measures

Intentional or frequent fires were not perceived as a risk when most of the programs discussed in this report were conceived and designed. It has only been through experience that the problem has been seen. The solution must come from a comprehensive evaluation of each program proposed and enacted. This study has made suggestions concerning a very limited number of housing programs in order to suggest ways to improve them. In the future, thought should be given to this issue beginning with the design of any housing subsidy program.

Project and Applicant Screening

Assuming limited funds, decisions must be made as to which projects to accept. To facilitate this decision, municipalities should be required to promulgate formal review criteria for all applications in order to receive direct housing rehabilitation funds or use block grant funds for rehabilitation.

Standards of building management should be developed. Funds should not be made available to owners or developers against whom a finding of harassment has been made. Funds should also be denied to owners or developers whose buildings show the rapid onset of tenant complaints, violations indicating poor maintenance or the lack of essential services, or multiple fires of a suspicious, incendiary, or unknown cause until these conditions have been thoroughly investigated.

In some instances benefits may be granted automatically for specified improvements. The developer or owner should be required to apply for such benefits before work starts and tenant harassment findings should be grounds to deny benefits. If harassment charges are pending no loans should be granted until the charges are fully investigated. Program regulations should contain such provisions.

Preliminary project review should begin as soon as is practically possible. Project screening is ineffective if adequate time is not allowed for the complete review of an applicant and his holdings. Project screening may also be ineffective if guidelines detailing acceptance and rejection criteria are not promulgated and adhered to. It is difficult to evaluate projects fairly and consistently in the absence of such criteria. To facilitate the use of formal criteria all developers, owners, partners, etc., should be required to submit comprehensive disclosure information as part of all applications for program funds. Making false or misleading statements on an applicant disclosure form should be immediate grounds to deny benefits. Disclosure information should include:

Corporate Affiliations

1. present organization, firm, partnership, etc.
2. other organizations involved in real estate with which the individual is connected
3. position or title in each organization
4. address of each corporation
5. percent interest (if appropriate)
6. major shareholders in each corporation
7. the same information for subsidiary corporations

Real property holdings of each corporation listed above

1. address
2. relationship to property (e.g., owner, managing agent, contractor, etc.)
3. whether receiving public funds for rehabilitation, management, etc.
4. mortgage status (i.e., whether in arrears) for all real property holdings
5. real estate tax arrears - all holdings
6. other liens - all holdings
7. bankruptcy proceedings

Harassment cases filed against any corporation or property listed in A or B, above

1. court or tribunal of jurisdiction
2. finding (whether guilty, charges withdrawn, etc.)
3. nature of case

Other pending lawsuitsWhether applicant has been convicted of a crimeWhether any person involved in corporations under A above has held elected or appointed officeOrganization or individual from which applicant building was purchased, including copies of all mortgage, deed, bargain and sale, etc. agreements

Once this material is received by the agency Inspector General or other appropriate party the screening process should include:

Verification of informationEvaluation of fire history for all buildings owned by individual and/or corporations, including:

1. cause of fire - Generally, there are two causes of fires, accidental/natural or incendiary. All incendiary fires should be reviewed. Additionally, fires that are determined to be accidental (i.e., boiler and trash fires) may actually be part of the harassment pattern.
2. occupancy at time of fire - A pattern of numerous fires may cause a building to become increasingly uninhabitable, resulting in declining occupancy.
3. damage - The damage caused by individual fires is often minimal although the cumulative effect may make the building uninhabitable.
4. point of origin - Fires of any type in a vacant apartment are usually suspicious. They may be indicative of an owner's failure to secure such areas. Fires in owner-controlled areas, such as the roof or cellar, may also signify negligence in securing these areas.

The fire histories should be reviewed for the real property holdings of all individuals and corporation listed on the applications. The fire histories of all such properties should be reviewed.

Title and mortgage documents should be examined to determine prior ownership in an effort to ascertain whether a relationship exists between the applicant on a recently purchased vacant building and the prior owner under whose ownership the building was vacated by means of harassment. While the purchase of one such building under these conditions does not necessarily indicate a relationship, several such transactions may be cause for concern.

Violations and Complaints - The rapid appearance of a large number of violations and complaints may be an indication of tenant harassment through declining services. Violation and complaint records should be examined if the building was occupied shortly before the application for program funds.

Potential Conflict of Interest - It should be determined whether any individuals who are associated with the present project held elected or appointed positions that would have involved them in the building selection process or provided them with advance knowledge of properties to be rehabilitated.

If a court or administrative tribunal has determined that harassment took place, such findings should constitute automatic grounds to deny program benefits. This should be stated in enabling legislation and program regulations.

APPENDIX A: STATISTICAL TABLES

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Equally important is the fact that poor management may mask an owner's attempt to vacate a building. Mismanagement of this type may be, in effect, a form of tenant harassment. It is characterized by:

- sporadic heat and hot water;
- the lack of janitorial services;
- reports of squatters or unauthorized tenants, often because the building or vacant apartments are left unsecured;
- rubbish accumulations in the public corridors, court yard, vacant apartments, and cellar or boiler room;
- rapidly diminishing occupancy;
- uncorrected structural or mechanical defects; and
- fires of an incendiary or suspicious nature.

Suspicious or incendiary fires may result from the conditions listed above, or be intentional to force tenants to leave.

Regardless of other factors, severe building deterioration does lead to an increased incidence of fires of all causes and is often part of a pattern of harassment. Such a pattern is discernible from a review of housing code violations relating both to building maintenance and structural conditions (Housing or Buildings Department records), Fire Department records, Health Department records, and occasionally Human Resource or Welfare Department records.

Table 3-1: Type of Submission by Borough

<u>Borough</u>	<u>NSA</u>	<u>NOFA</u>	<u>Total</u>
Bronx	2.2% (4)	34.2% (55)	17.2% (59)
Brooklyn	53.0 (97)	23.0 (37)	39.0 (134)
Manhattan	44.8 (82)	42.9 (69)	43.9 (151)
Total	100.0% (183)	100.0% (161)	100.0% (344)

Table 3-3: Percent of Brooklyn Section 8 and Control Buildings with Suspicious Fires (1/1/78-12/31/81)

<u>Suspicious Fires</u>	<u>Section 8</u>	<u>Control</u>
none	49.3% (66)	77.3% (1219)
one or more	50.8 (68)	22.7 (358)
Total	100.1% (134)	100.0% (1577)
chi-square=52.0 P=.0001 DF=1		

Table 3-4: Percent of Manhattan Section 8 and Control Buildings With Suspicious Fires (1/1/78-12/31/81)

<u>Suspicious Fires</u>	<u>Section 8</u>	<u>Control</u>
none	52.3% (79)	73.4% (1837)
one or more	47.7 (72)	26.6 (666)
total	100.0% (151)	100.0% (2503)
chi-square=31.5 P=.0001 DF=1		

Table 3-5: Percent of Bronx Section 8 and Control Buildings with Suspicious Fires (1/1/78-12/31/81)

<u>Suspicious Fires</u>	<u>Section 8</u>	<u>Control</u>
none	52.5% (31)	55.5% (442)
one or more	47.5 (28)	44.5 (355)
total	100.0% (59)	100.0% (797)
chi-square=.2 P=.66 DF=1		

Table 3-6: Percent of City-Wide Section 8 and Control Buildings with Multiple Suspicious Fires (1/1/78-12/31/81)

<u>Number of Suspicious Fires</u>	<u>Section 8</u>	<u>Control</u>
0	51.2% (176)	71.7% (3498)
1	23.8 (82)	16.1 (786)
2	8.7 (30)	6.0 (290)
3	6.4 (22)	2.4 (117)
4	2.6 (9)	1.5 (74)
5 or more	7.3 (25)	2.3 (112)
total	100.0% (344)	100.0% (4877)
chi-square=82.6 P=.0001 DF=5		

Table 3-7: Percent of Brooklyn Section 8 and Control Buildings with Multiple Suspicious Fires (1/1/78-12/31/81)

<u>Number of Suspicious Fires</u>	<u>Section 8</u>	<u>Control</u>
0	49.3% (66)	77.3% (1219)
1	20.9 (28)	12.4 (196)
2	9.7 (13)	5.3 (83)
3	7.5 (10)	2.0 (32)
4	3.7 (5)	1.5 (24)
5 or more	9.0 (12)	1.5 (23)
total	100.1% (134)	100.0% (1577)
chi-square=76.4 P=.0001 DF=5		

Table 3-8: Percent of Manhattan Section 8 and Control Buildings with Multiple Suspicious Fires

<u>Number of Suspicious Fires</u>	<u>Section 8</u>	<u>Control</u>
0	52.3% (79)	73.4% (1837)
1	28.5 (43)	17.2 (431)
2	8.6 (13)	5.2 (131)
3	4.0 (6)	1.9 (46)
4	2.0 (3)	1.1 (27)
5 or more	4.6 (7)	1.2 (31)
total	100.0% (151)	100.0% (2503)

chi-square=37.7 P=.0001 DF=5

Table 3-9: Composition of Program and Control Groups by Building Size and Borough

<u>Number of Dwelling Units</u>	<u>Bronx</u>		<u>Brooklyn</u>		<u>Manhattan</u>	
	<u>Sect 8</u>	<u>Control</u>	<u>Sect 8</u>	<u>Control</u>	<u>Sect 8</u>	<u>Control</u>
3-16 units	6.8% (4)	44.7% (340)	56.9% (74)	78.5% (1137)	43.7% (62)	56.7% (1099)
over 16 units	93.2 (55)	55.3 (421)	43.1 (56)	21.5 (312)	56.3 (80)	43.3 (838)
Total	100.0% (59)	100.0% (761)	100.0% (130)	100.0% (1449)	100.0% (142)	100.0% (1937)

Table 3-10: Percent of Suspicious Fires (1/1/78-12/31/81) in City-wide Program and Control Samples by Buildings Size

<u>Number of Suspicious Fire</u>	<u>3-16 units</u>		<u>Over 16 units</u>	
	<u>Sect 8</u>	<u>Control</u>	<u>Sect 8</u>	<u>Control</u>
0	58.6 (82)	80.5 (2074)	45.6 (87)	49.0 (770)
1	23.6 (33)	13.2 (340)	24.1 (46)	24.8 (389)
2	8.6 (12)	4.0 (104)	8.4 (16)	11.0 (172)
3	2.1 (3)	1.1 (28)	9.4 (18)	5.7 (89)
4	2.1 (3)	.6 (16)	3.1 (6)	3.5 (55)
5 or more	5.0 (7)	.5 (14)	9.4 (18)	6.1 (96)
Total	100.0 (140)	99.9 (2576)	100.0 (191)	100.1 (1571)

Table 3-11: Percent of Suspicious Fires (1/1/78-12/31/81) in Brooklyn Program and Control Samples by Building Size

<u>Number of Fires</u>	<u>Building Size</u>			
	<u>3-16 units</u>		<u>Over 16 units</u>	
	<u>Sect 8</u>	<u>Control</u>	<u>Sect 8</u>	<u>Control</u>
0	52.7 (39)	84.5 (961)	44.6 (25)	45.2 (141)
1	21.6 (16)	10.5 (119)	19.6 (11)	22.4 (70)
2	13.5 (10)	3.3 (37)	5.4 (3)	13.5 (42)
3	2.7 (2)	1.0 (11)	12.5 (7)	6.7 (21)
4	2.7 (2)	0.7 (8)	5.4 (3)	5.1 (16)
5 or more	6.8 (5)	0.1 (1)	12.5 (7)	7.1 (22)

Total 100.0 (74) 100.0 (1137) 100.0 (56) 100.0 (312)

Table 3-12: Percent of Suspicious Fires (1/1/78-12/31/81) in Manhattan Program and Control Samples by Building Size

<u>Number of Fires</u>	<u>Building Size</u>			
	<u>3-16 units</u>		<u>Over 16 units</u>	
	<u>Sect 8</u>	<u>Control</u>	<u>Sect 8</u>	<u>Control</u>
0	64.5 (40)	76.8 (844)	42.5 (34)	58.5 (490)
1	27.4 (17)	15.5 (170)	30.0 (24)	25.4 (213)
2	3.2 (2)	4.9 (54)	11.2 (9)	8.0 (67)
3	1.6 (1)	1.4 (15)	6.2 (5)	3.7 (31)
4	0.0 (0)	0.6 (7)	3.8 (3)	2.0 (17)
5 or more	3.2 (2)	0.8 (9)	6.3 (5)	2.4 (20)
Total	100.0 (62)	100.0 (1099)	100.0 (80)	100.0 (838)

Table 3-14: Percent of Suspicious Fires (1/1/78-12/31/81) by Type of Submission, Brooklyn

<u>Number of Fires</u>	<u>NSA</u>	<u>NOFA</u>
none	41.2% (40)	70.3% (26)
one	22.7 (22)	16.2 (6)
more than one	36.1 (35)	13.5 (5)
total	100.0% (97)	100.0% (37)

Table 3-16: Percent of Suspicious Fires (1/1/78-12/31/81) by 1978 Tax Arrears

<u>Suspicious Fires</u>	<u>Quarters in Arrears:</u>			
	<u>0-8</u>		<u>9 or more</u>	
	<u>Sect 8</u>	<u>Control</u>	<u>Sect 8</u>	<u>Control</u>
None	38.8 (38)	74.6 (2753)	56.1 (138)	62.8 (745)
One	25.5 (25)	14.7 (544)	23.2 (57)	20.4 (242)
more than one	35.7 (35)	10.7 (394)	20.7 (51)	16.8 (199)
total	100.0 (98)	100.0 (3691)	100.0 (246)	100.0 (1186)
chi-square (0-8 Quarters)=76.9			P=.0001	DF=2
chi-square (9 or more Quarters)=4.1			P=.13	DF=2
chi-square (Sect 8)=10.6			P=.005	DF=2
chi-square (Control)=62.7			P=.0001	DF=2

Table 3-18: Percent of Suspicious Fires (1/1/78-12/31/81)
by Occupancy
(Section 8 and Control)

Number of Fires	Vacant		Occupancy				Sect
	Sect 8	Control	1-50% Occupied	Control	51-99% Occupied	Control	
none	70.8 (80)	80.0 (897)	40.7 (22)	57.7 (98)	30.3 (23)	57.3 (939)	50.
one	15.9 (18)	12.1 (136)	22.2 (12)	21.8 (37)	30.3 (23)	22.4 (367)	28.
more than one	13.3 (15)	7.9 (88)	37.0 (20)	20.6 (35)	39.5 (30)	20.4 (334)	20.
Total	100.0 (113)	100.0 (1121)	99.0 (54)	100.1 (170)	100.1 (76)	100.1 (1640)	100.

chi-square=4.8
 P=.09
 DF=2

chi-square=6.7
 P=.04
 DF=2

chi-square=4.2
 P=.0001
 DF=2

chi-
 P=.0
 DF=2

Table 3-19: NSA Submissions by Occupancy (Con Edison Data)

Percent Occupied	Number in Category	Percent in Category
0	44	24.0
1-25	12	6.6
26-50	30	16.4
51-75	22	12.0
76-99	25	13.7
100	50	27.3
Total	183	100.0

Table 3-20: Percent of Suspicious Fires by Ownership and Occupancy, NSA Sample Only

Number of Fires	Percent Occupied							
	Vacant		1-50%		51-99%		100%	
	city owned	private	city owned	private	city owned	private	city owned	private
none	45.8% (11)	54.6% (6)	45.8% (11)	27.8% (5)	30.8% (8)	4.8% (1)	53.1% (17)	44.4% (8)
one	37.5 (9)	9.1 (1)	37.5 (9)	11.1 (2)	34.6 (9)	33.3 (7)	31.3 (10)	38.9 (7)
more than one	16.7 (4)	36.4 (4)	16.7 (4)	61.1 (11)	34.6 (9)	61.9 (13)	15.6 (5)	16.7 (3)
total	100.0% (33)	100.1% (11)	100.0% (24)	100.0% (18)	100.0% (26)	100.0% (21)	100.0% (32)	100.0% (18)

Table 4-1: Percent of Brooklyn PLP and Control Buildings with Suspicious Fires (1/1/78-12/31/81)

Suspicious Fires	PLP	Control
None	54.0% (27)	78.2% (597)
One	18.0 (9)	11.3 (86)
Multiple	28.0 (14)	10.5 (80)
Total	100.0% (50)	100.0% (763)
chi-square=17.9	P=.0001	DF=2

Table 4-2: Percent of Brooklyn PLP and Control Buildings with Multiple Suspicious Fires (1/1/78-12/31/81)

Suspicious Fires	PLP	Control
0	54.0% (27)	78.2% (597)
1	18.0 (9)	11.3 (86)
2	14.0 (7)	5.0 (38)
3	0.0 (0)	2.2 (17)
4	2.0 (1)	.9 (7)
5 or more	12.0 (6)	2.4 (18)
Total	100.0% (50)	100.0% (763)

Table 4-3: Percent of Manhattan PLP and Control Buildings with Suspicious Fires (1/1/78-12/31/81)

Suspicious Fires	PLP	Control
None	68.2% (45)	75.5% (810)
One	16.7 (11)	16.8 (180)
Multiple	15.1 (10)	7.7 (83)
Total	100.0% (66)	100.0% (1073)
chi-square=4.6	P=.098	DF=2

Table 4-4: Percent of Brooklyn PLP and Control Buildings with Suspicious Fires (1/1/78-12/31/81) by Neighborhood

Suspicious Fires	Neighborhood					
	Flatbush		Crown Hts		Other Brooklyn	
	PLP	Control	PLP	Control	PLP	Control
None	33.3% (5)	46.6% (55)	22.2% (2)	60.8% (104)	83.3% (20)	92.7% (379)
One	13.3 (2)	25.4 (30)	44.4 (4)	18.1 (31)	8.3 (2)	4.9 (20)
more than one	53.3 (8)	28.0 (33)	33.3 (3)	21.1 (36)	8.3 (2)	2.3 (10)
Total	99.9% (15)	100.0% (118)	99.9% (9)	100.0% (171)	99.9% (24)	99.9% (409)

Table 4-5: Percent of Crown Heights PLP and Control Buildings of Over 16 Units with Suspicious Fires (1/1/78-12/31/81)

Suspicious Fires	PLP	Control
None	22.2% (2)	21.6% (19)
One	44.4 (4)	27.4 (20)
more than one	33.3 (3)	51.0% (29)
Total	99.9% (9)	100.0% (68)

Table 5-2: Percent of J51 and Control Buildings with Suspicious Fires (1/1/78-12/31/79) by Building Size

Suspicious Fires	Number of Apartments:			
	3-25		26 and over	
	J51	Control	J51	Control
none	87.5 (35)	96.7 (1246)	87.7 (50)	92.5 (344)
one	2.5 (1)	2.8 (36)	5.3 (3)	6.4 (24)
more than one	10.0 (4)	0.5 (7)	7.0 (4)	1.1 (4)
total	100.0 (40)	100.0 (1289)	100.0 (57)	100.0 (372)
	chi-square=42.3 P=.0001 DF=2		chi-square=9.6 P=.008 DF=2	

Table 5-3: Percent of J51 and Control Buildings with Suspicious Fires (1/1/78-12/31/79) by 1978 Occupancy and Program Status

<u>Suspicious Fires</u>	<u>Occupancy</u>					
	<u>Vacant</u>		<u>Partially Occupied</u>		<u>Fully Occupied</u>	
	<u>J51</u>	<u>Control</u>	<u>J51</u>	<u>Control</u>	<u>J51</u>	<u>Control</u>
none	94.4 (34)	95.8 (250)	88.6 (31)	96.2 (381)	76.9 (20)	95.6 (952)
one	2.8 (1)	1.9 (5)	0.0 (0)	3.0 (12)	11.5 (3)	4.2 (42)
more than one	2.8 (1)	2.3 (6)	11.4 (4)	0.8 (3)	11.5 (3)	0.2 (2)
Total	100.0 (36)	100.0 (261)	100.0 (35)	100.0 (396)	100.0 (26)	100.0 (996)
	chi-square=.15 P=.93 DF=2		chi-square=23.8 P=.0001 DF=2		chi-square=70.6 P=.0001 DF=2	

Table 5-4: Percent of J51 and Control Buildings with Suspicious Fires (1/1/78-12/31/79) by Tax Arrears

<u>Suspicious Fires</u>	<u>Tax Arrears Status:</u>			
	<u>4 quarters or less of arrears</u>		<u>More than 4 Quarters of arrears</u>	
	<u>J51</u>	<u>Control</u>	<u>J51</u>	<u>Control</u>
none	87.9 (58)	95.9 (1373)	86.2 (25)	92.5 (111)
one	1.5 (1)	3.5 (50)	10.3 (3)	6.7 (8)
more than one	10.6 (7)	0.6 (8)	3.5 (1)	0.8 (1)
Total	100.0 (66)	100.0 (1431)	100.0 (29)	100.0 (120)

Table 5-5: Percent of J51 (only) Buildings with Suspicious Fires (1/1/78-12/31/79) by Rehabilitation Cost per Apartment

<u>Suspicious Fires</u>	<u>Certified Reasonable Cost Per Apartment:</u>		
	<u>Under \$10,000</u>	<u>\$10,000-\$20,000</u>	<u>Over \$20,000</u>
none	95.0% (38)	85.7% (36)	69.2% (9)
one or more	5.0 (2)	14.3 (6)	30.8 (4)
Total	100.0% (40)	100.0% (42)	100.0% (13)
chi-square=6.1	P=.048	DF=2	

APPENDIX B; ACRONYMS AND OTHER DEFINITIONS

ARPI (Arson Risk Prediction Index): A statistical model used by the New York City Arson Strike Force to assign buildings to arson risk categories through a number of quantitative indicators

CDBG (Community Development Block Grant): A Federal (under HUD) grant, which awards funds to cities to be used to eliminate slums and blight or for the benefit of low to moderate income people, according to priorities set by each city

Class A Multiple Dwelling: Residential building of more than 3 apartments occupied, as a rule, for permanent residence purposes

Class B Multiple Dwelling: Properties of more than three units occupied, as a rule, transiently, as the more or less temporary abode of individuals who are lodged with or without meals

HAP (Housing Assistance Plan): A Federally mandated document, which indicated a city's housing priorities and targets areas for CDBG assistance

HPD (New York City Department of Housing Preservation and Development): New York's agency responsible for the initiation, supervision, and evaluation of City programs relating to urban renewal, publicly-aided housing, neighborhood conservation, and the enforcement of all laws pertaining to housing rehabilitation, maintenance, and community preservation

HUD (Federal Department of Housing and Urban Development)

In-Rem: This term refers to the New York City tax foreclosure proceeding by which the City acquires the properties of owners who are delinquent in paying real estate taxes. In-rem buildings, as used in this report, is synonymous with City-owned buildings.

NOFA (Notice of Fund Availability): Notice published by HUD which announces the availability of Section 8 funds and invites proposals for the use of such funds

NSA (Neighborhood Strategy Area): An experimental program which, in 1979, gave eligible cities the responsibility to solicit, evaluate, and

select Section 8 proposals for properties in neighborhoods designated for NSA funds

ULURP (Uniform Land Use Review Process): Review process mandated by the New York City Charter for the use, development, and improvement of property and land, including the lease, sale, and transfer of City-owned properties

USFA (United States Fire Administration): The mandate of the USFA, a Federal agency, is the coordination of Federal assistance for arson prevention; compilation of national arson statistics; analysis of ways to reduce economic incentives for arson; as well as the promotion of local arson task forces.

END