rebuilding. The local pols would hold community meetings and talk up tiny grassroots bootstrap efforts as the answer. We remember in particular a community-board meeting in the South Bronx held by Robert Abrams, then Bronx Borough President, who was very enthusiastic about CETA programs and Hostos Community College, but ignored discussion about the closed fire companies and the ERS fireboxes. This meeting was held in 1976, when the South Bronx lay in ruins, and the fires there were becoming larger, eroding away what was left after the epidemic crest had blitzed a high proportion of the housing.

No New York Democrat would step forward and admit that a disaster had begun and progressed. After 1980, very few Republicans concerned themselves because they were betting on gentrification to get them votes. The Democrats had their own bets on how the destabilization and decay would affect voting patterns. They all thought they would end up on top of the ashpile.

Disasters to which responses are inadequate or inappropriate ripple out and amplify, engendering further disaster. A well-known disaster occurred in India when a reservoir was built in an earthquake zone. This triggered a massive quake which the authorities ignored. Their failure to aid the victims and see to sanitation led to an explosion in the rat population and an outbreak of plague. Thousands fled the plague, of whom some were already infected. Before the epidemic was controlled, it had spread across a whole state.[31]

The New York City burnout disaster greatly exceeds this Indian disaster by any measure: time frame, involved population, involved area, number of deaths, number of disease cases, and number of lives derailed. Yet, no one in authority will proclaim it a disaster. Foundations such as the Ford Foundation and the Fund for the City of New York pour money into such misguided programs as neighborhood arson task forces. In the hardest-hit areas, there isn't enough of a community on which to base an effective program, even if it were aimed at the proper target. So the disaster continues its course and draws an ever greater area and population into its meshes as it spreads.

Table 3-1 STATISTICS OF EXTERNAL WORKTIME DISTRIBUTIONS

YEAR	MEAN(HRS)	DISPERSION	PATCHINESS	%>100 HRS	%<5HRS
			Ladders		
1972	13.4	33.6	3.4	0.7	43.1
1973	25.3	83.4	4.3	6.3	31.5
1974	29.4	95.5	4.2	9.8	31.5
1975	39.9	103.1	3.6	12.4	26.3
1976	38.3	111.5	3.9	12.5	20.6
			Engines		
1972	12.7	87.8	3.6	1.8	57.7
1973	25.3	185.6	8.3	6.9	49.1
1974	35.4	242.3	7.8	9.7	48.4
1975	49.1	288.3	6.9	12.4	38.8
1976	46.1	152.7	4.3	12.2	22.0

Table 3-2 BOROUGH POPULATION DENSITIES, PERCENTAGE OF UNITS EXTREMELY OVERCROWDED, AND NUMBER OF FIRES PER UNIT POPULATION

BOROUGH	PD	OC	STRUCTURAL FIRES			RESIDENTIAL FIRES
			Feb	*May*	*Aug*	*1973–1975 mean*
Manhattan	67,808	3.78	8.66	7.57	5.44	7.83
Brooklyn	37,013	3.01	5.84	5.51	3.90	5.68
Bronx	35,721	3.18	6.85	5.92	4.28	8.79
Queens	18,393	1.74	2.36	2.68	2.13	2.49
Staten Island	5,138	1.02	2.53	3.26	2.69	2.93

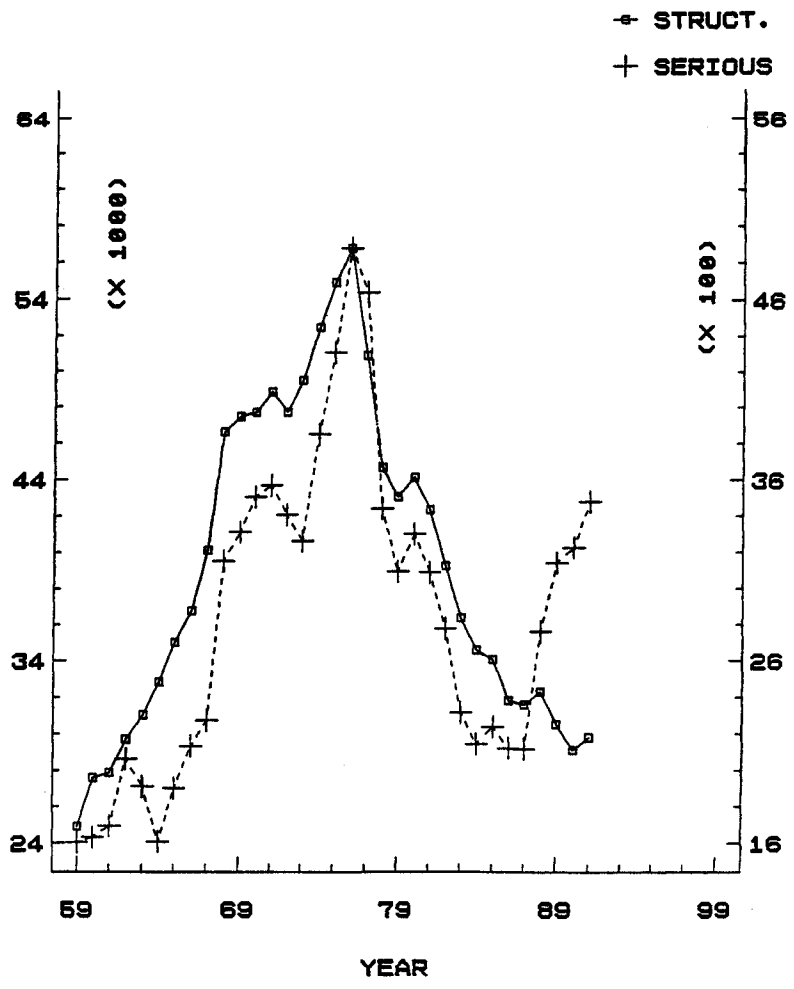
PD=population per square mile.
OC=percent of extremely overcrowded units
Structural fires = number/10,000 people in 1977
Residential fires = number/1,000 people

POPULATION DENSITIES, OVERCROWDING, AND TWO FIRE-SERVICE INDICES: SIX BROOKLYN COMMUNITY DISTRICTS

CD	PD	OC	TOTAL WORKTIME		TOTAL WORKERS	
			engines	*ladders*	*engines*	*ladders*
16	74.2	23.55	3,086.9	3,263.1	1,570	1,259
3	89.0	20.93	2,573.2	4,113.1	360	2,510
4	75.0	18.08	2,319.7	3,681.5	442	2,868
8	91.5	16.91	2,393.3	3,081.5	162	656
9	67.5	10.62	2,080.4	2,541.7	155	196
17	46.5	7.99	1,735.4	1,839.5	96	109

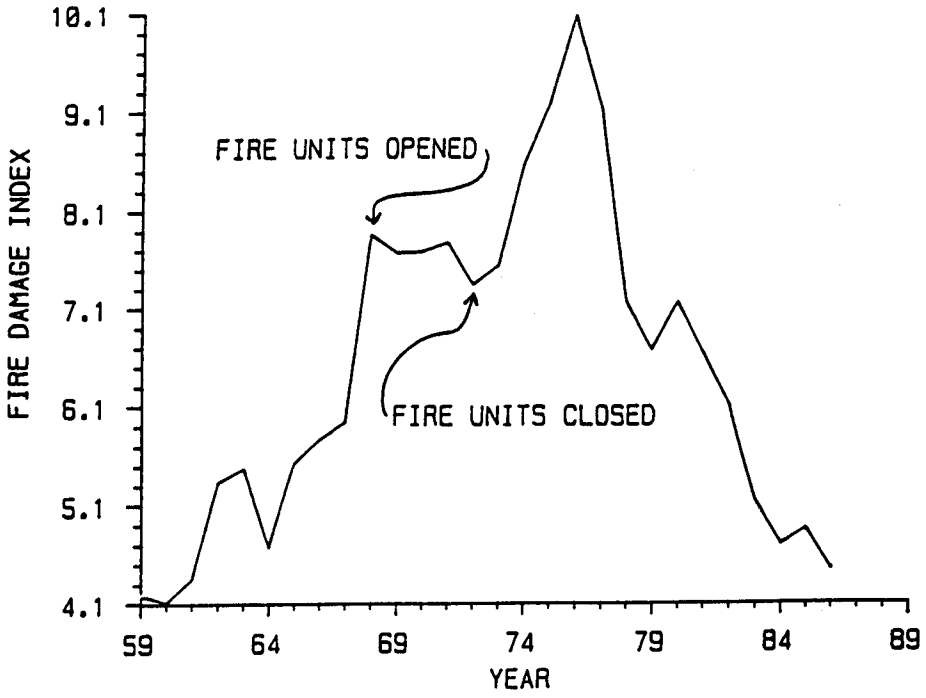
PD=thousands of people/square mile
OC=percentage overcrowded housing units
Worktime=total hours worktime per average unit 1975–1977
Workers=Incidents serviced by relocation, avenue company, 1975–1977

Figure 3-1 STRUCTURAL FIRES AND SERIOUS FIRES BY YEAR, NYC, 1959-1991



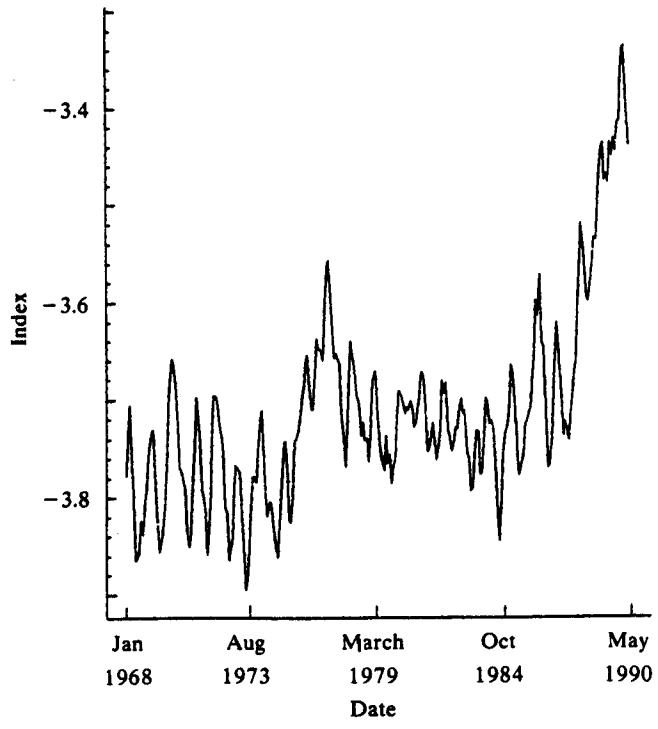
Left vertical axis=structural fires.
Right vertical axis=serious fires.
(Note how the number of serious fires increased after 1987.)

Figure 3-2 FIRE DAMAGE INDEX 1959-1986



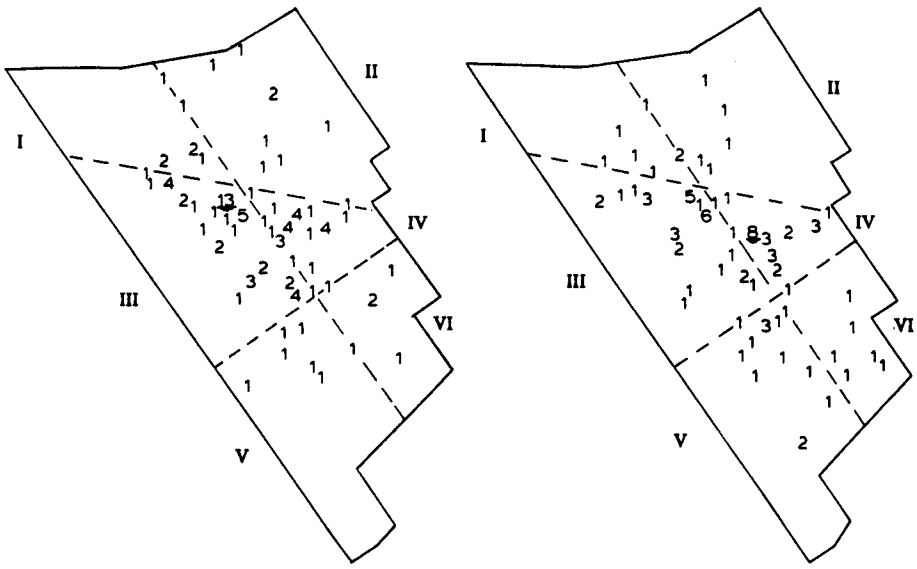
This index is based on hours of firefighting worktime, number of structural fires, and number of serious fires.

Figure 3-3 FIRE CONTROLLABILITY INDEX, 1968-1990



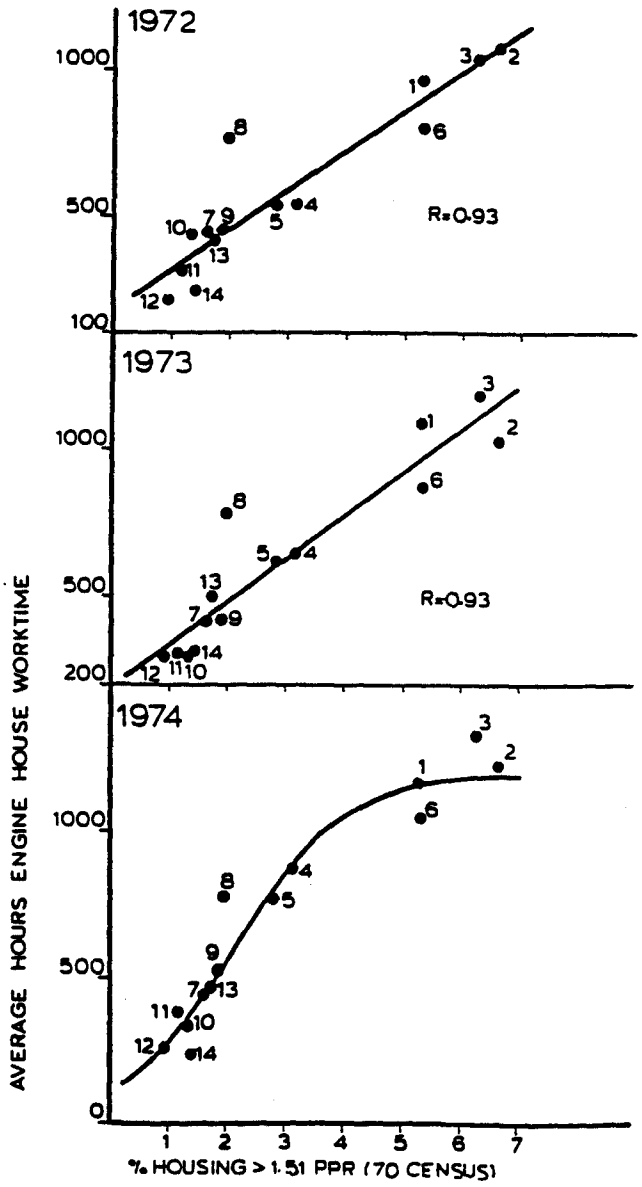
This index is a contrast between number of structural fires and the number of fire companies needed to control them. The less negative the index, the less controllable the fires.

Figure 3-4 STRUCTURAL FIRES BY BLOCK IN BUSHWICK



The left-hand map shows the number of structural fires in Bushwick in September 1976. Note the maximum number of thirteen fires on a single block of region III. The right-hand map shows the same phenomenon for December 1976. Notice the shift of the maximum clump into region IV. In each map, the maximum cluster is underlined.

Figure 3-5 AVERAGE BRONX COMMUNITY DISTRICT ENGINE WORKTIME TOTAL FOR 1972-1974 VS 1970 PERCENTAGE OF EXTREMELY OVERCROWDED HOUSING UNITS

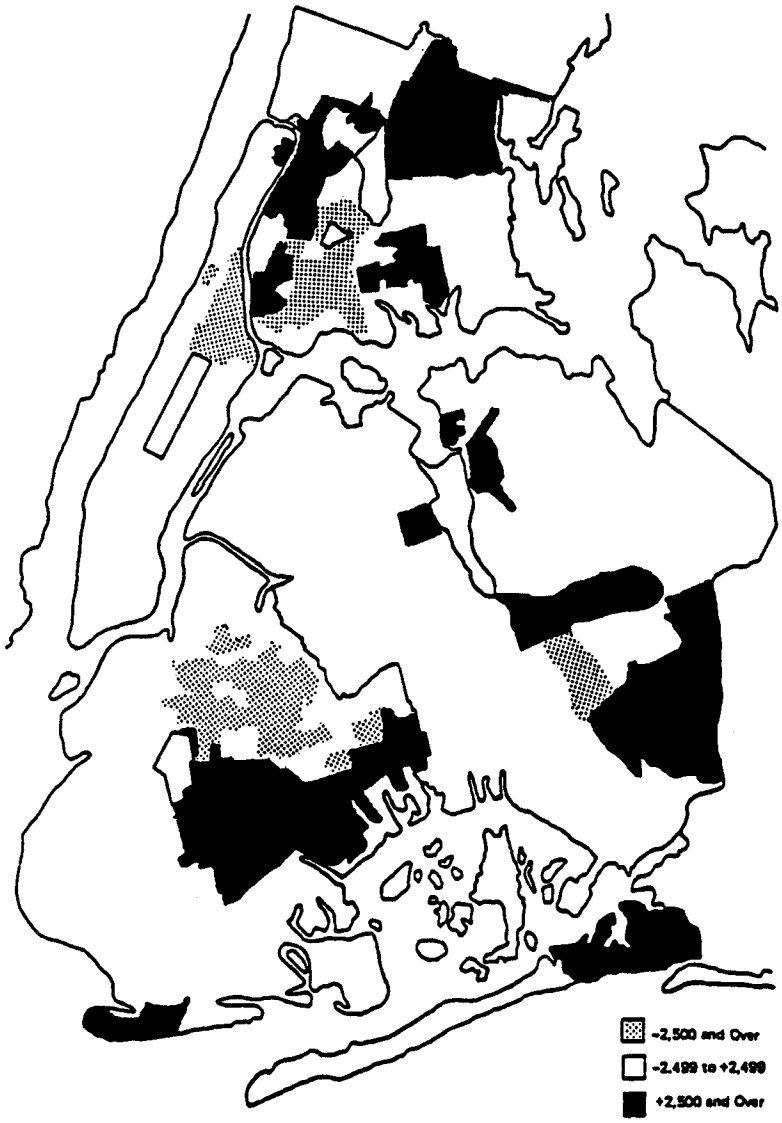


The "topping out" in 1974 represents a resource-limited inability to service total demand, a service shortfall.

Figure 3-6 CENSUS TRACTS WHICH LOST 500 HOUSING UNITS OR MORE, 1970-1980

Each large blackened area is composed of many census tracts.

Figure 3-7 CHANGE IN BLACK POPULATION 1970-1980



The changes of 2500 people refer to census tracts. The stippled and blackened areas are composed of many census tracts.

Figure 3-8 CHANGE IN HIGH DENSITY OF POPULATION ON WELFARE 1967-1977

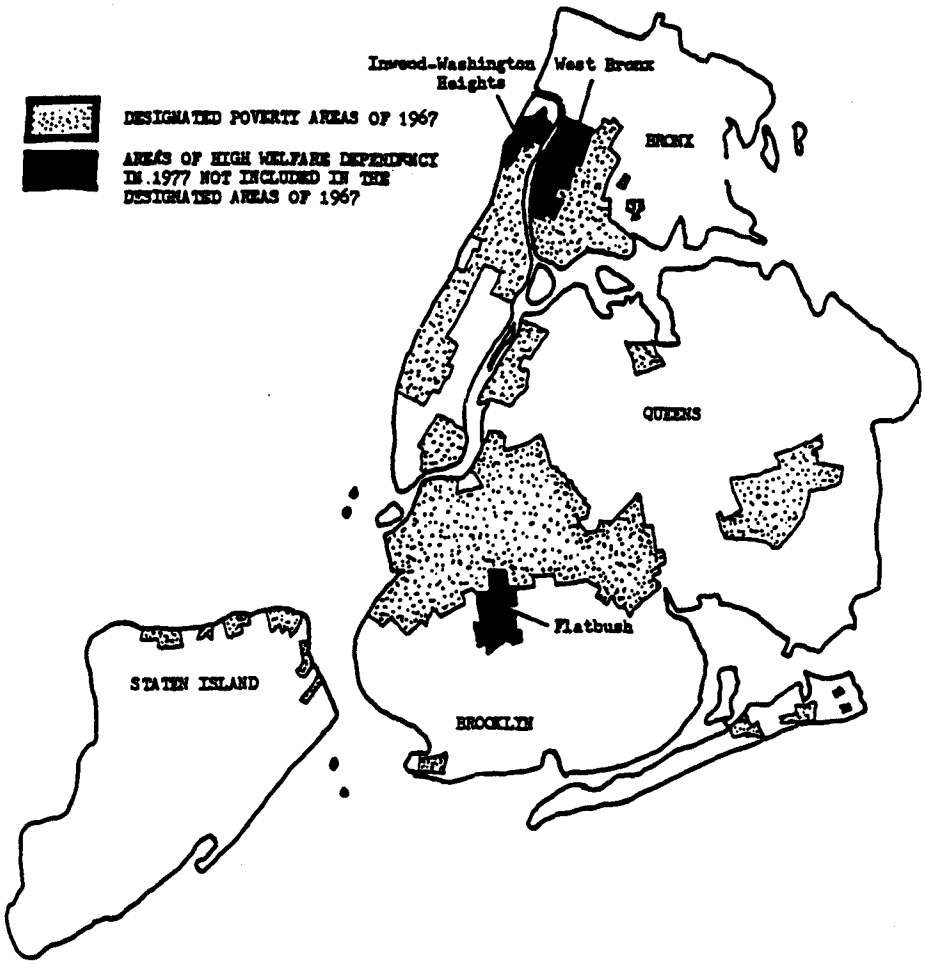
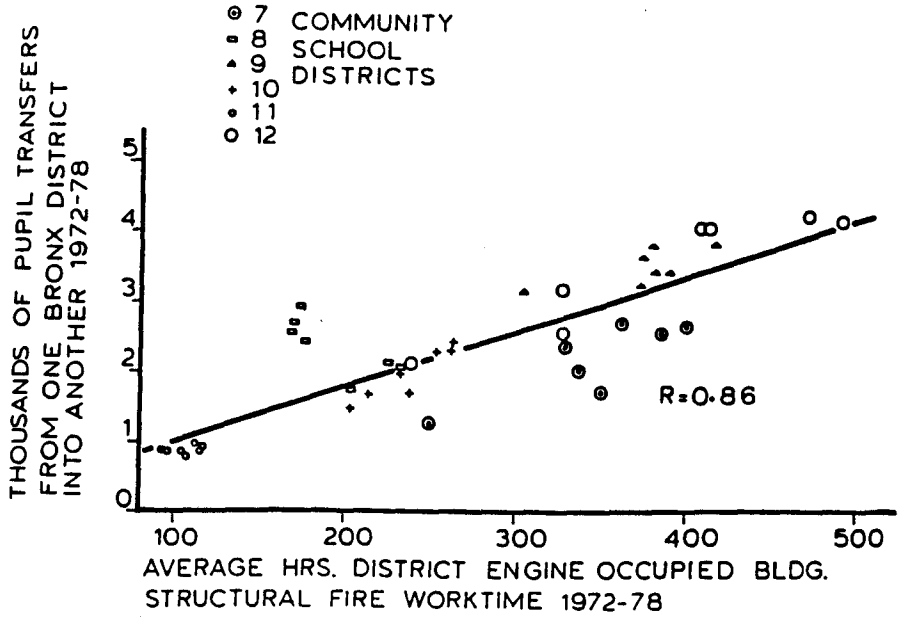


Figure 3-9 PUBLIC SCHOOL STUDENT TRANSFERS IN 1974-1975

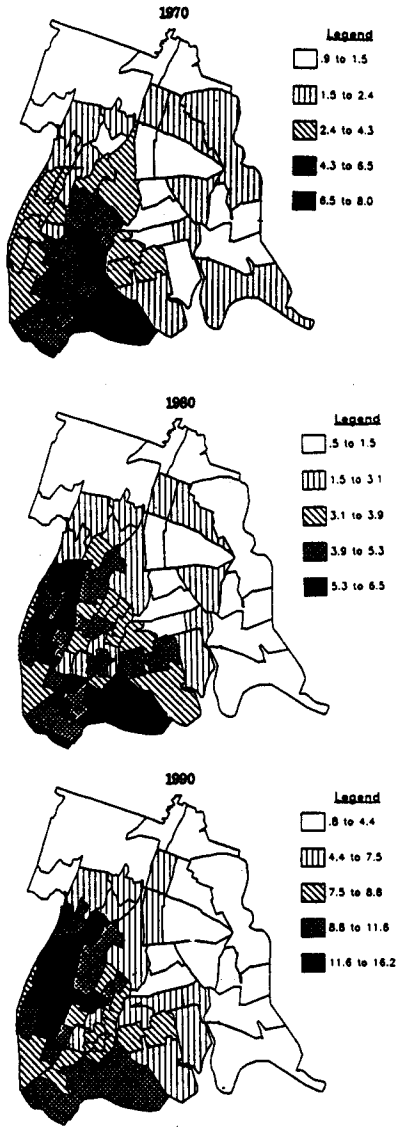
This year was the height of the fire epidemic in the South Bronx. Note the immense shift of students from the South Bronx to the West and Northwest Bronx. Note also the shifts from the Brooklyn fire band which had not yet reached its peak fire activity.

Figure 3-10 ANNUAL PUBLIC SCHOOL TRANSFERS IN THE BRONX VS. AVERAGE HOURS OF DISTRICT ENGINE WORKTIME FOR OCCUPIED STRUCTURAL FIRES: 1972-1978



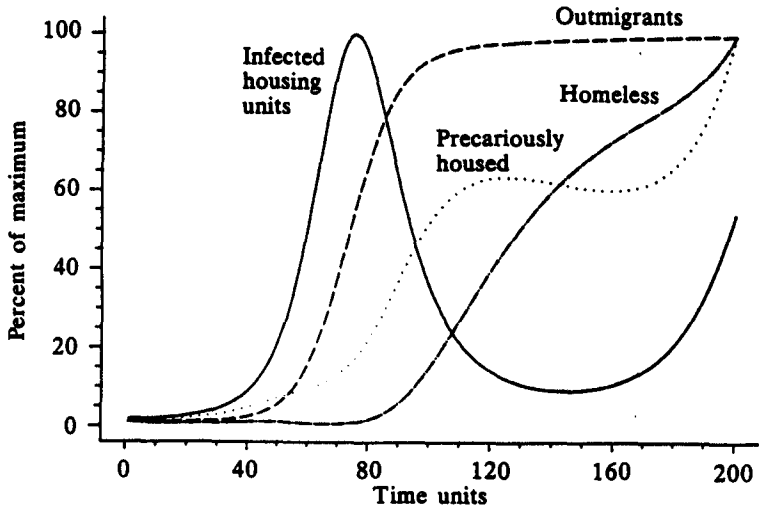
The fires drove the transfers. The statistical correlation was extremely high and the explanatory power of the fires for the transfers extremely high.

Figure 3-11 MAPS OF EXTREMELY OVERCROWDED HOUSING IN THE BRONX HEALTH AREAS: 1970, 1980,AND 1990



Note the shift to the West Bronx in 1980 of the highest percentage of extreme overcrowding and the subsequent increase in concentration of overcrowded housing units there by 1990. In 1970, the area with the most overcrowding had about 8% of the units extremely overcrowded. The area with the most overcrowding in 1990 had 16.2%, double that of 1970.

Figure 3-12 THE SUCCESSIVE WAVES OF HOUSING DESTRUCTION, EMIGRATION, CESSATION OF EMIGRATION, THE PRECARIOUSLY HOUSED, AND OVERT HOMELESSNESS



The coupling of contagious urban decay and homelessness.

As housing is destroyed and community conditions decay, those with resources emigrate. Their homes are freed for occupancy by those whose homes are destroyed. When emigration ceases, doubling up and other unstable arrangements lead to a large number of precariously housed residents. When these people fall out of the social network, they become the overtly homeless.