## CHINATOWN HOUSING SURVEY

Gregory W. Perkins Deborah A. Oriola

Boston Redevelopment Authority Research Department

December 1987

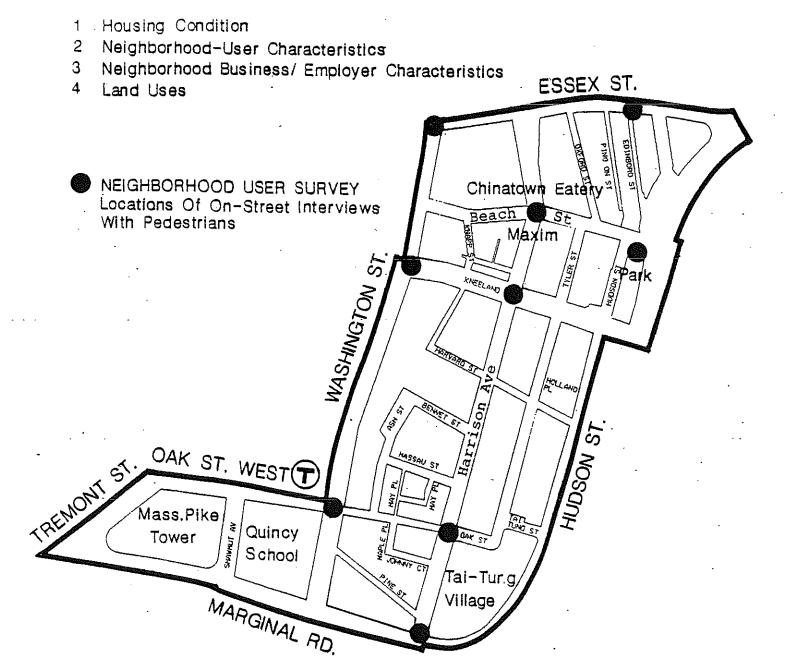
Raymond L. Flynn, Mayor City of Boston

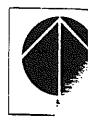
Stephen Coyle, Director Boston Redevelopment Authority

Alexander Ganz Research Director

Boston Redevelopment Authority
Board of Directors
Robert L. Farrell, Chairman
Joseph J. Walsh, Vice-Chairman
James K. Flaherty, Treasurer
Clarence Jones, Asst. Treasurer
Michael Donlon, Vice Chairman
of Subcommittees
Kane Simonian, Secretary

# CHINATOWN SURVEY AREA





# TABLE OF CONTENTS

	<u>Page</u>
Мар	
Executive Summary	1
Chinatown Building Survey	3
Structure Uses	3
Types of Structures	3
Number of Housing Units in Structures	3 3 3 5
Number of Floors in Structures	6
Housing Unit Vacancy Rate	6
Condition of Structure	6
Residential and Residential/Commercial	8
Commercial and Other Structures	9
Structures with Common Facilities	9
Chinatown Housing Unit Survey	11
Housing Unit Size	11
Condition of Housing Units	11
Kitchen and Bathroom facilities	11 `
Light, Ventilation, and Heating	12
Maintenance of Units	13
Parking	15
Demographic Characteristics	15
Household size	15
Elderly and Child population	16
Income and Poverty	16
Ethnic Backround	16
Educational Attainment	17
Methodology	1 2

# List of Tables and Exhibits

Tables	<u>Page</u>
Table 1: Distribution of Structure Type	
by Use of Structure	. 4
Table 2: Condition of Public Corridors by Use	
of Structure	7
Table 3: Proportion of Structures with Debris	
and Obstructions in Public Hallways	
by Structure Type	. 8
Table 4: Proportion of Structures Sharing Common	
Facilities by Structure Type	9
Table 5: Condition of Housing Units in	•
Chinatown Structures	12
•	
Exhibits	
,	
Exhibit 1: Structure Use	- 3
Exhibit 2: Structure Type	4
Exhibit 3: Units in Residential Structures	5
Exhibit 4: Units in Residential/Commercial Structures	6
Exhibit 5: Occupants Per Unit	11
Exhibit 6: Interior Unit Condition	13
Exhibit 7: Presence of Vermin	14
Exhibit 8: Aggas to Carbago Dianogal	1.4

#### **Executive Summary**

The Chinatown Community Plan effort, currently undertaken by the Boston Redevelopment Authority and the Chinatown/South Cove Neighborhood Council, seeks to assess the condition of housing units and determine the need for new construction and for upgrading of current units. A housing condition survey was carried out in the section of Chinatown bordered by Essex Street to the north, the Expressway to the east, the Mass Turnpike to the south and Washington and Tremont Streets to the west.<sup>1</sup>

The population of this area has grown in the past few years, from 3700 residents in 1980 to 5100 in 1987.<sup>2</sup> This growth, caused mostly by an influx of new residents, occurred in a period when the increase in housing units has been minimal.

Buildings in Chinatown are used for residential, commercial, mixed residential and commercial, and industrial purposes. The majority are brick structures and most have fewer than ten floors. Nearly one-half of the structures are used for residential purposes in both residential and residential commercial structures.

Although the buildings were found to be in fairly good condition, housing units in these buildings are overcrowded and many are deteriorating. Common stairwells are intact and not deteriorated, although there is a problem with

<sup>&</sup>lt;sup>1</sup>The survey area has been identified for the purpose of carrying out intensive field work in the Chinatown business and residential centers.

<sup>&</sup>lt;sup>2</sup>Chinatown's population was calculated by multiplying the total number of occupied housing units by the average household size in this area. Occupied housing units are the total housing units less vacant units. In the Chinatown Survey area there were 1478 units, of which 3.2 were vacant, giving us a total of 1431 occupied housing units. The average household size is 3.58. This multiplied by the total occupied units yields 5100 persons.

debris and clutter in public hallways. While many units appear to be in good condition, there are many units without accessible and private bathroom facilities; a significant number of buildings continue to have common kitchens as well as common bathrooms. Housing units in Chinatown are small, while the number of residents per household is much higher than the City average, indicating a problem of overcrowding.

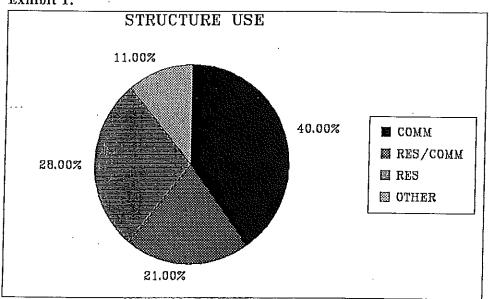
Parking does not seem to be a major problem for residents, in that less than one-third of Chinatown households own at least one car, and a similar share of these households have parking available with their building. Parking seems to be generally available for owners and visitors but most is expensive. In addition, if more households were to have cars, the lack of parking spaces would become a serious problem. For the moment parking appears to be more of a problem for visitors and businesses.

Chinatown is a unique, urban ethnic neighborhood offering much diversity and character to the City and serving as the center of the Asian population in Boston, Massachusetts, and New England. The fabric of the housing stock in Chinatown is generally in good condition but is beginning to show signs of deterioration and disrepair as a large number of old and new families with elderly and children call the neighborhood their home.

### Chinatown Building Survey

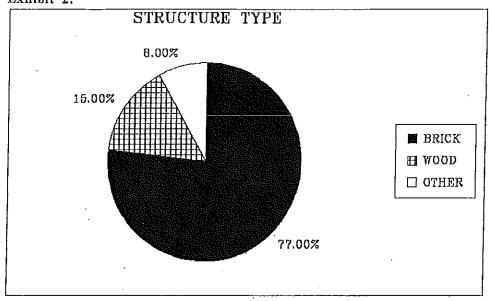
Structure Uses. A majority of Chinatown's structures incorporate commercial uses, with 40 percent utilized exclusively for commercial purposes, and 20 percent mixed commercial/ residential. Residential units are found in nearly one-half of the structures, with 21 percent mixed use buildings and 28 percent exclusively for residential use. The remaining 11 percent are used for other purposes, such as industrial use. See Exhibit 1.

Exhibit 1.



Types of Structures. Seventy-seven percent of the structures in Chinatown are constructed of brick, 15 percent are wood frame construction and 8 percent are constructed of other materials, primarily concrete slab. See Exhibit 2. Fifty-four percent of the frame structures are commercial structures, 26 percent are residential, 2 percent are residential/commercial and 19 percent

Exhibit 2.



are used for other purposes. Thirty-two percent of the brick structures are residential, 35 are commercial, 22 percent residential/commercial and 10 percent are for other purposes. See Table 1.

Table 1. Distribution of Structure Type by Use of Structure, Chinatown, 1987 (in percent)

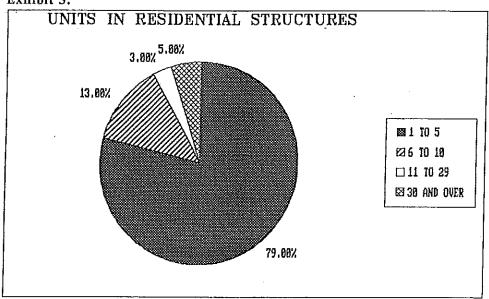
	Stucture Type		<u>Stucture Type</u>		
Use of Structure	<u>Frame</u>	Brick	_		
Residential	26	32			
Commercial	54	35			
Residential/					
Commercial	2	22			
Other	19	10			
Total	100	100			
Sample Size	43	215			

Note: 'Other' structure use includes industrial uses.

Source: The Chinatown Housing Survey, November, 1987.

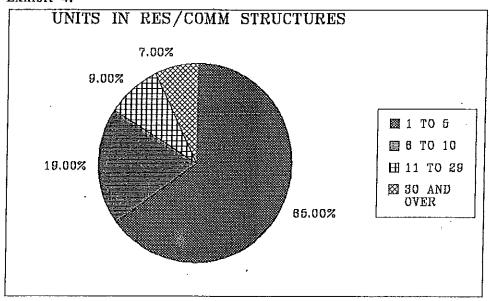
Number of Housing Units in Structure. In the structures containing only residential dwelling units, there is a median of 4.0 housing units. In residential/commercial structures, there is a median of 4.0 housing units as well. Ninety-two percent of the residential structures and 84 percent of the residential/commercial structures have ten or fewer housing units, and 79 percent of residential structures and 65 percent of residential/commercial structures have 5 or fewer units. Yet, 5 percent of residential structures and 7 percent of residential/commercial structures have thirty or more housing units, with three residential structures having well over 100 housing units each. See Exhibits 3 and 4.3

Exhibit 3.



<sup>&</sup>lt;sup>3</sup> The mean number of housing units in structures containing only residential units is 9.2 housing units and 10.8 housing units in residential/commercial structures. The difference between the mean and the median is explained by the distribution of the number of units found in each structure. The few structures containing many housing units, 30 or more units, caused the arithmetic average to be much greater than the median. Therefore, the median number of units more accurately reflects the characteristics of the majority of residential structures in this area.

Exhibit 4.



Number of Floors in Structures. Most of the structures in Chinatown have fewer than 10 floors, with nearly 50 percent having four floors or less. Eighty percent of the structures have no vacant floors.

Housing Unit Vacancy Rate. Only 3.2 percent of the housing units in Chinatown are vacant, an indication of an unusually tight housing market, even for a city where demand for housing is so strong. And only 9 percent of the structures containing residential units contain any vacant units with 91 percent completely occupied.

Condition of Structures. Using the condition of the public corridors and stairwells as indicators, the structures in Chinatown are generally in good condition. Ninety-six percent are found to be securely locked. In only 5 percent of the structures are the walls, the floors and the ceilings in the public corridors cracked, broken or in deteriorated condition. Similarly, in 5 percent of the structures, the stairs and railings in public areas are worn,

sagging, loose, missing or deteriorated. And, again, in 5 percent of the public corridors, lighting fixtures are in deteriorated condition. See Table 2.

Table 2. Condition of Public Corridors by Use of Structure, 1987 (in percent)

	Co	ndition		Sample
Structure Use	Intact	<u>Deteriorated</u>	<u>Total</u>	Size
Residential				76
Walls	97	3	100	
Floors and Ceilings	97	3	100	
Stairs and Railings	97	3 .	100	
Lighting Fixtures	99	1.	100	
Residential/Commercial		÷		56
Walls	93	7	100	
Floors and Ceilings	96	4	100	
Stairs and Railings	96.	4	100	
Lighting Fixtures	94	6	100	5
Commercial				109
Walls	95	5	100	
Floors and Ceilings	95	5	100	
Stairs and Railings	95	. 5	100	
Lighting Fixtures	95	5	100	
Other				29
Walls	86	14	100	
Floors and Ceilings	86	14	100	
Stairs and Railings	86	14	100	
Lighting Fixtures	86	14	100	
All Structures		,		270
Walls	94	6	100	-, -
Floors and Ceilings	95	5	100	
Stairs and Railings	95	5	100	
Lighting Fixtures	95	5	100	

Note: 'Other' structure use includes industrial uses.

Source: The Chinatown Housing Survey, November, 1987.

Although most structures have public areas that are in good condition, 11 percent have public corridors that are not free from debris and are possibly obstructed. See Table 3. The public corridors in structures containing both

residential and residential/commercial structures, are in good condition. Only 1 percent of residential structures and 7 percent of residential/commercial structures have walls in deteriorated condition. The floors, and stairs are in deteriorated condition in only 3 percent of the residential structures and 4 percent of residential/commercial. Lighting in public corridors is in poor condition in 1 percent of residentialstructures and 6 percent of residential/commercial structures.

Table 3. Proportion of Structures with Debris or Obstructions in Public Hallways by Structure Type
Chinatown, 1987
(in percent)

Structure Type Residential Commerical	Proportion 8	76
Residential/ Commerical	. 18	107 55
Other	14	29
All Structures	11	267

Note: 'Other' structure type includes industrial.

Source: The Chinatown Housing Survey, November, 1987.

Condition of Residential and Residential/Commercial Structures. However, 8 percent of residential and 18 percent of residential/commercial structures have hallways with debris or obstructions. Limited storage space, particularly in structures with residential units, may be one explanation. Most of Chinatown's housing units are small, leaving little or no storage space except for common hallways. Also, garbage and trash build up is a major problem in Chinatown, where receptacles for refuse are too few, forcing residents to either place them in hallways or outside beside the building or on the curb.

Condition of Commercial and Other Structures. Commercial buildings, similarly, are in relatively good condition, with only 5 percent of the wall, floors and stairs in public areas deteriorated, and only 5 percent of the lighting in public corridors is deteriorated. Also, only 7 percent of commercial structures have debris in the hallways. However, buildings used for other purposes, including industrial use, are not in as good of condition. Fourteen percent of the walls, floors and stairways in public corridors in 14 percent of the structures. Also, in 24 percent, the hallways are cluttered with debris.

Condition of Structures with Common Facilities. A somewhat larger proportion of inadequate inferior conditions exist in structures where tenants and residents share common kitchen and bathroom facilities. Eight percent of the structures in Chinatown share a common kitchen and 20 percent share a common bathroom. See Table 4. For residential structures only 1 percent share a

Table 4. Proportion of Structures Sharing Common Facilities by Structure Type, Chinatown, 1987 (in percent)

Structure Type Residential Commercial Residential/ Commercial Other	Use Common <u>Kitchen</u> 1 6 14	Use Common <u>Bathroom</u> 3 29 18 31	Sample <u>Size</u> 81 113 59 33
All Structures	8	20	275

Note: 'Other' structure type includes industrial.

Source: The Chinatown Housing Survey, November, 1987.

common kitchen and 3 percent share a common bath. Yet in residential/commercial structures, 14 percent have common kitchen facilities and 18 percent have common bathroom facilities. Only 6 percent of commercial buildings share a common kitchen and 29 percent share a common bathroom. In other use buildings, 17 percent share a common kitchen and 31 percent share a common bathroom.

Overall, the structures housing residential units and commercial and industrial activities are in good shape. Most common areas such as hallways and stairways are in good condition, as is the lighting in public areas.

Debris and obstructions in the hallways present a slight problem. Residential and commercial structures are in better condition than structures used for other purposes.

## Chinatown Housing Unit Survey

Housing Unit Size. Chinatown housing units are relatively small but hold relatively large numbers of occupants. The median number of occupants is 3.58 persons. While only 31 percent of units have 2 or fewer occupants, a full 25 percent of units contain 5 or more people. See Exhibit 5. The median number of rooms per unit is only 4.2 and the most common size is 4. Reflecting the small size of the housing units almost all of them -- 94 percent -- have only one bathroom.

OCCUPANTS PER UNIT

7.00%

11.00%

7.00%

TWO

THREE

FOUR

FIVE

SIX

OVER SIX

15.00%

Exhibit 5.

#### Condition of Housing Units

Kitchen and Bathroom Facilities. The structural characteristics of the units appear to be good. Ninety-six to 97 percent of all units have functioning hot and cold water, and with kitchens and sinks. Ninety-three percent of units have usable plumbing but a sizeable 7 percent have unusable facilities.

Ninety-five percent of all kitchen appliances are operable. The one real problem area is in accessible and private bathroom facilities, which were

reportedly not available in 14 percent of all units. Evidently a small but sizeable number of apartments share bathroom facilities between units. See Table 5.

Table 5. Condition of Housing Units in Chinatown Structures, 1987 (in percent)

Plumbing, bath and kitchen	<u>Yes</u>	<u>No</u>
Hot and cold water	96	4
Kitchen and sink	97	3
Full bath, shower, or tub	71	,
accessible and private	86	14
Plumbing is working	93	7.
Appliances are working	95	5
inpprentices are working	7.3	,
Light, ventilation and heating		
At least one unobstructed window		
or skylight in each room	89 -	11
Windows intact, operable, and have		
storm windows	91	9
Electricity available in each room		•
with at least two outlets	92	8
Interior passageways and staircases		•
safely lighted at all times	89	11
Heating units safely installed	92	8
<i>y</i>		Ŭ
General Maintenance		
Floors, walls, ceiling, doors, windown		
free from water and in good repair	67	33
Stairways safely banistered	91	9
Unit is vermin and rodent free	52	48
Access to container/dumpster for garbage	57	43
Unit can be securely locked	99	1
Building can be securely locked	96	4
<b>.</b>		•

Note: Based upon a sample of 265 housing units. The results are accurate to within + or - 3 percent of the reported value at a 95 percent level of confidence.

Source: The Chinatown Housing Survey, November, 1987.

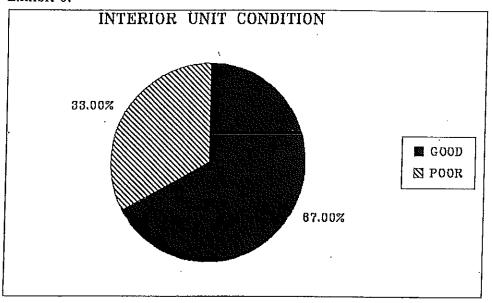
Light, Ventilation, and Heating. Light, ventilation, and heating also appear to be in good condition, but some problems with code violations do exist.

Eleven percent of units have obstructed windows or skylights in at least one

room. Ninety-one percent of all windows are operable and have storm windows while only 9 percent have some defects. Interior passageways have some problems with safe lighting as reported by 11 percent of all units.

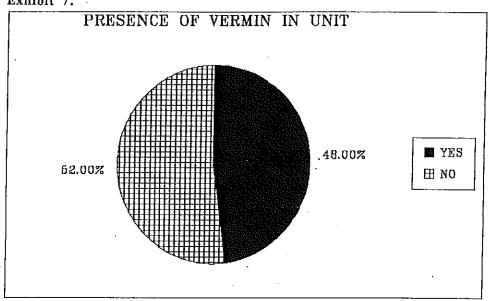
Electricity supply appears to be sufficient as 92 percent of units have adequate outlets per room. Also, 92 percent of units have safely installed heating units although 8 percent with unsafe units could be a problem.

Maintenance of Units. Maintenance of units is generally worse than bath, kitchen, lighting, heating and ventilation. The best maintenance feature is security. An almost universal 99 percent have secure unit locks and a full 96 percent have secure building locks. Also, 91 percent of the units are in buildings that have safely banistered staircases. General interior repair, however, could be much improved. See Exhibit 6. Two thirds, of the units have Exhibit 6.



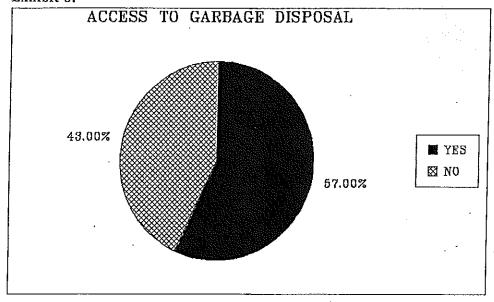
reported floors, walls, ceilings, doors, and windows in good condition but in a sizeable one third, there are defects in one or more of these items. In

general smaller units are in a greater state of disrepair. Vermin and rodents are present in 48 percent of all units, a sizeable problem. See Exhibit 7. In Exhibit 7.



addition, there is a major difficulty with garbage removal as 43 percent of all units have no access to a building container or dumpster for proper rubbish removal. See Exhibit 8.

Exhibit 8.



Parking. Parking for residents seems to be somewhat less of a problem than for residents in other parts of Boston since car ownership in Chinatown is not widespread. The residents of a majority, 71 percent, of the units have no cars. For twenty-two percent of the units, one car is available, 5 percent have two vehicles, and only 2 percent have more than two. Residents of twenty-seven percent of the units said parking is available with the building, closely comparable to the 29 percent that have vehicles. Forty-three percent of the local residents interviewed said parking was not available.

When asked what kind of parking is available the following responses were given: 40 percent public-parking at a fee, 19 percent private-pay, 17 percent street, 14 percent public-free, and 10 percent other. Twenty-seven percent of persons said that they use their cars to get to work, indicating that nearly all residents who own cars use them for this purpose. In general, persons without cars felt more strongly that there was less parking available in the neighborhood. As they are not looking for parking for personal use, and more likely to be looking for it for their visitors, parking may be a more serious problem for visitors than residents.

#### Demographic Characteristics

Household Size. The demographic and living arrangement characteristics of respondents are interesting and different from most of Boston. Overcrowding is a significant problem in Chinatown. The average number of adults per unit is 3.6 although a full 20 percent of all units have 4 or more adults residing in them.<sup>4</sup> Chinatown has a 21 percent rate of overcrowding, much greater than the national average and higher than all other Boston neighborhoods.

<sup>&</sup>lt;sup>4</sup> The standard Census definition of over-crowding is more than one person per room per unit.

Elderly and Child Population. Chinatown has a significant elderly population with 41 percent of all units containing at least one elderly person, and a large 18 percent having 2 or more. There appears to be a large number of extended families in Chinatown with grandparents living with their children.

There are relatively more children in Chinatown than in Boston as a whole.

Forty-eight percent of all families say that children live with them, and 21 percent of these children are age 5 or under. Thus, Chinatown's population contains a large proportion of both elderly and children, quite unlike the distribution of the population the city as a whole which has a larger proportion of young and middle-aged adults.

Income and Poverty. Chinatown is a poor neighborhood in Boston. A large 42 percent of families reported their incomes to be less than \$10,000 per year even though families tend to be larger. Only 7 percent of families earned over \$20,000. Twenty-one percent of all respondents refused to answer this income question so answers may not be all that accurate.

Ethnic Backround. Chinatown is almost exclusively a Chinese neighborhood with 91 percent of respondents answering to a Chinese ethnic background. Only 2 percent of respondents reported Vietnamese, Cambodian, or other Asian nationality. Boston's "other Asian" population lives in Allston-Brighton, Fenway-Kenmore, South Dorchester, Jamaica Plain and East Boston and is less diverse than those of other cities and towns in the region such as Lawrence and Attleboro. Seven percent of the population in Chinatown proper were of either white or black racial groups.

<sup>&</sup>lt;sup>5</sup> According to the 1985 City of Boston Household Survey, 34% of Boston's "other" Asian population lives in Allston-Brighton, 17% in Fenway-Kenmore and 9% in South Dorchester, Jamaica Plain and East Boston.

Educational Attainment. Educational attainment is considerably lower in Chinatown than for Boston as a whole. A large 65 percent of the adult population has less than a high school education reflecting the older, immigrant resident population. Twenty-six percent have a high school diploma while only 9 percent of the population have completed some college education or more. This lower educational attainment corresponds directly with the lower-income status of the population.

In summary, Chinatown reflects many of the characteristics of a heavily ethnic neighborhood. Relative to the rest of Boston, the population contains a large share of elderly and children, residents are poorer, and they possess a less advanced level of educational attainment. While the characteristics of housing units are generally good there are specific problems with overcrowding, shared bathroom and kitchen facilities, conditions of walls, floors, ceilings, doors and windows, presence of vermin and rodents, proper garbage removal, and accessibility to parking. The heavy burden of large and sometimes extended families places excessive stress on the overall quality of housing units in Chinatown.

ļu

## Methodology

The Chinatown building and housing unit surveys were conducted as part of the data gathering phase of the Chinatown Masterplan effort. These surveys were conducted by Louis DiNatale of the McCormack Institute of Public Affairs of the University of Massachusetts at Boston. The questionnaire was drawn up by the Boston Redevelopment Authority Policy Development and Research Department, reviewed by the Chinatown/South Cove Neighborhood Council, and completed by Louis DiNatale. Trained bi-lingual surveyors were recruited from the community to canvas the Chinatown core area in late September and early October, 1987. The Chinatown survey area has been identified for the purpose or carrying out an intensive building by building survey on the housing condition, land use and business in the Chinatown business and residential cores. The survey area covers 28 blocks or about 46 acres in the Downtown Interim Planning Overlay District (IPOD). The intensive field survey does not extend into the South End area where there is a significant concentration of Asian population.

Every building in the area was surveyed for its general condition. This included 292 structures of varying uses. A total of 265 units were surveyed, which is approximately twenty percent of total units in the area. Both the building and housing unit survey results are accurate to within + or - 3 percent at a 95 percent level of confidence. This means that chances are 95 in 100 that the central value of each of the data presented in this survey lies within the reported survey value, plus or minus three percent.