

# Survey on Occupancy of Recently Completed Housing Units 2004

## **INTRODUCTION**

The Planning Department (PlanD) regularly compiles population distribution estimates and projections by geographical area under the auspices of the Working Group on Population Distribution Projections (WGPD) to provide a basis for planning and provision of community facilities and services at the local level. As part of its continuous efforts to improve the methodologies and data sources, the Planning Department launched a survey, namely, the Survey on the Occupancy of Recently Completed Housing Units (the "Occupancy Survey"), between December 2004 and February 2005 to collect up-to-date data on the occupancy situation of recently completed housing units and the characteristics of the occupants.

2. Residents in recently completed housing units are the major source of population growth in local areas. Given that the total number of recently completed housing units are readily known from administrative records on a development project basis, the proportion of the housing units within a given residential development project<sup>1</sup> being occupied and the size of the occupant households are the two crucial parameters in estimating the number of residents in these housing units.

3. For public housing, these parameters can be readily derived from Housing Department's administrative records. For private housing, they are currently estimated using benchmark data available from the latest Population Censuses / By-censuses undertaken at five years intervals. For years between the intervals, it is assumed that the occupancy situation of recently completed housing units in private residential development projects would be similar to that of the last census year. However, the validity of this assumption has become increasingly disputable when the study year goes further away from the last census year.

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<sup>1</sup> For the purpose of the present study, a residential development project comprises housing units in one or more buildings for which a single Occupation Permit is issued in the case of private projects. In the case of public projects, it is as designated by the relevant authorities.

4. The Occupancy Survey was therefore conducted to obtain more up-to-date data on occupancy situation of recently completed housing units, covering private residential development projects completed between January 2001 and June 2004. The major findings of the survey are presented in this report and the survey data will be used for updating the estimation parameters mentioned in paragraph 2.

## **SURVEY FINDINGS**

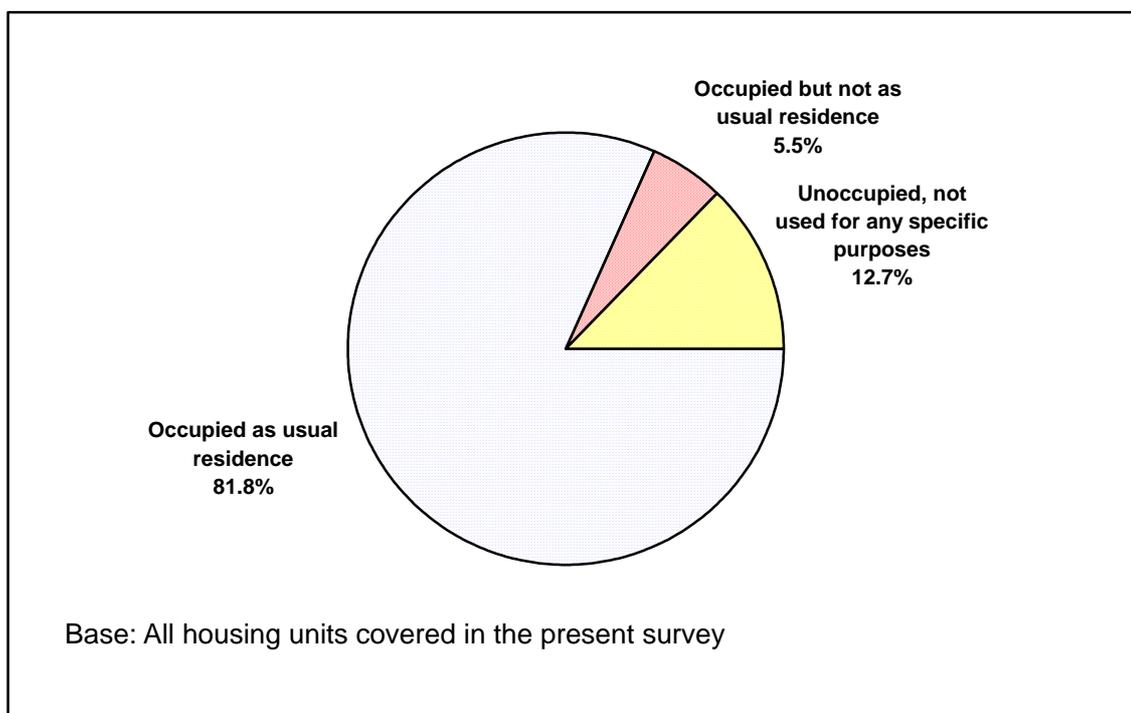
### **Overall Occupancy Situation**

5. A housing unit may assume one of the following occupancy status:

- (a) *Occupied as usual residence*, if the unit is the usual place of residence of at least one of the persons occupying it at the time of enumeration.
- (b) *Occupied but not as usual residence*, if all the persons occupying the units have a usual place of residence elsewhere at the time of enumeration.
- (c) *Unoccupied but used for non-domestic purposes*, if the unit is used entirely for industrial, commercial and other non-residential purposes.
- (d) *Unoccupied, not used for any specific purposes*, when the unit is neither used for residential nor non-residential purposes.

6. There were altogether 312 private residential development projects completed between January 2001 and June 2004, providing a total of 90 202 housing units. At the time of enumeration, 73 744 units (or 81.8%) were occupied as usual residence while 5 006 units (or 5.5%) were occupied but not as usual residence. The remaining 11 453 (or 12.7%) were not used for any specific purposes.<sup>2</sup> The results are shown in Chart 1.

**Chart 1: Recently Completed Housing Units by Occupancy Status**



7. The incidence of flat sharing was rare. All but 73 of the housing units occupied as usual residence were taken up by one household and only 64 units were occupied by two households. The remaining nine units were used as staff quarters. The *degree of sharing* was very low, with the ratio of the number of households to the number of housing units they occupied as usual residence at 1.0008.

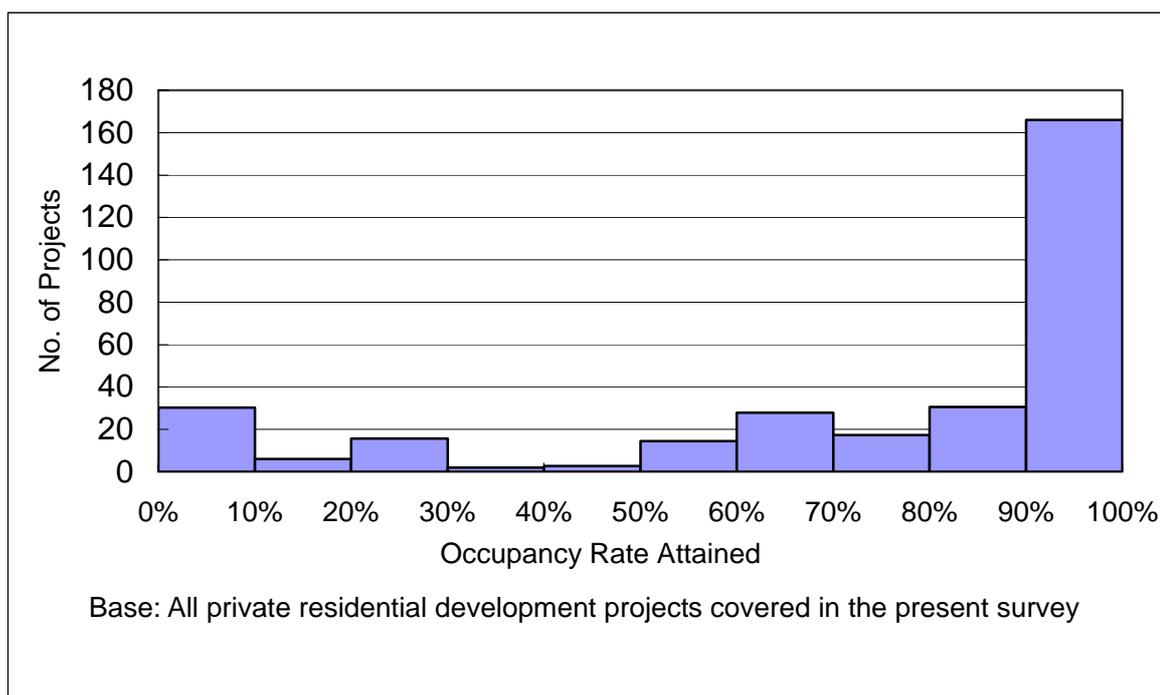
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<sup>2</sup> In other words, none was used for non-domestic purposes.

## Variations of Project Occupancy Rate

8. At individual development project level, the occupancy rate measures the proportion of the housing units in the project being occupied as usual residence. Project occupancy rates varied widely, ranging from 0% to 100%. Chart 2 shows the distribution of the projects by occupancy rate attained at the time of enumeration. Of the 312 private residential development projects surveyed, more than half (53.0%) had attained occupancy rates of 90% or more. The median occupancy rate was 92%, meaning that half of the projects had attained occupancy rate above 92%.

**Chart 2: Distribution of Recently Completed Private Residential Development Projects by Occupancy Rate Attained**



9. The occupancy rate attained for a project very much depends on the completion date of the project, i.e. the longer it has been completed, the higher the occupancy. As shown in Table 1, occupancy rates attained by projects completed in earlier years tend to be higher than those completed more recently. The median occupancy rate goes down from 92% and 94% for projects completed in 2001 and 2002 respectively to 64% for projects completed in 2004.

**Table 1: Recently Completed Private Residential Development Projects by  
Occupancy Rate Attained by Year of Completion**

Occupancy Rate Attained	No. of Projects by Year of Completion				
	2001	2002	2003	2004	All years
0% - <10%	6	2	10	12	30
	8%	2%	12%	35%	10%
10% - <20%	-	2	4	-	6
	-	2%	5%	-	2%
20% - <30%	3	9	3	-	15
	4%	8%	4%	-	5%
30% - <40%	-	-	-	2	2
	-	-	-	6%	1%
40% - <50%	3	-	-	-	3
	4%	-	-	-	1%
50% - <60%	6	3	4	1	14
	8%	3%	5%	3%	4%
60% - <70%	6	12	-	10	28
	8%	10%	-	29%	9%
70% - <80%	3	2	10	3	18
	4%	2%	12%	9%	6%
80% - <90%	8	9	12	1	30
	10%	8%	14%	3%	10%
90% -100%	43	78	40	5	166
	55%	67%	48%	15%	53%
Total	78	117	83	34	312
	100%	100%	100%	100%	100%
1 <sup>st</sup> quartile	70%	82%	75%	25%	67%
Median	92%	94%	90%	64%	92%
3 <sup>rd</sup> quartile	95%	100%	96%	77%	97%

## **Characteristics of Occupying Households**

### Tenure of Accommodation

10. There were a total of 73 800 households living in the housing units covered in the present survey. The vast majority (88.6%) of these households were owner-occupiers and about one-tenth (10.7%) were sole tenants. When compared with the overall situation for private permanent housing as given by the results of the General Household Survey (GHS)<sup>3</sup> for the first quarter (1Q) of 2005, which covered housing units of all ages, it is noted that the proportion of owner occupiers was significantly higher in recently completed housing units (Table 2). According to the GHS results, only 70.8% of all households in private permanent housing were owner-occupiers.

### Household Size

11. Almost half (48.7%) of the households living in the housing units covered in the present survey had either one or two persons and 17.6% and 20.0% had 3 and 4 persons respectively. In comparison, one-person and two-person households together made up only 43.9% of all households living in private permanent housing, according to the GHS results. These results indicate that households living in the recently completed housing units tend to be smaller. (Table 3)

### Whether Moved from Same District

12. About two-third (67.6%) of the households<sup>4</sup> used to live in different districts before moving into the recently completed housing units, whereas 32.4% of the households had lived in the same district before.

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<sup>3</sup> General Household Survey is a quarterly survey conducted by Census and Statistics Department.

<sup>4</sup> Based on the previous residence of the household heads.

**Table 2: Comparison of Number of Households by Tenure of Accommodation in GHS 2005 1Q and Present Survey**

Tenure of Accommodation	GHS 2005 1Q		Present Survey	
	No.	%	No.	%
Owner-occupiers	825 700	70.8	65 405	88.6
Sole tenants	210 100	18.0	7 901	10.7
Co-tenants	36 100	3.1	18	0.0
Accommodation provided by employers	52 800	4.5	329	0.4
Others	42 300	3.6	146	0.2
<b>Total</b>	<b>1 166 900</b>	<b>100.0</b>	<b>73 800</b>	<b>100.0</b>

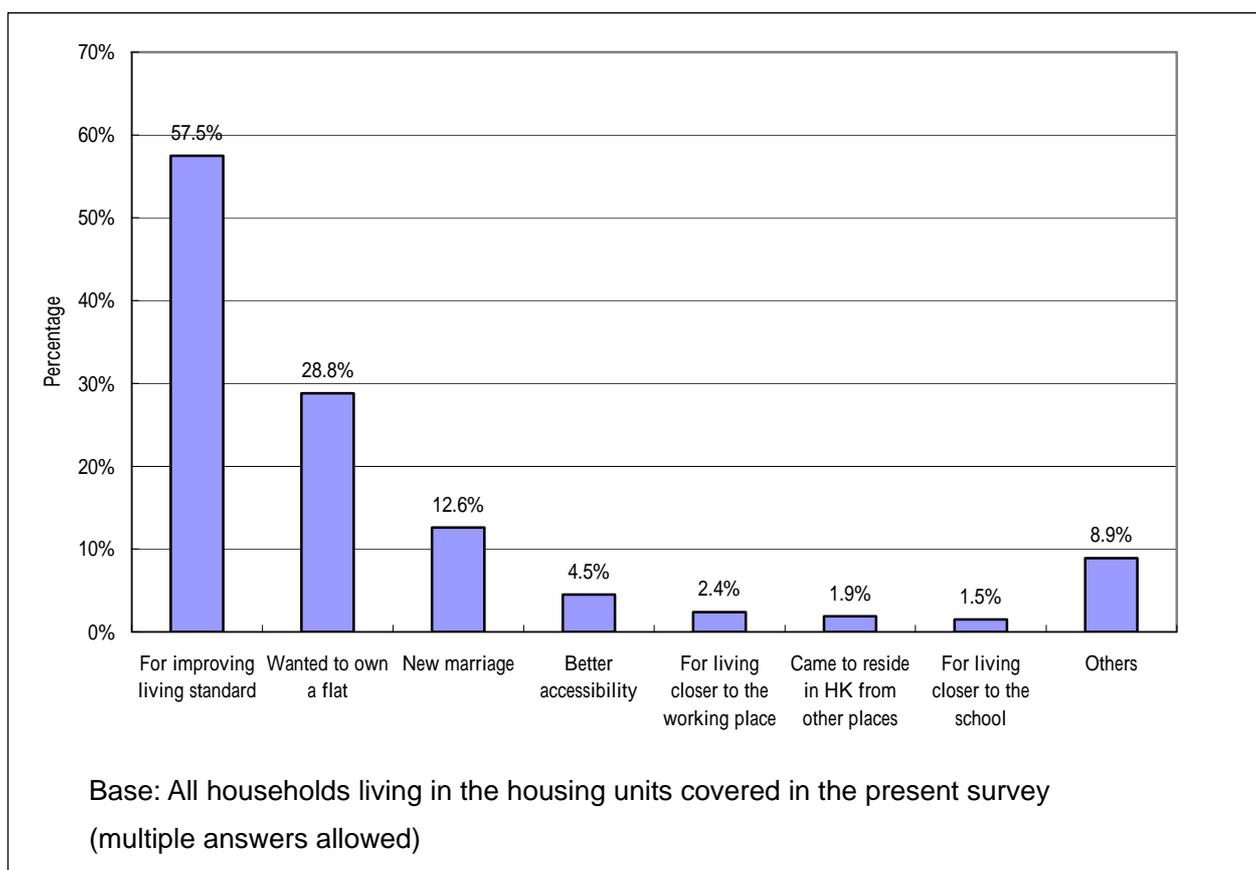
**Table 3: Comparison of Number of Households by Household Size in GHS 2005 1Q and Present Survey**

Household Size (No. of persons in household)	GHS 2005 1Q		Present Survey	
	No.	%	No.	%
One	201 400	17.3	8 389	11.4
Two	310 500	26.6	27 495	37.3
Three	244 300	20.9	12 963	17.6
Four	245 500	21.0	14 738	20.0
Five	110 400	9.5	7 287	9.9
Six or more	54 800	4.7	2 928	4.0
<b>Total</b>	<b>1 166 900</b>	<b>100.0</b>	<b>73 800</b>	<b>100.0</b>
<b>Average household size</b>	<b>3.0</b>		<b>2.9</b>	

## Reasons for Moving

13. More than half (57.5%) of the households claimed “for improving the living standard” as the major reason for moving to these recently completed housing units. The next two mostly claimed reasons are “wanted to own a flat” (28.8%) and “new marriage” (12.6%) respectively. (Chart 3)

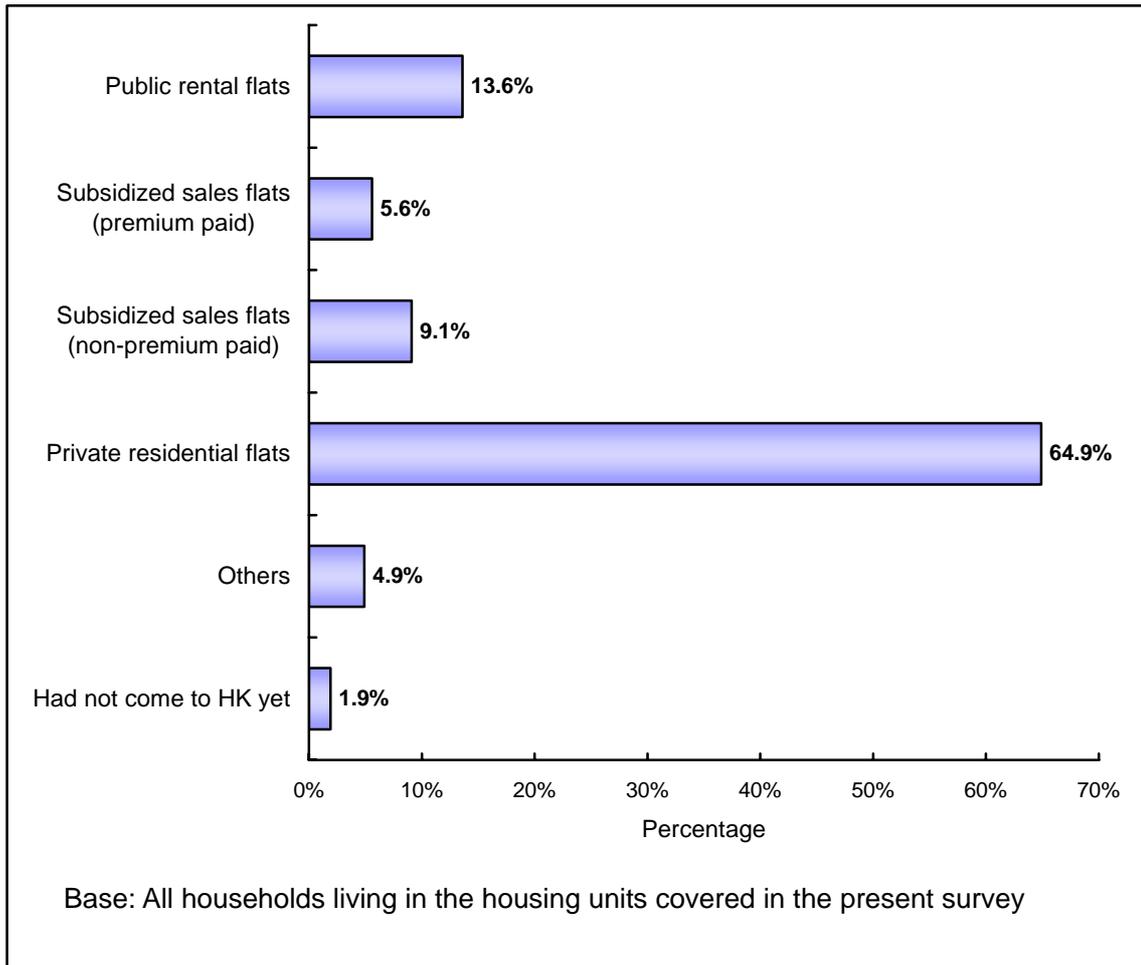
**Chart 3: Major Reasons for Moving**



## Housing Type of Previous Residence

14. About two-third (64.9%) of the households<sup>4</sup> used to live in private residential flats before moving to these recently completed housing units, 14.7% used to live in subsidized sales flats (with 5.6% premium paid and 9.1% non-premium paid) and 13.6% in public rental flats. (Chart 4)

**Chart 4: Housing Type of Previous Residence**



## **Personal Characteristics of Residents**

### Demographic Profile

15. There were a total of 216 148 persons in the households occupying the recently completed housing units as usual residence. Amongst them, there were more female (54.4%) than male (45.6%). In terms of age, 15.7% of the residents were below 15, whilst 4.3% were aged 65 and over. When compared with the overall population for private permanent housing as at mid-2004 compiled by the WGPD, it is noted that the proportion of persons aged 25-34 was significantly higher (30.5% as compared with 17.6%) and those aged 65 and over significantly lower (4.3% as compared with 9.6%) in recently completed housing units. Regarding the marital status, 56.8% of the occupants were married, whereas 39.5% were never married. (Table 4)

**Table 4: Number of Residents in Recently Completed Housing Units  
by Selected Demographic Characteristics**

	Number	%
Total	216 148	100
Sex		
Male	98 505	45.6
Female	117 643	54.4
Age		
Below 15	33 858	15.7
15 to 24	19 909	9.2
25 to 34	65 947	30.5
35 to 44	50 854	23.5
45 to 54	25 171	11.6
55 to 64	11 143	5.2
65 and over	9 266	4.3
Marital Status		
Never married	85 366	39.5
Married	122 865	56.8
Widowed	5 643	2.6
Divorced / Separated	2 274	1.1

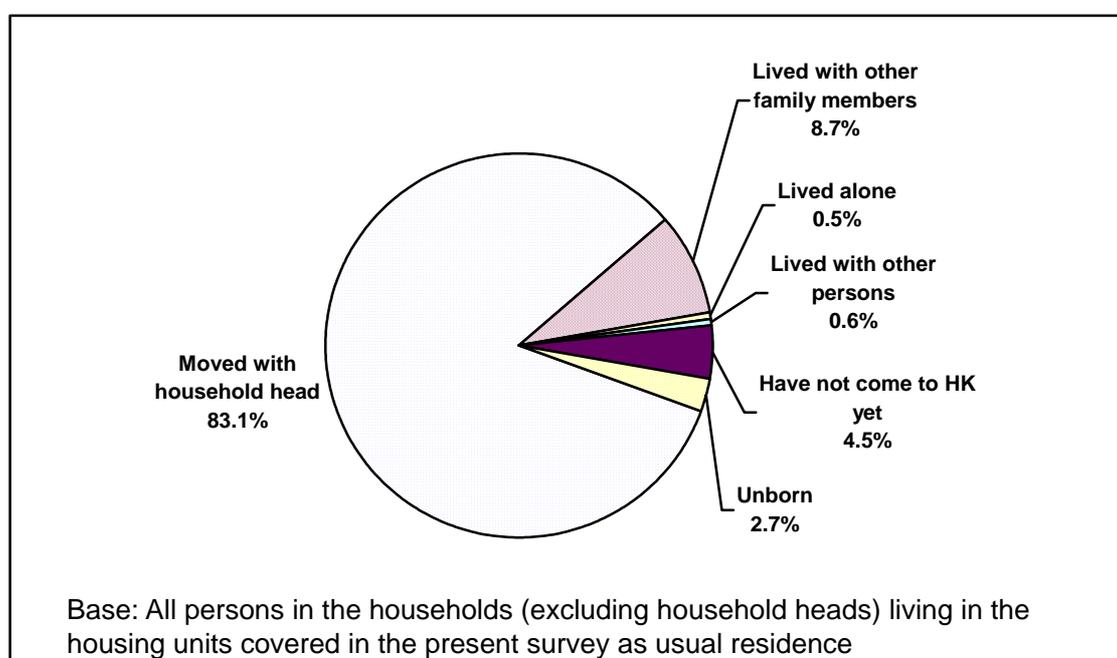
**Relation with Household Head**

16.           Apart from the 73 800 persons who were identified as household heads, there were 142 348 other household members living in these recently completed housing units. Amongst the latter, 37.0% (or 52 598 persons) were spouses and 37.2% (or 52 944 persons) were children of the household heads. Some 10.2% were live-in domestic helpers. Only a very small number of them were other relatives of the household heads.

## Whether Moved with Household Head from the Previous Residence

17. The majority (83.1%) of other household members moved together with the household heads from their previous residence into the recently completed housing units. In other words, they were already living with the household heads in their previous residence in Hong Kong. However, there were still as many as 9.7% of them who only joined the households as they moved into the recently completed housing units. Previously, these people were either living with other family members or other persons, or simply living alone. The rest of other household members had not yet come to Hong Kong or were not yet born before the household heads took up the current residence. (Chart 5)

**Chart 5: Whether Moved with Household Head**



## **Conclusion**

18. The Occupancy Survey has provided updated statistical data on the occupancy situation of housing units completed in recent years and the characteristics of households and persons living in them. These data will be used for enhancing the population distribution estimates in the coming years before the next by-census in 2006. The survey results also provide an insight into how the occupancy rate for housing units in a given residential development

project varies with the passage of time since completion, and hence can be used as the basis for predicting the take-up pattern of newly completed housing units in projecting future population distribution.

19. Other results from the Survey provide further statistical information about where the people taking up recently completed housing units had come from (district of previous residence) and how the movement had affected or had been affected by changes in the membership of the households concerned (e.g. whether they had moved with the household heads from the previous residence). These factors also contribute to changes in population at local level. The relevant survey results will be studied in details in the future review of the population distribution projection methodology.

## **SURVEY METHODOLOGY**

### **Coverage**

20. The survey covered all housing units in private residential development projects completed between January 2001 and June 2004 with Occupation Permit (OP) issued by Buildings Department (BD)<sup>5</sup>.

### **Sample Design**

21. A two-stage random sampling was adopted for drawing the random sample from the population.

22. In the first stage, a random sample of development projects was chosen out of the total 312 projects. As the large projects (defined as those with 500 or more housing units) are deemed more important, all the large projects were selected whilst about one-third of the remaining projects were randomly selected for the study. In total, 144 development projects were selected for the survey.

23. In the second stage, simple random selection was adopted for sampling the housing units within the selected projects. For development projects with less than 50 housing units, all units were selected for the study. For development projects with 50 or more housing units, a proportionate sample was drawn, i.e. the number of housing units randomly selected from a project was proportional to the total number of housing units in the project. In total, 9 600 housing units were sampled.

### **Data Collection Method**

24. The survey was conducted by face-to-face interview with the target respondents defined as those persons usually residing in the respective sampled households.

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<sup>5</sup> There was only one small project completed during this period in Wong Tai Sin District, which was excluded from the survey in consideration of cost-effectiveness in survey operation.

## Fieldwork Period and Enumeration Results

25. The fieldwork of the survey was conducted between 18 December 2004 and 3 February 2005. A total of 7 211 housing units were successfully enumerated, with an overall response rate of 85.8%.

26. Of the 9 600 private housing quarters initially sampled, 1 194 were unsuccessful cases with 777 being refusals and 417 being non-contact. In the 7 211 housing units having been enumerated, there were a total of 7 218 households, all of which were successfully interviewed.

27. The overall enumeration results are summarized as below:

(1) No. of housing units initially sampled	9 600
(2) No. of confirmed invalid cases	1 195
(a) Unoccupied	1 195
(b) Non-residential	0
(c) Demolished	0
(d) Others	0
(3) No. of remaining housing units	8 405
(a) No. of housing units successfully enumerated	7 211
(b) No. of unsuccessful cases	1 194
(i) No. of partially enumerated cases	0
(ii) No. of non-contact cases	417
(iii) No. of refusal cases	777
Completion rate: [(3)(a) + (2)]/(1)	87.6%
Response rate: (3)(a)/(3)	85.8%

## Reliability of Estimates

28. The 95% confidence intervals of the estimates of selected variables are given below to illustrate the precision level of the survey results.

Variables	Sample Estimate	95% Confidence Intervals	
		Lower Bound	Upper Bound
Occupancy rate of recently completed private housing units	81.8%	81.1%	82.5%
Occupancy rate of recently completed private housing units in large projects	82.6%	81.8%	83.4%
Occupancy rate of recently completed private housing units in small projects	78.9%	77.0%	80.8%

### **Occupancy Situation of New Territories Exempted Houses**

New Territories Exempted Houses (NTEH) accommodate a significant share of population in rural areas of the New Territories. Specific knowledge about their occupancy situation is therefore also useful for improving the population distribution estimates and projections for the rural areas. As a supplementary exercise, NTEH were also surveyed to find out the occupancy situation in these small houses.

Two-stage sampling was adopted for selecting the sample of NTEH in the survey. In the absence of a usable sampling frame, a sample of 72 villages was first selected randomly from the list of some 600 “recognized villages” in the New Territories. Villages in outlying islands were excluded for cost consideration. For each selected village, map showing the location of these houses was especially prepared and a random sample of houses was selected. A total of 1 805 houses were successfully enumerated, with an overall response rate of 77.5%. The main findings of the supplementary enquiry are as follows:

- \* It is estimated that there were a total of 19 560 NTEHs in the recognized villages covered by the survey. Of them, 95.8% (or 18 740 houses) were occupied as usual residence by one or more households.
- \* Most (82.0%) of the occupied NTEHs had 3 floors and about one-sixth (16.6%) had 2 floors. Only very few NTEHs had either 1 floor (1.1%) or 4 floors (0.2%). (Table A1)
- \* In about two-third (68.2%) of the occupied 3-floor NTEHs, each floor was used as separate living quarters and hence each house had 3 housing units. In another 28.7%, all three floors were used as one single housing unit. The average number of housing units per occupied 3-floors NTEHs was 2.4. (Table A1)
- \* It is estimated that there were a total of 39 766 households living in the NTEH covered by the survey. 40.2% of them were either one-person or two-person households and 25.2% and 21.5% had 3 and 4 persons respectively. The average household size was 3.1. (Table A2)

**Table A1: Number of NTEH by Number of Floors  
by Number of Housing Units**

No. of Floors	No. of Housing Units				
	1	2	3	4 or more	Total
1	202 (94.8%)	4 (1.9%)	7 (3.3%)	0 (0%)	213 (100%)
2	2 013 (64.7%)	1 086 (34.9%)	14 (0.4%)	0 (0%)	3 112 (100%)
3	4 411 (28.7%)	299 (1.9%)	10 487 (68.2%)	176 (1.1%)	15 373 (100%)
4	21 (50.0%)	0 (0%)	20 (47.6%)	0 (0%)	42 (100%)
Total	6 647 (35.5%)	1 389 (7.4%)	10 528 (56.2%)	176 (0.9%)	18 740 (100%)

**Table A2: Number of Households by Household Size**

Household Size (No. of persons in household)	No. of Households	%
One	3 867	9.7
Two	12 124	30.5
Three	10 016	25.2
Four	8 539	21.5
Five	3 428	8.6
Six or more	1 794	4.5
Total	39 766	100.0
Average Household Size	3.1	

## **Glossary of Terms**

**Housing Unit:** A house, an apartment, a group of rooms, or a single room occupied as separate living quarters, or if unoccupied, intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants live separately from any other individuals in the building and which have direct access from outside the building or through a common hall.

**Tenure of Accommodation:** The terms and conditions under which accommodation is held by a domestic household. The different terms are defined as follows:

*Owner-occupier:* A household which owns the quarters it occupies.

*Sole tenant:* A household which rents the whole quarters it occupies from someone who lives outside the quarters without sharing it with other household(s) or subletting.

*Co-tenant:* Two or more households each of which rents part of the quarters from someone who lives outside the quarters.

*Provided by employer:* A household which occupies an accommodation provided by the employer of one of the household members. This also includes households occupying quarters leased from employers at a nominal rent. If a household member uses housing allowance given by his employer for renting accommodation, the tenure is not considered as provided by employer.

*Others:* Main tenants, sub-tenants or rent free.

**Housing Types:** Permanent housing types include the following:

*Public Rental Flats:* These include Housing Authority (HA) rental flats (including Interim Housing), Housing Society (HS) rental flats and HS Senior Citizen Residence (SCR) Scheme flats, but excluding those flats sold to sitting tenants under HA Tenants Purchase Scheme (TPS).

*Subsidized Sales Flats (non-premium paid):* These include flats sold under the Home Ownership Scheme (HOS), Private Sector Participation Scheme (PSPS), Middle Income Housing Scheme (MIHS),

Mortgage Subsidy Scheme (MSS), Buy-or-Rent Option (BRO) Scheme and TPS of the HA and flats built under the Flat-For-Sale Scheme (FFSS) and Sandwich Class Housing Scheme (SCHS) of the HS, but exclude those that can be traded in the open market.

*Subsidized Sales Flats (premium paid):* These include HOS/PSPS/MIHS/FFSS/SCHS/TPS/MSS/BRO flats that can be traded in the open market.

*Private Residential Flats:* These include flats and apartments in multi-storey blocks or houses built mainly for residential purpose. Flats built under the Urban Improvement Scheme for the HS and flats built by the Hong Kong Settlers' Corporation are also put under this category.

*Others:* These include modern village houses, villas or bungalows, simple stone structures and traditional village houses, other permanent housing, temporary housing and institutional housing.