Information Note for
the LegCo Panel on Financial Affairs

Hong Kong Population Projections 2002–2031

Background

Population projections of Hong Kong by age and sex are updated at intervals of two to three years: one following each population census or by-census and another round during the intercensal years.

2. Following the release of the results of the 2001 Population Census, the population estimates since 1996 have been updated and released earlier. In line with the revision of population estimates, a new set of population projections, covering the period 2002–2031, has been prepared with the mid-2001 population estimate as the population base and using the most up-to-date information on fertility, mortality and migration patterns of the population available since the last set of population projections was produced.

3. A press conference announcing the results of the population projections was held on 7 May 2002. The publication "Hong Kong Population Projections 2002–2031" showing the detailed projection results, along with the projection methodology and assumptions, was published on the same day. A copy of the publication, together with a Guide to Reading the Publication has been sent to LegCo Members for reference on that date.

Population coverage

4. The Hong Kong population is measured by the "Hong Kong Resident Population", which comprises "Usual Residents" and "Mobile Residents".

5. "Usual Residents" refer to two categories of people: (1) Hong Kong Permanent Residents (HKPRs) who have stayed in Hong Kong for at least three months during the six months before or for at least three months during the six months after the reference time-point, regardless of whether they are in Hong Kong or not at the reference time-point; and (2) Hong Kong Non-permanent Residents (HKNPRs) who are in Hong Kong at the reference time-point.

6. As for "Mobile Residents", they are Hong Kong Permanent Residents

who have stayed in Hong Kong for at least one month but less than three months during the six months before or for at least one month but less than three months during the six months after the reference time-point, regardless of whether they are in Hong Kong or not at the reference time-point.

Projection methodology

7.   The standard method of compiling population projections, i.e. the 'component method', is adopted.   Under this method, a population by age and sex at a certain base year is brought forward by incrementing each individual's age year after year under separate projections of fertility, mortality and migration, until the end of the projection period.

8.   The starting point for the projections is the population situation in 2001. Statistical studies using modelling methods as far as possible are made on the past trends and recent developments pertaining to the socio-economic conditions in Hong Kong to generate the fertility, mortality and migration assumptions. Where government policies are involved, it is taken that existing policies will continue to apply.   For example, the existing policy of a daily quota of 150 One-way Permit Holders entering Hong Kong from the mainland of China is taken to apply throughout the projection period.

Projection assumptions

9.   The total fertility rate is projected to increase from 929 live births per 1 000 women in 2001 to 1 117 in 2010 and remain at that level for the rest of the projection period.

10.   The age specific fertility rates (AFRs) for the different age groups are projected to change differently over the projection period.   Assuming that the tendency of marriage postponement will stabilize and there will be some catching-up of postponed births, the projected AFRs for women in the age groups 20–24, 25–29, 30–34 and 35–39 would rise gradually.   As for the projected AFRs for females in the age groups 15–19 and 40 and over, they would remain at about the same level as now.

11.   The projected age-sex specific mortality rate will decline.   Female infants show the greatest reduction by 56% over the 30-year projection period.

12.   The reduction in age-sex specific mortality rates would lead to a

further rise in life expectancy. In 2001, the provisional figure for the expectation of life at birth was 78.2 years for males and 84.1 years for females. The expectation of life at birth is expected to increase to 82.3 years for males and 87.8 years for females in 2031.

13.　　　The recent trends of the residency and mobility patterns of the Hong Kong population provide the basis for formulating the assumptions on migration components.

14.　　　Assumptions on fertility, mortality and migration entail a certain degree of uncertainty. These assumptions will hence be revised in a roll-forward manner in each round of population projections conducted at intervals of two to three years.

Projection results (Table 1)

15.　　　The Hong Kong Resident Population is projected to increase at an average annual rate of 0.9%, from 6.72 million in mid-2001 to 8.72 million in mid-2031.

16.　　　The number of Usual Residents is projected to increase from 6.54 million in mid-2001 to 8.32 million in mid-2031. In addition, the number of Mobile Residents is projected to increase from 182 600 in mid-2001 to 405 400 in mid-2031.

17.　　　The population is projected to follow a continuous aging trend. In 2001, 16% of the population were aged under 15. This is projected to decrease to 12% in 2031. On the other hand, the proportion of those aged 65 and over is projected to rise gradually from 11% in 2001 to 11.9% in 2006, 12.2% in 2011 and to 14% in 2016. The proportion is then rise markedly to 17% in 2021, 21% in 2026 and 24% in 2031.

18.　　　The aging population trend will also be revealed by the increasing median age of the population, from 37 in 2001 to 46 in 2031.

19.　　　The changes in the age structure of the projected population can also be seen from the overall dependency ratio. This is defined as the number of persons aged under 15 and those aged 65 and over per 1 000 persons aged 15–64. During the projection period, the ratio would slightly fall from 382 in 2001 to 376 in 2016 and then rise to 424 in 2021, 493 in 2026 and 562 in 2031.

20. There are two sources of population growth: (i) natural increase (i.e. births less deaths); and (ii) net balance of migration.

21. The number of births is projected to remain at about 50 000 per annum.

22. The number of deaths is projected to increase from about 33 000 per year currently to about 65 000 at the end of the projection period. The increase in the number of deaths is mainly attributable to the growing proportion of elderly in the population despite a higher life expectancy (which implies a lower mortality rate).

23. Natural increase (births less deaths) would decrease gradually. The number of births is more or less the same as the number of deaths in 2022. Afterwards, the natural increase becomes negative.

24. Natural increase would account for 7% of the population growth during 2002–2031. Net balance of migration would be the main source of growth in the population, accounting for 93% of the population growth during the same period.

25. Entrants from the mainland of China continue to be the main source of inward migration. Under the current policy of admitting 150 One-way Permit Holders per day, about 54 000 entrants come to settle in Hong Kong per year. Of these persons, about 40% are aged below 15.

26. The population pyramid is a commonly used chart for presenting the population structure concisely. Putting the population pyramids of 2001, 2016 and 2031 side by side facilitates comparison. For the lower age groups, the number of males is slightly more than the number of females, reflecting the biological norm that there are more male births than female births. For the middle age groups, there are more females than males owing to the presence of foreign domestic helpers comprising mostly females and the continued entry of one-way permit holders envisaged in the coming years with a high proportion of females. For the higher age groups females have a longer life expectancy than males.

27. Different data users make different uses of population projections. They may require analysis to be conducted on different sectors of the projected populations. For example, some studies only concern Usual Residents. Some

would require analysis with foreign domestic helpers excluded. The presentation above shows the overall picture about the population projections. Different data users, especially different government departments, may need more detailed computations done on the basis of the basic projections, and the Census and Statistics Department will render the required service. For some studies, they may require analysis to be conducted on the projected populations with foreign domestic helpers excluded. Hence, the appendix of the publication "Hong Kong Population Projections 2002–2031" contains such statistics. Appendix 1 of this information note also presents a relevant table.

Census and Statistics Department
11 June 2002

Table 1   Key Summary Statistics

Ａ.   Significant Characteristics of the Population for Selected Years

	Mid-2001 (Base)	Mid-2006	Mid-2011	Mid-2016	Mid-2021	Mid-2026	Mid-2031
Population	6 724 900	7 121 800	7 527 700	7 896 500	8 228 300	8 492 400	8 721 500
Usual Residents	*6 542 300*	*6 890 900*	*7 245 100*	*7 562 000*	*7 841 800*	*8 096 100*	*8 316 100*
Mobile Residents	*182 600*	*230 900*	*282 600*	*334 500*	*386 500*	*396 300*	*405 400*
Average annual growth rate over a 5-year period	-	1.2%	1.1%	1.0%	0.8%	0.6%	0.5%
Sex ratio (males per 1000 females)	956	904	866	837	814	792	771
Percentage of population							
Aged 0–14	16%	15%	13%	13%	13%	12%	12%
Aged 15–64	72%	73%	74%	73%	70%	67%	64%
Aged 65 and over	11%	12%	12%	14%	17%	21%	24%
Dependency ratio							
Child dependency ratio	227	203	180	178	179	180	182
Elderly dependency ratio	155	162	164	198	245	313	380
Overall dependency ratio	382	365	344	376	424	493	562
Median age	37	39	41	42	44	45	46

Notes: Child Dependency Ratio is the number of persons aged under 15 per 1 000 persons aged between 15 and 64

Elderly Dependency Ratio is the number of persons aged 65 and over per 1 000 persons aged between 15 and 64

Overall Dependency Ratio is the number of persons aged under 15 and those aged 65 and over per 1 000 persons aged between 15 and 64

Table 1   (Cont'd.)   Key Summary Statistics

B .   Components of population growth

Reference time-point (Mid-year)	Hong Kong Resident Population	Usual Residents	Mobile Residents	Compared with the previous reference time-point Population growth	From the previous reference time-point to this reference time-point Births	Deaths	Net balance of migration
2001 [1]	6 724 900	6 542 300	182 600	-	-	-	-
2002	6 799 800	6 608 100	191 700	74 900	50 500	34 400	58 800
2003	6 877 600	6 676 400	201 200	77 700	50 700	35 100	62 100
2004	6 957 700	6 746 800	210 900	80 200	50 600	35 900	65 400
2005	7 040 000	6 819 100	220 800	82 300	50 400	36 700	68 600
2006	7 121 800	6 890 900	230 900	81 900	50 700	37 500	68 600
2007	7 203 800	6 962 700	241 000	81 900	51 700	38 400	68 600
2008	7 285 500	7 034 200	251 300	81 700	52 200	39 300	68 800
2009	7 366 800	7 105 100	261 700	81 300	52 700	40 200	68 800
2010	7 447 700	7 175 600	272 100	80 900	53 200	41 100	68 800
2011	7 527 700	7 245 100	282 600	80 000	53 200	42 100	68 900
2012	7 605 600	7 312 400	293 100	77 800	53 000	43 100	67 900
2013	7 681 200	7 377 700	303 500	75 600	52 900	44 200	66 900
2014	7 754 800	7 441 000	313 800	73 600	52 900	45 200	65 900
2015	7 826 600	7 502 400	324 200	71 800	53 000	46 200	64 900
2016	7 896 500	7 562 000	334 500	69 900	53 100	47 200	64 000
2017	7 964 500	7 619 700	344 800	68 100	53 200	48 200	63 100
2018	8 031 700	7 676 500	355 200	67 200	53 300	49 200	63 100
2019	8 098 100	7 732 500	365 600	66 400	53 400	50 200	63 200
2020	8 163 700	7 787 600	376 100	65 600	53 500	51 100	63 200
2021	8 228 300	7 841 800	386 500	64 600	53 600	52 200	63 200
2022	8 283 700	7 895 000	388 700	55 400	53 800	53 300	54 900
2023	8 337 800	7 947 200	390 600	54 100	53 900	54 400	54 600
2024	8 390 600	7 998 200	392 400	52 800	53 700	55 600	54 600
2025	8 442 100	8 047 800	394 300	51 500	53 600	56 700	54 600
2026	8 492 400	8 096 100	396 300	50 300	53 500	58 000	54 700
2027	8 541 400	8 143 100	398 300	49 000	53 500	59 200	54 700
2028	8 589 000	8 188 800	400 200	47 600	53 500	60 600	54 700
2029	8 634 900	8 232 900	402 000	46 000	53 400	62 000	54 600
2030	8 679 200	8 275 400	403 800	44 200	53 200	63 500	54 500
2031	8 721 500	8 316 100	405 400	42 400	53 100	65 100	54 400

Note: (1) Base year population estimate

( )
Significant Characteristics of the Population for Selected Years (Excluding Foreign Domestic Helpers)

	( ) Mid-2001 (Base)	Mid-2006	Mid-2011	Mid-2016	Mid-2021	Mid-2026	Mid-2031
Population	6 497 900	6 824 100	7 182 700	7 527 400	7 849 200	8 103 300	8 322 400
Usual Residents	*6 315 300*	*6 593 200*	*6 900 100*	*7 192 900*	*7 462 700*	*7 707 000*	*7 917 000*
Mobile Residents	*182 600*	*230 900*	*282 600*	*334 500*	*386 500*	*396 300*	*405 400*
Average annual growth rate over a 5-year period	-	1.0%	1.0%	0.9%	0.8%	0.6%	0.5%
( ) Sex ratio (males per 1000 females)	1 021	979	943	913	885	859	836
Percentage of population							
Aged 0–14	17%	16%	14%	14%	13%	13%	12%
Aged 15–64	71%	72%	73%	71%	69%	65%	62%
Aged 65 and over	12%	12%	13%	15%	18%	22%	25%
Dependency ratio							
Child dependency ratio	238	216	192	190	192	193	196
Elderly dependency ratio	162	172	175	211	262	336	409
Overall dependency ratio	400	388	367	401	454	528	605
Median age	37	40	42	43	45	46	47

Notes: Child Dependency Ratio is the number of persons aged under 15 per 1 000 persons aged between 15 and 64

Elderly Dependency Ratio is the number of persons aged 65 and over per 1 000 persons aged between 15 and 64

Overall Dependency Ratio is the number of persons aged under 15 and those aged 65 and over per 1 000 persons aged between 15 and 64