

For discussion on  
26 October 2015

**Legislative Council Panel on Welfare Services  
Subcommittee on Retirement Protection**

**Population Projections 2015-2064**

**Purpose**

This paper briefs members of the Subcommittee on population projections from 2015-2064 released by the Census and Statistics Department (C&SD).

**Background**

2. The C&SD released an updated set of population projections on 25 September 2015. Population projections provide a common basis for the Government in planning public services and facilities. They are regularly updated to take account of information on the latest developments of the population.

3. In the updated set of projections, the projection period is extended from 30 years to 50 years to better discern the trends and profile of the future population. Making reference to the practice of other advanced economies, apart from the baseline population projections, two additional projection scenarios, namely high and low population projections, have been compiled for reference. While projections under the baseline scenario are based on assumptions that are considered most likely to be realised at the time of compilation, the two additional scenarios explore possible outcomes under alternative assumptions on fertility, mortality and movement.

**Salient findings**

Decline in population

4. Under the baseline population projections, the Hong Kong Resident Population is projected to increase from 7.24 million in mid-2014 to a peak of 8.22 million in mid-2043, and then decline to 7.81 million by mid-2064. The average annual growth rate over the entire

projection period is projected to be 0.2%. From mid-2014 to mid-2043, the population is projected to grow at a rate of 0.4% per annum. Yet, with a significant increase in the number of deaths due to an ageing population, coupled with a decrease in the number of births, the population is projected to decrease at the rate of 0.2% per annum from mid-2043 to mid-2064.

5. Over the entire period from mid-2014 to mid-2064, the overall population is projected to increase by 0.57 million. There would be a natural decrease (i.e. deaths less births) of 1.27 million and a net movement (i.e. inflow less outflow) of 1.84 million.

#### Decline in fertility

6. Broadly speaking, Hong Kong's fertility showed a declining trend over the past two decades. The total fertility rate of Hong Kong, which is the number of children born alive to 1 000 women during their lifetime, has been consistently below the replacement level of 2 100. It decreased from 1 355 live births per 1 000 women in 1994 to a historical low of 901 in 2003. It rebounded in recent years and reached 1 234 in 2014. In the fertility projections, reference is made to various factors, including the proportion of ever married women, marital fertility rates and births born in Hong Kong to Mainland women. The total fertility rate is projected to decrease gradually from 1 234 live births per 1 000 women in 2014 to 1 182 in 2064.

#### Increase in life expectancy

7. Hong Kong experienced a continuous decline in mortality rate from 1994 to 2014, leading to an increase in life expectancy. In 2014, the expectation of life at birth was 81.2 years for males and 86.9 years for females. Compared with other economies, Hong Kong enjoys a very low mortality rate. The expectation of life at birth for males is projected to increase to 84.3 years in 2034 and further to 87.0 years in 2064. Likewise, the expectation of life at birth for females is projected to increase to 89.9 years in 2034 and further 92.5 years in 2064. This implies that the life expectancy at birth for males and females will increase by 5.8 years and 5.6 years respectively in the next 50 years.

8. The number of deaths is projected to increase from about 45 400 per year at the beginning of the projection period to about 97 600 per year at the end of the projection period. The increase in the number of deaths

is mainly attributable to the growing proportion of older persons in the population despite a longer life expectancy.

### Net inflows of persons into Hong Kong

9. It is projected that there will be a continuous net inflow of persons into the Hong Kong population over the entire projection period. A major component of the net movement of the population is holders of a One-Way Permit (OWP). Taking into account the inflow of OWP holders in recent years, the C&SD has adopted a daily inflow of 100 OWP holders (as compared to 150 in the last round of projection), or 36 500 OWP holders per year as the long-term assumption.

### Population ageing

10. Population ageing is expected to continue. Excluding foreign domestic helpers, the proportion of elderly persons aged 65 and over is projected to rise markedly, from 15% in 2014 to 36% in 2064. Population ageing is expected to be most rapid in the coming 20 years with the proportion of over 65s reaching 23% in 2024 and 30% in 2034. This is mainly attributable to the post-war baby boomers entering old age. Towards the end of the projection period, the proportion of the elderly will stabilise as the baby boomers gradually pass away. Meanwhile, the proportion of the population aged under 15 is projected to decrease gradually from 12% in 2014 to 9% in 2064.

11. The phenomenon of population ageing can also be further analysed based on the dependency ratio. This is a demographic indicator reflecting the age composition of the population. It is defined as the number of persons aged 'under 15' and '65 and over' per 1 000 persons aged 15 to 64. The ratio is projected to rise continuously from 371 in 2014 to 831 in 2064. In other words, at present on average 3 persons at working ages supported 1 child or elderly person, while 50 years later the situation will become 5 working age persons supporting 4 children or elderly.

12. The ageing trend is also revealed by the increasing median age of the population, which will rise from 43.7 in 2014 to 50.0 in 2034, and further to 53.5 in 2064 (excluding foreign domestic helpers).

13. The projected size and characteristics of the population for selected years are presented in Tables 1 and 2, while the components of

population growth are analysed in Table 3. The population under the high and low projection scenarios is presented in Table 4.

#### Decline in labour force

14. The C&SD has also updated the labour force projections with the availability of the latest population projections. Based on the updated labour force projections, the total labour force (excluding foreign domestic helpers) is projected to increase slightly from 3.60 million in 2014 to 3.65 million in 2018, and then decrease to 3.43 million in 2031. The labour force is then projected to hover between 3.42 million and 3.43 million until 2038, before decreasing to 3.11 million in 2064. The overall labour force participation rate (i.e. the proportion of the labour force in the population aged 15 and over) is projected to decrease from 59.3% in 2014 to 48.6% in 2064. Table 5 presents the updated labour force and labour force participation rate projections.

#### **Conclusion**

15. Members of the Subcommittee are invited to note the content of this paper.

Census and Statistics Department  
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**Table 1 Population size for selected years**

	Mid-2014 (Base)	Mid-2019	Mid-2024	Mid-2029	Mid-2034	Mid-2044	Mid-2054	Mid-2064
Population (Thousands)	7 241.7	7 518.9	7 755.8	7 941.5	8 100.5	8 224.0	8 071.3	7 813.9
Usual Residents (Thousands)	7 025.7	7 305.3	7 538.7	7 712.6	7 861.3	7 997.1	7 858.6	7 611.6
Mobile Residents (Thousands)	216.0	213.6	217.1	228.9	239.2	226.9	212.7	202.3
Average annual growth rate over a 5-year period	0.8%	0.8%	0.6%	0.5%	0.4%	0.1%	-0.3%	-0.3%

**Table 2 Characteristics of the population for selected years (excluding foreign domestic helpers)**

	Mid-2014 (Base)	Mid-2019	Mid-2024	Mid-2029	Mid-2034	Mid-2044	Mid-2054	Mid-2064
Sex ratio (males per 1 000 females)	935	915	896	879	862	825	797	783
Percentage of population								
Aged 0 – 14	12%	12%	12%	11%	10%	9%	10%	9%
Aged 15 – 64	73%	69%	65%	61%	60%	58%	55%	55%
Aged 65 and over	15%	19%	23%	27%	30%	33%	35%	36%
Aged 65 – 69	5%	6%	8%	8%	7%	6%	7%	6%
Aged 70 – 79	6%	7%	10%	13%	14%	13%	12%	14%
Aged 80 – 89	4%	4%	4%	5%	7%	11%	10%	10%
Aged 90 and over	1%	1%	1%	2%	2%	3%	5%	6%
Dependency ratio								
Child dependency ratio	159	179	192	186	176	163	177	173
Elderly dependency ratio	211	269	353	444	505	574	629	658
Overall dependency ratio	371	448	546	630	680	738	806	831
Median age	43.7	45.5	47.0	48.5	50.0	52.5	53.2	53.5

**Table 3 Components of population growth**

Thousands

Reference time-point (Mid-year)	Hong Kong Resident Population	Usual Residents	Mobile Residents	Compared with the previous reference time-point	From the previous reference time-point to this reference time-point		
				Population growth	Births	Deaths	Net movement (inflow <i>less</i> outflow)
2014 <sup>(Note)</sup>	7 241.7	7 025.7	216.0	54.2	58.7	45.4	40.9
2015	7 298.6	7 083.3	215.3	56.9	62.6	44.5	38.8
2016	7 354.5	7 144.4	210.1	55.9	62.0	48.3	42.3
2017	7 411.3	7 199.6	211.7	56.7	61.9	49.1	43.9
2018	7 463.5	7 250.6	212.9	52.2	61.9	49.8	40.2
2019	7 518.9	7 305.3	213.6	55.4	61.8	50.6	44.2
2020	7 575.0	7 360.9	214.1	56.1	61.8	51.4	45.8
2021	7 625.9	7 411.1	214.8	50.9	61.4	52.3	41.8
2022	7 673.7	7 458.3	215.5	47.8	60.5	53.1	40.4
2023	7 716.1	7 500.0	216.1	42.4	59.7	53.9	36.6
2024	7 755.8	7 538.7	217.1	39.7	58.8	54.7	35.6
2025	7 798.4	7 579.8	218.6	42.5	57.8	55.6	40.3
2026	7 836.4	7 615.8	220.6	38.0	56.8	56.6	37.9
2027	7 870.8	7 647.7	223.1	34.3	55.6	57.7	36.5
2028	7 906.2	7 680.2	225.9	35.4	54.4	58.8	39.8
2029	7 941.5	7 712.6	228.9	35.3	53.2	60.0	42.1
2030	7 974.6	7 743.2	231.4	33.1	52.0	61.2	42.3
2031	8 007.2	7 773.4	233.8	32.5	50.8	62.5	44.2
2032	8 039.0	7 803.3	235.8	31.9	49.8	63.8	45.9
2033	8 070.8	7 832.8	237.9	31.8	48.9	65.2	48.1
2034	8 100.5	7 861.3	239.2	29.7	48.2	66.8	48.3
2035	8 126.8	7 888.0	238.9	26.3	47.8	68.5	47.0
2036	8 150.5	7 912.0	238.5	23.7	47.7	70.4	46.4
2037	8 171.4	7 933.0	238.4	20.9	47.9	72.5	45.5
2038	8 189.2	7 953.0	236.2	17.7	48.4	74.6	44.0
2039	8 202.6	7 968.6	234.0	13.5	49.0	76.8	41.2
2040	8 213.2	7 980.8	232.4	10.6	49.8	79.0	39.7
2041	8 220.0	7 989.1	231.0	6.9	50.6	81.2	37.5
2042	8 223.4	7 993.8	229.6	3.4	51.3	83.5	35.6
2043	8 224.9	7 996.6	228.2	1.5	51.9	85.8	35.3
2044	8 224.0	7 997.1	226.9	-0.9	52.3	88.0	34.8

Note : Base period population estimates.

**Table 3 (Cont'd) Components of population growth**

Thousands

Reference time-point (Mid-year)	Hong Kong Resident Population	Usual Residents	Mobile Residents	Compared with the previous reference time-point	From the previous reference time-point to this reference time-point		
				Population growth	Births	Deaths	Net movement (inflow <i>less</i> outflow)
2045	8 220.2	7 994.8	225.4	-3.7	52.3	90.2	34.1
2046	8 214.1	7 990.1	224.0	-6.2	52.2	92.2	33.8
2047	8 204.2	7 981.7	222.5	-9.9	52.0	94.1	32.3
2048	8 192.5	7 971.5	221.1	-11.7	51.5	95.8	32.6
2049	8 178.0	7 958.4	219.6	-14.5	51.0	97.3	31.8
2050	8 161.0	7 942.8	218.2	-17.0	50.4	98.6	31.1
2051	8 140.8	7 924.1	216.7	-20.2	49.8	99.5	29.5
2052	8 119.1	7 903.8	215.3	-21.7	49.2	100.3	29.4
2053	8 095.7	7 881.7	214.0	-23.5	48.7	100.9	28.7
2054	8 071.3	7 858.6	212.7	-24.4	48.1	101.3	28.8
2055	8 046.2	7 834.7	211.5	-25.1	47.6	101.5	28.8
2056	8 020.8	7 810.4	210.4	-25.4	47.2	101.5	28.9
2057	7 994.2	7 784.8	209.3	-26.6	46.7	101.4	28.1
2058	7 967.8	7 759.6	208.3	-26.3	46.3	101.1	28.5
2059	7 941.3	7 733.9	207.3	-26.6	45.9	100.7	28.2
2060	7 914.9	7 708.5	206.4	-26.4	45.5	100.1	28.3
2061	7 889.0	7 683.6	205.4	-25.9	45.1	99.5	28.5
2062	7 862.7	7 658.3	204.4	-26.3	44.7	98.8	27.8
2063	7 837.4	7 634.0	203.4	-25.3	44.3	98.2	28.6
2064	7 813.9	7 611.6	202.3	-23.5	44.0	97.6	30.0

**Table 4 Hong Kong Resident Population under baseline population projections, high population projections and low population projections**

Thousands			
Reference time-point (mid-year)	Baseline population projections	High population projections	Low population projections
2014 <sup>(Note)</sup>	7 241.7	7 241.7	7 241.7
2015	7 298.6	7 298.6	7 298.6
2016	7 354.5	7 357.8	7 351.4
2017	7 411.3	7 419.1	7 404.4
2018	7 463.5	7 479.5	7 446.6
2019	7 518.9	7 548.6	7 490.7
2020	7 575.0	7 620.6	7 534.1
2021	7 625.9	7 689.6	7 570.9
2022	7 673.7	7 758.7	7 603.7
2023	7 716.1	7 825.2	7 630.3
2024	7 755.8	7 890.3	7 653.4
2025	7 798.4	7 959.7	7 679.3
2026	7 836.4	8 026.4	7 700.7
2027	7 870.8	8 091.6	7 718.7
2028	7 906.2	8 157.8	7 738.0
2029	7 941.5	8 224.1	7 757.6
2030	7 974.6	8 288.1	7 775.1
2031	8 007.2	8 351.5	7 792.2
2032	8 039.0	8 414.1	7 808.8
2033	8 070.8	8 476.6	7 825.5
2034	8 100.5	8 537.0	7 840.2
2035	8 126.8	8 594.0	7 851.6
2036	8 150.5	8 648.4	7 860.4
2037	8 171.4	8 700.0	7 866.5
2038	8 189.2	8 748.4	7 869.4
2039	8 202.6	8 792.5	7 868.0
2040	8 213.2	8 833.8	7 863.8
2041	8 220.0	8 871.3	7 856.0
2042	8 223.4	8 905.2	7 844.7
2043	8 224.9	8 937.1	7 831.5
2044	8 224.0	8 966.5	7 816.1

Note : Base period population estimates.

**Table 4 (Cont'd) Hong Kong Resident Population under baseline population projections, high population projections and low population projections**

Thousands			
Reference time-point (mid-year)	Baseline population projections	High population projections	Low population projections
2045	8 220.2	8 992.8	7 798.0
2046	8 214.1	9 016.4	7 777.5
2047	8 204.2	9 036.0	7 753.5
2048	8 192.5	9 053.5	7 727.8
2049	8 178.0	9 067.8	7 699.4
2050	8 161.0	9 079.3	7 668.6
2051	8 140.8	9 087.4	7 634.7
2052	8 119.1	9 093.7	7 599.5
2053	8 095.7	9 098.0	7 562.5
2054	8 071.3	9 101.1	7 524.7
2055	8 046.2	9 103.5	7 486.4
2056	8 020.8	9 105.7	7 447.7
2057	7 994.2	9 106.8	7 408.1
2058	7 967.8	9 108.4	7 368.9
2059	7 941.3	9 109.8	7 329.5
2060	7 914.9	9 111.2	7 290.4
2061	7 889.0	9 112.8	7 251.9
2062	7 862.7	9 113.9	7 213.1
2063	7 837.4	9 115.7	7 175.4
2064	7 813.9	9 118.8	7 139.6

**Table 5 Labour force and labour force participation rate (excluding foreign domestic helpers)**

Year	Labour force (Thousands)	Labour force participation rate (%)
2014 <sup>(Note)</sup>	3 598.1	59.3
2015	3 631.2	59.9
2016	3 644.2	59.7
2017	3 647.8	59.4
2018	3 648.0	59.1
2019	3 638.9	58.8
2020	3 629.1	58.4
2021	3 620.2	58.0
2022	3 603.2	57.5
2023	3 578.5	56.9
2024	3 549.3	56.1
2025	3 522.1	55.3
2026	3 501.9	54.5
2027	3 482.2	53.8
2028	3 461.1	53.3
2029	3 442.7	52.7
2030	3 428.3	52.2
2031	3 425.1	51.9
2032	3 426.0	51.7
2033	3 421.3	51.3
2034	3 418.8	51.1
2035	3 418.5	50.8
2036	3 423.8	50.7
2037	3 429.3	50.6
2038	3 425.9	50.4
2039	3 422.3	50.3
2040	3 418.0	50.2
2041	3 413.6	50.1
2042	3 407.5	50.0
2043	3 399.3	49.9
2044	3 389.7	49.8

Note: Actual figure.

**Table 5 (Cont'd) Labour force and labour force participation rate (excluding foreign domestic helpers)**

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Year	Labour force (Thousands)	Labour force participation rate (%)
2045	3 378.6	49.7
2046	3 367.3	49.6
2047	3 354.9	49.6
2048	3 340.6	49.5
2049	3 324.7	49.4
2050	3 307.6	49.3
2051	3 290.8	49.3
2052	3 274.6	49.2
2053	3 257.9	49.1
2054	3 240.2	49.1
2055	3 222.1	49.0
2056	3 204.2	48.9
2057	3 188.8	48.8
2058	3 174.7	48.7
2059	3 162.0	48.7
2060	3 149.1	48.7
2061	3 135.3	48.6
2062	3 124.8	48.6
2063	3 115.6	48.6
2064	3 108.4	48.6

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