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Land and Housing
Policy Research Series | ❸

Housing Policy Reform to Narrow Wealth Gap

Urgent Formation of Land to Improve People's Livelihood

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About Our Hong Kong Foundation

Our Hong Kong Foundation (OHKF) is a Hong Kong non-profit organisation registered in September 2014, with a mission to promote the long-term and overall interests of Hong Kong through public policy research, analysis and recommendation. Pooling together local, mainland and international talent, the Foundation studies Hong Kong's development needs, offering multidisciplinary public policy recommendations and solutions to foster social cohesion, economic prosperity and sustainable development.

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PART ONE

Reforming Our Public Housing System: Why and How?

Executive Summary

1. Introduction

In our first report, we have pointed out the economic inefficiencies of our public housing system. In our second report, we have further discussed the various socio-economic issues arising from it. In this third report, we would take a step further to study the imperfections of the mechanism design of our public housing system in detail and the inefficiencies embedded in it. These include inefficient use of Public Rental Housing (PRH) units, mismatch of PRH households and units, slow units recovery and unsustainable financing of the system.

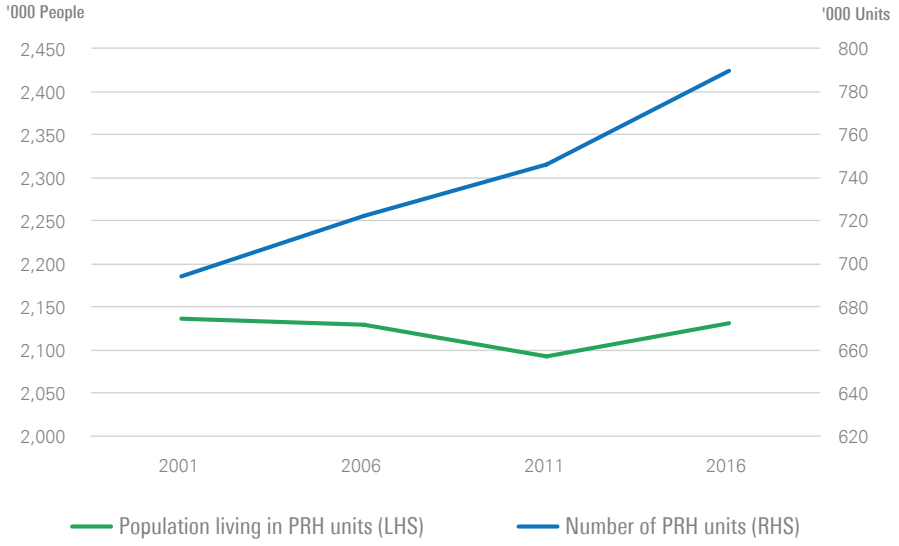
In our view, the root cause of all these inefficiencies is that PRH units are not owned by their occupiers, and hence cannot be allocated efficiently in response to changing situations. This is especially problematic at the time when the society is facing a severe undersupply of new public housing units. Given the design of our public housing system and its associated incentives facing the PRH households, any administrative measures to mitigate the said inefficiencies are likely to have only limited effects unless they are draconian, which might incur high costs to both the government and PRH residents. Therefore, the more effective way to reform our public housing system, in our view, is through our proposed Subsidised Homeownership Scheme (SHS), an homeownership-oriented public housing scheme. The SHS could cover not only future supply of public housing, but also existing public housing units.

2. Inefficient Use of PRH Units

First and foremost, the completions of more PRH units over the past decade have not brought in more PRH residents. Despite an increase of 95,000 PRH units from 2001 to 2016, the number of PRH residents has actually dropped slightly by 4,000 over the period.

Some may argue that the decrease in number of PRH residents is driven by

▼ **Number of PRH units and population living in PRH**



Sources: Housing Authority; Census and Statistics Department.

social phenomena, for instance the growing trend of nuclear family, drop in fertility rate, ageing population, etc. Whilst the aforementioned social factors do result in a decrease in average household size across the society, such contraction is much more pronounced in PRH. Average household size in PRH has dropped from 3.4 to 2.8 from 2001 to 2016. In comparison, the number for private housing has only dropped slightly from 3.1 to 2.9. This implies there are factors uniquely affecting the household size of PRH, which, we believe, are policy-related and stemmed from the mechanism design of the existing PRH system.

A crucial factor contributing to the reduction in number of PRH residents and their average household size is the splitting of PRH household. The more prevalent household splitting within PRH residents in recent years has clearly contributed to the longer PRH waiting list, with the percentage of applicants on the PRH waiting list that are originally living in PRH units increasing from 18% in 2001/02 to 30% in 2013/14. The drastic increase in cases is arguably a result of the unintended consequences of the current policy of Housing Authority regarding the application of PRH units by existing PRH residents.

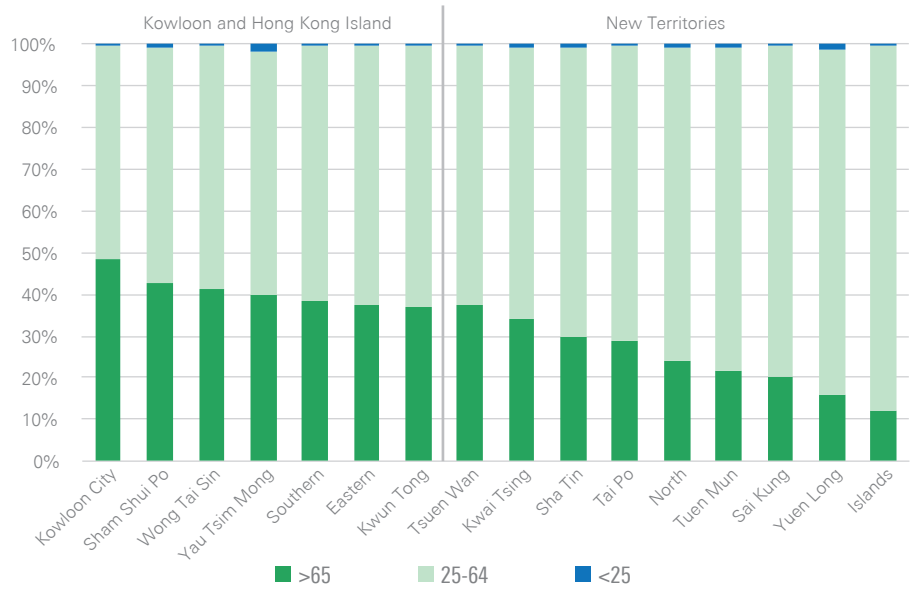
In all fairness, the policies are designed with good intent. But the system is at risk of being abused, potentially resulting in an inefficient use of public resources. We must emphasise that we do not advocate tightening the relevant policies, which might hurt those who are genuinely in need. Instead, a better way is to privatise the PRH units through SHS such that the households are faced with more rationalised incentives.

3. Mismatch of PRH Units and Their Households

A household's housing demand changes with individual needs in various stages of life. Nevertheless, PRH households, unlike families in private housing, are not allowed to freely move to more ideal units according to individual needs.

In general, housing demand can be decomposed into two components - size and location. Regarding location, data from the Population Census shows that PRH estates in Kowloon and on Hong Kong Island have relatively higher percentage of elderly households than those in the New Territories. On one hand, the retired should prefer to live further away from the city centre where living costs are lower. On the other hand, the working-aged should prefer to live close to their work places so as to minimise the commuting time and expenses. This indicates a substantial mismatch between PRH residents and the units they occupy.

▼ **Distribution of PRH households, by age of household head by district**



Note: Excluding households with more than one household head.
Source: Hong Kong Population Census 2011.

Regarding size, other things being constant, a larger family should demand a larger unit, and vice versa. For instance, the so-called "upgrade demand" is usually associated with marriages and new births. Similarly, "downsizing demand" is usually associated with departure or death of family members. However, it is not easy for families living in PRH to move to units with different sizes when there is a change in the number of their family members.

As PRH units are prohibited from the private rental or sales market, the only way for a PRH household to move to another PRH unit is through the transfer schemes offered by the Housing Authority. Nevertheless, the effectiveness of these transfer schemes are dubious. Over the past four years, there were on average only 5,600 successful transfers per year.

In order to alleviate the mismatch of PRH household and their units, we have to increase the mobility of PRH residents. One way to do this is to expand and expedite the current transfer schemes provided by the Housing Authority. This might, however, incur exceedingly high costs given the amount of administrative procedures involved. A cheaper and more effective alternative is to privatise the PRH units. A market for these units would emerge and the allocative inefficiencies would be ameliorated. There would be an incentive for trading to take place and re-matching of tenants' needs and housing units would come into effect

4. Slow Recovery of PRH Units

Any PRH households with monthly income exceeding two times of PRH income limits (PRHILs) are regarded as "Well-Off Tenants" and are required to pay additional rents. Our estimation shows that there were 291,200 PRH households, or 38.2% of all PRH households who had monthly income higher than the PRHILs in 2016, based on Population Census data. Among them, 48,500 households (6.2%) had monthly income more than two times of PRHILs. Yet, there were only around 26,000 (3.5%) PRH households who are actually paying additional rents in 2016 according to the Housing Authority's figures. This suggests there might be difficulties in the enforcement of the Well-Off Tenant Policies. The ineffectiveness of the Well-Off Tenant Policies has resulted in a slow progress of unit recovery, with less than 1% of PRH units being recovered each year over the past five years.

While we understand any policies on Well-Off Tenants cannot be exceeding draconian, PRH is a valuable public resource that must be utilised carefully. Admittedly, not all Well-Off Tenants could afford to purchase flats in the private market, a better way is to allow them to purchase their existing or new PRH units at an affordable cost. As long as the units are priced to cover at least the development cost, the government can recover their investment in PRH and redistribute valuable public resources for other uses, including the construction of new public housing for those who are in need.

5. Unsustainability of PRH Financing

The construction cost of a PRH unit, which constitutes the largest component of the total cost, has been increasing rapidly over the past few years and is expected to rise further. This sharp increase in construction cost is financially unsustainable to the Housing Authority. Similar to the case of construction cost, the operating cost of PRH units has exhibited a sharp uptrend in recent

years, whilst the rental income collected by the Housing Authority has failed to keep up.

Indeed, according to its own forecast, the Housing Authority's reserve is projected to drop by more than half, from HK$47bn to HK$18bn in the five years leading to 2020/21, at a rate of approximately 20% per year. In addition, according to the Report of the Working Group on Long Term Fiscal Planning, the Housing Authority is projected to have a cumulative funding shortfall of HK$490 bn by 2041/42, even assuming PRH rent could be raised by 5% every two years. For that reason, we need a new financing model for our public housing.

6. Unaffordable Premium Payments for TPS and HOS Units

Home Ownership Scheme (HOS) and Tenants Purchase Scheme (TPS) units were sold at a discount to market price. The difference between the market value and the selling price of the unit is called unpaid premium. The owners of the TPS and HOS units have to repay the said amount to the government before they can freely trade their units in the open market. Nevertheless, instead of being fixed at the time of purchase, the level of unpaid land premium changes with market prices.

This suggests that TPS and HOS owners cannot enjoy the full capital gain of their property when housing price soars the same way private homeowners do. Effectively, an owner of a TPS or HOS unit with unsettled premium is only a quasi-homeowner. For instance, if the owner purchased the unit at 50% of the market price, he or she would only benefit from 50% of the full capital gain of the property before settling the premium. The remaining 50% would go to the Housing Authority.

With the persistent increase in property prices, owners of TPS and HOS units can hardly afford to purchase flats in the private market and move up the housing ladder using the receipt upon the disposals of their TPS or HOS units, after repaying the unpaid premiums to the government. In fact, as of 2015, only 23% of some 324,200 HOS units have their premiums settled. The situation of TPS is even direr. Only 1% of some 132,000 units have their premiums settled.

7. Suggested Road Map of the Implementation of Subsidised Homeownership Scheme

For PRH tenants, since they do not own their units, they have neither the incentives nor ways to put their units to the most efficient uses. For HOS and TPS owners, since the amount of unpaid premiums are linked with the prevailing market prices, they cannot – after repaying the premiums – enjoy the full capital gain of their units, and upgrade to private housing. For the government, the construction and operating costs of PRH represent a huge

financial burden, having recovered only a tiny portion of the unpaid premiums embedded in HOS and TPS units. This is indeed a triple-lose situation. We have presented in our previous sections how our proposed SHS, a homeownership-oriented public housing scheme, can reform our public housing system and address the above mentioned problems, turning triple-lose to triple-win. In this section, we would lay out the suggested road map of the implementation of the SHS in four stages.

Firstly, a pilot SHS scheme could be launched in order to examine the level of public support of the scheme. We can view this as a refined version of the current HOS with:

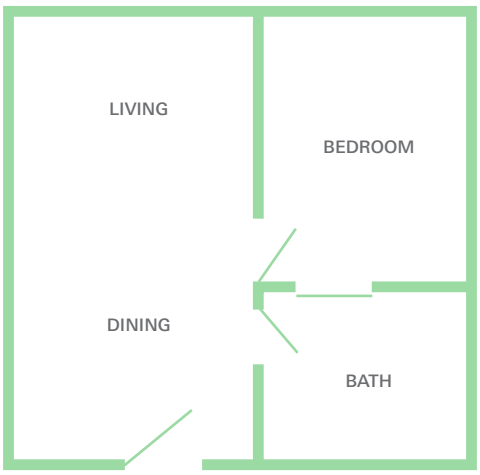
(i) Pricing linked to development cost; and

(ii) The amount of unpaid premium capped at the date of occupation.

This is illustrated below with a hypothetical example of a SHS unit with a market value of HK$4m.

▼ Pricing mechanism of SHS

Assumed market value : HKD 4,000,000



Unpaid land premiums: HKD 3,000,000

Possible mechanisms:

- Discount on early repayments
- Repayment in instalments
- Unpaid premiums: the lower of the level at time of occupation, or market price at the first instalment; or the moving average over this period
- Interest accrued on unpaid premiums

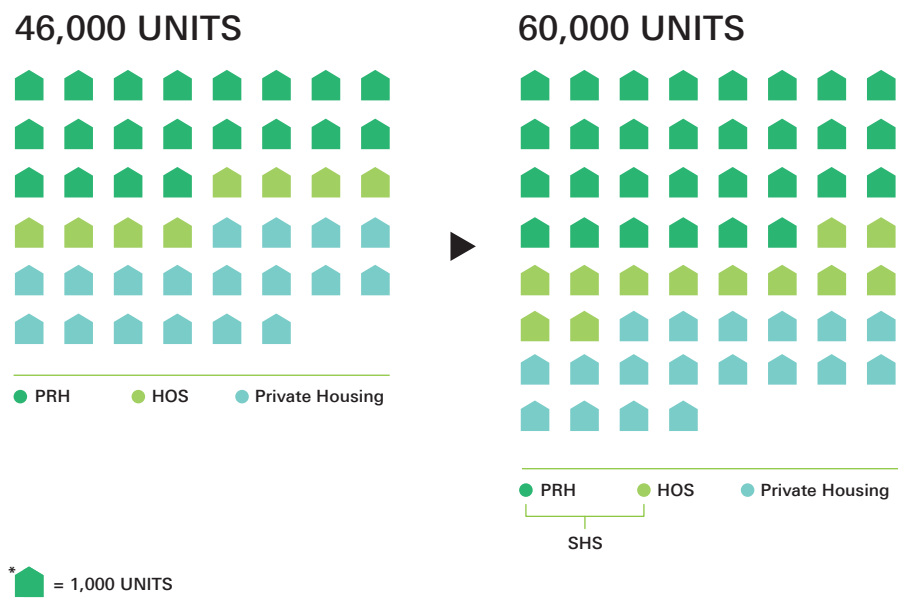
Selling price at development cost: HKD 1,000,000

- 90 - 95% mortgage guaranteed by the government
- 5 - 10% down payment

Source: Our Hong Kong Foundation.

Secondly, if the scheme is widely accepted by the society, the government could expand the SHS to cover all future supply of public housing. Given that the current supply of public housing trails significantly behind its demand, we suggest the government to adjust the public-private target split of future supply from the current target of 60-40 to 70-30. Consequently, without compromising private housing supply (i.e. 18,000 units), the annual supply target of public housing units – in the form of SHS – should increase from the current 28,000 units to 42,000 units. In other words, the annual total housing supply target would increase from 46,000 to 60,000. The proportion of units allocated to current PRH and HOS applicants would be the same with existing arrangements. But applicants of the SHS could choose to buy, rent or even rent-to-buy the units.

▼ Annual housing supply target



Source: Our Hong Kong Foundation.

As a next step, the government should also consider allowing the owners of the existing TPS and HOS units to repay the premiums of their units under the same SHS mechanism.

Finally, privatisation of existing PRH would be rolled out in phases. We believe it is unsuitable for units that are too old to be privatised since they will more likely be facing the need for redevelopment. Of the 790,000 existing PRH units, about 363,000 of them are built after 1997 (i.e. aged < 20 years as of now), we could assume these units are suitable for privatisation given that they were mostly built after the implementation of TPS. It should be noted at the peak of TPS in 2000, 24,000 units were sold. We may use this as a reference for the annual capacity of PRH privatisation.

One possible arrangement is that the privatisation programme for existing stock in the first year would cover the newest 24,000 PRH units, and rolling to the next newest 24,000 in the following year, so on and so forth. At this assumed pace, suppose the privatisation programme is to be started today (2017), in 15 years' time (i.e. by 2032), it will have covered all PRH units built after 1997. For the remaining PRH units, options could be granted to their residents either to purchase the redeveloped units upon completion; or to surrender their PRH units and purchase one of the newly built SHS units.

If the SHS is implemented successfully, we expect the homeownership rate of Hong Kong could reach 65% in 10 years (i.e. 2026), up from the current c50%. It could further reach 74% in 30 years (i.e. 2046). In addition, the share of public housing among the overall housing stock is estimated to reach 60% in 2046.

1

Introduction

For long, our public housing system has featured a housing ladder comprised of – from the bottom to the top – Public Rental Housing (PRH), subsidised sales flats and private housing. Ideally, a household who cannot afford to rent an ordinary private housing unit can live in PRH provided by the government; then becomes a homeowner by purchasing a Tenant Purchase Scheme (TPS) or Homeownership Scheme (HOS) unit when it saves enough for down payment; and finally upgrades to a private housing unit when its economic situation further improves. Unfortunately, this housing ladder has broken, at every step:

- the number of PRH application and waiting time have skyrocketed over the past decade, with the number of general applicants and their waiting time hitting 150,000 cases and 4.7 years, respectively, with the latter far exceeding the government's pledge of three years;
- the undersupply of subsidised sales flats and their expensive pricings, which are linked to the ever-increasing property prices, means only a small portion of PRH residents can purchase these flats and return their PRH units to the government; and
- owners of subsidised sales flats have been unable to pay off the unpaid premiums of their units, which are again linked to the prevailing market prices, and move to private housing. All in all, our public housing system is in desperate need of reform.

In our first report, we have pointed out the economic inefficiencies of our public housing system. In our second report, we have further discussed the various socio-economic issues arising from it. In this third report, we would take a step further to study the imperfections of the mechanism design of our public housing system in detail and the inefficiencies embedded in it. These include inefficient use of PRH units, mismatch of PRH households and units, slow units recovery and unsustainable financing of the system.

In our view, the root cause of all these inefficiencies is that PRH units are not owned by their occupiers, and hence cannot be allocated efficiently in response to changing situations. This is especially problematic at the time when the society is facing a severe undersupply of new public housing units.

Given the design of our public housing system and its associated incentives facing the PRH households, any administrative measures to mitigate the said inefficiencies are likely to have only limited effects unless they are draconian, which might incur high costs to both the government and PRH residents. Therefore, the more effective way to reform our public housing system, in our view, is through our proposed Subsidised Homeownership Scheme (SHS), a homeownership-oriented public housing scheme. The SHS could cover not only future supply of public housing, but also existing public housing units. In brief, the mechanism of the SHS is as follows[1]:

(i) Rent-to-buy and for-sale units are offered at prices that make reference to the development cost; and

(ii) The unpaid premium will be capped at the time of occupation and no longer be linked to the fluctuating market value.

We will discuss more in detail of the suggested road map of the implementation of the SHS later in the report.

1. For a more detailed description of the SHS, please refer to Part I of "Maximising Land Use to Boost Development, Optimising Land Housing Resources to Benefit All" (November 2015), Our Hong Kong Foundation.

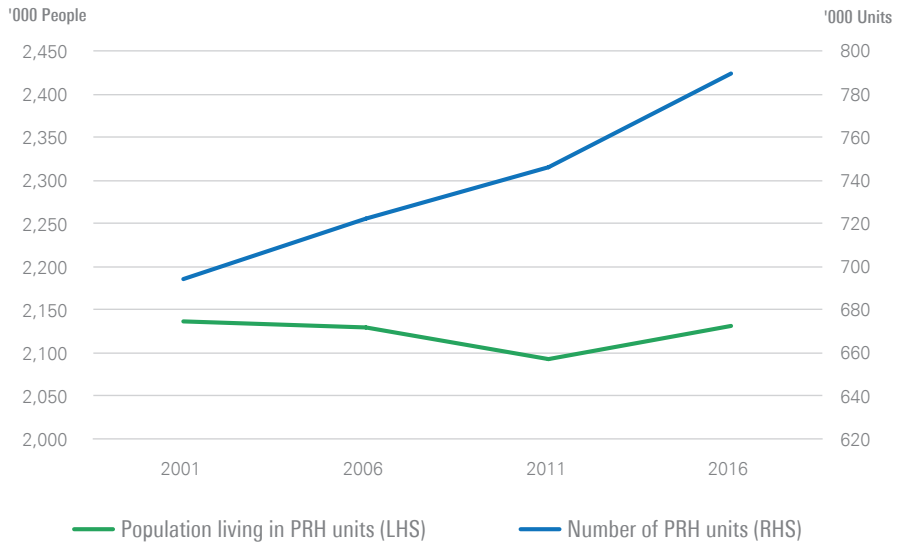
2

Inefficient Use of PRH Units

2.1 More Units Housing Less People

First and foremost, the completions of more PRH units over the past decade have not brought in more PRH residents. Figure 2.1 below shows the number of PRH units and the population therein from 2001 to 2016. Despite an increase of 95,000 PRH units, the number of PRH residents has actually dropped slightly by 4,000 over the period.

▼ **Figure 2.1 Number of PRH units and population living in PRH**



Sources: Housing Authority; Census and Statistics Department.

Some may argue that the decrease in number of PRH residents is driven by social phenomena, for instance the growing trend of nuclear family, drop in fertility rate, ageing population, etc. It is no denying that the aforementioned social factors resulted in a decrease in average household size across the society (Figure 2.2). Yet, such contraction is much more pronounced in public rental housing. Average household size in PRH has dropped from 3.4 to 2.8 from 2001 to 2016. In comparison, the number for private housing has only dropped slightly from 3.1 to 2.9. This implies there are factors uniquely affecting the household size of PRH. We believe these factors are policy-related and stemmed from the mechanism design of the existing PRH system.

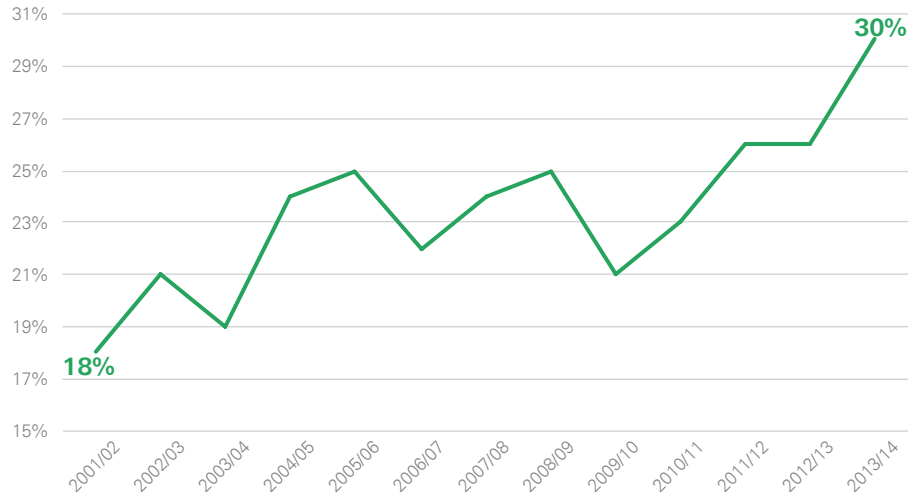
▼ **Figure 2.2 Average household size by type of housing**

Sources: Housing Authority; Census and Statistics Department.

2.2 Household Splitting

A crucial factor contributing to the reduction in number of PRH residents and their average household size is the splitting of PRH household. Household splitting in the context of PRH refers to members of an existing PRH household forming a new household and applying for an additional PRH unit. A PRH household, after splitting, will become two separate households and, after being allocated an extra unit, occupy two PRH units. The more prevalent household splitting within PRH residents in recent years has contributed to the longer PRH waiting list.

▼ **Figure 2.3 Percentage of PRH applicants on the waiting list who are living in PRH**



Source: Housing Authority.

Figure 2.3 above presents the percentage of applicants on the PRH waiting list that are originally living in PRH units. From 2001/02 to 2013/14, the figure increased from 18% to 30%. In 2013/14, out of the some 248,100 PRH applicants, 74,400 of them were indeed living in PRH units.

Household splitting might arise naturally from the formation of new family. Yet the drastic increase in cases as shown above is unlikely to be of natural consequences. Instead, it is arguably a result of the unintended consequences of the current policy of Housing Authority regarding the application of PRH units by existing PRH residents. This can be illustrated by a recent case of manipulation of the PRH system as exposed by the media.[2] In the case, a PRH tenant and his three sons were originally occupying one PRH unit, the tenant then applied for a new PRH unit with one of his sons and grandson in 2003. He, who was already 84 years old at the time, was able to apply through the "The Families with Elderly Persons Priority Scheme" and got allocated a PRH unit within three years. The original unit was subsequently taken over by another of his sons as the new tenant.

The above case reveals at least three features in the PRH allocation system which might provide incentives for PRH households to split and apply for extra PRH units. The first one is to allow existing PRH residents to apply a new PRH unit without any penalty. Whilst non-elderly one-person applicants who are living in PRH unit at the time of application will be deducted 30 points under the current Quota and Points System, a similar penalty had not been imposed on general applicants. The government has noticed the issue and addressed it earlier this year. Starting in April 2017, if all the members of a general application are currently living in a PRH unit, the application will be frozen by one year. The new policy, however, does not apply to existing applications on the waiting list. More importantly, it does not apply to elderly applications through the "Single Elderly Persons Priority Scheme", "Elderly Persons Priority Scheme", and "Harmonious Families Priority Scheme".[3]

2. 一家霸三公屋 審查驚爆「黑洞」 http://paper.wenweipo.com/2015/01/28/HK1501280014.htm

3. "The Families with Elderly Persons Priority Scheme" has been replaced by the "Harmonious Families Priority Scheme" in the year 2009.

This points to the second feature, which is to offer shortened waiting time to elderly applicants regardless of whether they are currently living in PRH units. Such policy is well-intended, encouraging the younger family members to live with the elderly by giving credit to households with elderly members, but is prone to manipulation by existing PRH residents to obtain more units. For instance, if the elderly member of an existing PRH household applies for another PRH unit, he / she can easily and quickly be allocated one.

The third feature is to allow existing occupants of the PRH unit to take over the tenancy after the original tenant has moved out or passed away, through the "Policy on Grant of New Tenancy". The original intention of the policy is to provide flexibility to families with their members passing away. Nevertheless, it has been manipulated by some PRH residents to get hold of their original units after their elderly members have been allocated another PRH unit. Although the existing occupants still need to undergo a comprehensive means-test, they can be spared the long waiting time that they would otherwise have to endure in the case of a new application. Furthermore, the income and asset limits are less stringent than those imposed on new PRH applicants. Specifically, the existing occupants will be allowed to take over the tenancy as long as their income does not exceed five times the PRH income limits (PRHILs), provided their net asset value does not exceed 100 times the PRHILS, and they do not own any private domestic property.

In addition to that, the drop in average household size in PRH has also been contributed to by the growing number of divorced couples living in PRH. In our previous report, we have already discussed how the PRH allocation criteria may possess incentives for unhappy couples to initiative divorce and the associated consequences of family breakdown[4].

2.3 SHS and A Rationalised Incentive Scheme

In all fairness, all these policies are designed with good intent, such as encouraging the younger family members to live with the elderly; allowing flexibility to families whose members have passed away; and providing assistance to single-parent families, etc. But the system is at risk of being abused, potentially resulting in an inefficient use of public resources. We must emphasise that we do not advocate tightening the relevant policies, which might hurt those who are genuinely in need. Instead, a better way is to privatise the PRH units through SHS such that the households are faced with more rationalised incentives.

We acknowledge that any public housing programme would be restricted by administrative constraints and the SHS is not a silver bullet that can solve all problems. It could, however, alleviate part of the inefficiencies regarding the use of public housing units. Firstly, by injecting wealth to the households through the form of homeownership, it encourages households to satisfy their housing demand through the private market instead of staying within the public system. Secondly, under our proposal, the application for the SHS is restricted to once in a life time. This could prevent existing public housing unit owners from applying an extra unit. Finally, we have explained in our previous report[5] how homeownership could act against family breakdown by increasing the cost of divorce.

4. Please refer to "Reforming Public Housing Policy, Building Sustainable Land Reserve" (October 2016), Our Hong Kong Foundation. Part I, Section 4.4.

5. Please refer to "Reforming Public Housing Policy, Building Sustainable Land Reserve" (October 2016), Our Hong Kong Foundation. Part I, Section 7.2.

3

Mismatch of PRH Units and Their Households

A household's housing demand changes with individual needs in various stages of life. People often change jobs, get married and raise kids - who will one day go to school or change schools - and eventually retire. Nevertheless, PRH households, unlike families in private housing, are not allowed to freely move to more ideal units according to individual needs.

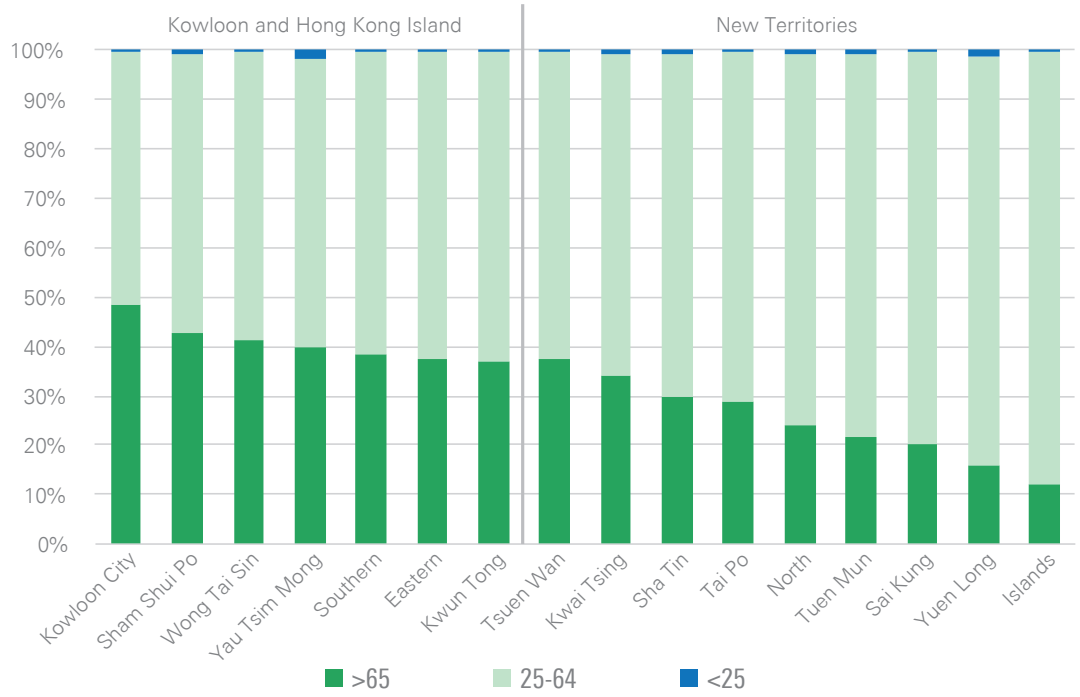
3.1 Locational Mismatch

In general, housing demand can be decomposed into two components– size and location. Regarding location, the very first batch of PRH estates were built in the 1950s and 1960s. These include Sai Wan Estate, Model Estate, Choi Hung Estate, Wah Fu Estate, to name a few. The government then started to build PRH estates in the New Territories alongside the development of new towns. Given the relatively low mobility of PRH households, we expect a higher concentration of elderly households in the old PRH estates.

Indeed, the average age of PRH units in Kowloon and on Hong Kong Island are older than those in the New Territories. Consequently, PRH estates in Kowloon and on Hong Kong Island should have relatively higher percentage of elderly households than those in the New Territories. As shown in Figure 3.1, 40% of all PRH households living in Kowloon and on Hong Kong Island have household heads aged above 65 years old (i.e. possibly retired), compared to just 25% in the New Territories. In contrast, up to 70% of PRH households living in the New Territories have household heads aged between 25 and 64 (i.e. likely to be working population), compared to 60% in Kowloon and on Hong Kong Island. On one hand, the retired should prefer to live further away from the city centre where living costs are lower. On the other hand, the working-aged should prefer to live close to their work places so as to minimise the commuting time and expenses. This indicates a substantial mismatch between PRH residents and the units they occupy.

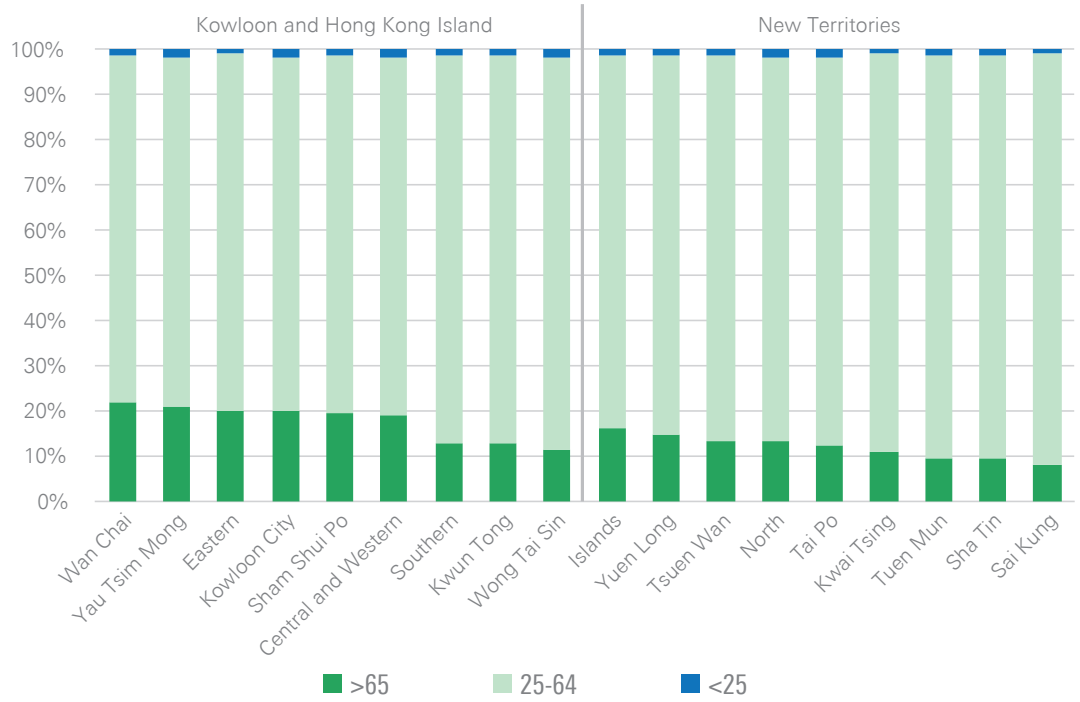
As a comparison, the situation is much better in the private housing sector as residents can freely move between different locations. Although there are still higher percentage of households with elderly household heads in the urban area than the New Territories, the difference is much smaller than their PRH counterparts. (Figure 3.2)

Figure 3.1 Distribution of PRH households, by age of household head by district



Note: Excluding households with more than one household head.
Source: Hong Kong Population Census 2011.

Figure 3.2 Distribution of private housing households, by age of household head by district



Note: Excluding households with more than one household head.
Source: Hong Kong Population Census 2011.

We of course understand not all elderly would like to live in the New Territories. Some of them might indeed prefer to live in urban areas where they share their ties with the local community. Similarly, certainly not all working-aged wish to live in the city centre. However, we believe options should be given to PRH households such that they can move to units in different locations according to their needs, just like families living in private housing.

3.2 Size Mismatch - Under-Occupation and Overcrowded Households

Regarding size, other things being constant, a larger family should demand a larger unit, and vice versa. For instance, the so-called "upgrade demand" is usually associated with marriages and new births. Families living in PRH, however, are not allowed to move to larger units when their family sizes grow, unless they are classified as Overcrowded (OC) Households. And the requirement is strict – with a per capita living space smaller than 5.5 square meters (sqm). To put that into context, the average per capita living space in Hong Kong is 170 square feet, or 15.8 sqm. Given the strict criteria, although there were only 3,600 OC households as at 2015/16, we would expect there are many more PRH households who demand flats that are larger than their current ones.

Similarly, "downsizing demand" is usually associated with departure or death of family members. When that happens, a logical case for a household living in private housing, who no longer need such a large unit, would be to sell / lease out its existing unit in exchange for a smaller one, as they bear the (opportunity) costs of its unit (i.e. the market price or rent). In contrast, a PRH household would have no incentive to release its large unit and move to a smaller one, as it does not bear the (full) cost of its unit. This is evident in the large number of Under-Occupation (UO) households. In 2015/16, we estimated there were 51,000 UO households or 6.7% of all PRH households, up from 31,700 in 2006/07.[6]

Currently the Housing Authority would classify households into UO Households according to the standards shown in Table 3.1 For example, a two-person household would be classified as UO if its unit is larger than 35 sqm. It is worth noting that not all households will be classified as UO households when there is a reduction in family members. For example, a six-person household who had been allocated a 54 sqm unit in would not be classified as UO Household even if it lost two members and became a four-person household.

This existence of OC and UO Households suggests a mismatch between the size of PRH families and the units they occupy, representing a potential misallocation of resources. On one hand, there are households living in PRH units that are considered too small for them. One the other hand, there are PRH households occupying PRH units that is larger than they need.

6. The Housing Authority decided to remove UO households with disabled members or elderly members aged 70 or above from the UO list during the review of the policy in 2013. At that time, there were 26,300 such households. We assume the number of such households remain unchanged. This is a reasonable assumption given the increasing trend of elderly PRH households. In particular, the percentage of elderly PRH households has increased from 11.3% in 2001 to 12.8% in 2011.

▼ **Table 3.1 Standard for Under-Occupation (UO) Households and the maximum size in PRH unit allocations**

Family Size (person)	1	2	3	4	5	6
UO Household: Internal Floor Area exceeding (sqm)	25	35	44	56	62	71
Maximum Allocation Standard: Internal Floor Area not exceeding (sqm)	18	30	40	49	54	54

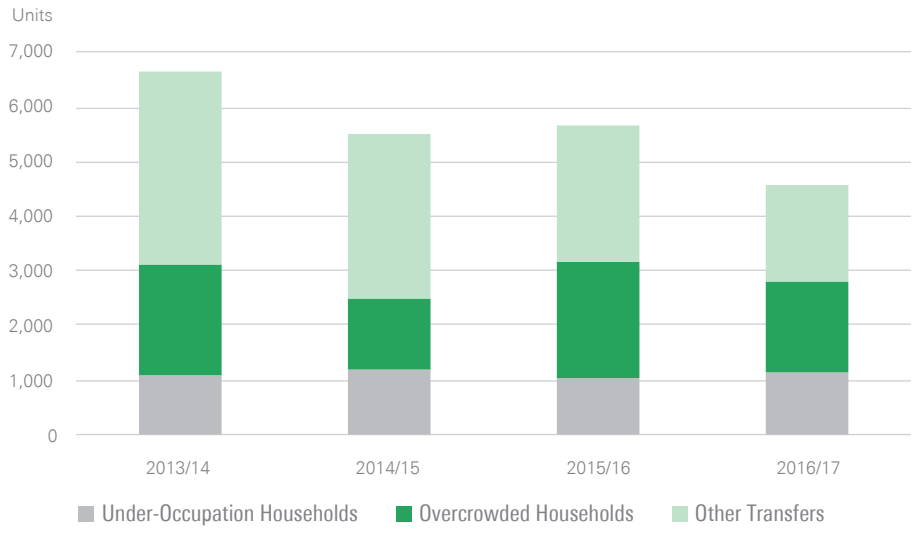
Note: Households with disabled members or elderly members aged 70 or above will be removed from the list of UO Household. Those with elderly members aged between 60 and 69 will be placed at the end of the list.
Sources: Housing Authority; Legislative Council documents.

3.3 Ineffective Transfer Schemes

As PRH units are prohibited from the private rental or sales market, the only way for a PRH household to move to another PRH unit is through the transfer schemes offered by the Housing Authority. Currently there are in total nine different transfer schemes, each serving a specific purpose.[7]

Nevertheless, the effectiveness of these transfer schemes are dubious. Over the past four years (2013/14 - 2016/17), there were on average only 5,600 successful transfers per year[8]. As shown in Figure 3.3, the majority of transfers were made for UC and OC households. Yet, this is far from enough. For example, the 1,200 average annual transfers of UC households are equivalent to only 2.2% of the 51,000 UC households in total and the average successful rate for OC households who made their transfer applications in the past four years were as low as 28%.[9]

▼ **Figure 3.3 Number of successful transfer of PRH units per year**



Sources: Housing Authority; Legislative Council.

7. See Appendix 1 for the details of each transfer scheme.

8. Excluding transfers resulting from clearance of old PRH estates.

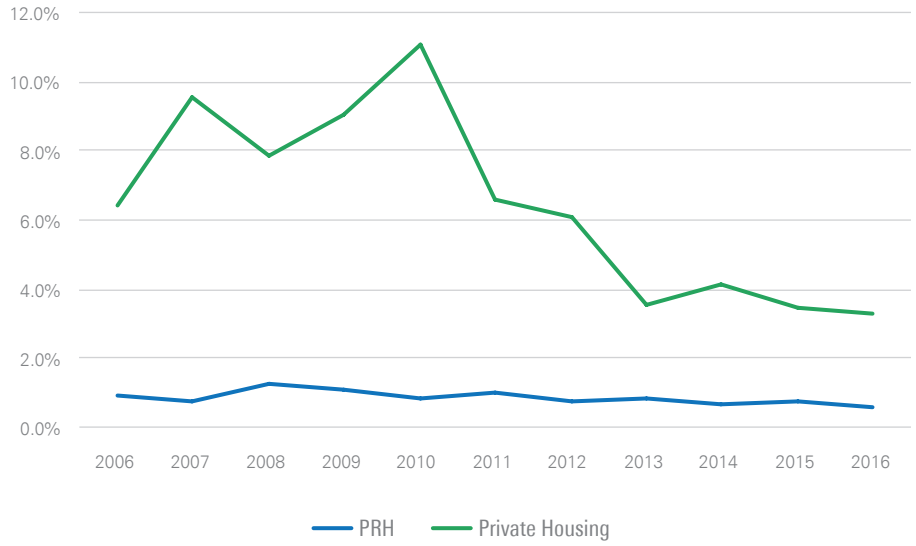
9. Apart from the OC Households, households with per capita living space less than 7 sqm but larger than 5.5 sqm can also apply for transfers, despite priority being given to those with per capital living space less than 5.5 sqm. This is the combined application successful rate for both.

3.4 SHS and A More Efficient Allocation Mechanism

In order to alleviate the mismatch of PRH household and their units, we have to increase the mobility of PRH residents. One way to do this is to expand and expedite the current transfer schemes provided by the Housing Authority. This might, however, incur exceedingly high costs given the extent of administrative procedures involved. A cheaper and more effective alternative is to privatise the PRH units. A market for these units would emerge and the allocative inefficiencies would be ameliorated. There would be an incentive for trading to take place and re-matching of tenants' needs and housing units would come into effect.

To illustrate the effectiveness of privatisation on the circulation of housing units, we have compared the churn rate (turnover rate) of both private housing and PRH units. In the past four years, there were on average 40,900 secondary transactions in the private housing market, representing 3.6% of total private housing stock. As a market for PRH does not exist, we have estimated the churn rate of PRH by dividing the annual transfers of PRH units by the total PRH stock. The average figure for the past four years is 0.7%, which is only one-fourth the corresponding figure in the private housing market. (Figure 3.4)

▼ **Figure 3.4 Churn rate of PRH and private housing units**



Notes: For PRH, the churn rate is calculated as annual transfers as % of total PRH stocks. For private housing, it is calculated as annual secondary transaction as % of total private housing stocks.
Sources: Housing Authority; Rating and Valuation Department; CEIC.

4 Slow Recovery of PRH Units

4.1 Ineffective Well-Off Tenant Policies and Slow Units Recovery

Under the existing "Well-Off Tenant Policies", any PRH households with monthly income exceeding two times of PRH income limits (PRHILs) are regarded as "Well-Off Tenants" and are required to pay additional rents (Table 4.1).

▼ Table 4.1 The Well-Off Tenant Policies

Household Income and Asset	Policy
Household income is equivalent to 2-3 times of PRHILs	To pay 1.5 times net rent plus rates
Household income is equivalent to 3-5 times of PRHILs	To pay double net rent plus rates
Before 1st October 2017 Both: • Household income exceeding 3 times of PRHILs • Assets exceeding 84 times of PRHILs **After 1st October 2017** Either one of the following: • Household income exceeding 5 times of PRHILs • Assets exceeding 100 times of PRHILs • Private domestic property ownership in Hong Kong	To vacate their flats within 12 months, and to pay the higher of double net rent plus rate and market rent before vacating

Notes: Households with all their members aged 60 or above, or being CSSA recipients are exempted from any mean-tests.
Source: Housing Authority.

Our estimation shows that there were 291,200 PRH households, or 38.2% of all PRH households who had monthly income higher than the PRHILs in 2016, based on Population Census data.[10] Among them, 47,500 households (6.2%) had monthly income more than two times of PRHILs, and should pay additional rents according to the policy. Yet, there were only around 26,000 (3.5%) PRH households who are actually paying additional rents in 2016 according to the Housing Authority's figures (Table 4.2). This suggests there might be difficulties in the enforcement of the Well-Off Tenant Policies. In particular, only PRH households who have lived in their units for 10 years are subject to mean-tests by the Housing Authority. In other words, anyone who had been allocated a PRH unit can enjoy the rental subsidy by the government for at least 10 years regardless of their income and asset level within the period.[11]

▼ **Table 4.2 Number of PRH households paying additional rent**

Rent / Year	2010/11	2012/13	2013/14	2014/15	2015/16
1.5 times net rent plus rates	20,848	18,109	18,200	18,700	22,800
Double net rent plus rates	2,907	2,321	2,400	2,300	3,100
Market rent	23	15	23	20	60
All households paying additional rent	23,778	20,445	20,600	21,600	25,960
Percentage of all PRH households	3.5%	2.9%	2.8%	2.8%	3.5%

Sources: Housing Authority; Legislative Council; Government press release.

The purpose of the Well-Off Tenant Policies is to recover units from tenants who have income and assets exceeding the limits, and reallocate them to those who are genuinely in need. However, the ineffectiveness of the Well-Off Tenant Policies has resulted in a slow progress of unit recovery. As shown in Table 4.3 below, over the past five years (2012/13 - 2016/17), on average less than 1% of all PRH units have been recovered by the Housing Authority each year.

10. The number of households were estimated by overlaying the income limits of PRH eligibility with the PRH household income distribution data from the Population Census. If the income limits did not exactly coincide with the income thresholds of income brackets in the Population Census, the number of households were estimated by assuming uniform distribution of households within income brackets. For instance, in 2016, the income limit of PRH eligibility for a 3-person household was HK$22,390 and lies within the income bracket of HK$20,000 – HK$25,000, which contains 29,965 3-person PRH households. By assuming a uniform distribution, it is estimated there were 15,642 3-person PRH households earning a monthly income between HK$20,000 and HK$22,390.

11. There is an exception, however. PRH tenants who are found to own any private domestic property are required to vacate their flats even they have lived in the current units for less than 10 years.

▼ Table 4.3 PRH flat recovery by the Housing Authority, by reason

Reason / Year	2012/13	2013/14	2014/15	2015/16	2016/17
Voluntary surrender by tenants	4,700	4,700	5,000	4,900	5,400
Issuance of notice-to-quit	1,200	1,400	1,500	1,500	1,400
Purchase of subsidised sale flats	1,300	1,200	1,100	1,200	900
Net recovery	7,300	7,400	7,500	7,600	7,700
As % of PRH stock	0.9%	0.9%	1.0%	1.0%	1.0%

Source: Housing Authority

4.2 Widening Gap Between PRH Eligibility And Coverage

The ineffective Well-Off Tenant Policies and the associated slow recovery of PRH units have become a more serious problem at the time when demand for PRH is at height. The purpose of PRH is to provide shelters for those who cannot afford to rent flats in the private market. According to the formula from the Housing Authority, rentals of private units is one of the main factors in determining the maximum income limits of PRH.[12] Given the sharp rise in rents of private units, especially small-to-medium size units[13], the PRHILs have increased by an average of 48.2% over the past six years (from 2011/12 to 2017/18). Table 4.4 shows the PRH income and asset limits for families of different sizes, and their changes.

The rising income limits have expanded the eligibility for PRH. According to our estimation, close to 42% of all households in Hong Kong had a monthly income below the PRH income eligibility in 2016, up from 36% in 2011. Nevertheless, the percentage of households living in PRH units has remained virtually unchanged at around 30%. As a result, the gap between families who are eligible for PRH and those who actually live in PRH units has widened significantly, from 6% to 11.5%, over the same period (Figure 4.1). The widening gap suggests that the completions of PRH units have considerably trailed behind the increase in demand over the past five years.

12. See Appendix 2 for a more detailed explanation on how the PRH income and asset limits are devised.

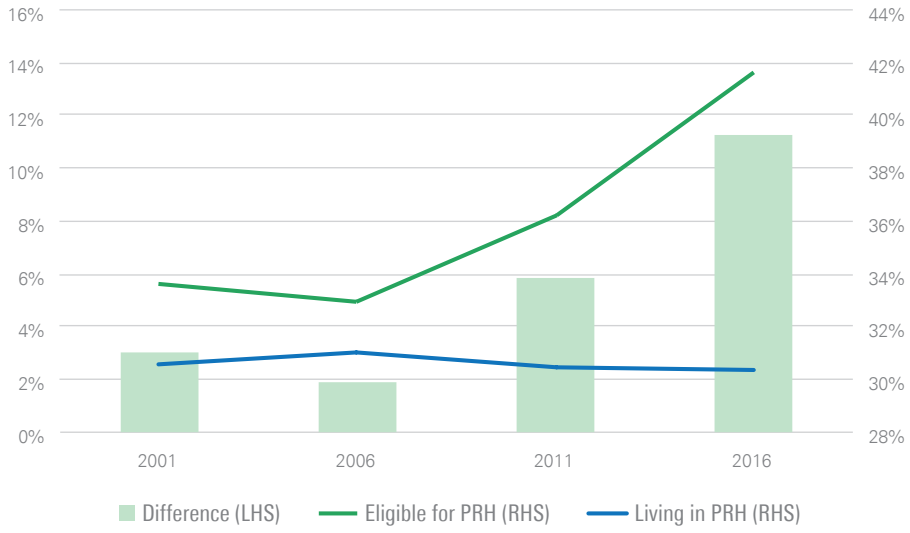
13. From 2010 to 2016, the average rents of Class A (<40 sqm, IFA) and Class B (40-69.9 sqm, IFA) units have increased by 47% and 37%, respectively, according to the figures from the Rating and Valuation Department.

▼ Table 4.4. Maximum income and asset limits of PRH eligibility

	Maximum Income Limit (HK$ per month)			Maximum Asset Limit (HK$)		
Family Size (Person)	2011/12	2017/18	Change	2011/12	2017/18	Change
1	8,740	11,250	28.7%	193,000	245,000	26.9%
2	13,410	17,350	29.4%	260,000	333,000	28.1%
3	15,260	22,390	46.7%	341,000	433,000	27.0%
4	18,560	27,050	45.7%	397,000	506,000	27.5%
5	21,520	32,960	53.2%	442,000	562,000	27.1%
6	25,040	36,010	43.8%	478,000	608,000	27.2%
7	27,340	41,420	51.5%	510,000	650,000	27.5%
8	28,950	46,320	60.0%	535,000	681,000	27.3%
9	32,230	51,090	58.5%	591,000	752,000	27.2%
10 or above	33,950	55,750	64.2%	636,000	810,000	27.4%
Average			**48.2%**			**27.3%**

Sources: Housing Authority; Legislative Council.

▼ Figure 4.1 Households eligible and living in PRH Units, as % of all households in Hong Kong



Notes: Only consider eligibility in terms of income.
Sources: Population Census and By-Census; Housing Authority; Legislative Council; Our Hong Kong Foundation.

4.3 SHS and A Fair Spending of Public Resources

While we understand any policies on Well-Off Tenants cannot be exceedingly draconian, PRH is a valuable public resource that must be utilised carefully. On average, the Housing Authority is subsidising some HK$8,000 per month for every PRH unit[14]. In other words, each year the Housing Authority is subsidising a total of HK$28bn in rentals on the some 291,200 PRH households who have monthly income exceeding the PRHILs.

Admittedly, not all Well-Off Tenants could afford to purchase units in the private market, a better way is to allow them to purchase existing or new PRH units at an affordable cost. As long as the units are priced to cover at least the development cost, the government can recover their investment in PRH and redistribute valuable public resources for other uses, including the construction of new public housing for those who are in need. Undeniably, the construction of more public housing rests on the availability of land. In the second part of this report, we will discuss our recommendations on how to increase land supply.

14. According to the figures from the Housing Authority (HA) Housing In Figures 2016, the average monthly rents (HKD per sqm) for private units in Hong Kong Island, Kowloon and New Territories are 377, 298 and 277 respectively, while the average monthly rents (HKD per sqm) for HA PRH flats in the three territories are 55, 61, and 49, respectively. Given that the median size of a PRH unit is 33.5 sqm, on average, the HA is subsidising a monthly rental of HK$10,800, HK$7,900 and HK$7,600 for a PRH unit in HKI, Kowloon and NT respectively. Weighted by the number of PRH units in the three territories, on average the HA is subsidising HK$8,000 per month for every PRH unit.

5

Unsustainability of PRH Financing

5.1 Rising Construction Cost of PRH Units

The cost of a PRH unit is heavily subsidised by the Housing Authority. The construction cost of a PRH unit, which constitutes the largest component of the total cost, has been increasing rapidly over the past few years and is expected to rise further. This sharp increase in construction cost is financially unsustainable to the Housing Authority and has placed a huge burden on its fiscal well-being.

▼ **Table 5.1 Average construction cost of a PRH and HOS unit**

	Average Construction Cost of a PRH Unit (HK$)	Average Construction Cost of a HOS Unit (HK$)
2016/17	589,100	1,076,100
2017/18	712,500	1,878,200
2018/19	837,500	1,178,600
2019/20	942,200	1,139,700
2020/21	1,063,100	1,163,300
Cumulated change	+80%	+8%

Source: Legislative Council.

Table 5.1 shows the average construction cost of a PRH and HOS unit. The construction cost of PRH units is determined by their locations, scale and other geographical and environmental factors. For instance, more units have been built on slope or uneven land and this has contributed to the rapid rise in construction cost.

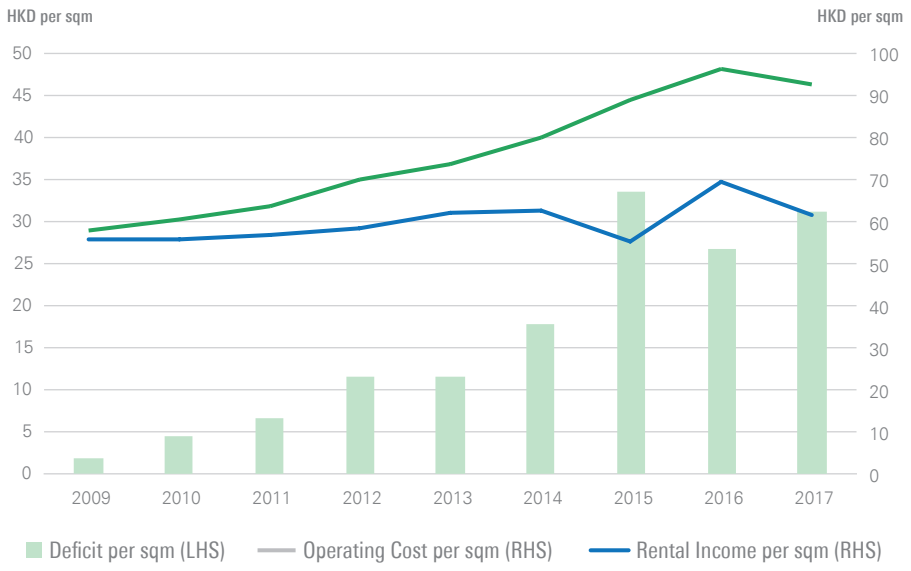
Under the existing financial model, selling one HOS unit can approximately cover the costs of building two PRH units. For instance in the financial year 2016/17, on average an HOS unit is selling for about HK$2m according to the estimation from Housing Authority. Taking into account construction cost of the unit, this can produce an HK$1m profit, which can largely cover the costs of building two PRH units.

This financing model, which has been effective so far, will no longer be sustainable in the near future. While the construction cost of a HOS unit will remain largely unchanged, that of a PRH unit is projected to nearly double from HK$0.6m to HK$1.1m. This suggests that the same HKD$1m profit generated from the sale of a HOS unit will only be capable of covering the cost of one PRH unit. According to the government's Long Term Housing Strategy, however, the ratio of PRH and HOS supply in the next 10 years is roughly 2:1. It is therefore unlikely that the same model will be able to cover the cost of PRH units as before.

5.2 The Widening Gap in Rental Income and Operating Cost

Similar to the case of construction cost, the operating cost of PRH units has exhibited a sharp uptrend in recent years, whilst the rental income collected by the Housing Authority has failed to keep up with the pace.

▼ **Figure 5.1 Rental income and operating cost of new PRH units**



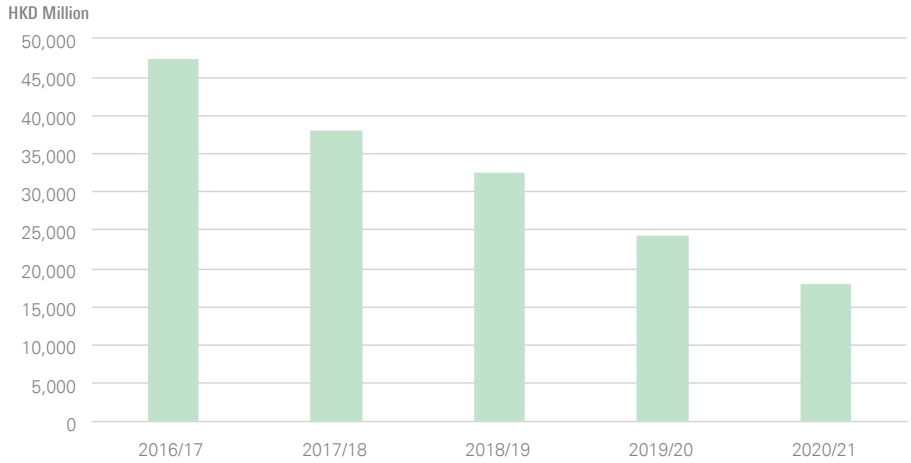
Source: Housing Authority.

Figure 5.1 above shows the widening gap between the rental income and operating cost of PRH units. The average operating cost spent on a new PRH unit has increased by 60% from HK$58 per sqm to HK$93 per sqm during 2009 to 2017. However, the average rental income collected from a new PRH unit has only increased by merely 10% from HK$56 per sqm to HK$62 per sqm over the 8-year period. In 2017, Housing Authority runs an operating deficit of HK$31 per sqm for every new PRH unit built. This is indeed not surprising given the current low level of PRH rent as compared with the market rate. This keeps draining the financial resources of the Housing Authority.

5.3 Declining Reserve Of The Housing Authority

Indeed, according to its own forecast, the Housing Authority's reserve is projected to shrink continuously at a steady rate in the coming years. As shown in Figure 5.2 below, if there is no increase in the rental level of PRH units, reserve of the Housing Authority is expected to drop by more than half, from HK$47bn to HK$18bn in the five years till 2020/21, at a rate of approximately 20% per year. In addition, according to the Report of the Working Group on Long Term Fiscal Planning, the Housing Authority is projected to face a cumulative funding shortfall of HK$490bn by 2041/42, even assuming PRH rent could be raised by 5% every two years.

▼ **Figure 5.2 Forecast of Housing Authority reserve**



Source: Housing Authority.

5.4 SHS and a New Financing Model

Our present PRH programme is operated at a recurrent loss, and it has been increasingly difficult to rely on the cross-subsidies from the sales of HOS units to finance the rising cost of PRH units. In essence, both PRH and HOS units are financed through monetising part of the land values of the public housing units. Part of the land values of the HOS units, which are sold at discount, are not fully monetised since parts of the premium is still unpaid and not whole settled with the government. If the PRH and HOS units are sold at development costs and have the amount of unpaid premiums capped at the date of occupation such that they are affordable to the households, the Housing Authority would be able to recover the construction costs of the units, and collect more unpaid premiums at a much faster rate. A more sustainable financial model for public housing would drive government expenditure on housing down and would help reduce government spending pressure enormously, making scare government revenues for other use.

6

Unaffordable Premium Payments for TPS and HOS Units

In 1998, the Housing Authority introduced the TPS, which allowed PRH tenants to purchase their units. The policy was terminated in 2005/06 in response to the government's repositioned housing policy. Similar to HOS, the units were sold at a discount to market price. The difference between the market value and the selling price of the unit is called unpaid premium. The owners of the TPS (and HOS) units have to repay the said amount to the government before they can freely trade their units in the open market.

TPS was proposed with a good intention which allowed existing tenants to purchase their units and become a homeowner. The problem, however, lies in the way unpaid premium is calculated. Instead of being fixed at the time of purchase, the level of unpaid land premium changes with market prices. Suppose a PRH tenant purchased his or her unit through TPS at a 50% discount for HK$1m. This means that the amount of unpaid premium at the time of purchase was HK$1m. After 10 years, if the market price grew to HK$4m, instead of repaying HK$1m, the owner had to repay HK$2m (HK$4m x 50%) to the Housing Authority before selling the unit in the private housing market. The same applies to the HOS.

The way that unpaid premium is calculated suggests that TPS and HOS owners cannot enjoy the full capital gain of their property when housing price soars as private homeowners do. Effectively, owner of a TPS or HOS unit with unsettled premium is only a quasi-homeowner. If the owner purchased the unit at 50% of the market price, he or she would only benefit from 50% of the full capital gain of the property before settling the premium. The remaining 50% would go to the Housing Authority.

▼ Table 6.1 Case study on capital gain of property for different type of housing

	Pok Yat House, Pok Hong Estate, Shatin (premium unsettled)	City One, Shatin	Fung Tak Estate, Wong Tai Sin (premium settled)	Hsin Kuang Centre, Wong Tai Sin
(a) Original Purchase Price	HK$190,000 (2003)	HK$1,190,000 (2003)	HK$950,000 (2004)	HK$1,050,000 (2004)
(b) Estimated Percentage of Unpaid Premium	55%*	N/A	N/A	N/A
(c) Estimated Unpaid Premium [(b)x(d)]	HK$2,145,000	N/A	N/A	N/A
(d) Market Price	HK$3,900,000 (2015)	HK$4,850,000 (2015)	HK$4,000,000 (2015)	HK$4,500,000 (2015)
(e) Expected Profit [(d)-(a)-(c)]	HK$1,565,000	HK$3,660,000	HK$3,050,000	HK$3,450,000
(f) Rate of Return [(e)/((a)+(c))]	71%	308%	321%	330%

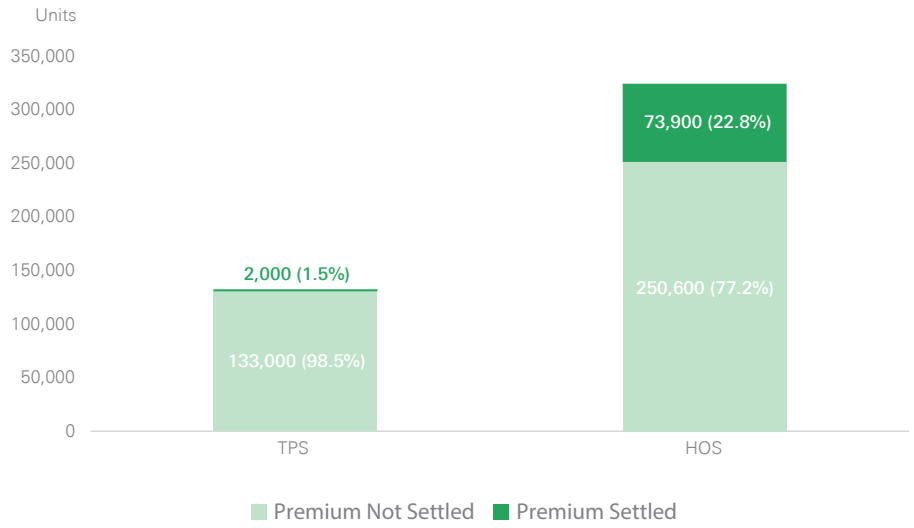
Note: *The Housing Authority has offered an additional discount (roughly 50%) on top of the original discount (i.e. 55%). In other words, the HK$190,000 purchase price is indeed c72.5% off the market value of the unit. This additional discount, however, does not have to be repaid in the form of premiums. Therefore, the estimated percentage of unpaid premium is still 55%.
Sources: Housing Authority; Ming Pao; HKET; HKEJ; EPRC.

Table 6.1 above presents the amount of expected capital gain for TPS units with and without premium settled as well as private housing units of similar sizes in their respective districts. It is clear that the owner of the TPS unit with premium unsettled in Pok Yat House, Pok Hong Estate in Shatin enjoys a much lower return than owner of a similar size unit in City One. The difference is as high as 230 percentage points. In comparison, no such difference exists when we compare the similar size TPS unit with premium settled with private housing unit in the same district of Wong Tai Sin. This is unsurprising as a TPS unit with premium fully repaid is effectively a private property. The bona-fide owner can therefore enjoy the full capital gain of the property.

With the persistent increase in property prices, this means owners of TPS and HOS units can hardly afford to purchase flats in the private market and move up the housing ladder using the receipt upon the disposals of their TPS or HOS units, after repaying the unpaid premiums to the government.

In fact, as of March 2017, only 23% of some 324,200 HOS units have their premiums settled. The situation of TPS is even direr. Only 1.5% of some 135,000 units have their premiums settled. This is possibly due to the generally steeper discounts offered to TPS households, and consequentially leading to an even higher unpaid premium. (Figure 6.1)

▼ **Figure 6.1 Number of HOS and TPS units by premium settled**



Note: All data pertain to 2015.
Sources: Legislative Council; Census and Statistics Department.

Therefore, in order to assist owners of subsidised sales flats to move up the housing ladder, we should cap the amount of unpaid premium and delink it with the prevailing market prices. In the next section, we shall propose a rationalised mechanism to determine the level of premium in our proposed SHS.

7

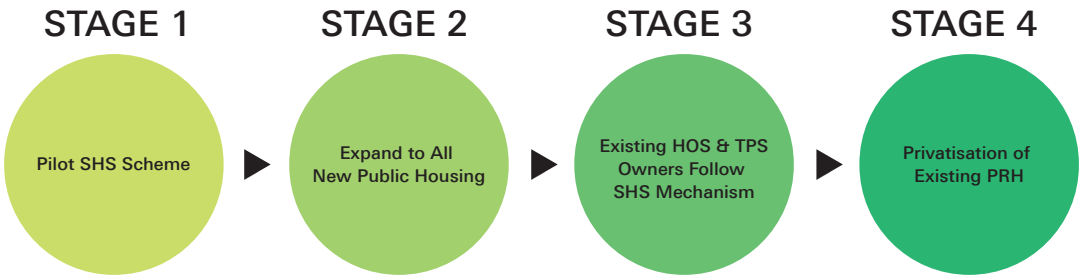
Suggested Road Map of the Implementation of Subsidised Homeownership Scheme

For PRH tenants, since they do not own their units, they have neither the incentives nor ways to put their units to the most efficient uses. For HOS and TPS owners, since the amount of unpaid premiums are linked with the prevailing market prices, they cannot – after repaying the premiums – enjoy the full capital gain of their units, and upgrade to private housing. For the government, the construction and operating costs of PRH represent a huge financial burden, having recovered only a tiny portion of the unpaid premiums embedded in the HOS and TPS units. This is indeed a triple-lose situation.

We have presented in our previous sections how our proposed SHS, a homeownership-oriented public housing scheme, can reform our public housing system and address the above mentioned problems, turning triple-lose to triple-win. In this section, we would lay out the suggested road map of the implementation of the SHS in four stages.

Firstly, a pilot SHS scheme could be launched, before it is expanded to all new public housing supply. It has the advantage of bringing only minimal changes to the current system. If it is well-received by the public, all new supply of public housing units could be subject to the SHS arrangements, with both rent-to-buy and for-sale units. Afterwards, existing HOS and TPS owners could be allowed to repay the premiums of their units under the SHS mechanism. Finally, privatisation of existing PRH could be rolled out in phases. (Figure 7.1)

▼ Figure 7.1 Suggested road map of implementation of SHS



Source: Our Hong Kong Foundation.

7.1 Launch of a Pilot SHS

We advocate the government to first launch a pilot scheme of the SHS in order to examine the level of public support of the scheme. At this stage only for-sale SHS units would be offered. We can view this as a refined version of the current HOS with

(i) Pricing linked to development cost; and

(ii) The amount of unpaid premium capped at the date of occupation.

As far as eligibility is concerned, the government could either adopt the existing HOS income limits or increase the limits to extend the coverage of the pilot scheme. A possible juncture to implement the said Pilot Scheme would be when the government launches the "Starter Homes", a new class of subsidised sales flats, presumably targeting middle-class families as committed by the Chief Executive in her Election Manifesto.

7.1.1 Pricing

Unlike HOS units which are priced at a fixed discount off current market prices, SHS units would be priced at development costs. Practically, the government could consider to offer a suite of SHS units with various sizes and qualities to cater for buyers within different income brackets. In addition, with the government acting as the guarantor, the household can become a homeowner by drawing a mortgage loan up to 90-95% of the selling price, with a down-payment of only 5-10%.

7.1.2 Determination and Repayment of Unpaid Premiums

The difference between the selling price and the market value of the units would be the amount of unpaid premiums, which would be fixed at the time of occupation and delinked with the change of market values of the units. Furthermore, since the ultimate goal of the SHS is to assist the buyers to become bona-fide homeowners, numerous different designs in the unpaid premiums determination mechanism could be introduced to encourage the buyers of SHS units to exercise their right to own and / or repay the premiums. These possible options include:

(i) Providing discount on early repayments

Some may argue that the amount of the unpaid premiums would still be substantial given the current high housing prices and as a result some buyers, especially those in the lower income brackets, would never be able to repay the premiums. In view of this, the government can consider providing discounts on the unpaid premiums based on the affordability of the buyers. A stepped discount could be structured such that larger discounts would be provided if the owners choose to repay the premiums earlier.

(ii) Charging interests on the unpaid premiums

Interest could be charged on the unpaid premiums after the lock-up period to recover the time cost of money. Numerous alternative mechanisms could be considered. For example, the government may charge a fixed interest rate (e.g. 1-2%); or adopt a real interest rate plus changes in general price level (e.g. Consumer Price Index); or referencing the market interest rate with a set of upper and lower limits. This feature is especially worth considering if public housing are sold to higher-income households, e.g. the "Starter Homes", under the SHS mechanism, because these are not grassroots families.

(iii) Allowing the repayment of unpaid premiums in instalments

Admittedly, the unpaid premium is not a small sum and it might be difficult for an owner to repay the premium at one go. In view of this, the government may allow the premium to be repaid in monthly instalments. In the case if interest is charged, note that owners choosing a longer repayment period would have to endure with a larger total repayment amount, since interest would continue to accrue on the remaining principal of unpaid premiums. In this way, the government has transformed the unpaid premium to be the second mortgage of the unit, with the government acting as the lender.

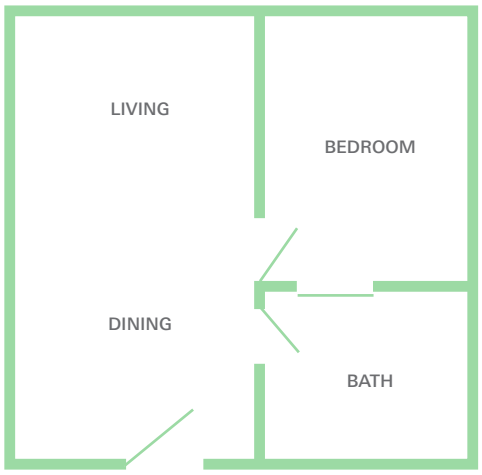
(iv) Averaging the unpaid premiums downward when market values decrease

Some may be concerned that the buyers of SHS would be worse off if the market values of their units go down after their purchase. In view of this, we can consider adopting an "average downward" mechanism when determining the amount of unpaid premiums. The premiums could be fixed at the lower of the time of occupation or the time of repayment, or the moving average over the period in question.

The pricing mechanism and the determination of unpaid premiums are illustrated in Figure 7.2 with a hypothetical example of a SHS unit with a market value of HK$4m.

▼ Figure 7.2 Pricing mechanism of SHS

Assumed market value : HKD 4,000,000



Unpaid land premiums: HKD 3,000,000

Possible mechanisms:

- Discount on early repayments
- Repayment in instalments
- Unpaid premiums: the lower of the level at time of occupation, or market price at the first instalment; or the moving average over this period
- Interest accrued on unpaid premiums

Selling price at development cost: HKD 1,000,000

- 90 - 95% mortgage guaranteed by the government
- 5 - 10% down payment

Source: Our Hong Kong Foundation.

7.2 Expansion of the SHS to Cover All New Public Housing

If the pilot SHS is widely accepted by the society, the government could expand it to cover all future supply of public housing. The current HOS and PRH programmes should be combined into a single SHS programme, to increase transparency to the applicants and improve administrative efficiency.

7.2.1 Supply Target of SHS

In our last report, we have estimated that Hong Kong would need 1.26 million housing units over the next 30 years. Similar to the government's projection in its "Hong Kong 2030+" consultation, we believe that close to half of the demand should emerge in the next 10 years, given the chronic undersupply of housing units and the sheer size of households living in sub-divided units in recent years. This translates into a housing demand of a total of 600,000 units in the next 10 years, or an average of 60,000 units per year, 30% more than the 460,000 target set by the Long Term Housing Strategy.

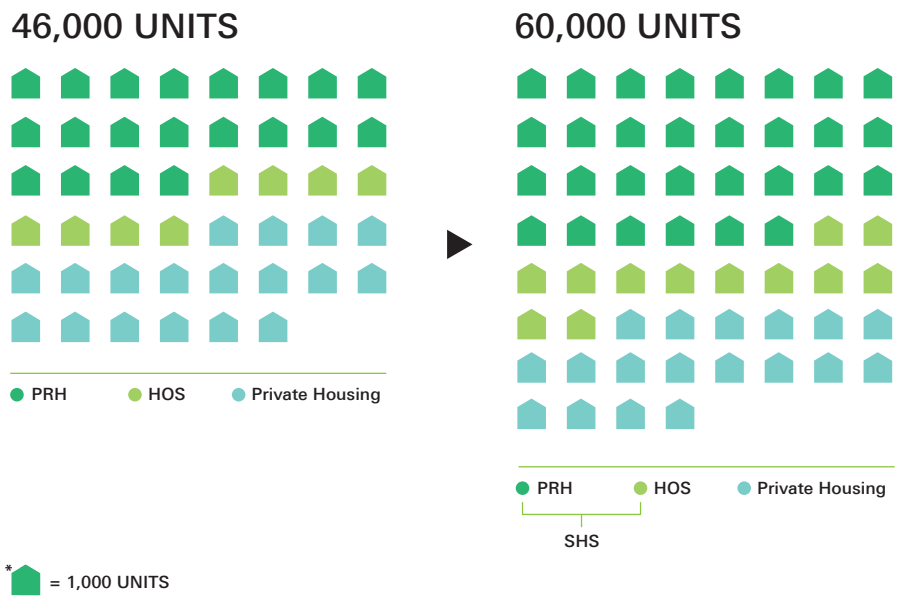
Given that the current supply of public housing trails significantly behind its demand, we suggest the government to adjust the target public-private split of future supply from the current 60-40 to 70-30. Consequently, the annual supply target of public housing units – in the form of SHS – should increase from the current 28,000 units to 42,000 units. Admittedly, whether the higher target can be achieved depends on the availability of additional land. In this regard, we would discuss our various recommendations on ways to increase land supply in the second part of this report.

7.2.2 Allocation of SHS Units

The proportion of units allocated to current PRH and HOS applicants would be the same with existing arrangements. In other words, no PRH and HOS applicants would be made worse off by the introduction of SHS. Rather, they would actually be better off should the increased supply target be achieved. Of the 42,000 SHS units, 12,000 of them (c30%) would be allocated to households eligible for the current HOS. These units are for sale only, similar to the current HOS but with a refined mechanism on pricing and repayment of unpaid premiums stated above. If needed, the government could also consider increasing the income limits so that more households can benefit from the scheme.

Another 30,000 units (c70%) would be allocated to applicants on the PRH waiting list. Unlike the current PRH which only allows the applicants to be renters, the applicant of the future SHS could choose to either buy or rent the units. The split between units for sale and rent would be determined by market surveys conducted on the applicants. Another difference with the current PRH is that all for-rent SHS units would come with an option-to-buy, allowing the households to purchase their own units and become homeowners when they have the ability in the future.

▼ **Figure 7.3 Annual housing supply target**



Source: Our Hong Kong Foundation.

7.2.3 Units are Offered for Sale / Lease by the Block

Given TPS has been criticised for creating management problems by mixing renters (represented by government bureaucrats) and owners, there is a concern that the SHS will also pose similar problems.

In the past, management problems were often caused by conflicts between renters and owners resulting from lack of common interest. In the long run, given a rationalised mechanism to determine premium payment (i.e. no longer linked with market value), except for those who have neither the means nor the intention to own their homes, aspiring home owners among the renters will adjust their behaviour accordingly and adopt a more homeownership-oriented attitude, thereby aligning incentives over property management between renters and owners.

Practically, these potential problems could further be alleviated or avoided by the structure of the programme. For example, referencing Singapore's experience, SHS units could be designated for sales or lease by the block, to mitigate the potential problem of mixed tenure. In concrete terms, regarding the "rent-to-buy" option under the SHS, eligible households could be required to rent units in blocks designated for lease. And as they choose to exercise their option to buy later, they can choose to purchase units in blocks designated for sales.

7.3 Optimisation of the Determination and Repayment Mechanism of Unpaid Premiums of Existing TPS and HOS

If the SHS is widely accepted by the society, there is no reason for not allowing the owners of the existing TPS and HOS units to repay the premiums of their units under the same SHS mechanism. Under such mechanism, the amount of unpaid premiums would be the difference of market value and selling price of these units at the time they were sold, plus accrued interest. This should be significantly lower than what would be under the current arrangement, given the marked rise in property prices over the past three decades. Coupled with the option of repayment in instalments, this should allow owners of TPS and HOS units to repay the premiums of their units and become bona-fide homeowners much easier and rebuild the housing ladder in the long run.

7.4 Privatisation of Existing PRH

7.4.1 Priority of Privatisation

As far as the priority of privatisation of existing PRH units is concerned, we believe it is unsuitable for units that are too old to be privatised since they will more likely be facing the need for redevelopment.

Of the 790,000 existing PRH units, about 363,000 of them are built after 1997, i.e. aged <20 years as of now. We could assume these units are suitable for privatisation given that they were mostly built after the implementation of TPS. It should be noted that under the TPS a total of some 135,000 units were sold, and at its peak in 2000, 24,000 units were sold. We may use this as a reference to consider the annual capacity of PRH privatisation for the existing stock.

One possible arrangement is that the privatisation programme for existing stock in the first year would cover the newest 24,000 PRH units, and rolling to the next newest 24,000 in the following year, so on and so forth. In other words, 3% of the existing 790,000 PRH units would be privatised each year. At this assumed pace, suppose the privatisation programme is to be started today (2017), in 15 years' time (i.e. by 2032), it will have covered all PRH units built after 1997.

For the remaining PRH units, options could be granted to their residents either to purchase the redeveloped units upon completion; or to "opt out" from their current PRH, i.e. to surrender their PRH units and purchase one of the newly built SHS units. The latter option may accelerate the progress of privatisation as this effectively adds new demand for purchasing newly built SHS units. The government may even come up with a set of preferential policies to assist and encourage these PRH households to purchase the newly built SHS units.

7.4.2 Pricing of Existing PRH Units

Admittedly, for the case of existing PRH units, especially those that were built many years ago, there would conceivably be a significant gap between the value of their development costs versus their market value. As such, the public may have the perception that the government is providing too large a "windfall" gain to the eligible households.

To address this issue, a mechanism may be designed to take time cost into account. To illustrate with hypothetical numbers, assume a PRH unit occupied by a tenant 10 years ago had a market price of HK$100 (dollar amount 20 years ago), where the development cost amounted to HK$30. When this PRH unit is to be privatised, the sitting tenant should be required to purchase the unit at HK$30 plus interest. The government can adopt the same mechanism in determining the interest rate as mentioned in Section 8.1. The same principle could also apply to renters of future SHS units become homeowners.

7.5 Policy Goals: A Society of Homeowners

The proposed implementation procedure of SHS on different segments of public housing are summarised in Table 7.1 below.

▼ **Table 7.1 Implementation of SHS on different segments of public housing**

Type of Units	Number of Units	Implementation Procedure
New public housing units	Target*: 882,000 in 30 years	All offered in the form of SHS, with both rent-to-buy and for-sale units.
Existing TPS and HOS units with premiums unpaid	380,000	Allow the households to repay the unpaid premiums of their units under the same SHS repayment mechanism.
Existing PRH units built after 1997	363,000	Allow the households to purchase their own units under the same SHS pricing mechanism.
Existing PRH units built before1997	427,000	Allow the households to purchase the new SHS units with some preferential policies.

Note: *We assume an overall supply target of 1.26 million units in 30 years, 70% of which are public housing units.
Sources: Housing Authority; Census and Statistics Department; Legislative Council; Our Hong Kong Foundation.

If the SHS could be implemented successfully, the homeownership rate of Hong Kong could be increased significantly. Specifically, if we assume:

(i) Annual supply of SHS units to be 42,000 from 2017-2026, and 23,000 from 2027-2046;

(ii) 86% of new SHS units will be purchased (eventually) by the households[15];

(iii) Annual supply of private housing units to be 18,000 from 2017-2026, and 10,000 from 2027-2046;

(iv) 60% of new private housing units will be occupied by owner-occupiers, which is the same as the current distribution;

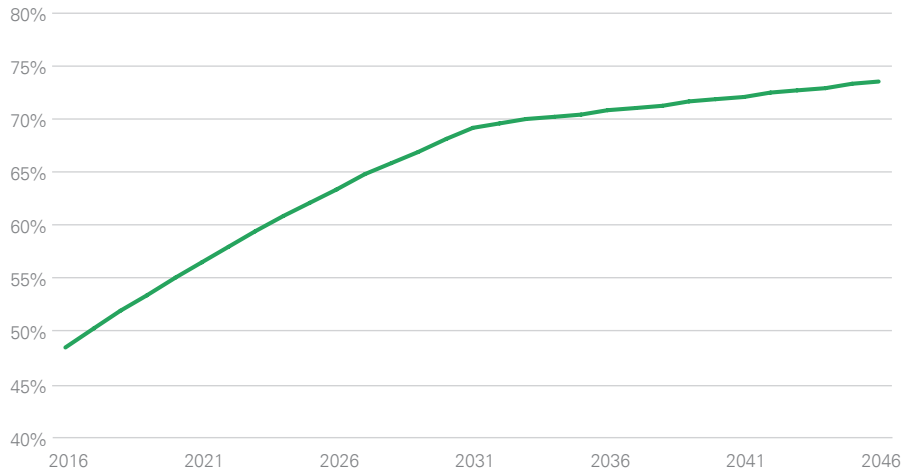
(v) All existing PRH units built after 1997 (in total 363,000 units) will be privatised, at a rate of 24,000 units per year;

(vi) In total, 210,000 PRH units and 390,000 private housing units will be demolished in the next 30 years, evenly distributed each year.

We expect the homeownership rate of Hong Kong could reach 65% in 10 years (i.e. 2026), up from the current c50%. It could further reach 74% in 30 years (i.e. 2046) (Figure 7.4). In addition, the share of public housing among the overall housing stock is estimated to reach 60% in 2046 (Figure 7.5).

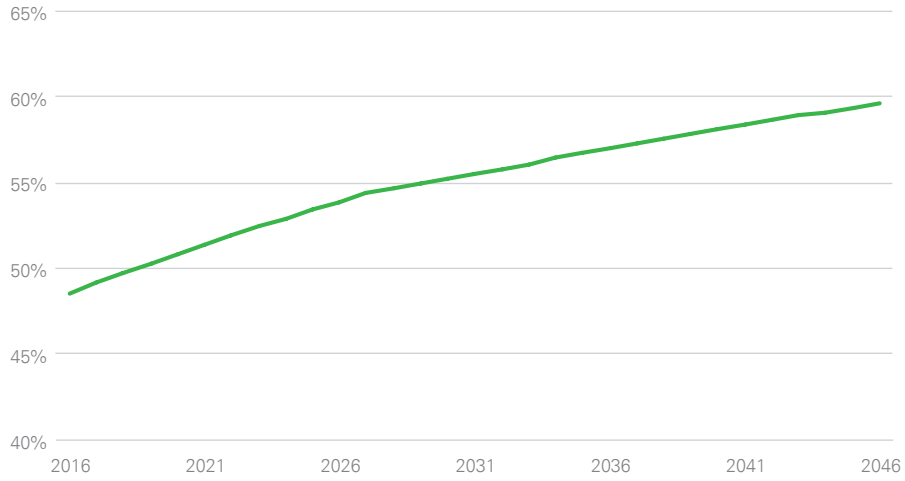
15. 30% of the new SHS units will be sold to the HOS applicants. For the remaining 70% of units offered to PRH applicants, we assume 80% of them will be purchased by the households (eventually). This is not an aggressive assumption. When the TPS was launched, on average 73% of the units in the estates included in the scheme were sold. Given an improved pricing and premiums payment mechanism, we could expect a better response of the SHS than the then TPS.

▼ Figure 7.4 Projected homeownership rate



Sources: Housing Authority; Population Census; Our Hong Kong Foundation.

▼ Figure 7.5 Projected share of public housing stock



Sources: Housing Authority; Population Census; Our Hong Kong Foundation.

8 Issues for Discussion

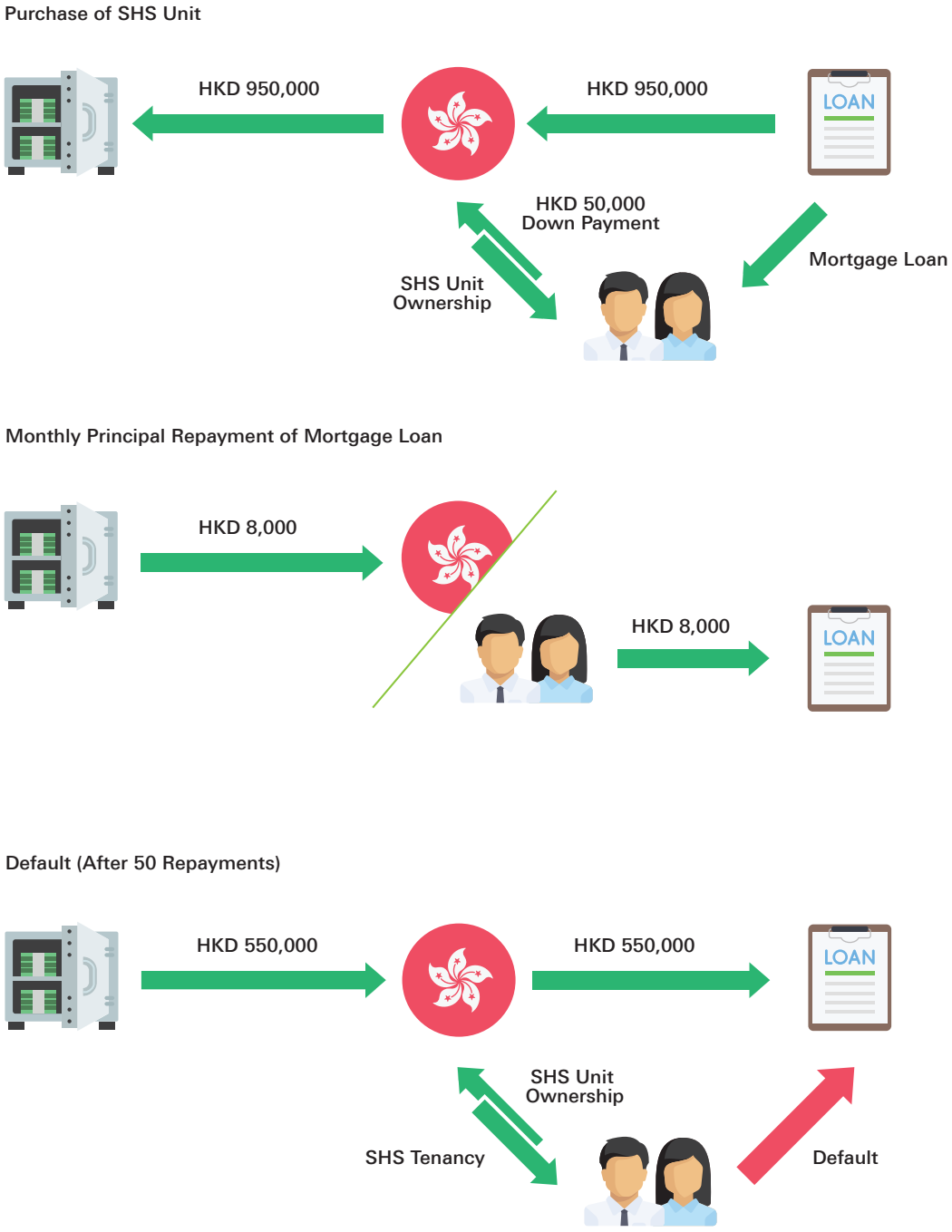
8.1 Financial Implications to the Government

Under the proposed mechanism of SHS, the government would act as the guarantor for the public housing units sold to the eligible households (including the newly completed SHS units and the existing PRH upon privatisation), similar to the current practice of HOS and Green Form Subsidised Home Ownership Pilot Scheme (GSH). Using again the example in Section 7.1, assuming a public housing unit with a market value of HK$4m is sold at the development cost of HK$1m. With the government acting as the guarantor, the household can become a homeowner by drawing a mortgage loan of up to HK$0.95m, with a down payment of HK$50,000 (5% of HK$1m). In other words, the government would receive an upfront payment of HK$1m and recover its money spent on constructing the unit.

In the event that the buyer fails to continue servicing the mortgage, the government will have to cover the said loss by returning whatever is outstanding of the HK$0.95m to the bank and take over the mortgage from the bank. The government could allow the household to continue living in the unit and pay the subsidised rent (with reference to the rental level of PRH), rendering the unit to virtually become again a subsidised rental unit. In other words, the financial position of the government would never be worse off than the current system of PRH.

Hence, it is guaranteed that no pressure is added to the cash flow position of the government by the mortgage loans of these units, assuming very conservatively, the government would not spend more than the "equity" position of the value of the public housing unit sold, i.e. the down payment of HK$50,000 and the subsequent principal repayments. Alternatively, the government can set up a fund to pool all the sales proceeds from these public housing units, and spend only the investment returns of the said fund. This is illustrated in Figure 8.1 below.

▼ Figure 8.1. Government guarantee of SHS mortgage



8.2 Impact on the Private Housing Market

8.2.1 Impact on Prices

A major concern about the privatisation of PRH, TPS and HOS units is that it may lead to a flood of new housing units into the market and force property prices to go down.

On one hand, privatisation releases the land value originally "frozen" in the PRH, TPS and HOS units. In our second report, we have estimated the magnitude of such "deadweight loss" that could potentially be released is as large as HK$3 trillion[16]. This positive wealth effect should provide support for home prices.

On the other hand, privatisation would also release PRH, TPS and HOS units into the private market that would have otherwise been untradeable. However, on the assumptions that:

(i) These units are not originally vacant; and

(ii) The owners of these public housing units do not emigrate out of Hong Kong after selling these flats.

Then the overall demand-supply balance of our housing market would theoretically remain unchanged. Put it differently, while privatisation increases the supply of housing units in the private market, it also increase the demand as the owners of the privatised public housing units have to buy another units upon the sales of their original ones.

Regarding assumption (i), there were a total of 8,180 "vacant" PRH units in Hong Kong as of March 31, 2015, according to the Housing Authority, or 1% of the total stock of PRH units in the territory. However, it should be noted that the quoted figure covers units that are currently under allocation (nearly 3,000 units), hence this encompasses indeed the "natural vacancy rate" of PRH units. In the extreme case that all these vacant units shall be put to the market for sale upon privatisation over a period of 15 years, this represents on average, an addition of some 550 units of second-hand supply in the market each year, which is immaterial.

Assumption (ii) is more difficult to examine. Whilst population ageing is an irreversible demographic trend, there are a wide array of factors determining the decision of retirement location, e.g. social ties with the community, cost of living, the quality of healthcare and long-term care system. It is even more difficult to evaluate its ultimate impact on housing prices as it involves even more aspects of social and economic policies.

In addition, we have also shown in our previous report[17] that the sales of public housing to sitting tenants does not necessarily lead to a drop in home prices using the case of the United Kingdom's privatisation of public council housing under the 1980 Housing Act or the "Right to Buy".

16. The actual amount would depend on factors including but not limited to, the time of privatisation and the exact mechanism to determine the premium payment for these units.

17. Please refer to "Rethinking Public Housing Policy, Building Sustainable Land Reserve" (October 2016), Our Hong Kong Foundation. Part I, Section 8.1.

8.2.2 Impact on Volatility

Whilst the privatisation is unlikely to have a significant impact on the level of housing prices, it is likely to reduce the volatility of the housing market. The privatisation programme would make available a maximum of 743,000 public housing units on the private market, including 363,000 PRH units and 380,000 HOS/TPS units. This is equivalent to expanding the size and depth of the existing private housing market by about 50%. In theoretical terms, more buyers and sellers means better liquidity, and abrupt change in demand and supply is less likely to have a material impact on prices in a liquid market. Indeed, there are numerous academic studies showing that an increase in market thickness would reduce the volatility of asset markets.[18]

18. These include Bessembinder, H., & Seguin, P. (1993). Price Volatility, Trading Volume, and Market Depth: Evidence from Futures Markets. Journal of Financial and Quantitative Analysis, 28(1), 21-39.; and Watanabe, T. (2001). Price volatility, trading volume, and market depth: evidence from the Japanese stock index futures market. Journal of Applied Financial Economics, 11(6), 651-658.

8.3 Risk Exposure of Households

It is true that as more and more families enter the property market and secure mortgage loans, the society as a whole may be more exposed to the risk of fluctuation in property prices. However, we are of the view that given:

(i) Urbanisation is a global trend; and

(ii) Hong Kong shall remain a key gateway city connecting the mainland and the world, and hence shall maintain its attractiveness for global talents and enterprises to settle here;

A secular and persistent downtrend of Hong Kong's real estates is highly improbable, despite, of course, short-term fluctuations as a result of business cycles. Therefore, an increase in homeownership should be beneficial for the community at large, provided that Hong Kong shall continue to ride on the long-term prosperity of the Chinese economy that is enjoying a structural growth trend.

Even in the case of short-term correction in property prices, the risk of a large-scale default is unlikely. Assuming again a SHS unit sold at HK$1m, with a 95% mortgage, 2% annual interest rate and a 25-year mortgage period, the monthly mortgage repayment is as low as HK$4,000. Even if the repayment of the premium (HK$3m in the previous example) is taken in consideration, if we assume a 1% annual interest rate and a 50-year instalment period, the monthly repayment of the said premium is only HK$6,400. That means the amount of total monthly repayment, including the mortgage and premium, is about HK$10,400 per month, which is equivalent to 40% of our medium household income in 2016.

8.4 Allocation of Public Resources

The purpose of PRH is to provide housing to needy families and is supposed to be recirculated in the public system upon the death of the tenant, or as the tenant accumulates enough wealth. Some hold the view that upon privatisation, these units would then become private assets and be passed on to the next generation, which might not necessarily be consistent with PRH's original policy intention.

Whilst such claim is factually correct, its real impact is seemingly limited over the short-term. This is because the would-be PRH buyers, unless they are Well-Off Tenants, will be unlikely to return their existing PRH units to the Housing Authority even if they do not purchase the units. Their existing units will only be recovered when they pass away, or exceed the income and asset limits under the Well-Off Tenants Policies, which is unlikely to be the case over the short-term.

Over the long-term, the root cause of the problem of long waiting time for PRH units lies in the chronic shortage of land supply. If we can indeed secure enough land to increase the supply of public housing from the current 28,000 units to 42,000 units, the said concern could be alleviated. Of course, whether the increased supply target could be reached rest on the availability of additional land supply. In part two of this report, we shall discuss in detail our recommendations on how to increase land supply over the short, medium and long term.

Appendix 1:
PRH Transfer Schemes

Harmonious Families Transfer (HFT) Exercise	• Provides opportunities for PRH tenants to apply for transfer to the same estate in which their elderly parents/offspring is currently living in for mutual care • Elderly parents living in PRH can nominate one of their offspring/spouse of their offspring to apply for this transfer scheme. • Younger generations can also nominate their parent(s)/parent(s)-in-law to apply for HFT. • The applicant and nominator should both be PRH households living in PRH flats located in different District Council (DC) districts. • The annual quota set aside for this type of applications is 1,000 flats. • Priority is given to household based on the age of the elderly and the length of residence.
Territory-wide Overcrowding Relief Exercise and Living Space Improvement Transfer Scheme	• The Territory-wide Overcrowding Relief Transfer Exercise (TWOR) and the Living Space Improvement Transfer Scheme (LSITS) would be implemented in one-go starting from 2017/18. • All PRH households with a per capita living space below 7 m^2 may apply for transfer to a larger flat. The per capita living space of applicants will determine the order of priority for flat selection - household with the lowest per capita living space will come first. • If applicants refuse the housing offers (including relinquishing their chance for flat selection in the absence of prior written notification, failure to show up for flat selection and intake, and unreasonable refusal of the selected flat) in 3 exercises, their eligibility for applying the transfer scheme will be frozen for 1 year counting from the day following the closing date of their last application.

Internal Transfer	• Tenants who have difficulties in continuously living in their existing flats due to special circumstances, such as medical or social grounds, may apply for transfer to a flat in the same estate.
Special Transfer	• If tenants have difficulties in continuously living in their existing flats due to special circumstances, such as social or medical grounds, but Internal Transfer cannot solve their problem, they may apply for Special Transfer to a flat in another estate. • Applicants have to provide sufficient reasons with relevant supporting document such as medical certificate or written recommendation from the Social Welfare Department, if required. • Should tenants in financial difficulties find it hard to afford the existing rent, they may request transfer to flats of a cheaper rent in another estate.
Thinning-out Transfer under Estate Clearance Project	• Tenants in estates affected by estate clearance may apply for Thinning-out exercise. When suitable flats in new estates are available for such use, the Housing Authority will invite these tenants by notices. • Successful applicants will be granted a Domestic Removal Allowance (DRA) upon their acceptance of the allocation of another PRH flat.
Transfer for Major Repairs/ Improvement Programmes	• Tenants who have to move out due to structural problems, comprehensive repair or improvement works of their blocks will be allocated another suitable flat. • These tenants will be granted a DRA upon transfer to another PRH flat.
Transfer of Tenants Occupying Converted One-person Flats	• To phase out converted one-person (C1P) flats, the households concerned can apply for self-contained flats through internal or external transfer. • Upon the transfer to another PRH flat, they will be granted a DRA. • For those last-remaining tenants in C1P flats, they can also apply to take up the entire flat through Automatic Offer (AO) but DRA will not be offered to them.

Transfer of Households of Housing for Senior Citizens Type I

- To phase out Housing for Senior Citizens (HSC) Type I units under the conversion programme, households concerned can apply for HSC Type II or Type III units or other self-contained flats.
- Upon transfer to other PRH flats, they will be granted a DRA.

Transfer for Under-occupation Households

- The current under-occupation (UO) and Prioritised UO (PUO) thresholds are as below.

Family Size (person)	UO Thresholds IFA (m^2) exceeding	PUO Thresholds IFA (m^2) exceeding
1	25	30
2	35	42
3	44	53
4	56	67
5	62	74
6	71	85

- An UO/PUO household has to move to a PRH flat of suitable size which Housing Authority considers appropriate for the family.
- If the household refuses three offers without any valid reason, a Notice-to-Quit will be issued to terminate the tenancy of the household.
- Households with disabled or elderly member aged 70 or above would be excluded from the UO list.
- UO households with elderly between 60 and 69 would be placed at the end of UO list for transfer.
- As incentives, DRA will be granted to all UO households upon their transfer.

Source: Housing Authority

Appendix 2:

Determination Mechanism of PRH Income and Asset Limits

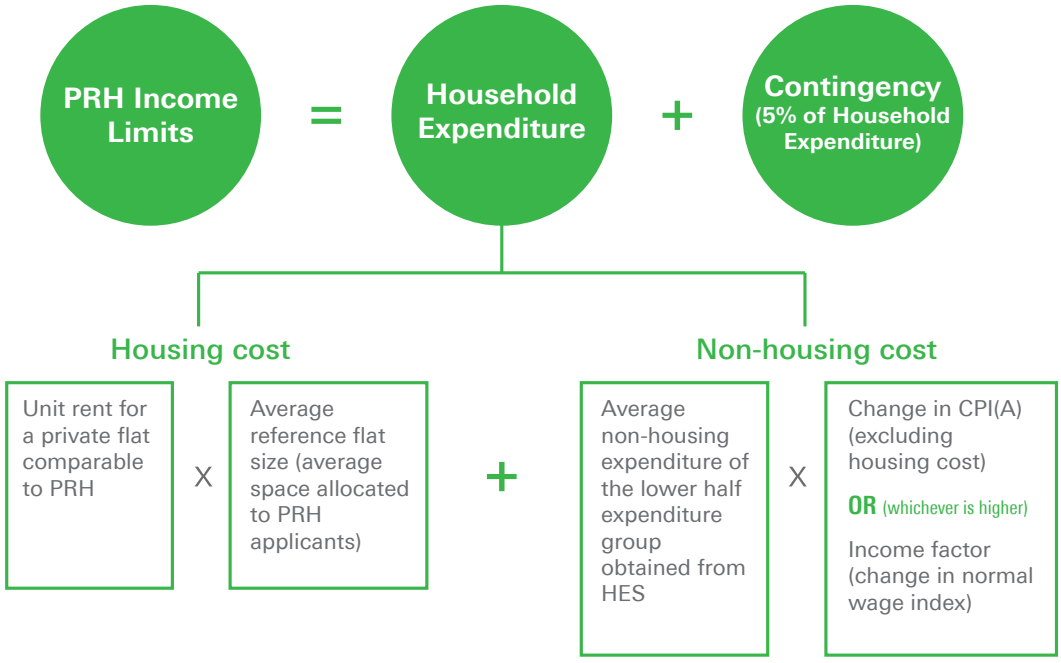
Income Limits

Under the established mechanism, the PRH income limits are derived using a household expenditure approach, which consists of housing costs and non-housing costs, plus a contingency provision. Housing costs measure the cost of renting a private flat comparable to PRH. This depends on the differential unit rents of private accommodation and reference flat sizes. The non-housing cost is determined with reference to the latest Household Expenditure Survey (HES) conducted by the Census and Statistics Department (C&SD), with adjustments made according to the latest movement in the Consumer Price Index (CPI) (A) (excluding housing costs), or the change in the nominal wage index obtained through the Labour Earnings Survey (LES) conducted by C&SD as the income factor, whichever is higher. The PRH income limits for different household sizes are the respective sums of the above two major cost items, plus a 5% contingency provision. The mechanism is summarised in the Figure A2.1.

Under the established mechanism, housing costs include rent payment, rates, government rent and management fees required for a household to rent a private flat of comparable size to PRH. The exact figure is obtained by multiplying the reference flat size (i.e. average space allocated to PRH applicants in the past three years) by a unit rent derived from a sample survey of private dwellings conducted by the C&SD. For 1-person and 2-person households, the respective differential unit rent or the overall average unit rent, whichever is higher, is adopted in the calculation. For households of three persons or above, the overall average unit rent is adopted.

For non-housing costs, the non-housing expenditure statistics from the latest HES of the lower half expenditure group among tenant households in the private sector, excluding those households comprising solely of elderly or non-working members, is adopted.

▼ Figure A2.1 Determination mechanism of PRH income limits



Source: Housing Authority

Asset Limits

Under the established mechanism, the PRH asset limits are adjusted with reference to the movements in CPI (A) over the year. In 2005, the SHC agreed to set the asset limits for elderly households at two times the limits for non-elderly applicants. The SHC further decided in 2006 that the asset limits for 2005/06 should be adopted as the basis for future annual adjustments with reference to the movements in CPI (A).

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PART TWO

Urgency to Increase Land Supply

Executive Summary

1. Land and Housing Supply: Myths vs. Facts

1.1 Introduction

In our previous reports, we have repeatedly emphasised the urgency and severity of land shortage in Hong Kong. We are of the view that land supply has trailed, and will continue to significantly lagged behind land demand, in the short-, medium-, and long-term. The situation is anything but optimistic.

This report, being the third in our "Land & Housing Research Series", strives to provide solutions in different timeframes. We propose a public-private partnership (PPP) scheme to release the development potentials of privately owned land resources, with a view to increasing both public and private housing units in the short- to medium-term; and we hold that more aggressive reclamation outside the Victoria Harbour is an essential land supply option for the city in the long-term.

However, there is still a substantial amount of inaccurate information and hence misconceptions about the land and housing supply situation of the city, which we shall address in the subsequent section.

1.2 The "Quarter-Household" gap (QH Gap)

There have been views in the community that assert an existence of more than 240,000 vacant units in Hong Kong as of 2015. Proponents of this view believe that the housing problem of the city is not an issue of "shortage", but rather one of "distribution". However, we are of the view that the 240,000 vacant housing units, or the 9% vacancy rate, is a statistical artefact due to the comparison of data from various sources.

After adjusting for the relevant differences between statistical frameworks, the QH Gap is narrowed from 243,900 units to 139,100 units in 2015. When expressed as a share of the total number of quarters, it is just 2.1% higher than the number of vacant units suggested by administrative records.

In a nutshell, the so-called QH Gap, is seemingly the result of differences between statistical frameworks. To propose that we do not need to increase land supply merely because of the existence of vacant housing units is apparently not practical.

1.3 "Idle" government land

The then Secretary for Development has released in July 2012 a set of statistics regarding "vacant government land", indicating there were a total of 952.5 hectares (the equivalence of about 48 Victoria Parks) of vacant government land zoned as Residential or Commercial / Residential (C/R); and another 1,201.2 hectares (the equivalence of about 60 Victoria Parks) of vacant land zoned as Village Type Development (V-zone land), as of June 2012.

Although the Development Bureau has repeatedly emphasised that numerous limiting factors might render a significant portion of these sites undevelopable, or at least with low development potentials, as "vacant land" also included man-made slopes, roads or passageways, very small sites with area less than 0.05 hectare (<500 sq. m), etc. In fact, after deducting such sites from the quoted land areas above, there were only 391.5 hectares and 932.9 hectares of vacant government that are zoned as Residential (including C/R) and V-zone, respectively.

The Development Bureau has also pointed out in their official statements that "not all the remaining 391.5 hectares of "Residential" and "C/R" land are developable…there remain a number of sites with irregular shapes within the unleased and unallocated government land (e.g. empty space between buildings, back lanes and narrow strips of land alongside existing developments, highways or other amenities) and they may not be suitable for housing development."

However, there have still been views that the government should prioritise utilising the existing vacant government residential land and V-zoned land, before pursuing other land development projects such as reclamation outside the Victoria Harbour and New Development Areas (NDAs) in the New Territories.

Findings: 391.5 hectares of vacant government residential land

According to their development potentials and latest conditions, we have provided plenty of examples explaining the typical categories in which these sites fall.

First, we note that these sites are mostly zoned as the lower-density Residential (Group C) instead of the higher-density Group A and Group B. It implies that development potential aside, many of these so-called "idle" government sites are, in fact, unable to support large-scale, high-density development.

Also, a lot of sites are found to be "stripe-shaped" that typically represent:

(1) The narrow areas between existing developments and roads, e.g. the edge of a housing estate;

(2) Between the buildings within a larger development (a.k.a. back alley), e.g. the areas separating different blocks in a housing estate; and

(3) Staircases in hilly areas.

These sites are unlikely to be developable given their relatively small size, irregular shapes and that they are right next to existing roads or other residential blocks.

For sites with larger successive landmass, based on our preliminary analysis on the development potentials of these sites, we found that they could be broadly categorised into:

(i) Marked as vacant government land as of June 2012, but were sold / allocated to Housing Authority / developed during the past five years;

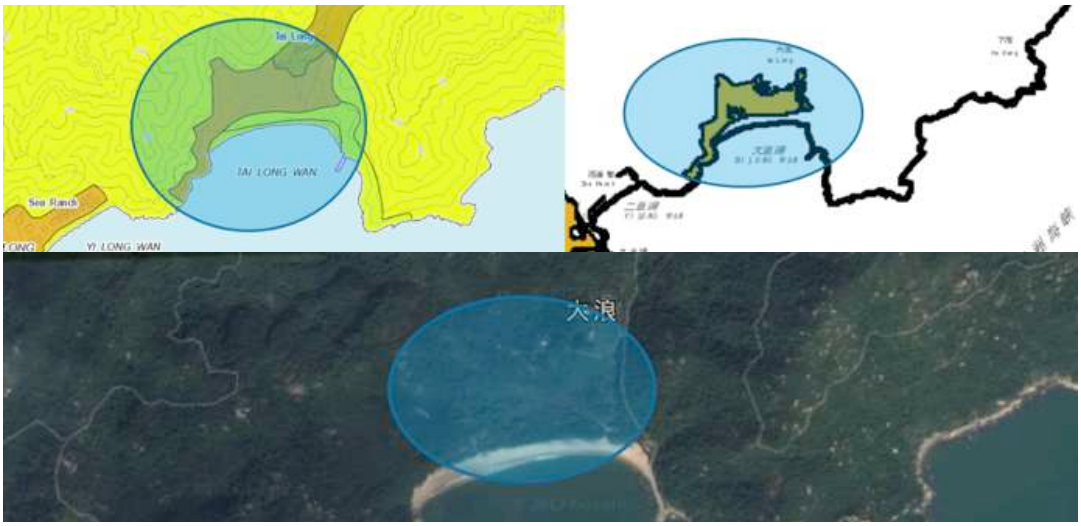
(ii) Unlikely to be developable;

(iii) Development potentials uncertain, but would likely require significant site formation works, transport enhancement, and / or resettlement of temporary structures or squatters for larger-scale development; and

(iv) Likely to be developable.

For sites that are considered unlikely developable, this is generally because of the lack of public road access or that they are currently occupied by existing buildings.

▼ **Lack of public road access: sites near Tai Long Wan, Island (measured area = 97,469m^2)**



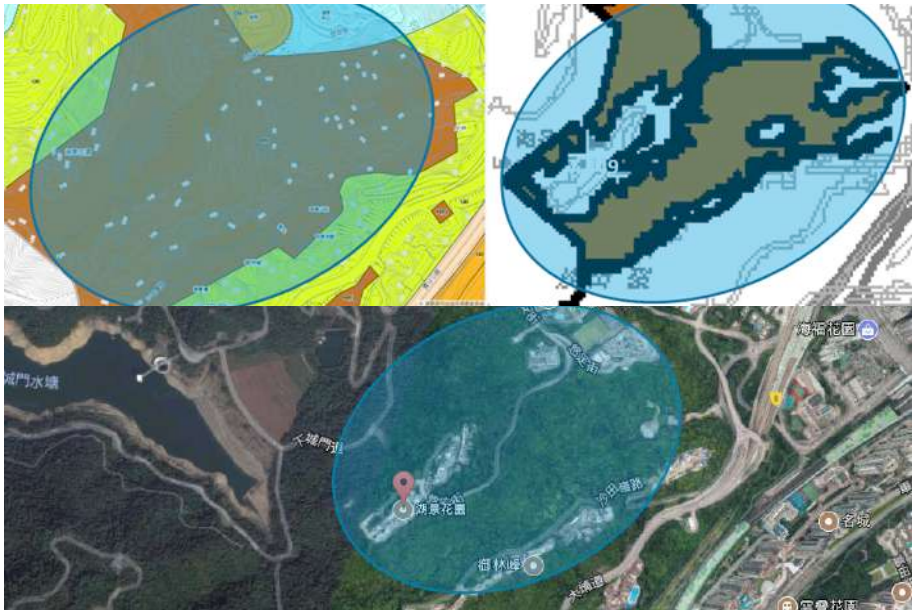
Sources: Development Bureau; Town Planning Board; Google Earth.

For example, this site near Tai Long Wan is hardly accessible on land, and is surrounded by an extensive area of Green Belt. This greatly reduces their development potentials, particularly for larger-scale ones.

Many sites in the urban areas are currently occupied by buildings or public facilities. These include the official residences of a few principal government officials, alongside other sites with existing buildings that are suspected to be erroneously included in the map as vacant government land. For examples, Hung Tong Estate and Tsui Lok Estate, both located in Eastern District.

The broadest category contains sites that are considered having "uncertain development potentials". These sites are typically flat areas (often in the New Territories) with existing temporary structures or squatters; or sloped green areas (often close to existing residential developments).

▼ **Sloped green area that require site improvement: sites near Lakeview Garden, Sha Tin (measured area = 133,357m^2)**



Sources: Development Bureau; Town Planning Board; Google Earth.

For sites that are likely to be developable, they are usually included in the Land Sales Programme 2017/18, whereas others are located in the Kai Tak NDA.

All in all, the accusation of "government intentionally hoarding usable residential land" is not supported by fact. Indeed, many of the more readily developable sites have already been put up for land sales or used for public housing development. A substantial portion of these sites, while being vacant, are with questionable development potential in their current conditions. Significant amount of infrastructure investment, clearance and resettlement of temporary structure, etc. are needed before any development of a meaningful scale can be carried out.

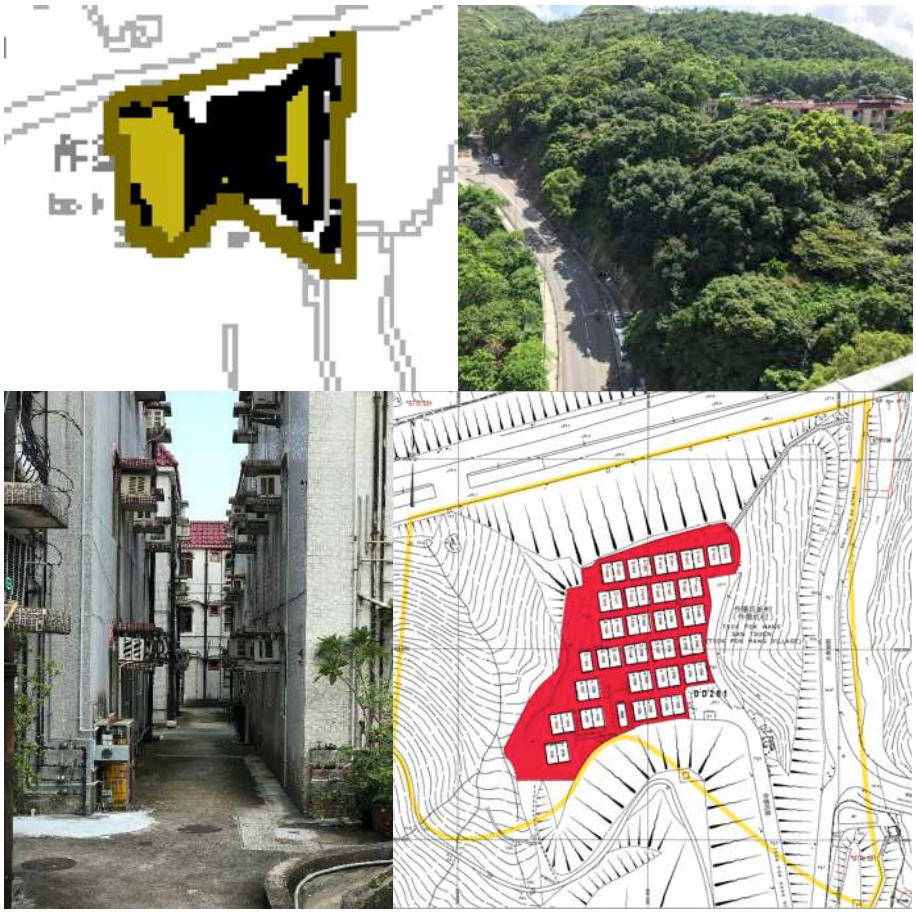
Findings: 932.9 hectares of V-zone land

For the 932.9 hectares of government V-zone land, we have identified plentiful examples in which the sites are unlikely to be developable. Similar to the situation of the 392 hectares of vacant government residential land, many of their V-zone counterparts are scattered pockets of land that are too small to be seen on the map. Scatteredness and small size are usually unconducive for housing development.

Our preliminary analysis shows that the typical reasons that render development unlikely or complicated on these sites include: back alley; temporary structure; slope; Fung Shui / burials / urn; outside Village Environs boundary; remoteness; environmentally sensitive area; and former work site for infrastructure project.

The most prominent reason seems to be back alley between houses. In spite of being vacant, their physical condition preclude any housing development. Whilst negligible in size individually, they are included in the counting of 932.9 hectares of V-zone land and represent a substantial portion of the total area.

▼ **Back alley in Tsok Pok Hang New Village**



Note: The lot index plan reproduced with permission of the Director of Lands.

Sources: Development Bureau; Lands Department; Our Hong Kong Foundation.

It is not uncommon for V-zone land to be undevelopable despite being idle due to reasons associated with fengshui, burials, or urn. Indigenous residents possess the right to forbid development in certain regions in the village designated as "fengshui area". Similarly, development of small houses can be rejected due to existing burials and urns.

Generally, one condition for small houses to be built is that it should lie on V-zone land as well as within the Village Environs boundary. Under normal circumstances, V-zone land should lie within Village Environs boundary. Yet, there appears to be cases where V-zone land are outside Village Environs boundary.

Remoteness represents a major obstacle when it comes to development of small houses in V-zone land. For some sites, mere access is of great difficulty let alone development of small houses.

Some large V-zone areas are left vacant because they fall within environmentally sensitive areas. For instance, a significant portion of Shan Pui village is part of the buffering zone for the wetland nearby.

▼ **Environmentally sensitive area in Shan Pui Village**

Sources: Development Bureau; Our Hong Kong Foundation.

In sum, whilst the above represent only a collection of examples, a central message is clear: for a variety of reasons, many of the sites among the 932.9 hectares of unleased government V-zone land that have remained undeveloped since the implementation of the "Small House Policy" in 1972, cannot even support the development of small houses for indigenous residents, let alone the possibility of converting them into large-scale housing development for the wider community.

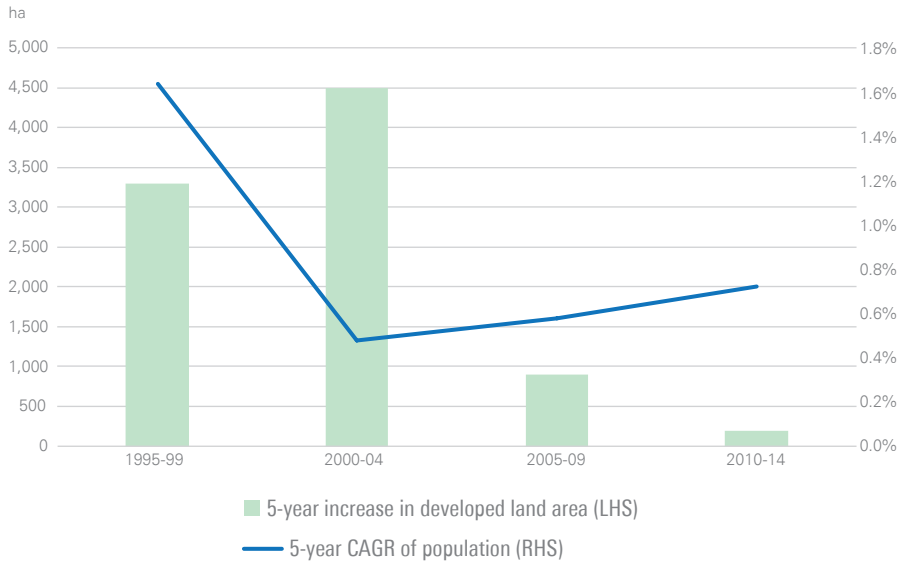
1.4 Population policies

Some in the community have opined that new arrivals from the Mainland is placing severe pressure on Hong Kong's capacity in land and housing. These new arrivals obtain the right to abode in Hong Kong via the application of One Way Permits (OWPs), documents issued by relevant authorities in the Mainland. The application, approval and issuance of OWPs fall within the remit of the Mainland authorities. It allows Mainland residents to come to Hong Kong for family reunion in an orderly manner.

In fact, less than 2% of OWP holders have no next of kin in Hong Kong since the establishment of OWP. At present, there exists a daily quota for OWPs at 150 persons. For nearly two decades, the annual number of OWP holders never exceeded 0.86% of the year-end population of Hong Kong.

The primary contributing factor of the acute land shortage today, we argue, is the sharp slowdown in the pace of land development, especially in the past decade. As a matter of fact, ranging from 0.4% to 0.9% p.a., Hong Kong's population growth rates during 1997 to 2016 have been remarkably lower

▼ **5-year compound annual growth rate (CAGR) of population and 5-year increase in developed land area**



Note: Due to changes in methodology, developed land area only includes land for residential, commercial, industrial, government / institution, open space and transportation use.
Source: Census and Statistics Department.

compared to, say, the 1980s during which a higher-than-1% population growth per year was the norm. Unfortunately, land development has virtually halted, falling sharply behind a significantly slower population growth. In other words, the problem of land shortage today originates more from the supply side than the demand side.

In fact, being a small open economy like Hong Kong has always been, openness to the world and diversity are the critical elements for our

development. We have always been developing new land to accommodate the growing population for more than half a century until the recent years. Therefore, the shortage of land and housing resources today is not the result of a drastic increase in population growth - in fact, such growth has been on the decrease - but rather the sharp slowdown in the pace of land and housing production of the city.

2. A Fundamental Analysis of the Housing Market

In the second report in our "Land & Housing Research Series", we have opined that housing demand is sturdy on the back of (a) strong demographic forces (e.g. first marriages, live births, and divorces) driving housing demand; (b) a healthy balance sheet. This section provides an updated assessment on the private housing market, and fundamental analysis suggests that the said market is still very tight, and we expect such demand-supply tightness to sustain for a while.

Over the past seven years (2010 - 2016) after the Global Financial Crisis (GFC), net demographic events for housing demand[1] averaged 67,290. Despite being 14% lower than the corresponding average (78,368) from 1985 to 1999, it represented a 37%-increase from the average (49,230) during the first decade of the Millennium (2000 - 2009).

More importantly, total housing supply, i.e. the sum of completion of new private, public rental housing (PRH), and Homeownership Scheme (HOS) units, over the period has drastically contracted over the years. For every 100 net demographic events for housing demand, there were on average 80 housing units completed every year during 1985 to 1999. This ratio collapsed to a mere 39% for the past seven years, highlighting the sharpness of undersupply of housing in recent years.

Furthermore, it must be noted that the latest 2016 Population By-census put the latest number of fully-paid owner-occupied private units at nearly 800,000, or 65.7% of total. Furthermore, average Loan-to-Value (LTV) ratio of new residential mortgages has hovered around 50% to 55% since 2011, with the latest reading at 51% in March 2017. In addition, the debt-servicing ratio for these new mortgages stood at a mere 34% in March 2017.

On the supply side, completion of new private homes during 1998 to 2003, if expressed as a share in total private housing stock of the corresponding

1. Defined as the sum of first marriages, live births of babies whose parents are both permanent Hong Kong residents, and divorces, minus the number of deaths.

year, averaged to be 2.8%. This is in a startling contrast with its counterpart for the past decade (2007 - 2016), which measured 1.0%. Whilst we forecast the government to meet and exceed its supply target of private housing units over the next few years, the average new supply as % of total stock is still just a modest 1.6% for the 5-year period 2016 - 2020.

3. Policy Recommendations

3.1 Short- to medium-term measures

PPP to release development potentials of private land reserve

Currently, private land owners have a considerable amount of land (mainly in the New Territories). However, given their remote locations and the lack of supporting infrastructure, large-scale development is often difficult. We recommended the government establish a mechanism to collaborate with private land owners and provide policy support, enabling them to utilise their land reserve for residential development within designated areas.

As part of the PPP scheme, private land owners are required to either (a) allocate certain portion of the said land to the government for the development of subsidised sales flats; or (b) to construct subsidised sales flats according to specifications stipulated by the government, who will pay for the construction costs of the units. These units will then be returned to government for sales to eligible households. The exact ratio of private and public units under the PPP should depend on, among other things, the magnitude of infrastructure investment and policy facilitation provided by the government over the process.

To maximise development potentials, the government can also consider up-zoning the relevant areas under the PPP scheme so that more units, both private and public, could be built. Of course, the private developers are required to settle the relevant amount of differential land premium in the process.

We believe with a fair, open, and just process in place, PPP command promising potentials as a short-term relief that the city is in dire need for, as far as land and housing production is concerned. The key principle of the PPP mechanism is that the net social gain resulting from speedier public housing supply would not be lower than the net gain captured by the relevant private developers.

However, we must also reiterate our firm view that a basket of land supply

options should be simultaneously, rigorously, and expeditiously pursued for short-, medium-, and long-term solutions, with PPP as a short-to-medium term solution, and large-scale reclamation outside the Victoria Harbour as a medium-to-long term solution. We believe that the active pursuance of longer term solutions would send a strong signal of the Administration's future direction of land supply, which would be helpful in reaching agreements for shorter term solutions.

2. Please refer to Page 120 of "Rethinking Public Housing Policy, Building Sustainable Land Reserve" (October 2016), Our Hong Kong Foundation.

Composite development

As another avenue to provide developable space for public facilities, we have pointed out in our previous research report that there exists certain land resources in the urban area that could be more optimally utilised to achieve maximum efficiency.

For instance, we have explicitly stated that "we hope that these land resources…can at least be considered to support a denser development of other public facilities, such as community centres[2]."

In this connection, we are glad to see Mrs. Carrie Lam, our Chief Executive, has undertaken in her election manifesto that the Administration shall "consider a model of "multiple use" multi-storey development for existing Government land in order to consolidate facilities and release land for community use".

In fact, we can generalise the principle of composite development to sites to other land uses, such as Open Space (O) and Other Specified Use (OU). Some facilities on these sites have the potential to be integrated into a composite structure.

As an example, the Cheung Sha Wan Wholesale Food Market located on Yen Chow Street West is currently zoned as OU. It covers an area of 10 hectares and accommodates a single-storey structure. The facility has the capacity to accommodate at least another storey for community centres run by Non-government Organisations (NGOs).

Reviewing the demand management measures imposed on the residential property market

The demand management measures imposed on the private home market have been in place for the eighth years now, we believe it is high time the government reviewed the costs and benefits associated with these said measures on the property market.

To begin with, private residential property transactions, particularly in the secondary market are sharply suppressed. The turnover rate of private homes plummeted to an average of 4.9% over the past four years (2013 - 2016). This compares with the 20-year average since the Handover of 8.3%.

There is a case that these measures might not be affecting only investment and speculative demands, but are in fact, hurting end-users as well. This is especially true with the macro-prudential measures imposed by the HKMA, e.g. requiring home buyers to pay upfront a 40% down-payment for properties with value below HK$7m. Such requirements have effectively tilted the

balance of homeownership opportunities, strongly favouring those who are already endowed with other assets, be it other properties or the accessibility to parents' financial support.

This is also consistent with the observation that homeownership rate has been on a sharp decrease since 2011. As home prices soared against a supposedly growing housing demand stemming from solid demographics, newly-formed households have to resort to other types of housing, including renting private flats or applying for public housing, if they cannot afford homeownership in the private market. As a result, homeownership rates in 2016 was 50.4%, the second-lowest level since the Millennium.

Further confirming the existence of unsatisfied demand for homeownership is the rental market. Since the Handover, when the rental growth of Class A units exceeds that of the overall market by at most 10 ppt., the former would start to converge to the latter. This has always been the case until the aftermath of the GFC, when the rental growths for both Classes A and B units started to significantly outpace that of the overall market, staying well above their historical averages, showing no signs of mean-reversion.

With the secondary market dried up by the demand management measures, aspiring homeowners who have genuine end-user needs have no choice but to resort to the primary market. In fact, the primary market accounted for 31% and 44% of the total private residential market, in terms of transaction volume and value, respectively, in 2016. Both figures are at their highest levels since 2004.

In conclusion, transactional analysis shows that the private residential market has seen noticeable distortions introduced by the various demand management measures over the past years. We urge the government and Hong Kong Monetary Authority to carefully and comprehensively review how effective these measures are, and what social costs, market distortions and wealth distributional effects are incurred in the process.

3.2 Structural changes within the government

Optimising the determination mechanism of land premium

Over the past five years, in terms of number of units, private housing developments through lease modification or land exchange fell short by more than 80% of the original forecast figure. At an average of 490 units per year, housing supply from the said sources for the past 5 years was 86% lower than the corresponding average of 2003 to 2012. This is of particular interest because as home prices rose 152% since 2008, while construction costs grew no more than 60% over the same period, developers having large land banks still chose to leave their sizeable land reserves idle.

In this regard, the determination of payment of differential land premium to the government has long been criticised that this process has slowed down private developments and redevelopments.

Under the prevailing mechanism, a 100% premium on the increase in land

value as a consequence of the conversion of the site in question is charged. The premium is the difference between the government's assessed "after" (the value of the site "after" the conversion of land use) and "before" values (the value of the site under the existing lease conditions).

However, some of the key assumptions adopted by the Lands Department (LandsD) in its assessment of both "before" value and "after" value are "unrealistic"[3], making the premiums well in excess of the actual increase in value.

(1) "Before" value

LandsD has underestimated the "before" value in two ways. Firstly, it values the agricultural land as pure agricultural site, and adopts this to be the "before" value, when in reality the site concerned may be under other uses (including "Melhado use"), which is significantly more valuable than a site solely for agricultural use. Neither would LandsD adopt the "Ex-gratia Compensation Rates for Resumed Land" as the "before" value.

Furthermore, LandsD assesses the "before" value on a "cleared site value" basis, i.e. assuming there is no existing building on the site. However, under the existing lease conditions, the value lies in the land and buildings, which is what the developer had to pay for the lot and, should the lease modifications not proceed, what he can sell it for.

For that reason, to reflect the true opportunity cost in the premium calculation, we propose that the government should adopt the Ex-gratia Rates in assessing the "before" value and also consider the value of existing building on the site before lease modifications.

(2) "After" value

The "residual method" adopted by LandsD in calculating the "after" value has overestimated the "after" value in three ways. First, it does not take the time and cost for obtaining vacant possession into consideration . Secondly, it ignores costs contingent on development. Finally, LandsD tends to underestimate the development costs.

Hence, we suggest that LandsD should deduct the above costs to reflect the true development cost and discuss with the industry to adjust the parameters used in its premium calculation.

Speeding up land and housing development approval processes

In our previous reports, we have raised numerous recommendations to speed up the approval processes, which are echoed by professionals in the real estate sectors. It is encouraging to see that of late, some government departments have also responded to some of these recommendations. Shortly after the commencement of new term of Administration, it is reported that LandsD and Planning Department shall calculate the area of recreational

3. "Land Supply – Why and how we need to unlock the private sector's land banks to help meet current housing need" (September 2016), The Real Estate Developers Association Hong Kong

facilities in private housing projects using the Buildings Department (BD)'s standards.

In general, we believe the cutting of red tape and speeding up of land and housing development should follow three primary directions:

(1) Delegation and empowerment;

(2) Accountability and mandate; and

(3) Resources and manpower.

(1) Delegation and empowerment: establishment of the Director for Land Development's Office

We propose the government should set up a position of "Director for Land Development" ("the Director" hereafter), possibly within the Development Bureau, to be formed with manpower borrowed from the approving departments including PlanD, LandsD, and BD. The Director (and his / her office) would be (a) empowered with the authority to not just coordinate, but to make overriding decisions regarding land development approvals; and (b) the first government point of contact for developers when they submit development / building plans. In other words, the Director's Office would serve as both the "first-stop" and "one-stop" interface between the Administration and the developers.

(2) Accountability and mandate: setting land and housing supply targets, with clearly defined responsibility for their delivery

We make reference to the Steering Committee on Land Supply for Housing (HOUSCOM) set up in 1997/98, chaired by the Financial Secretary. The HOUCOM was tasked to ensure and oversee the annual target level of housing production, i.e. 85,000 private and public units. To achieve this, officials in relevant departments were responsible to deliver a designated housing production target, and were subject to regular scrutiny by the HOUSCOM.

In short, behind the average of 68,200 public and private units completed during the five years from 1999 to 2003, was a system installed with clear mandate, accountability, well-defined delivery targets and timetable, which seems to be absent in today's government. Given the severe shortage of land and housing resources, we suggest the government to consider reinstating a similar structure as far as land and housing development is concerned.

(3) Resources and manpower: steeping up fiscal support for land development-related areas

We have already pointed out in our previous report that recurrent fiscal resources allocated to the policy area of "Planning and Lands" actually grew slower than overall government expenditure during the previous-term Administration. We hold that sufficient manpower and resources dedicated to this policy area is of paramount importance, given Hong Kong has not witnessed large-scale land development programmes for more than a decade.

▼ Selected major medium- to long-term land supply projects

Land Supply Project	Estimated Land Area (hectares)	Estimated Completion Time
Kwu Tung North and Fanling North NDA	320	2023-2031
Tung Chung New Town Extension	196	2023-2030
Hung Shui Kiu NDA	441	2024-2037
Yuen Long South Development	183	2027 and after
Tseung Kwan O Area 137	80	TBC
Sunny Bay Reclamation	80	Before 2030
Ma Liu Siu Reclamation	60	Before 2030
Lung Kwu Tan Reclamation	225	Before 2030
Tsing Yi (South West) Reclamation	100	TBC
Siu Ho Wan Reclamation	70	TBC
East Lantau Metropolis	1,000	After 2030
New Territories North	720	After 2030

Sources: Development Bureau; Legislative Council; Our Hong Kong Foundation.

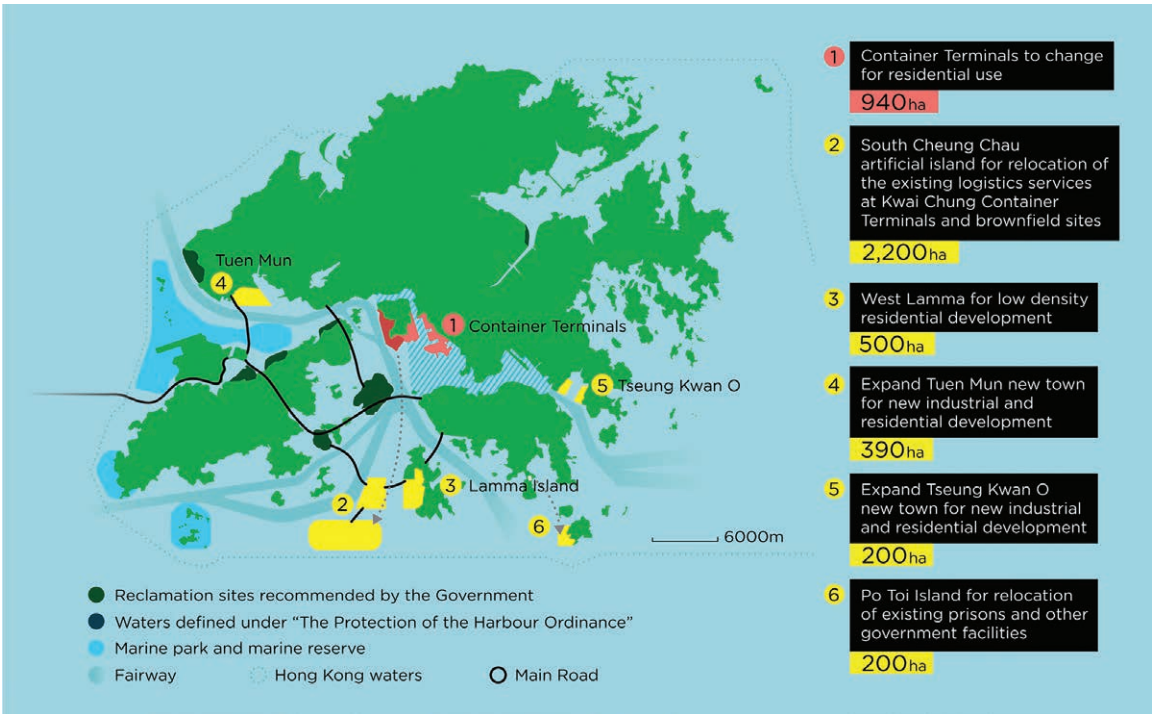
3.3 Long-term land development programme

In its "Hong Kong 2030+" consultation, the Government has estimated that all confirmed / planned land development project, together with those still under consultation, could potentially provide some 5,300 hectares of land over the next 30 years. Should any of the above land supply projects not be delivered on time, we would risk entering a window of no new land supply when all the short-term land supply avenues could be exhausted in five to 10 years' time.

Furthermore, in our previous reports, we have estimated that Hong Kong will need 9,350 hectares of land over the next 30 years, which roughly equals to the size of three Shatin new towns. That means even with this 5,300 hectares in place, this is still 4,000 hectares short off the estimated land demand.

To this end, we have argued in our last report that reclamation is the best way to create land in the long-term. In this regard, we have sketched out a more aggressive preliminary concept map and wish to encourage the community to engage in serious and rational discussion regarding suitable reclamation sites.

▼ OHKF Proposed Reclamation Sites



Note: The size and shape of reclamation sites on this plan are preliminary assumptions for the purpose of concepts expression only. They do not represent any future design to be implemented.
Source: Our Hong Kong Foundation.

3.4 Consolidation of Port Facilities and Harbourfront Management

Currently, around three quarters of all container throughput in Hong Kong are handled at the Kwai Tsing Container Terminals (KTCT), while the remaining one quarter are handled through the River Trade Terminal (RTT) in Tuen Mun, as well as various mid-stream sties (MSS) and public cargo working areas (PCWAs). Nevertheless, according to the Government's "Hong Kong Port 2030+" consultation study, the utilisation rate of the RTT and PCWAs were both below 50%. This suggests that we might need an integrated port facility which can handle both small and large, river and ocean vessels in the same place.

We might consider relocating all the existing port facilities in the city, including the KTCT, RTT, as well as other MSS and PCWAs, to the South Cheung Chau artificial island, and consolidating them into a single integrated modern container terminal. This could on one hand increase the efficiency of our ports, while releasing valuable land along the coast line in the urban area for residential development and other purposes to satisfy the city's socio-economic and livelihood needs.

1

Land and Housing Supply: Myths vs. Facts

1.1 Introduction

Part I of this report has given a detailed account of the various inefficiencies embedded in the mechanism design of our public housing system, and how our proposed "Subsidised Homeownership Scheme" would help mitigate, if not eliminate them.

Part II of the report will focus on issues surrounding land supply. In our previous reports, we have repeatedly emphasised the urgency and severity of land shortage in Hong Kong. We are of the view that land supply has trailed, and will continue to significantly lagged behind land demand, in the short-, medium-, and long-term. The situation is anything but optimistic.

This report, being the third in our "Land & Housing Research Series", strives to provide solutions in different timeframes. We propose a public-private partnership (PPP) scheme to release the development potentials of privately owned land resources, with a view to increasing both public and private housing units in the short- to medium-term; and we hold that more aggressive reclamation outside the Victoria Harbour is an essential land supply option for the city in the long-term.

However, there is still a substantial amount of inaccurate information and hence misconceptions about the land and housing supply situation of the city. We believe it is critical to first establish a consensus about the actual situation in the community, which is the focus of this Chapter.

1.2 The "Quarter-Household" gap

There have been views in the community that assert an existence of more than 240,000 vacant units in Hong Kong, equivalent to some 9% of the total number of units in the city as of 2015. This compares with the vacancy rate of private residential units as compiled by the Rating and Valuation Department (R&VD) of the same year, which was only 3.7%.

Proponents of this view argue that given the considerable number of vacant units, land development projects such as the New Development Areas (NDAs) in the New Territories and reclamation outside the Victoria Harbour should be placed at a lower priority. Instead, they advocate the government implement a "vacancy tax" with a view to increasing the effective supply of housing units in the market (either by letting or selling) by raising the cost of property owners who hold unoccupied units.

However, we are of the view that the 240,000 vacant housing units, or the 9% vacancy rate, is a statistical artefact due to the comparison of data from various sources. Specifically, it was derived by comparing the total number of permanent living quarters (2.696 million) and the total number of domestic households in Hong Kong (2.452 million) in 2015. The difference between the two figures, a.k.a. the "Quarter-Household Gap" (QH Gap), amounts to 243,900.

As noted in an official response by the Transport and Housing Bureau (THB) in 2013, it is erroneous to ascertain the number of vacant units by comparing the two said figures directly. In terms of data sources, the number of permanent living quarters is sourced from the Census and Statistics Department (C&SD)'s Register of Quarters (RQ), which is periodically published in the Digest of Statistics, whereas the number of domestic households is estimated from the General Household Survey (GHS).

It is important to note there are numerous differences between coverages of the RQ and the GHS. RQ defines "permanent living quarters" to include non-residential units usually with people living therein, such as quarters known to be used for residential purposes in commercial and industrial buildings; quarters in buildings of elderly homes, hospitals and penal institutions for accommodating staff; as well as quarters in buildings for accommodating students and staff in boarding schools.

On the other hand, GHS covers only land-based non-institutional households with at least one "usual resident" and exclude households with "mobile residents"[1] only.

It follows from the above that any attempt to approximate the actual number of vacant units should first deduct from the number of permanent living quarters:

(1) staff quarters;

(2) student hostels;

(3) residential units in industrial buildings; and

(4) other non-domestic quarters.

1. Refers to 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 moment, regardless of whether they were in Hong Kong or not at the reference moment.

This is because the first three types of structures are accommodating households not included in the survey scope of GHS, whereas the last type of units are not used for housing purposes. At the same time, an estimate of households with only "mobile residents" should be added to the total number of domestic households, because these households still occupy units despite not being covered by the GHS.

Table 1.1 attempts to reconcile the difference between the QH Gap and the number of vacant units according to administrative records.

▼ **Table 1.1 Reconciliation of the "QH Gap" with administrative records**

('000)	2010	2011	2012	2013	2014	2015
Domestic households (A) Note (1)	2,315.6	2,342.7	2,369.5	2,389.4	2,421.0	2,451.7
Permanent living quarters (B) Note (2)	2,561.0	2,593.2	2,629.6	2,647.7	2,671.9	2,695.6
QH Gap (C) = (B) – (A)	**245.4**	**250.5**	**260.1**	**258.3**	**250.9**	**243.9**
Adjustments for:						
Staff quarters Note (2)	31.9	31.7	31.2	31.7	30.7	30.6
Non-domestic quarters Note (2)	22.1	22.1	23.1	25.9	26.6	27.0
University hostels Note (3)	16.8	17.0	17.3	17.4	17.8	17.7
Subdivided units in industrial buildings Note (4)	3.8	3.8	3.9	3.9	4.0	4.0
Mobile households Note (5)	24.1	24.3	24.6	24.8	25.1	25.5
Total adjustments (D)	**98.7**	**99.0**	**100.1**	**103.8**	**104.3**	**104.8**
QH Gap after adjustments (E) = (C) – (D)	**146.7**	**151.5**	**160.0**	**154.5**	**146.6**	**139.1**
Vacant units as per administrative records:						
Private residential units Note (6)	55.0	51.3	51.9	49.9	46.6	45.8
Modern village houses Note (7)	11.1	10.7	10.7	10.3	9.8	9.8
Traditional village houses Note (7)	3.0	2.7	2.7	2.6	2.4	2.3
Subsidised sales flats (with unpaid premium) Note (7)	23.1	21.0	21.0	20.1	18.7	18.3
Vacant lettable & unlettable public rental units Note (8)	15.7	15.6	12.5	12.0	8.2	8.0
Total vacant units as per administrative records (F)	**107.9**	**101.3**	**98.8**	**94.9**	**85.6**	**84.3**
Unaccounted difference (G) = (E) – (F)	**38.8**	**50.1**	**61.2**	**59.7**	**61.0**	**54.8**
As % of permanent living quarters (G) / (B)	**1.5%**	**1.9%**	**2.3%**	**2.3%**	**2.3%**	**2.0%**

Sources: Census and Statistics Department; Rating and Valuation Department; Legislative Council; Our Hong Kong Foundation.

Notes to Table 1.1

(1) Figures are sourced from the GHS.

(2) Figures as per the RQ.

(3) Only the number of student hostel places instead of the number of units are available for the years 2013/14 and 2014/15. Table 1.1 assumes each student hostel unit accommodate two places and interpolates the remaining data using the change of the total number of permanent living quarters.

(4) According to Society for Community Organisation's survey, there were 4,000 sub-divided units in industrial buildings in 2016. Table 1.1 assumes this is the figure for 2015 and interpolates the data for previous years using the change of the total number of permanent living quarters.

(5) Refers to the households with only mobile residents. According to the Population Census, in 2011, there were a total of 212,200 mobile residents and 109,019 households with both usual and mobile residents. Assuming each of these households has 1.5 mobile residents implies that there are 48,672 mobile residents residing in households with only mobile residents. At an assumed average household size of 2.0, it is estimated that there were 24,336 mobile households in 2011. Figures for other years are interpolated using the change in the total number of domestic households.

(6) R&VD records do not cover village houses and subsidised sales flats, regardless of whether they are tradable in the market, hence they must be separately estimated. Figures are obtained by multiplying the official vacancy rate compiled by R&VD to the number of private residential units (as per R&VD records) as well as tradable subsidised sales flats (as per RQ), i.e. those with premium settled.

(7) It is assumed that both subsidised sales flats with unpaid premium and village houses have higher vacancy rates than the general market. Figures are obtained by multiplying 1.5 times (i.e. 50% higher) the R&VD's vacancy rate to the number of village houses; and 1.25 times (i.e. 25% higher) the R&VD's vacancy rate to the number of subsidised sales flats.

(8) Figures are sourced from the Housing Authority's administrative records. They refer to the sum of flats under offer, lettable vacant units, and unlettable units for the years 2011 to 2014. Figures for 2010 and 2015 are interpolated by the change in R&VD's vacancy rate.

As displayed in Table 1.1, after adjusting for the statistical differences between the two sources, i.e. RQ and GHS, the QH Gap is narrowed from 243,900 units to 139,100 units in 2015. This compares with the number of vacant units estimated using administrative records, namely the R&VD's vacancy rate and Housing Authority's figures, of 84,300 units for the same year. This leaves an unaccounted difference of 54,800 units. Does that mean the actual number of vacant units is 54,800 higher than what the official figures suggest?

We believe this is not the case and would like to emphasise two points:

(1) A complete reconciliation between the QH Gap and the number of vacant units suggested by administrative records is extremely difficult, if not entirely impossible. Unlike reconciliation exercises in the field of accounting, the issue in question draws information from numerous different data sources, each of which has its own statistical basis. However, importantly, it could be seen that the remainder of the difference only amounts to an average of 2.1% when expressed as a share of the total number of quarters.

    This is not unacceptable given that the statistical discrepancy between the values of GDP compiled using the expenditure and production approaches, because of the adoption of different data sources and estimation methods, ranged from 0.9% to 2.1% of GDP during the same period.

(2) There are still several factors that the above reconciliation did not consider, which would conceivably narrow the QH gap further. For instance, due to data unavailability, quarters accommodating students in boarding schools are not included in the above reconciliation.

Also, the RQ was not established to estimate the number of habitable units in the city in the first place. Instead, it serves to facilitate the sampling exercise of C&SD surveys. Due to its limited transparency of methodology, we cannot determine, among other things, how frequently and accurately the RQ is updated for demolition of old and addition of new buildings in the city. These could well be the sources of statistical discrepancy.

It should also be noted that private residential units in Table 1.1 already included primary units completed but yet to be sold. In fact, the number of these units only ranged from 1,000 to 3,000 for the past five years. Hence, the allegation that developers might be hoarding completed units is doubtful.

In a nutshell, the so-called QH Gap, according to the above analysis, is seemingly the result of differences between statistical frameworks. To propose that we do not need to increase land supply merely because of the existence of vacant housing units is apparently not practical.

1.3 "Idle" government land

In his reply to questions raised by Legislative Council (LegCo) members, the then Secretary for Development has released in July 2012 a set of statistics regarding "vacant government land". According to these statistics, there were a total of 952.5 hectares (the equivalence of about 48 Victoria Parks) of vacant government land zoned as Residential or Commercial / Residential (C/R); and another 1,201.2 hectares (the equivalence of about 60 Victoria Parks) of vacant land zoned as Village Type Development (V-zone land), as of June 2012.

The release of these figures, which coincided with the previous-term Administration's efforts to increase land supply via a multi-pronged approach, have sparked some intense discussions among the community. The vacant Residential, C/R, and V-zone land, totalling more than 2,100 hectares, is larger than the whole of Tseung Kwan O new town, which is home to 400,000 people.

Although the Development Bureau has repeatedly emphasised that among the land area quoted above, there are numerous limiting factors that might render them undevelopable, or at least with low development potentials, as "vacant land" also included man-made slopes, roads or passageways, very small sites with area less than 0.05 hectare (<500 sq. m), etc. In fact, after deducting such sites from the quoted land area above, there were only 391.5 hectares and 932.9 hectares of vacant government that are zoned as Residential (including C/R) and V-zone, respectively (Table 1.2).

▼ Table 1.2 Unleased or unallocated government land, June 2012

(A) Area of unleased or unallocated government land (hectares)								
	Residential (R), by Group:					C/R^	R and C/R^	Village Type Development
	A	B	C	D	E			
	371.8	209.3	182.4	158.6	11.0	19.4	**952.5**	**1,201.2**
(B) Types of land which are considered not suitable for development, not yet available for development, or with low development potential (hectares)								
Road or passageways	171.1	45.8	33.7	17.4	3.9	14.5	**286.4**	**137.3**
Man-made slopes	55.5	49.2	25.1	11.1	0.5	0.1	**141.5**	**106.9**
Simplified Temporary Land Allocation~	29.4	3.6	0.7	2.8	0.9	0.1	**37.5**	**24.1**
<0.05 hectares	50.0	15.8	19.3	6.5	1.9	2.1	**95.6**	**N/A@**
(C) Unleased or unallocated government land after deducting the types of land above (hectares)								
Remaining land area [= (A) – (B)]	65.8	94.9	103.6	120.8	3.8	2.6	**391.5**	**932.9**

Notes:
(^) "C/R" denotes "Commercial / Residential".
(~) Generally for temporary work sites of concerned departments.
(@) Sites smaller than 0.05 hectares are not deducted.

Source: Development Bureau.

The Development Bureau has also pointed out in their official statements that "not all the remaining 391.5 hectares of "Residential" and "Commercial/ Residential" land are developable…there remain a number of sites with irregular shapes within the unleased and unallocated government land (e.g. empty space between buildings, back lanes and narrow strips of land alongside existing developments, highways or other amenities) and they may not be suitable for housing development"[2].

However, over the past five years since the said set of information was made public, there have been views in the community that the government should prioritise utilising the existing vacant government residential land and V-zoned land, before pursuing other land development projects such as reclamation outside the Victoria Harbour and New Development Areas (NDAs) in the New Territories.

To resolve this issue, this report attempts to preliminarily assess the development potentials of the vacant government sites zoned as Residential, C/R, and V-zone in the territory.

2. "Government's response to media reports and enquiries on 'vacant government land' ", Development Bureau, October 2012.

1.3.1 Methodology

We based our research on the map of "Unleased and Unallocated Government Land Zoned "Residential" or "Commercial/Residential" (after deducting the types of land which are considered not suitable for development, not yet available for development or with low development potential)" as of June 2012 released by the Development Bureau. However, the image quality and level of details of the said map is rather low. Hence, we also relied on the assistance of the online Statutory Planning Portal; the GeoInfo Map of Hong Kong; as well as Google Earth, to determine among other things, the location, proximity to existing road network, land use zoning, current situation, and area of all the sites on the map. For some of the sites, we have purchased Lot Index Plans from the Lands Department (LandsD) to ascertain more precisely the boundary of unleased and allocated government land.

A few technical points must be noted:

(1) Due to the limited resolution of the map released by the Development Bureau, when it is zoomed in to 800% or above of the original size, it is very difficult, if not impossible, to precisely locate the boundaries of the sites indicated by the map on other geographic systems, such as the Statutory Planning Portal. The research team must rely on other details such as the relative location of the indicated sites with reference to key roads and major housing estates nearby. Therefore, a substantial amount of visualisation is involved, especially during the measurement of areas of the indicated sites of the map using the GeoInfo Map system. This inevitably results in inaccuracies in the measurement of areas of these sites.

(2) Furthermore, the map has already deducted the types of land which are considered not suitable for development, not yet available for development or with low development potential. As a result, a substantial portion of these are not pockets of successive landmass that span a certain area (which would have been be marked as coloured spots the map). These sites in question are displayed on the map as stripe-shaped or highly irregular in shape, making accurate measurement of their areas an even more demanding task.

(3) Although it is possible to ascertain the current usage and conditions of specific sites with the help of online systems, whether these sites are developable hinges on a host of other factors, ranging from the government's overall planning scheme in a particular area, the possibility of adding and / or expanding capacity of supporting infrastructure, the interface with nearby land uses, etc. These must be ascertained by professional and technical studies, which this report did not set out to cover.

▼ Table 1.3 Selected examples of sites by category

	District	Location	Area (ha)	Existing Use
(1) Unlikely to be developable				
1.1 Between roads and existing development				
Figure 1.1	North	Europa Garden	0.4	R(C)
Figure 1.2	South	Kellet Bay	0.7	R(A)
1.2 Back Alley				
Figure 1.3	Wan Chai	Elm Tree Towers	0.4	R(B)
1.3 Stairs				
Figure 1.4	Sai Kung	Fei Ngo Shan Road	0.3	R(C)
1.4 Others				
Figure 1.9	Island	Tai Long Wan	9.7	R(C)
Figure 1.10	Central and Western	Mansfield Road	1.6	R(C)
Figure 1.11	Eastern	Hung Tong Estate	0.4	R(A)
Figure 1.12	Eastern	Tsui Lok Estate	0.3	R(A)
(2) Sold / allocated for development during the past 5 years				
2.1 Sold				
Figure 1.5	Tuen Mun	88 So Kwun Wat Road	5.0	R(B)
Figure 1.6	Island	Cheung Sha	2.9	R(C)
2.2 Allocated for public housing				
Figure 1.7	Island	Ying Hei Rd	6.3	R(A)
Figure 1.8	Sha Tin	Kwong Sin St	1.7	R(B)
(3) Covered by NDA				
Figure 1.18	Yuen Long	Hung Shui Kiu	10.4	R(C)
(4) Likely to be developable				
Figure 1.19	Tai Po	Tai Po Kau	6.7	R(C)
Figure 1.20	Kowloon City	Kai Tak	3.5	R(A) & R(B)
(5) Development potentials uncertain, but would likely require significant site formation works, transport enhancement, and / or resettlement of temporary structures or squatters for larger-scale development				
5.1 Involves temporary structure / squatters				
Figure 1.13	Kwun Tong	Cha Kwo Ling	4.5	R(A)
Figure 1.14	Yuen Long	Tai Ling	2.5	R(D)
5.2 Site improvement needed				
Figure 1.15	Sha Tin	Lakeview Garden	13.3	R(B)
Figure 1.16	Wan Chai	Black's Link	0.4	R(C)
Figure 1.17	Sha Tin	Keng Hau Road	1.5	R(B)
Total area of these 20 examples			**72.7**	

Sources: Development Bureau; Town Planning Board; Lands Department; Google Earth.

1.3.2 Findings: 391.5 hectares of vacant government residential land

According to their development potentials and latest conditions, this report shall provide plenty of examples (Table 1.3) explaining the typical categories in which these sites fall. We must emphasise that this represents our preliminary findings regarding vacant government land. We strive to provide a set of revised and more specific figures after more due diligence is carried out in the near future.

One point that stood out regarding these sites is that most of them (in terms of area) are zoned as the lower-density Residential (Group C) instead of the higher-density Group A and Group B. Although Table 1.3 is just a collection of 20 examples covering some 70 hectares, but they do represent the overall picture of the vacant government residential land. It implies that development potential aside, many of these so-called "idle" government sites are, in fact, unable to support large-scale, high-density development. This is one important piece of information that seems to be missing in all related public discussion.

A lot of the sites are commonly found to be "stripe-shaped", displayed as areas with only black boundaries without any coloured spots on the Development Bureau's map. After further investigation, it is revealed that these sites typically represent:

- The narrow areas between existing developments and roads, e.g. the edge of a housing estate;
- Between the buildings within a larger development (a.k.a. back alley), e.g. the areas separating different blocks in a housing estate;
- Staircases in hilly areas.

These sites are unlikely to be developable given their relatively small size, irregular shapes and that they are right next to existing roads or other residential blocks (See Figures 1.1 to 1.4 for examples).

▼ Figure 1.1 Stripe-shaped site: between Europa Garden and Route 9, North District (measured area = 4,486 m^2)

Sources: Development Bureau; Town Planning Board; Google Earth.

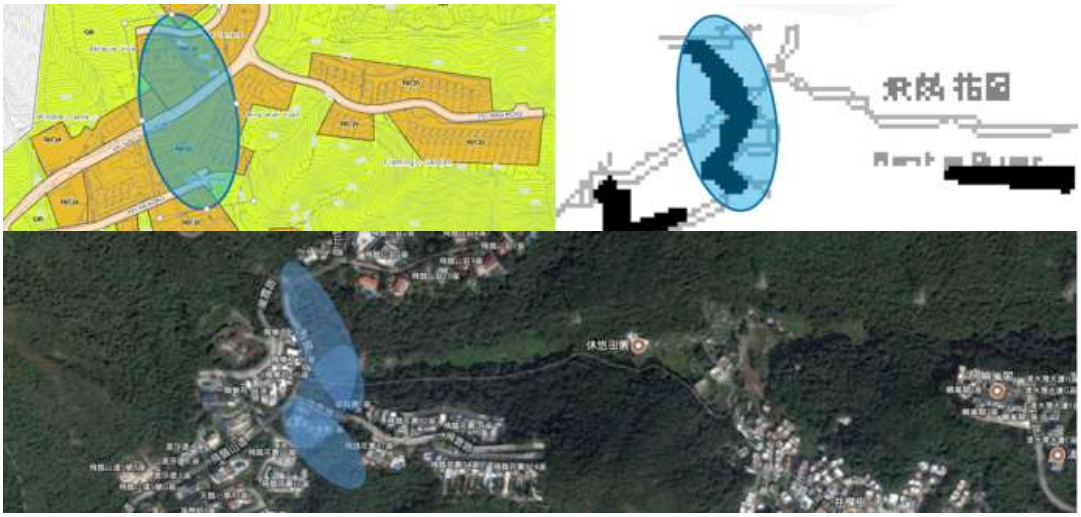
▼ Figure 1.2 Stripe-shaped site: narrow area adjacent to Shek Pai Wan Road, South District (measured area = 7,374m^2)

Sources: Development Bureau; Town Planning Board; Google Earth.

▼ Figure 1.3 Stripe-shaped site: back alley between Bellevue Heights and Elm Tree Towers, Wan Chai (measured area = 4,151m^2)

Sources: Development Bureau; Town Planning Board; Google Earth.

▼ Figure 1.4 Stripe-shaped site: stairs near Fei Ngo Shan Road, Sai Kung (measured area = 3,168m^2)



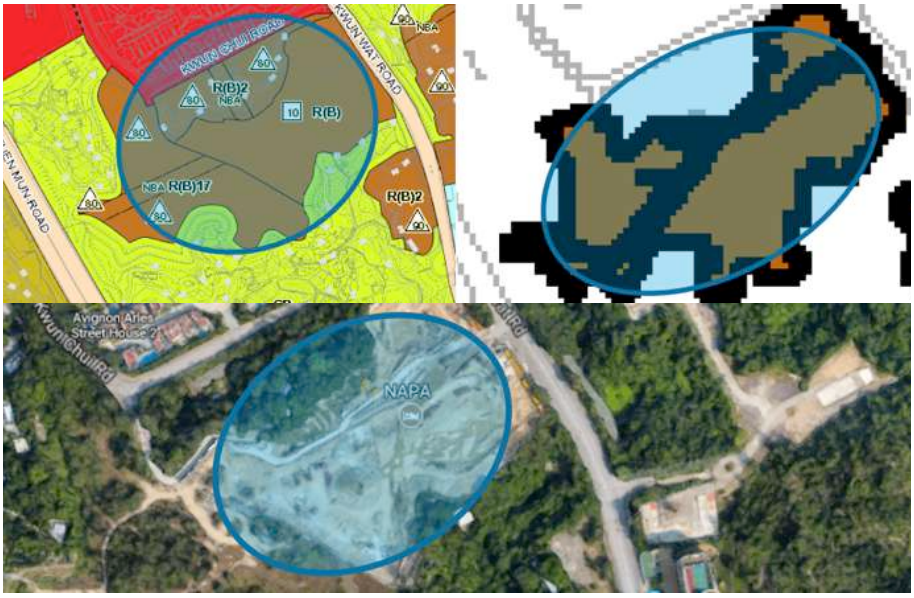
Sources: Development Bureau; Town Planning Board; Google Earth.

For those sites with coloured spots (indicating larger successive landmass), based on our preliminary analysis on the development potentials of these sites, we found that they could be broadly categorised into:

- Marked as vacant government land as of June 2012, but were sold / allocated to Housing Authority / developed during the past five years;
- Unlikely to be developable;
- Development potentials uncertain, but would likely require significant site formation works, transport enhancement, and / or resettlement of temporary structures or squatters for larger-scale development; and
- Likely to be developable.

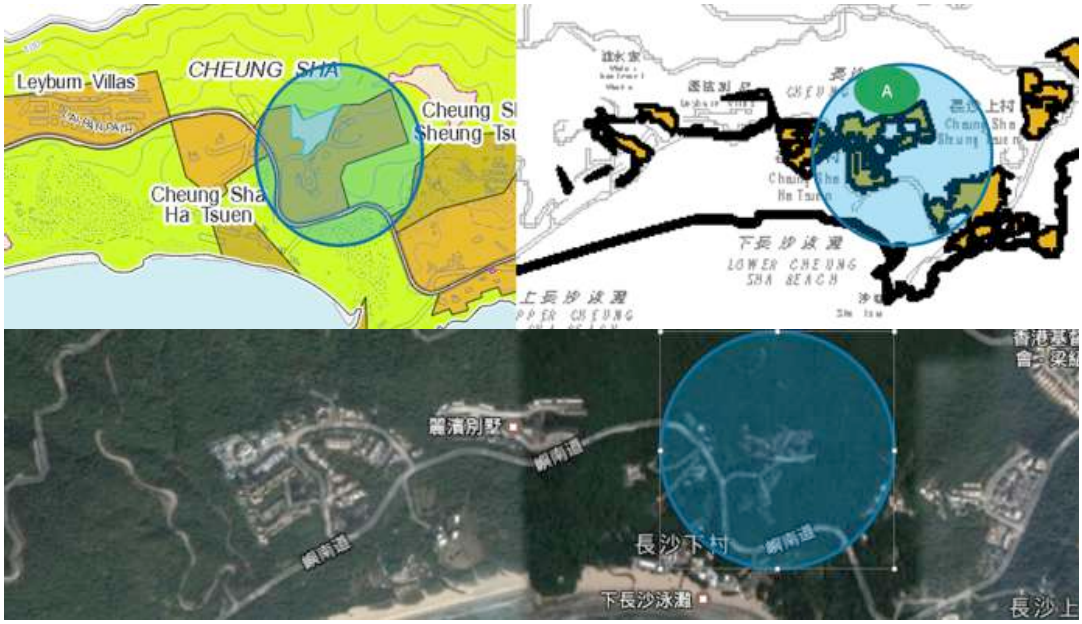
Partly reflecting the previous-term government's efforts in boosting land and housing supply, many sites marked as vacant government land as of June 2012, were either sold to private developers or allocated for the development of public housing over the past five years (See Figures 1.5 to 1.8 for examples).

▼ **Figure 1.5 Sold during the past five years: 88 So Kwun Wat Road – Lot number: TMTL 500 (sold in 2015) and TMTL427 (sold in 2013), Tuen Mun (measured area = 50,209m^2)**



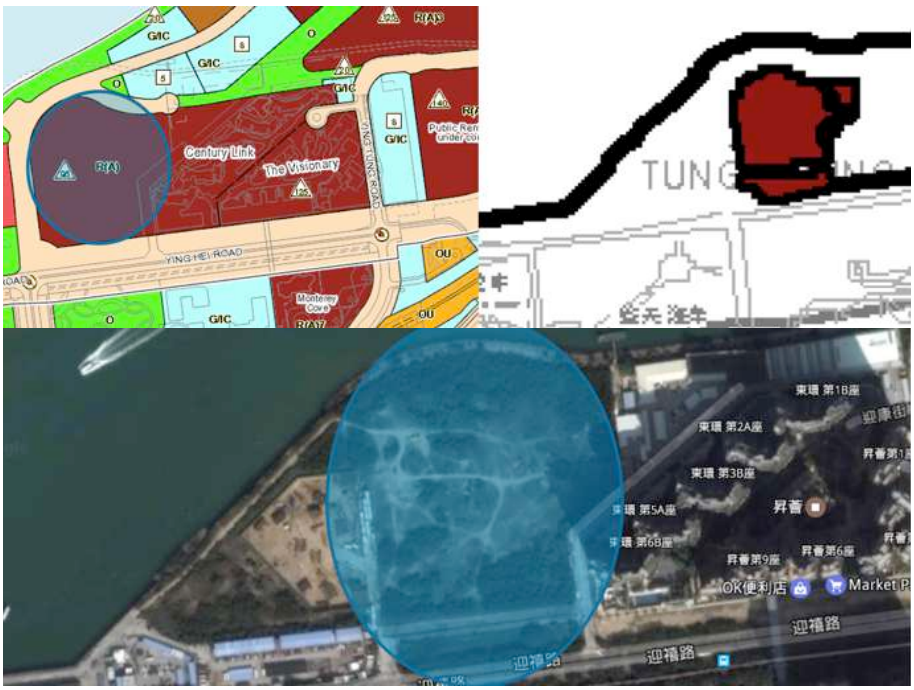
Sources: Development Bureau; Town Planning Board; Google Earth.

▼ Figure 1.6 Sold during the past five years: Cheung Sha (Lot number: 758 in demarcation District No. 332) (sold in 2014), Island (measured area = 28,603 m^2)



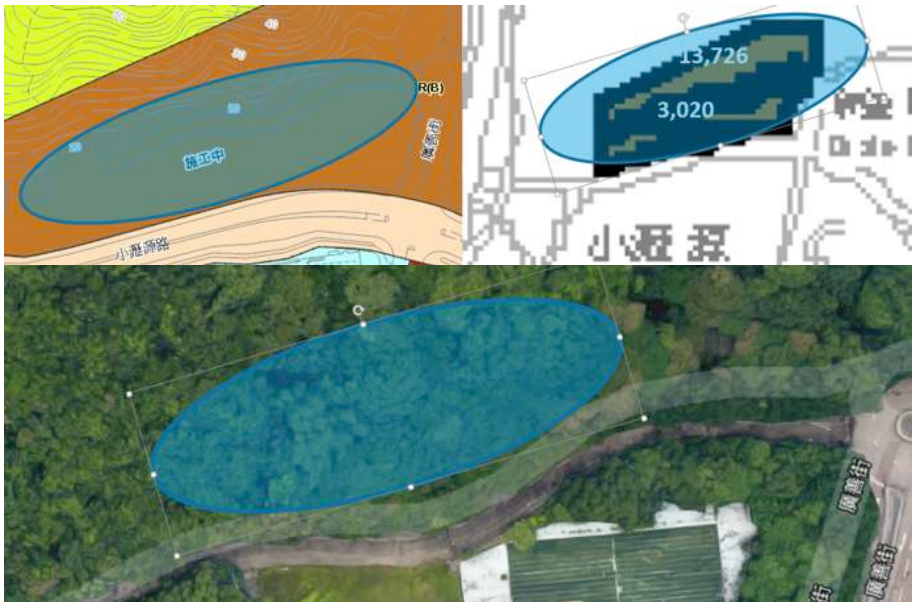
Sources: Development Bureau; Town Planning Board; Google Earth.

▼ Figure 1.7 Site allocated during the past five years: Subsidised Sale Flats Development at Tung Chung Area 54, Island (measured area = 62,986m^2)



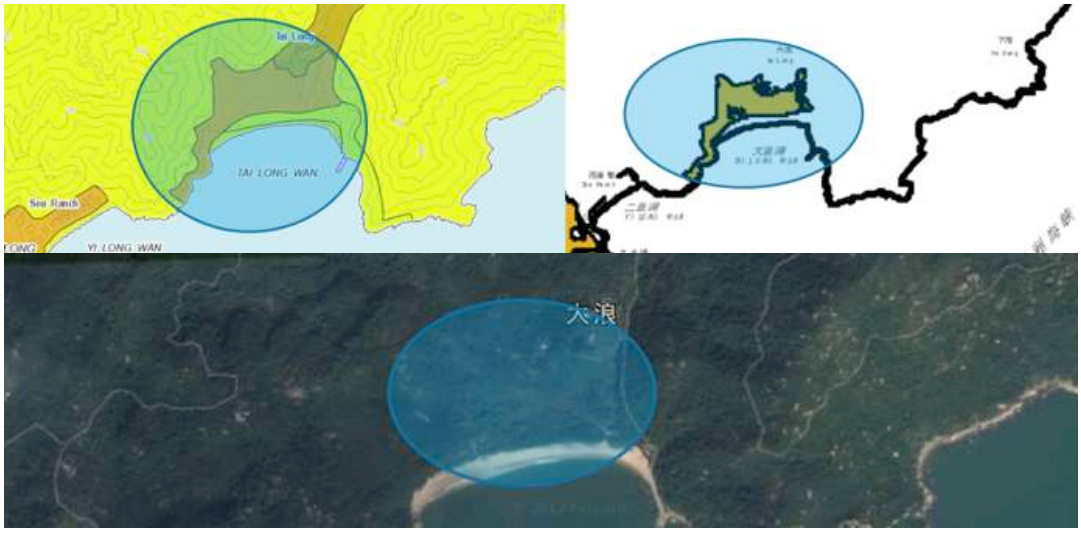
Sources: Development Bureau; Town Planning Board; Google Earth.

▼ Figure 1.8 Site allocated during the past five years: Greenhill Villa (subsidised sale flats project), Sha Tin (measured area = 16,746m^2)



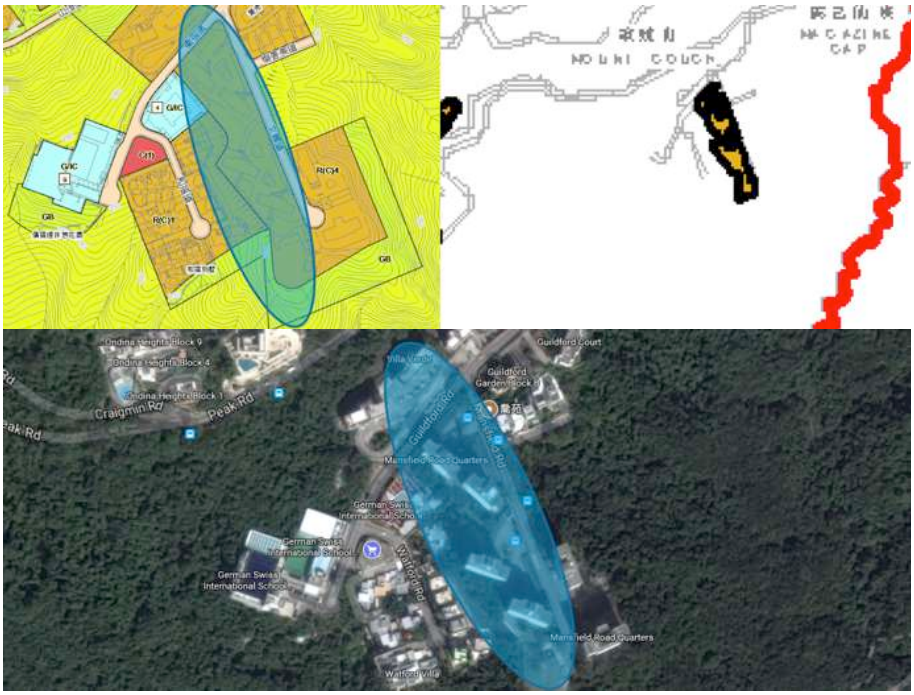
Sources: Development Bureau; Town Planning Board; Google Earth.

▼ Figure 1.9 Lack of public road access: sites near Tai Long Wan, Island (measured area = 97,469m^2)



Sources: Development Bureau; Town Planning Board; Google Earth.

▼ **Figure 1.10 Occupied by existing buildings: Mansfield Road Quarters 8 Mansfield Road, Central and Western (measured area = 16,458m^2)**



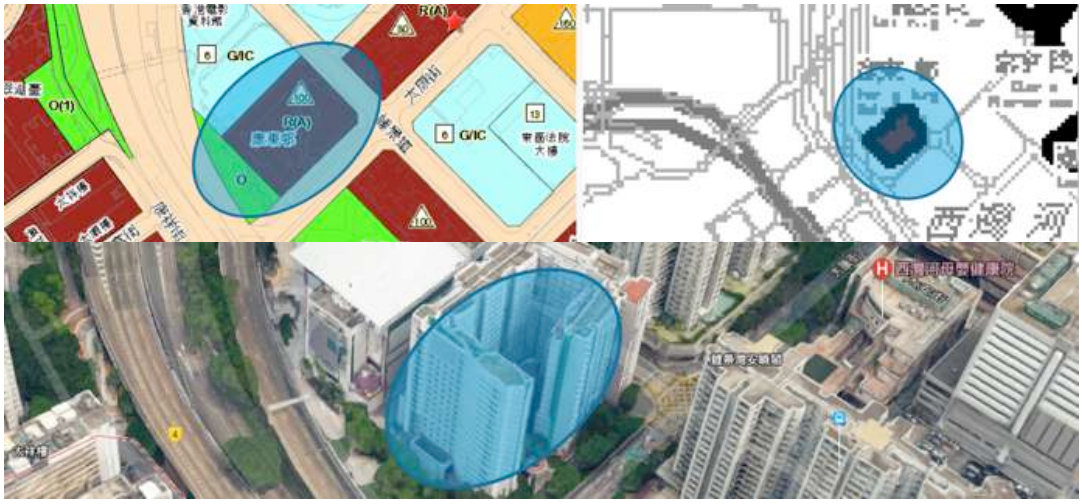
Sources: Development Bureau; Town Planning Board; Google Earth.

For sites that are considered unlikely to be developable, this is generally because of the lack of public road access or that they are currently occupied by existing buildings.

For example, this site near Tai Long Wan is hardly accessible on land, and is surrounded by an extensive area of Green Belt. This greatly reduces their development potentials, particularly for larger-scale ones. In fact, we found a lot of sites situated along the south coast of the Lantau Island that are marked as "idle government residential land", located in places such as Yi Long Wan and Mui Wo. To state that it is the wish of the wider community for these locations to see minimal development (particularly for housing) would not be unreasonable.

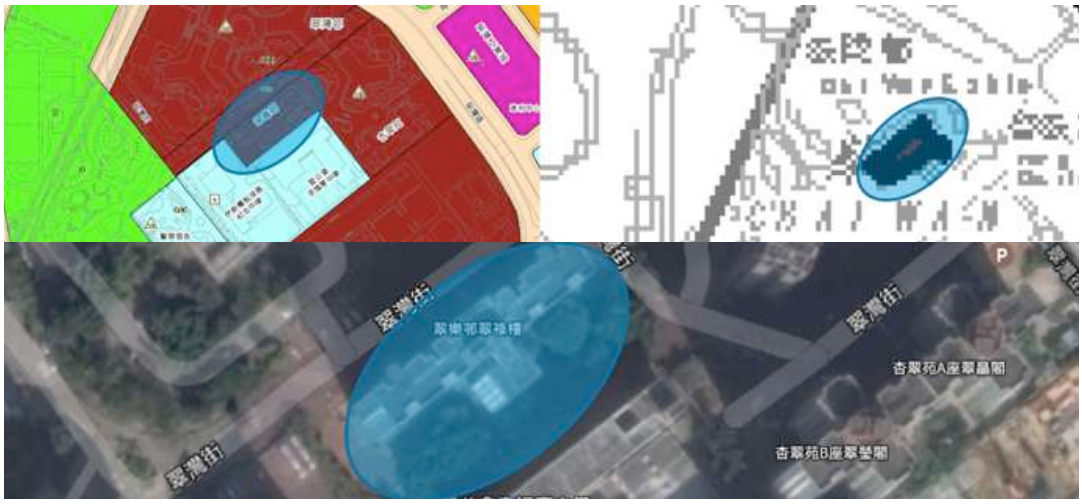
Like the site shown in Figure 1.10 above, many sites in the urban areas are currently occupied by buildings or public facilities. These include the official residences of a few principal government officials, such as Chief Secretary for Administration, Financial Secretary, etc., which the Development Bureau has already explained in their official response. But interestingly, we found that in addition to these official residences that are listed as "vacant government land" because they are not allocated to any government departments, there are other sites with existing buildings that are suspected to be erroneously included in the map as vacant government land. For examples, Hung Tong Estate (Figure 1.11) and Tsui Lok Estate (Figure 1.12), both located in Eastern District, are listed as vacant government sites in the Development Bureau's map, when the two said estates were completed in 1999 and 1998, respectively.

▼ Figure 1.11 Occupied by existing buildings: Hung Tong Estate, Eastern District (measured area = 4,137m^2)



Sources: Development Bureau; Town Planning Board; Google Earth.

▼ Figure 1.12 Occupied by existing buildings: Tsui Lok Estate, Eastern District (measured area = 2,659m^2)

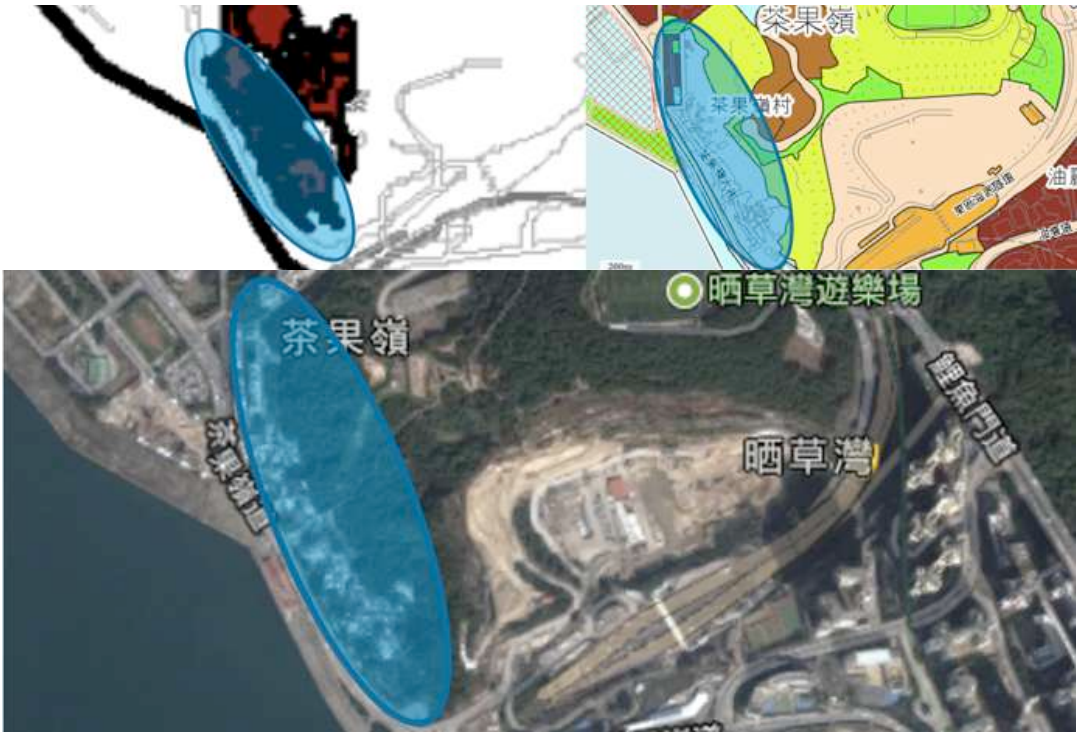


Sources: Development Bureau; Town Planning Board; Google Earth.

We believe the broadest category in terms of total site area on the Development Bureau's map, contains sites that are considered having "uncertain development potentials". These sites are typically flat areas (often in the New Territories) with existing temporary structures or squatters (See Figures 1.13 to 1.15) or sloped green areas (often close to existing residential developments) (See Figures 1.16 to 1.18).

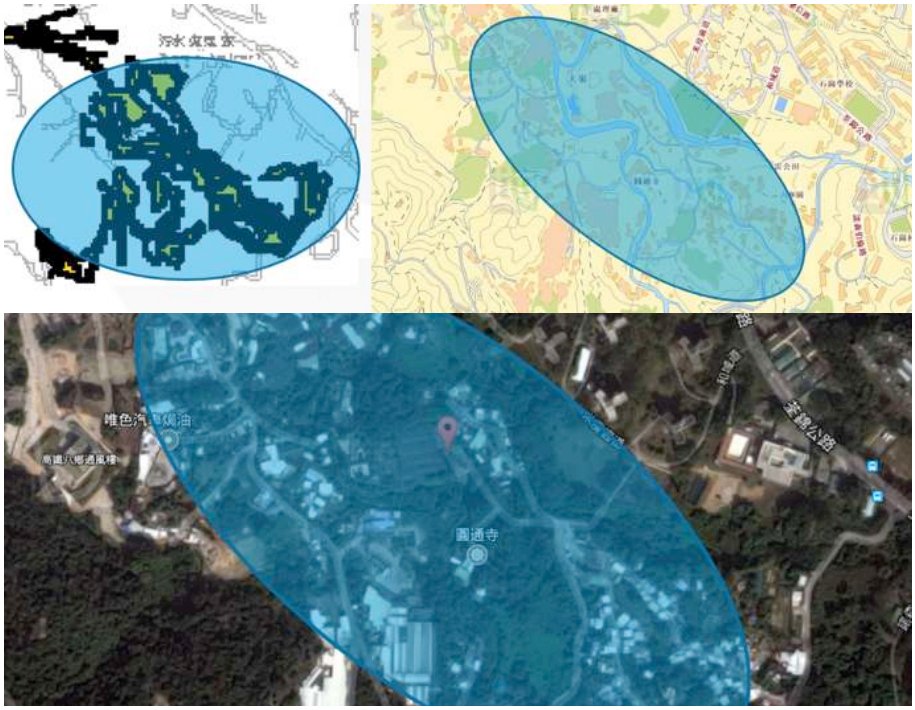
These sites, regardless of their sizes, would conceivably face great challenges, such as necessitating large-scale site formation, clearance, resettlement, and transport infrastructure enhancement, before they can support housing developments (especially large-scale ones). These processes could be considerably time-consuming and costly. This is also consistent with the fact that most of these sites are currently zoned with density of or lower than Residential (Group C).

▼ **Figure 1.13 Occupied by existing temporary structures or squatters: sites near Cha Kwo Ling Road, Kwun Tong (measured area = 44,828m^2)**



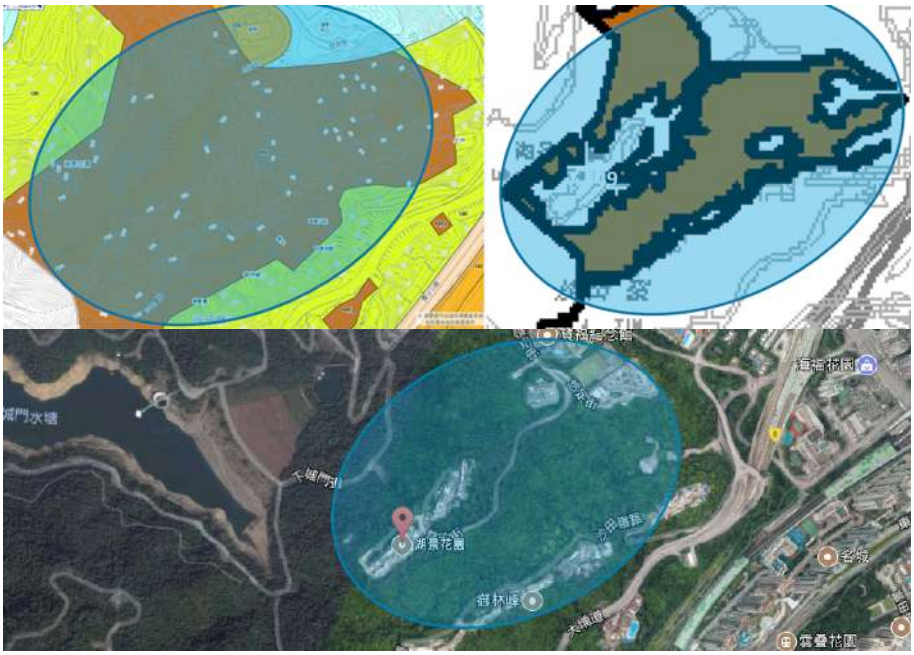
Sources: Development Bureau; Town Planning Board; Google Earth.

▼ Figure 1.14 Occupied by existing temporary structures or squatters: sites near Tai Ling, Yuen Long (measured area = 25,477m^2)



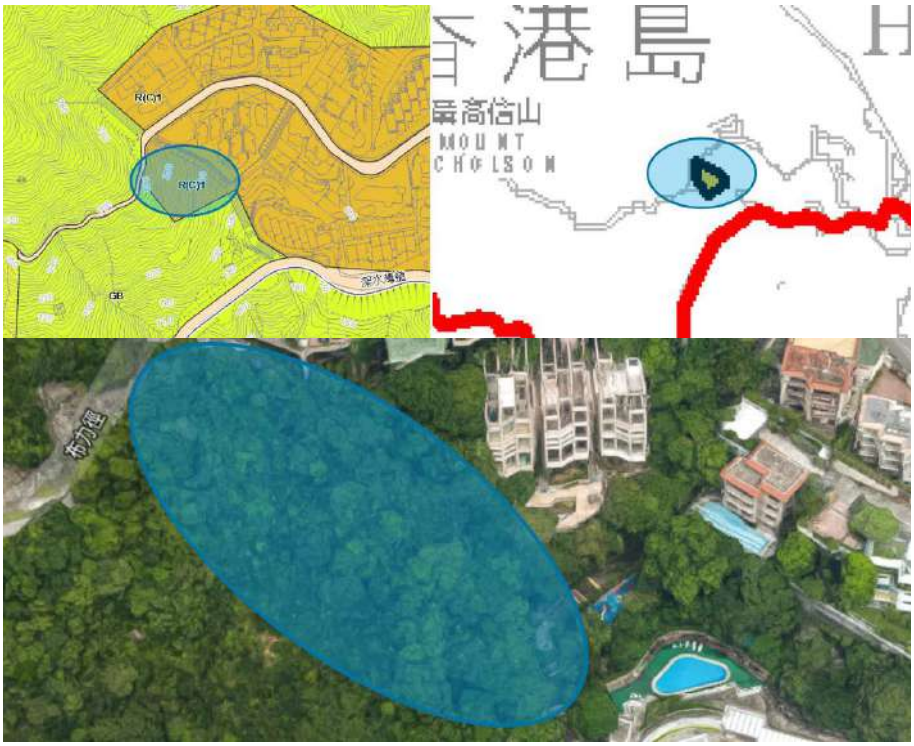
Sources: Development Bureau; Town Planning Board; Google Earth.

▼ Figure 1.15 Sloped green area that requires site improvement: sites near Lakeview Garden, Sha Tin (measured area = 133,357m^2)



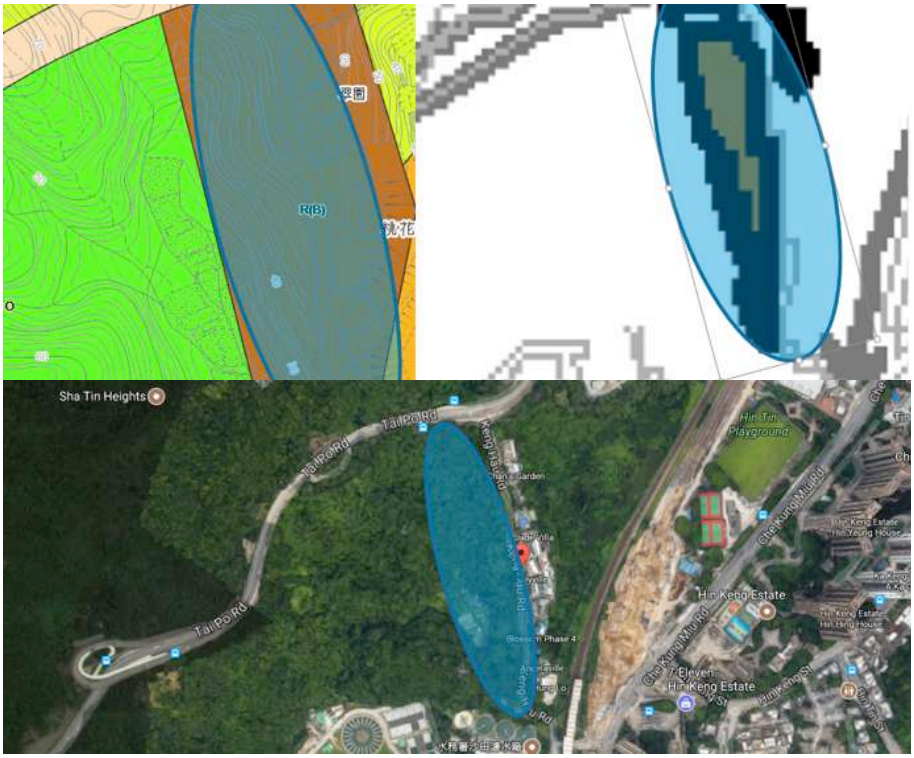
Sources: Development Bureau; Town Planning Board; Google Earth.

▼ Figure 1.16 Sloped green area that requires site improvement: sites near Black's Link, Wan Chai (measured area = 3,678 m^2)



Sources: Development Bureau; Town Planning Board; Google Earth.

▼ Figure 1.17 Sloped green area that requires site improvement: sites near Keng Hau Road, Sha Tin (measured area = 15,105m^2)

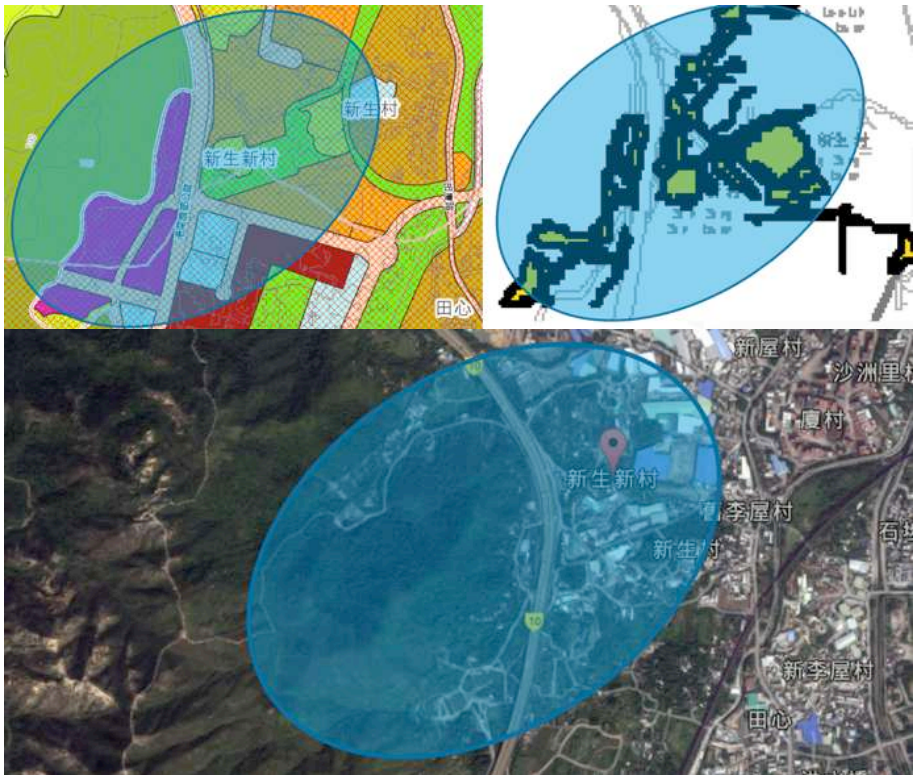


Sources: Development Bureau; Town Planning Board; Google Earth.

A few sites are covered by the Hung Shui Kiu NDA Development Plan (Figure 1.18). Since the new NDA plan (which did not exist as of June 2012 when the Development Bureau's map was released) would override the existing land use, we did not go over each site covered by the NDA plan to determine their development potentials.

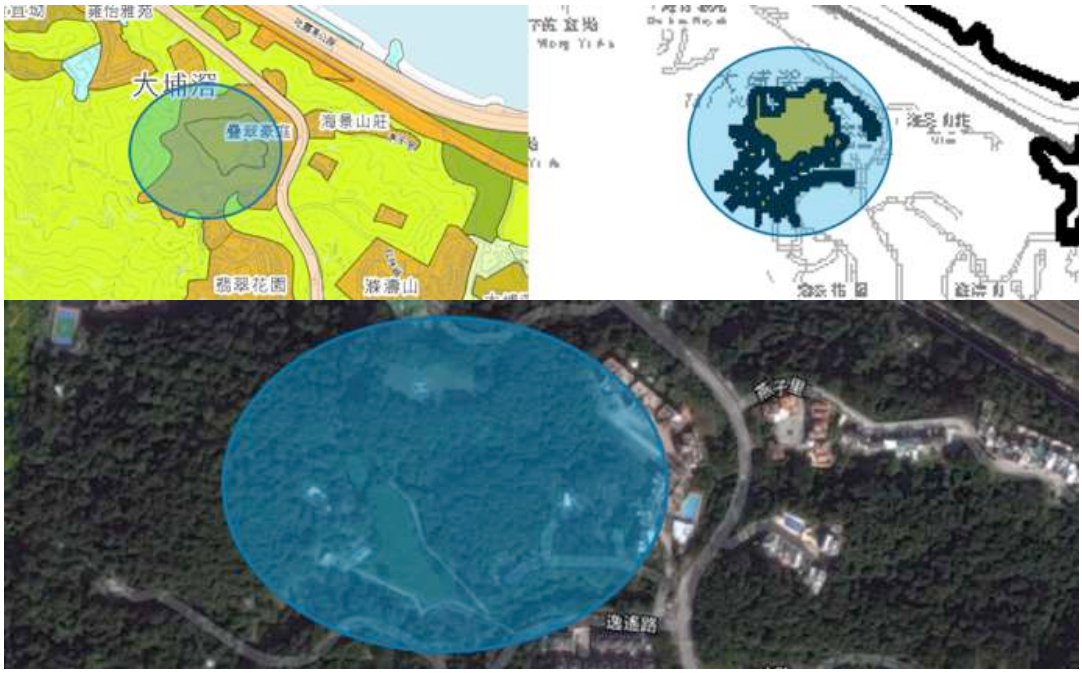
For sites that are likely to be developable, they are usually included in the Land Sales Programme (LSP) 2017/18 (Figure 1.19), whereas others are located in the Kai Tak NDA (Figure 1.20).

▼ **Figure 1.18 Covered by NDA plan: sites in Hung Shui Kiu, Yuen Long (measured area = 104,460m^2)**



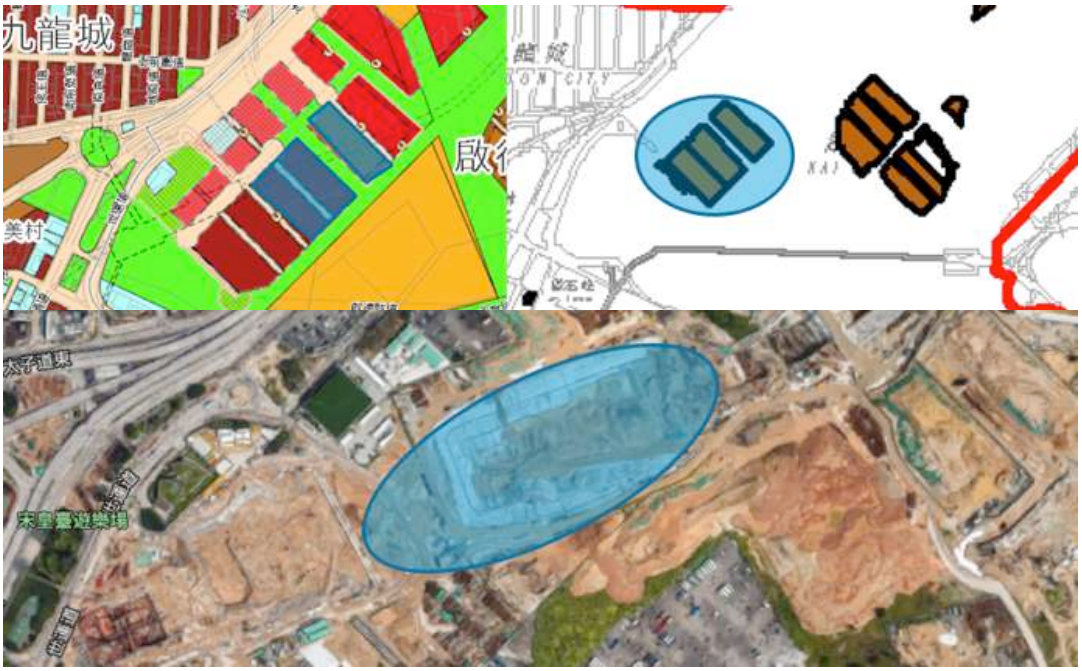
Sources: Development Bureau; Town Planning Board; Google Earth.

▼ Figure 1.19 Included in Land Sales Programme: sites near Tai Po Kau, Tai Po (measured area = 67,303m^2)



Sources: Development Bureau; Town Planning Board; Google Earth.

▼ Figure 1.20 Sites in Kai Tak NDA (measured area = 34,605m^2)



Sources: Development Bureau; Town Planning Board; Google Earth.

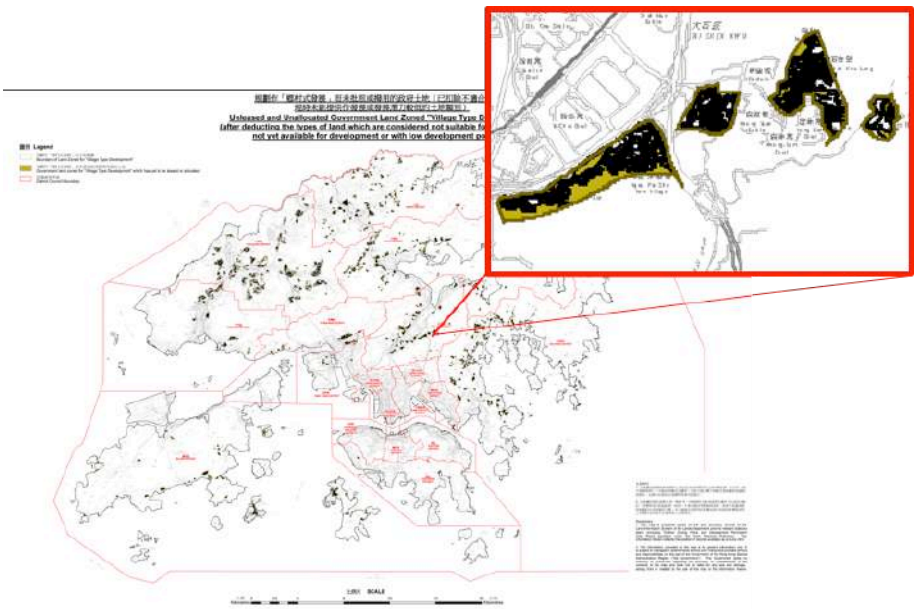
All in all, despite being a preliminary set of data, the above analysis, which represent the typical categories of all the vacant government residential sites, still shows that the accusation of "government intentionally hoarding usable residential land" is not supported by fact. Indeed, many of the more readily developable sites have already been put up for land sales or used for public housing development. A substantial portion of these sites, while being vacant, are with questionable development potential in their current conditions. Significant amount of infrastructure investment, clearance and resettlement of temporary structure, etc. are needed before any development of a meaningful scale can be carried out.

1.3.3 Findings: 932.9 hectares of Government Land Zoned for Village-type Development

For the 932.9 hectares of government V-zone land, we have identified plentiful examples in which the sites are unlikely to be developable. They can be broadly classified into several categories according to their existing conditions and reasons for development to be unlikely or complicated. Similar to the case of government residential land, the findings below are preliminary and we shall provide a set of more detail and comprehensive figures in the near future.

Figure 1.21 below is the map released by the Development Bureau in 2012 and a typical example of villages, surrounded by the dark yellow boundary. The yellow region represents the unleased or unallocated government land after deducting road or passageways, man-made slopes and simplified temporary land allocation. It is noteworthy that many of these sites are scattered pockets of land that are too small to be seen on the map, and are displayed as large black areas. Scatteredness and small size are usually unconducive for housing development.

▼ **Figure 1.21 V-zone map from Development Bureau**



Source: Development Bureau.

Our preliminary analysis shows that the typical reasons that render development complicated or difficult on these sites include: back alley; temporary structure; slope; Fung Shui / burials / urn; outside Village Environs Boundary; remoteness; environment sensitive area; and former work site for infrastructure project. We are going to supplement each of the identified category with examples below. They are summarised in Table 1.4.

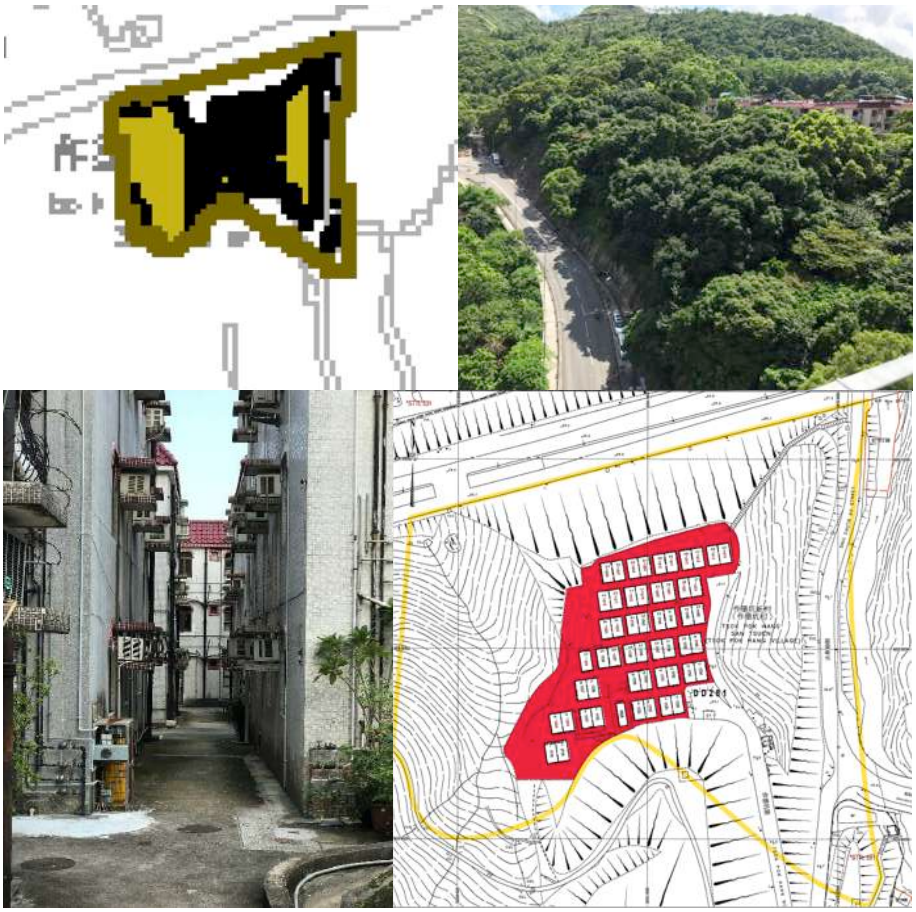
▼ Table 1.4 Selected examples of sites by category

	District	Location	Area (ha)
(1) Back Alley			
Figure 1.22	Sha Tin	Tsok Pok Hang New Village	4.4
(2) Temporary Structure			
Figure 1.23	Yuen Long	Wang Chau Village	21.1
(3) Slope			
Figure 1.24	Sha Tin	Pai Tau Village	10.0
(4) Fengshui / Burials / Urns			
Figure 1.25	Sha Tin	Wu Kai Sha Village	8.3
(5) Outside Village Environs Boundary			
Figure 1.26	Tai Po	Ha Hang Village	1.4
(6) Remoteness			
Figure 1.27	Island	Mong Tung Wan Village	5.2
(7) Environment Sensitive Area			
Figure 1.28	Yuen Long	Shan Pui Village	26.8
(8) Former Work Site for Infrastructure Project			
Figure 1.29	Yuen Long	Fung Chi Tsuen	5.4
Total Area of these 8 examples			**82.6**

Sources: Development Bureau; Lands Department; Town Planning Board; Google Earth.

Among the various categories, the most prominent seems to be back alley between houses. In spite of being vacant, their physical condition preclude any housing development. As an example, the red area in the lower panel of Figure 1.22 (which correspond to the black areas on the Development Bureau's map) below denotes back alley. Whilst negligible in size when viewed individually, they actually account for a significant portion when we add up the back alley of all villages within V-zone land. They are included in the counting of 932.9 hectares of V-zone land and represent a substantial portion of the total area.

▼ **Figure 1.22 Back alley in Tsok Pok Hang New Village**



Note: The lot index plan reproduced with permission of the Director of Lands.
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Sources: Development Bureau; Lands Department; Our Hong Kong Foundation.

Some V-zone sites are actually not vacant but occupied by temporary structures, albeit unleased or unallocated by the government. The existence of temporary structures suggests that development and construction of small houses would involve the compensation and resettlement for the residents of the temporary structures (See Figure 1.23 for example).

▼ Figure 1.23 Temporary structures in villages of Wang Chau

Sources: Development Bureau; Our Hong Kong Foundation.

Slope stands out to be another typical reason for being undevelopable among v-zone sites. It is extremely difficult, if not impossible, to surmount the technical difficulties of building small houses on a slope especially those with a high gradient. Even in some rare cases where development is possible, it is not likely that indigenous residents are willing to bear the extra development cost. Consequently, slopes are left undeveloped despite being idle in V-zone land (See Figure 1.24 for example).

▼ Figure 1.24 Slope at Pai Tau Village

Sources: Development Bureau; Google Earth.

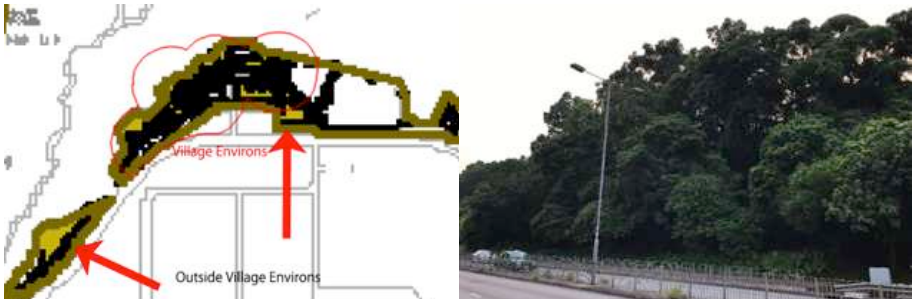
It is not uncommon for land to be undevelopable despite being idle due to reasons associated with fengshui, burials, or urn. Indigenous residents possess the right to forbid development of certain regions in the village designated as "fengshui area" or "Permitted Burial Area". Once identified as "fengshui area", no construction of small house is possible before modification of its boundary. Similarly, development of small houses can be rejected due to existing burials and urns. Figure 1.25 below illustrates an example of a large piece of vacant land in Wu Kai Sha Village where development is impossible due to fengshui reason.

▼ **Figure 1.25 Fengshui Woodland in Wu Kai Sha Village**

Sources: Development Bureau; Our Hong Kong Foundation.

Generally speaking, one condition for small houses to be built is that it should lie on V-zone land as well as within the Village Environs boundary. Village Environs boundary is defined in 1972 as within 300 square feet of the last small house built in the village. Under normal circumstances, V-zone land should lie within Village Environs boundary. Yet, there appears to be cases where V-zone land are outside Village Environs boundary. Figure 1.26 is an example from Ha Hang Village where a significant portion of V-zone land lies outside Village Environs boundary.

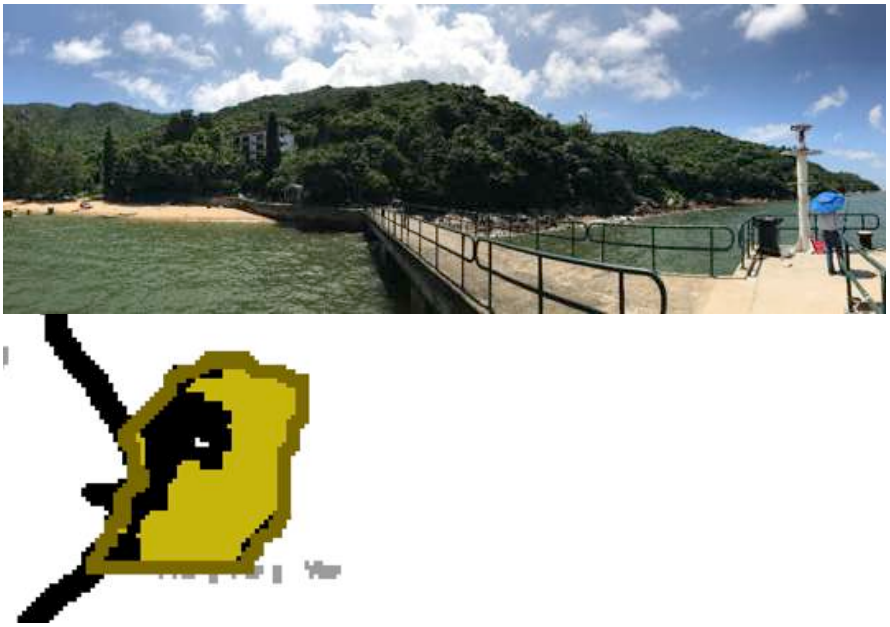
▼ Figure 1.26 V-zone land outside Village Environs boundary in Ha Hang Village



Sources: Development Bureau; Our Hong Kong Foundation.

Remoteness represents a major obstacle when it comes to development of small house in V-zone land. V-zone land are distributed across different districts in Hong Kong, some are situated in remote area, without sufficient infrastructure such as roads. Mere access to these area is of great difficulty let alone development of small houses (See Figure 1.27).

▼ Figure 1.27 Mong Tung Wan Village in remote area



Sources: Development Bureau; Our Hong Kong Foundation.

Some large V-zone area are left vacant because they fall within environmentally sensitive areas. For instance, a significant portion of Shan Pui village is part of the buffering zone for the wetland nearby (Figure 1.28). This suggests that any further development would require additional approval from the Town Planning Board and other relevant government authorities.

▼ Figure 1.28 Environmentally sensitive area in Shan Pui Village

Sources: Development Bureau; Google Earth.

Some of the v-zone land had been allocated as work site for infrastructure project nearby. Yet, after completion of the project, they have not been restored into their original use as small house development (See Figure 1.29 below for an example).

▼ Figure 1.29 Former work site for infrastructure project in Fung Chi Tsuen

Sources: Development Bureau; Our Hong Kong Foundation.

In sum, whilst the above represent only a collection of examples, a central message is clear: for a variety of reasons, many of the sites among the 932.9 hectares of unleased government V-zone land that has remained undeveloped since the "Small House Policy" was implemented in 1972, cannot even support the development of small houses for indignous residents, let alone the possibility of converting them into large-scale housing development for the wider community.

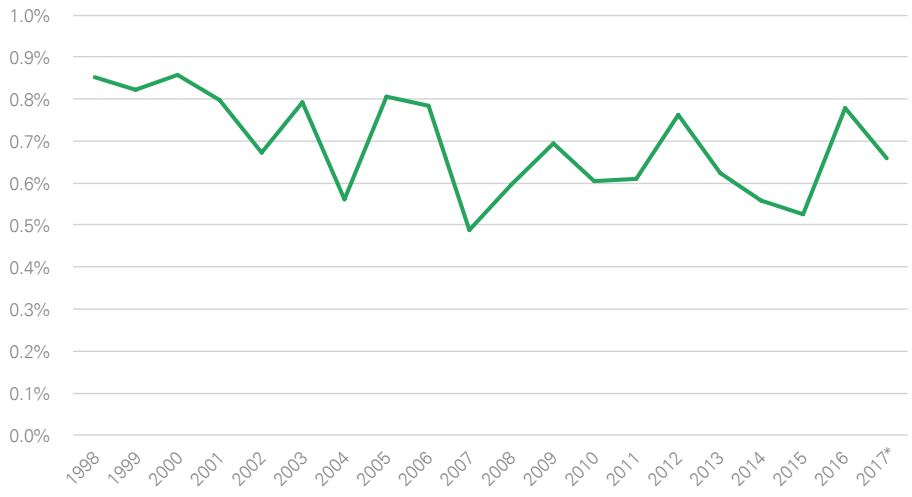
1.4 Population policies

Another, perhaps even more common, argument against increasing land supply is that the government should instead focus on controlling the demand for land by reviewing our population policies. Proponents of this school of thoughts usually opine that new arrivals from the Mainland is placing severe pressure on Hong Kong's capacity on all fronts, ranging from land demand to social welfare.

Article 22 of the Basic Law stipulates that, for entry into the HKSAR, people from other parts of China must apply for approval. Accordingly, Mainland residents who wish to settle in Hong Kong for family reunion must apply for Permits for Proceeding to Hong Kong and Macao, commonly known as "One-way Permits" (OWPs) from the exit and entry administration office of the public security authority of the Mainland at the places of their household registration.

OWPs are documents issued by relevant authorities in the Mainland. The

▼ **Figure 1.30 OWP holders as % of year-end population 1998 – 2017**



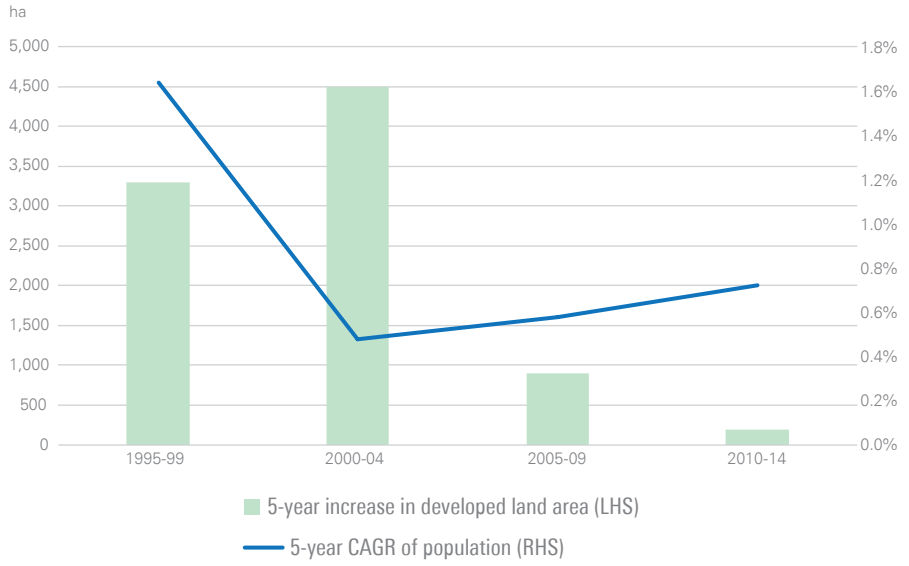
Note: (*) Annualised figure using first half data and mid-year population.
Sources: Home Affairs Department; Census and Statistics Department.

application, approval and issuance of OWPs fall within the remit of the Mainland authorities. The OWP scheme allows Mainland residents to come to Hong Kong for family reunion in an orderly manner through approval by the Mainland authorities in accordance with the laws and regulations of the Mainland. In fact, less than 2% of OWP holders have no next of kin in Hong Kong since the establishment of OWP.

At present, there exists a daily quota for OWPs at 150 persons. For nearly two decades, the annual number of OWP holders never exceeded 0.86% of the year-end population of Hong Kong (Figure 1.30).

The primary contributing factor for the shortage of land and housing resources nowadays, we argue, is the sharp slowdown in the pace of our own land development, especially in the past decade. In fact, being a small open economy like Hong Kong has always been, openness to the world and diversity are the critical elements for our development. We have always been developing new land to accommodate the growing population for more than half a century until the recent years.

▼ **Figure 1.31: 5-year compound annual growth rate (CAGR) of population and 5-year increase in developed land area**



Note: Due to changes in methodology, developed land area only includes land for residential, commercial, industrial, government / institution, open space and transportation use.
Source: Census and Statistics Department.

As a matter of fact, ranging from 0.4% to 0.9% p.a., Hong Kong's population growth rates during 1997 to 2016 have been remarkably lower compared to, say, the 1980s during which a higher-than-1% population growth per year was the norm. Unfortunately, land development has virtually halted, falling sharply behind a significantly slower population growth (Figure 1.31). In other words, the problem of land shortage today originates more from the supply side than the demand side.

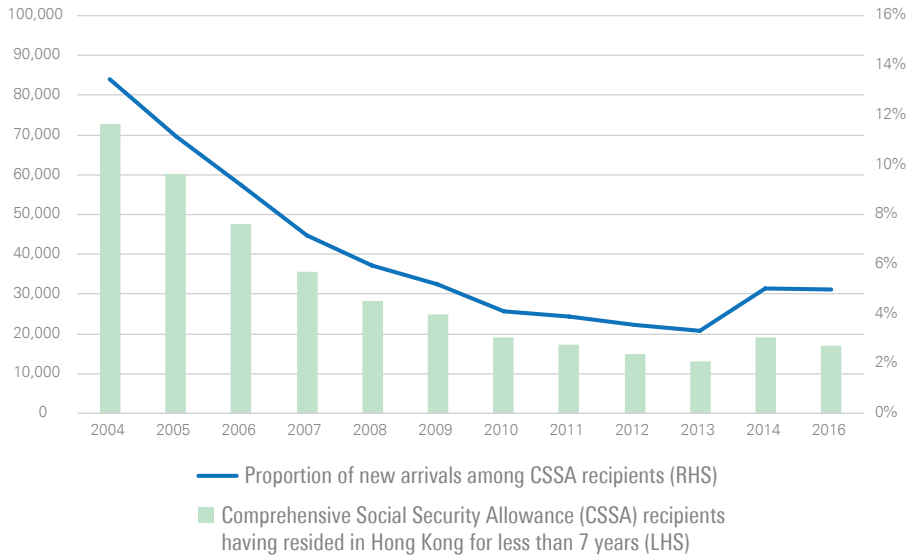
Delving deeper into the socio-economic profiles of new arrivals from the Mainland, a few observations are worth mentioning. In terms of housing characteristics, in 2011, there were a total of 171,322 persons from the Mainland having resided in Hong Kong for less than seven years (PMRs). Among them, 45.1% or about 80,000 persons resided in PRH units. Whilst this share is notably higher than the territory-wide figure of 30.5%, one should note that among the 2.1 million Hongkongers living in PRH units, only less than 4% were PMRs.

Moreover, according to prevailing eligibility criteria for PRH units, the applicant and all family members included in the application form must be residing in Hong Kong at the time of application; and at least half of the family members included in the application form must have lived in Hong Kong for seven years at the time of flat allocation. In other words, PMRs alone, singletons or couples alike, are not eligible for PRH units.

Combined with the fact that almost all OWP holders are the next of kin, usually spouses or children, of permanent Hong Kong residents, it follows that conceivably, these PMRs may not be occupying additional PRH units, since they may be just moving in with their existing next of kin who are living in PRH units.

Furthermore, their reliance on social welfare is limited. There have been views in the community that OWP holders are draining a disproportionately large amount of social welfare resources. However, such claims are not supported by facts. Specifically, Comprehensive Social Security Allowance (CSSA) recipients having resided in Hong Kong for less than 7 years have been on the decrease since 2004, from 72,816 persons to 17,100 in 2016. The corresponding share of these recipients in the total figure also dropped from 13% to 5% over the period in question (Figure 1.32).

▼ Figure 1.32: New arrivals receiving CSSA and Proportion of new arrivals among CSSA recipients

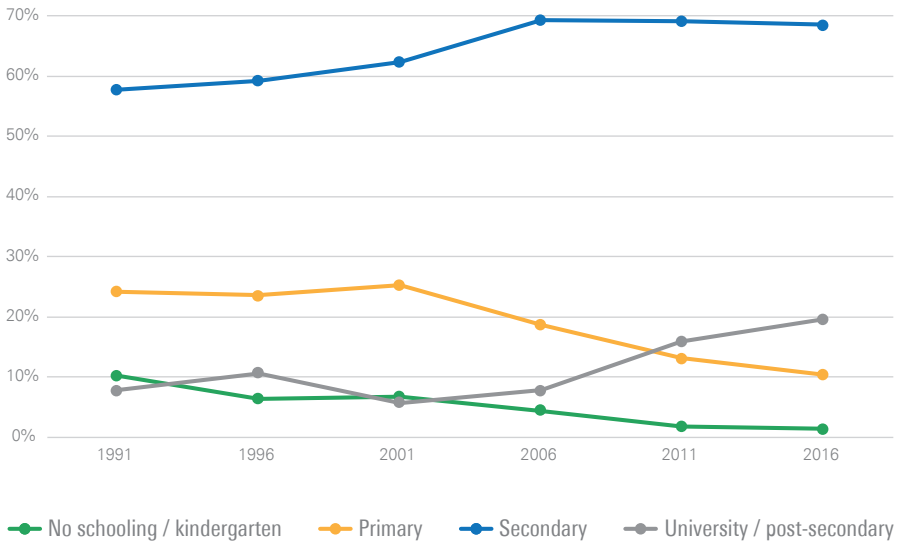


Sources: Legislative Council; and Census Statistics Department.

It warrants particular attention that on December 17, 2013, the Court of Final Appeal handed down the judgment of a judicial review case on the residence requirement of the CSSA Scheme. The judgment declared that the Government should restore the "one-year residence requirement". As a result, new arrivals must reside in Hong Kong for one, instead of seven, year(s) before they are eligible for CSSA, rendering application for CSSA easier for new arrivals from the Mainland. Yet, as Figure 1.32 shows, whilst the number of CSSA recipients having resided in Hong Kong for less than 7 years picked up 13,105 in 2013 to 19,127 in 2014, it quickly stabilised to 17,000 in 2016, and its share maintained at a modest 5%, which is noticeably lower than its 10-year average from 2004 of 6.7%.

In addition, their educational attainment has been improving. In particular, the share of PMRs having received primary education or below dropped from 34.5% in 1991 to 11.8% in 2016, whereas the corresponding share for those having received tertiary education or above more than doubled from 7.8% to 19.6% over the same period (Figure 1.33). These changes were more noticeable over the decade leading to 2011.

▼ **Figure 1.33 One-Way Permit Holders by educational attainment**



Sources: Census and Statistics Department; Home Affairs Department.

In our previous research report "Riding on Mainland's Economic Development in a New Era", authored by Prof. PW Liu, Prof. Joanna Lam, and Kenny Shui, we have already addressed the concerns of new arrivals, particularly from the recent immigrants "diluting" the opportunities for our local people. Quoting from the said report, we found that for the people entering the labour market during the period 1981 to 2000, returns to schooling of male natives have been consistently higher than those to immigrants, while both sets of figures have improved from between the two censual periods (2001 and 2011) (Table 1.5). Meanwhile, the report also find that the gap between the mean earnings of new male immigrants and that of male natives narrowed (the former catching up with the latter) substantially from 48.4% in 2001 to 27.6% in 2011, a phenomenon typical in an economic assimilation process commonly observed in many countries that receive a large number of immigrants.

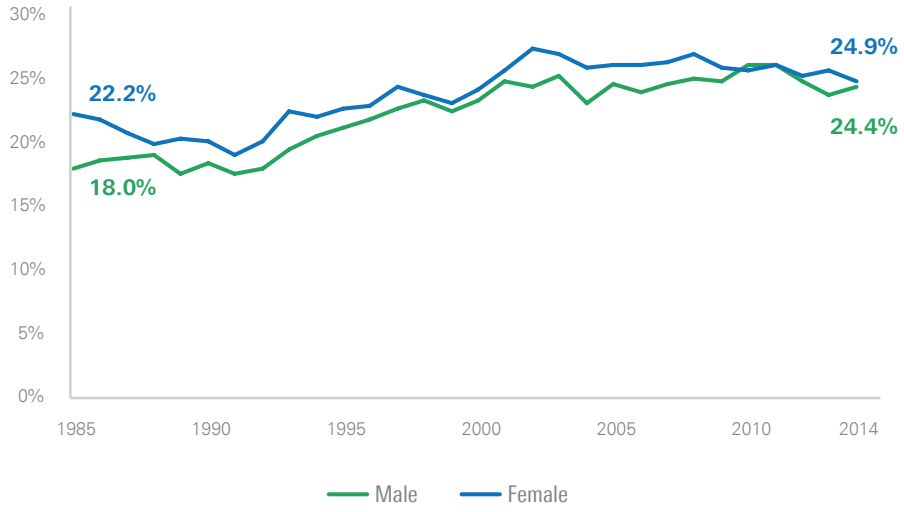
▼ **Table 1.5 Returns to schooling of male natives and immigrants and intercensal change, 2001 - 2011**

	Natives			Immigrants		
Year of Labour Market Entry	2001	2011	Inter-censal Change (2011-2001)	2001	2011	Inter-censal Change (2011-2001)
1996-2000	0.147	0.167	0.02	0.117	0.137	0.02
1991-1995	0.145	0.167	0.022	0.116	0.141	0.025
1986-1990	0.16	0.169	0.009	0.101	0.116	0.015
1981-1985	0.159	0.165	0.006	0.091	0.092	0.001
1976-1980	0.14	0.137	-0.003	0.068	0.08	0.012
1971-1975	0.124	0.097	-0.027	0.07	0.053	-0.017
1966-1970	0.106	0.057	-0.049	0.064	0.038	-0.026

Sources: Population Censuses 2001 and 2011; Census and Statistics Department.

Meanwhile, Prof. Richard Wong has estimated that the return rate to school of university graduates from 1985 to 2014 exhibited a persistent upward trend, with the rate of return to female graduates gaining 6.4 ppt. over the three decades in question, whereas that to male graduates also up by 2.7 ppt. (Figure 1.34). In short, there is no evidence of new arrivals diluting labour market opportunities of the locals.

▼ Figure 1.34: Rate of return to school of university graduates by gender, 1985 - 2014



Source: Our Hong Kong Foundation.

As a matter of fact, just like other top-notched World Cities such as London and New York, Hong Kong has been a diverse city taking in aspiring individuals from all around the globe. Statistically, the aforementioned three cities have a strikingly similar mix of foreign-born residents at around 40% (Table 1.6).

▼ Table 1.6 Share of residents by place of birth

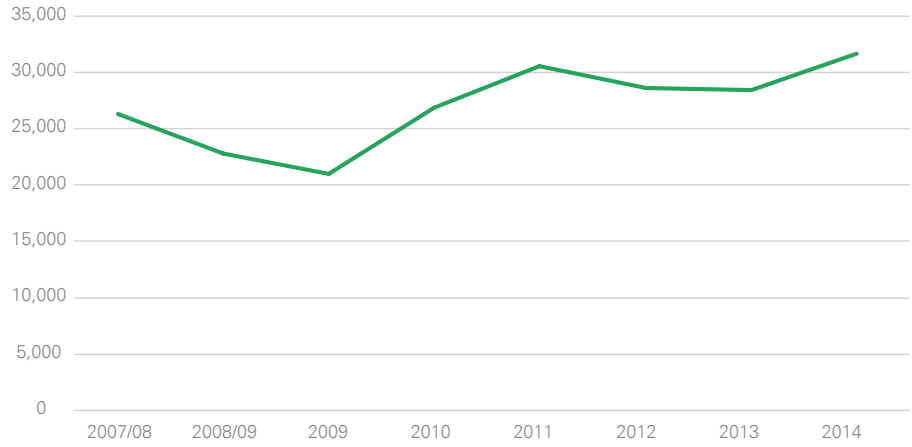
	Foreign-born	Local-born
New York (2011)	37%	63%
London (2011)	37%	63%
Hong Kong (2016)	39%	61%

Sources: Census and Statistics Department; Migration Observatory of the Oxford University; Department of City Planning of New York City.

This observation brings out another important point: beside Mainland Chinese, Hong Kong is also home to a lot of people from other parts of the world. To think that only Mainland Chinese, or OWP holders in particular, are the only source of population pressure on our housing and other social resources is clearly biased.

For example, the number of visas granted under the "General Employment Scheme" (GES) during the past few years average to be some 30,000 per year (Figure 1.35). Under GES, these are outside talents filling positions which cannot be readily taken up by the local workforce, provided that the remuneration package commensurate with the prevailing market rate of Hong Kong. Importantly, these professionals must have accommodation needs, either addressed by their employers in the form of housing allowance (in kind or in cash), or they themselves must seek accommodation in the private rental market.

▼ **Figure 1.35 Employment Visas under 'General Employment Policy'**



Source: Immigration Department.

In addition, there were on average some 18,000 visas granted to dependants of those who already became permanent residents of Hong Kong. Note that this policy does not apply to Chinese residents of the mainland (as they should be covered by the OWP system). Also, the rate of success for the application of this type of visas is relatively high (Table 1.7) and it normally takes only six weeks to process these applications.

▼ Table 1.7: Number of dependant Visas

Year	Applications Received	Applications Approved
2007	21,297	18,692
2008	22,282	19,043
2009	20,094	17,080
2010	24,125	20,385
2011	24,752	19,564
2012	23,364	18,357
2013	22,456	18,406
2014	21,883	18,830
2015	21,006	17,874
2016	21,010	17,250
2017 1H	10,628	8,704

Note: Figures exclude those cases of which sponsors acquire their entry for residence through Immigration Arrangement for Non-local Graduates (IANG), Quality Migrant Admission Scheme, Capital Investment Entrant Scheme, Admission Scheme for the Second Generation of Chinese Hong Kong Permanent Residents and other schemes allowing mainland residents coming to Hong Kong for employment, training or studying.
Source: Immigration Department.

In conclusion, analysis of relevant statistics demonstrates that the shortage of land and housing resources today is not the result of a drastic increase in population growth - in fact, such growth has been on the decrease for more than three decades - but the sharp slowdown in the pace of land and housing production of the city. From an even more macro perspective, Hong Kong will see the peak of our labour force as soon as next year, according to the projection of the Census and Statistics Department. Given OWP holders are younger than our general population, they represent a viable source of new labour supply as our population ages.

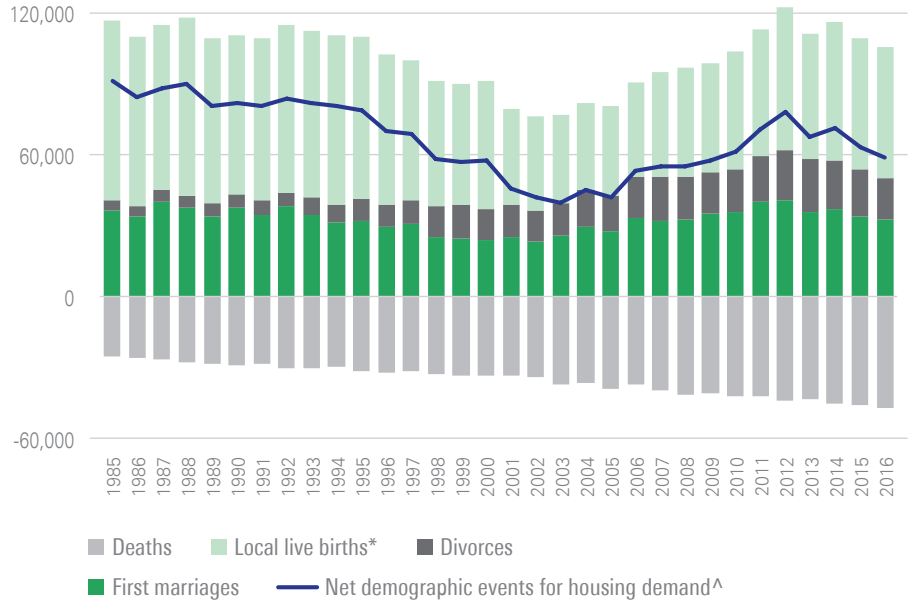
In fact, facing ageing populations, a lot of economies, particularly the developed ones, have been actively engaged in the "battle for talents" on the global platform. Hong Kong is no exception. As our population ages and labour force expected to dwindle, the last thing we should do is to embrace isolationism, especially for a small open economy like Hong Kong.

2

A Fundamental Analysis of the Housing Market

In the second report in our "Land & Housing Research Series", we have opined that housing demand is solidly anchored by (a) strong demographic forces (e.g. first marriages, live births, and divorces); (b) a healthy balance sheet (e.g. historically high ratio of private homeowners having fully paid their mortgages). As a result, private home prices surged given housing supply has been near its lowest level in history over the past decade. This Chapter provides an updated assessment on the private housing market, and fundamental analysis suggests that the said market is still very tight, and we expect such demand-supply tightness to sustain for a while.

▼ **Figure 2.1 Selected demographic event related to housing demand**



Notes: (*)Refers to babies whose parents are both permanent Hong Kong residents.
(^)The number of: [Local live births + Divorces + First marriages – Deaths]
Source: Census and Statistics Department.

Figure 2.1 replots the key demographic events related to housing demand over the past three decades, namely, the number of (a) first marriages; (b) local live births, i.e. total number of live births excluding those whose parents are not both permanent Hong Kong resident; (c) divorces; and (d) deaths. This is based on Figure 9 of our second research report[3], adding the number of deaths and extending the time-series to include the 2016 data.

We understand that the relationship between the mere episodes of demographic events as shown above and the actual demand for housing units is non-trivial, and would call for econometric estimation to reliably ascertain the actual housing demand as a result of these demographic events. For example, one episode of first marriage in a given year and another episode of live birth a few years later may pertain to the same household, which could result in some sort of double-counting, as far as housing demand in terms of unit, is concerned.

Notwithstanding this limitation, we believe these figures could still serve as a rough gauge of the level of underlying housing demand over time. For example, it is easy to comprehend a newly-wedded couple would demand an additional housing units. Similarly, families having a new-born may also demand a larger flat, raising the total demand for residential space in terms of area.

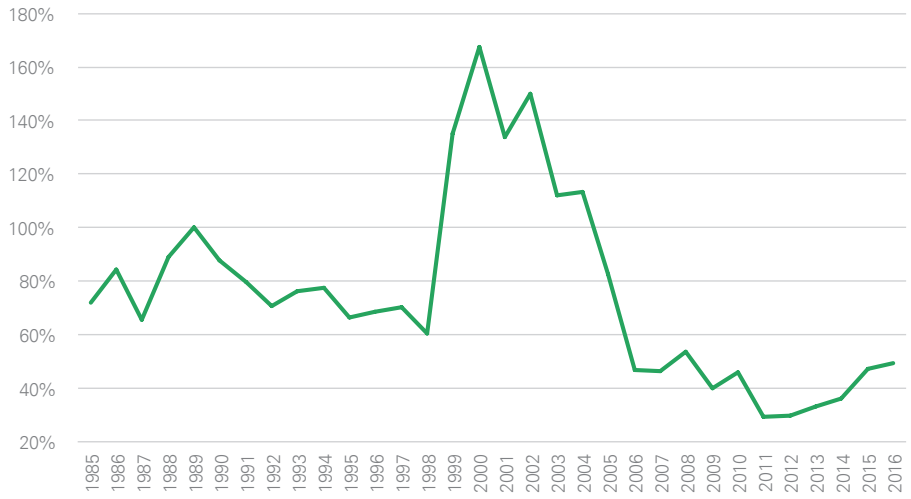
Note that in Figure 2.1, the number of deaths is presented on the negative axis, since contrary to marriages, births and divorces, deaths should decrease instead of increase housing demand. The black line represents the excess of the sum of the number of first marriages, local live births, and divorces, over the number of deaths. For convenience's sake, the said difference is defined as "Net demographic events for housing demand", serving as a rough proxy of the net demographic forces behind the housing market.

Over the past seven years (2010 - 2016) after the Global Financial Crisis (GFC), net demographic events for housing demand averaged 67,290. Despite being 14% lower than the corresponding average (78,368) of the 15 years leading up to the Millennium (1985 - 1999), it represented a 37%-increase from the average (49,230) during the first decade of the Millennium (2000 - 2009).

More importantly, total housing supply, i.e. the sum of completion of new private, public rental housing (PRH), and Homeownership Scheme (HOS) units, over the period has exhibited significant changes over the years. As Figure 2.2 demonstrates and referencing the three periods as identified above, for every 100 net demographic events for housing demand, there were on average 80 housing units completed every year during 1985 to 1999. This ratio surged to 95% in the subsequent decade, but collapsed to a mere 39% for the past seven years, highlighting the sharpness of undersupply of housing in recent years.

3. Please refer to "Rethinking Public Housing Policy, Building Sustainable Land Reserve" (October 2016), Our Hong Kong Foundation.

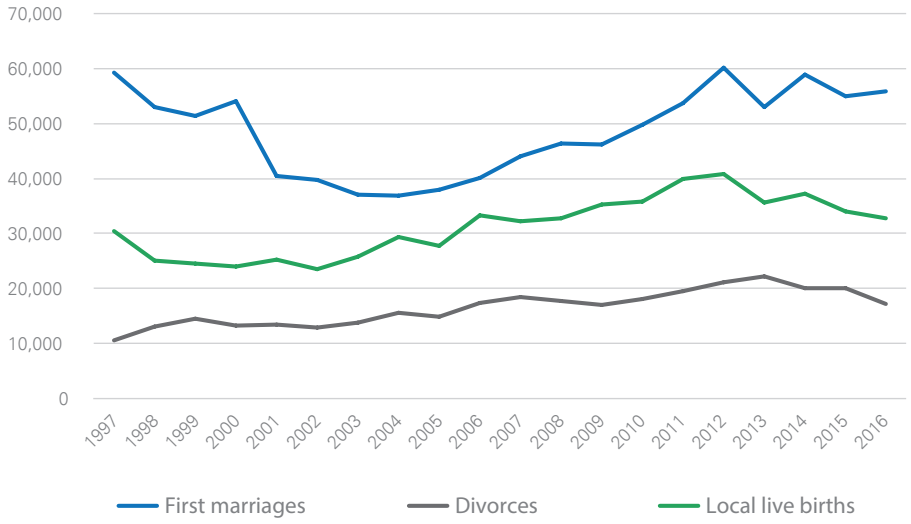
▼ **Figure 2.2 Total housing supply as a share of net demographic events for housing demand**



Sources: Census and Statistics Department; Rating and Valuation Department.

Demographically, divorces aside, housing demand is typically generated by (a) first marriages, which usually spawn new households; and (b) births, which normally means the need for larger living space for the same households. In the recent years, it is observed that housing demand stemming from these two sources have both increased substantially.

▼ **Figure 2.3 Selected demographic events**



Source: Census and Statistics Department.

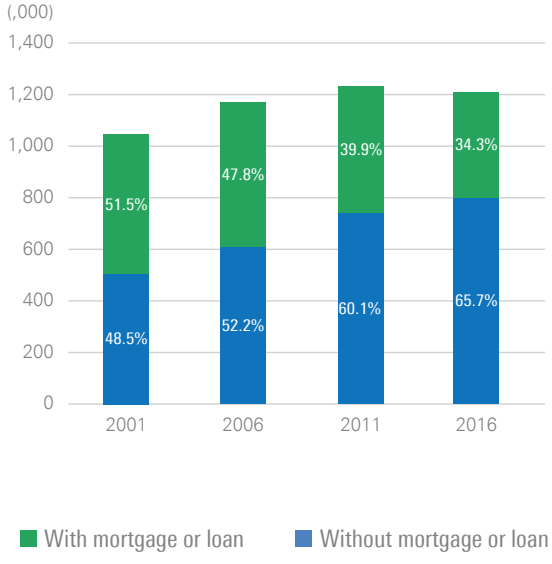
Specifically, the 7-year average during 2010 to 2016 of first marriages was 42% higher than the figure in 2003, whereas the corresponding 7-year average of local live births grew 49% compared to the 2003-level as well (Figure 2.3). Intuitively, these statistics suggest that housing demand has been across-the-board, from smaller units (e.g. <500 sf Gross Floor Area (GFA)) that are conceivably for newly-wedded couples, to mid-sized, three-bedroom units (e.g. c700 sf GFA) for three- or four-person families.

As already noted in Figure 12 in our second research report, the share of private homeowners who have their mortgage and loan fully repaid have increased substantially over the past decade or so. The latest 2016 Population By-census further confirmed this trend, putting the latest number of fully-paid owner-occupied private units at nearly 800,000, or 65.7% of all owner-occupied private residential properties in the territory (Figure 2.4(a)).

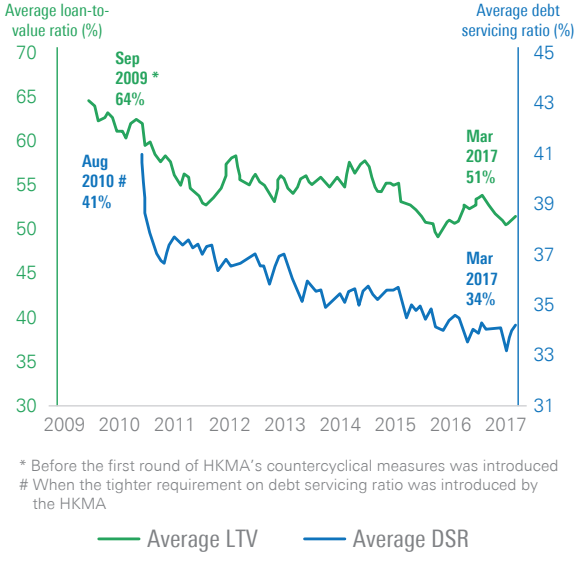
Furthermore, the gearing of the marginal buyers of properties have remained low. According to HKMA's statistics, average Loan-to-Value (LTV) ratio of new residential mortgages has hovered around 50% to 55% since 2011, with the latest reading at 51% in March 2017. In addition, the debt-servicing ratio for these new mortgages stood at a mere 34% in March 2017 (Figure 2.4(b)). This is just half of the 67% published in the "Hong Kong Economic Report" (Q1 2017), which is arrived at by assuming an median income-earning household (excluding those living in public housing) servicing a mortgage with 70% LTV ratio and a 20-year tenor for a 45m^2 flat in the private market.

▼ **Figure 2.4 Balance sheet and income conditions of the housing market**

(a) Number of owner-occupiers, by status of mortgages / loans



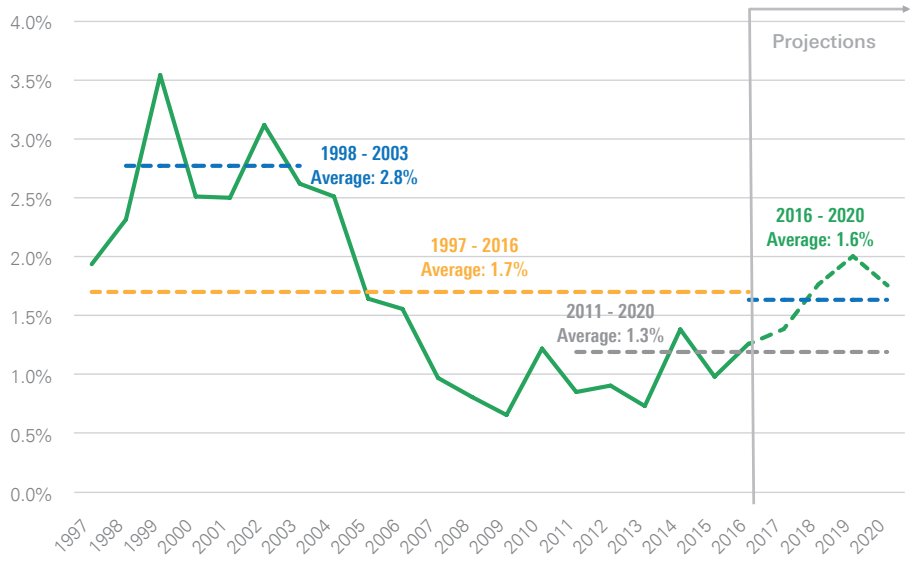
(b) Newly approved mortgage loans: affordability indicators



* Before the first round of HKMA's countercyclical measures was introduced
\# When the tighter requirement on debt servicing ratio was introduced by the HKMA

Sources: Hong Kong Monetary Authority; Population Censuses.

▼ Figure 2.5 Private homes completion as % of total private housing stock



Sources: Rating and Valuation Department; Our Hong Kong Foundation.

In short, the overall gearing of existing property holders is healthy as revealed by the Population By-census data, whereas the new buyers are also financially sound both in terms of their balance sheet and income conditions.

On the supply side, given the previous-term Administration's sustained efforts to increase land supply for housing development, there have been views that the private housing market might witness a certain degree of over-supply. We do not share that view.

During 1998 to 2003 when housing prices saw significant corrections, new private housing supply, if expressed as a share in total private housing stock of the corresponding year, never stayed below 2.3% and averaged to be 2.8%. This is in a startling contrast with its counterpart for the past decade (2007 - 2016), which measured 1.0% (Figure 2.5).

In absolute terms, it represented an annual average of more than 28,000 new private flats per year during 1998 to 2003, or 56% higher than the current supply target of 18,000 units, not to mention the actual annual average completion was merely 11,000 units for the past decade.

Hence, whilst we forecast the government to meet and exceed its supply target of private housing units over the next few years, the average new supply as % of total stock is still just a modest 1.6% for the 5-year period 2016 - 2020, close to the long-term average of 1.7% for the two decades ended 2016. But if we extend backward the comparison to cover the decade ending 2020, the corresponding average would be even lower, at 1.2%.

In a nutshell, fundamental analysis above suggests that the current uptrend of the housing market is supported by genuine end-user demand on the back of sound demographics, income conditions and balance sheet strength. Coupled with a persistently low level of housing supply over the past decade and in the foreseeable future, the housing market is expected to remain tight.

3 Policy Recommendations

In Chapter 1, we have furnished an in-depth investigation into a few prominent common counter-arguments against increasing land supply, and have explained why these arguments are, in our view, misconceptions. Chapter 2 went on to conduct a thorough analysis of the private residential property market, and have concluded that fundamental factors suggest that the housing market is facing a chronic and severe supply-demand imbalance.

Therefore, it is unrealistic to rely on administrative demand-management measures such as even harsher punitive taxes to cope with our housing problem. The real solution must lie in the supply side, and this Chapter is going to raise and discuss several policy recommendations.

3.1 Short- to medium-term measures

We believe the urgency and severity of the problem calls for quicker solutions that could possibly yield visible results in a shorter time frame. In this connection, in our latest published report[4] of our "Land & Housing Advocacy Series", we have already proposed the government to promote public-private partnerships (PPP) to increase land and housing supply. The ensuing section shall outline the key features of the possible modus operandi of the said PPP scheme.

4. Please refer to "From Large-scale Reclamation to an Ideal Home" (April 2017), Our Hong Kong Foundation.

3.1.1 PPP to release development potentials of private land reserve

(1) Possible modus operandi

Currently, private land owners have a considerable amount of land (mainly in the New Territories). However, given the remote locations of and the lack of

supporting infrastructure surrounding these sites, large-scale development is often difficult. The determination mechanism of differential land premium also contributes to the problem, should the land owners attempt to change the land use of the sites, e.g. from agriculture to residential.

We recommended the government establish a mechanism to collaborate with private land owners and provide policy support, enabling them to utilise their land reserve for residential development within designated areas. As part of the PPP scheme, private land owners are required to either (a) allocate certain portion of the said land to the government for the development of subsidised sales flats; or (b) to construct subsidised sales flats according to specifications stipulated by the government, who will pay for the construction costs of the units. These units will then be returned to government for sales to eligible households. The exact ratio of private and public units under the PPP should depend on, among other things, the magnitude of infrastructure investment and policy facilitation provided by the government over the process.

The latter arrangement would be analogous to the mechanism of the previous Private Sector Participation Scheme (PSPS) for HOS units, with PSPS using government land for development, whereas the currently proposed PPP scheme would involve privately owned sites. Such a collaboration model between the public and private sectors has not been unfamiliar in Hong Kong. Some prominent examples of HOS estates under the PSPS include Charming Garden in Yau Ma Tei, Lung Mun Oasis in Tuen Mun, and Bauhinia Garden in Tseung Kwan O. Indeed, City One Shatin, one of the largest private housing estate in the city, completed in 1980s, was exactly the product of a PPP. Under the PPP, private developers were responsible for the land reclamation works of the site in question, after which 70% of the site was returned to the government for the development of public housing and other facilities, whereas the remainder supported the construction of City One Shatin. Another example of PPP of a private housing development project would be Park Island between 2002 and 2011.

Due to historical reasons, land ownership patterns in Hong Kong are often scattered in the New Territories. It is not uncommon to see pockets of government land and privately-owned sites situated next to each other. In such cases, the government can consider facilitating a large-scale development by including the nearby government sites into the PPP scheme, such that the development potentials of both privately owned land and government land could be realised.

To maximise development potentials, the government can also consider up-zoning the relevant areas under the PPP scheme so that more units, both private and public, could be built. Of course, the private developers are required to settle the relevant amount of differential land premium.

Conceivably, to yield the largest number of units on a given plot of land, certain site improvement works, e.g. road enhancement, additional pipes and wires, etc., are required. These works typically involve multiple government bureaux and departments. For the PPP scheme to achieve maximum efficiency, the government must facilitate this process by expediting the relevant approval procedures. We shall discuss the streamlining of approval processes in the next section.

We note in the first Policy Address of the fifth term of HKSAR government recently published, that a new type of subsidised sales units, the "Starter Homes", would be built using an approach similar to the PPP scheme proposed above but on a site originally included in the 2017/18 Land Sales Programme. Over the long term, new sources of land in addition to those the government already has on hand must be found so that the supply of "Starter Homes" is sustainable, without compromising supply of other types of housing. Otherwise, in the Chief Executive's (CE) own words, it would be merely "robbing Peter to pay Paul". The proposed PPP scheme is exactly one option to consider for new sources of land for the provision of "Starter Homes".

We believe with a fair, open, and just process in place, PPP command promising potentials as a short-term relief that the city is in dire need for, as far as land and housing production is concerned. The key principle of the PPP mechanism is that the net social gain resulting from speedier public housing supply would not be lower than the net gain captured by the relevant private developers.

However, we must also reiterate our firm view that a basket of land supply options should be simultaneously, rigorously, and expeditiously pursued for short-, medium-, and long-term solutions, with PPP as a short-to-medium term solution, and large-scale reclamation outside the Victoria Harbour as a medium-to-long term solution. We believe that the active pursuance of longer term solutions would send a strong signal of the Administration's future direction of land supply, which would be helpful in reaching agreements for shorter term solutions.

(2) Overseas examples

We have examined and summarised below, a number of PPP projects around the globe.

Generally, governments engage in PPP out of:

a. The need to attract new businesses;

b. The need for labour and expertise to complete large-scale developments;

c. Involvement of private ownership of land; and

d. Risk sharing.

In terms of public commitments, the government usually engage in (a) pre-development work including acquisition of land and land use plans; (b) post-development work including provision of infrastructure and facilities for the area; and (c) securing funding.

▼ Figure 3.1 United Kingdom: the Kidbrooke Village

Source: Berkeley Homes.

Covering 109 hectares in the suburb, the Kidbrooke Village is developed by a private firm, the Berkeley Homes, in partnership with the Royal Borough of Greenwich. This PPP was initiated to regenerate the old Ferrier Estate that had fallen into disrepair since the 1990s. The private firm has entered into a Development Agreement with the authority for the Kidbrooke site. Under the agreement, the firm has to develop 4,763 new homes, in which 35% are Affordable Homes. The development has served as an inspiration for the 2014 London Housing Strategy, and has received a number of awards recognizing its regeneration progress.

▼ Figure 3.2 Netherlands: Utrecht, De Woerd

Source: Bouwfonds.

The De Woerd is a 17-hectare residential project in Utrecht West, jointly developed by the local authority and three private firms. One of the initiators of this project, Bouwfonds, owned the land and had submitted several development plans to the government. Meanwhile, the local government required additional labour to develop this otherwise deserted area.

The government facilitated the process by granting relevant permits, securing public funding and taking up operation and maintenance work of public area. Developers also enjoyed considerable flexibility as the government only regulated a few conditions regarding the design of public space.

The projected was completed in 2009, turning the originally greenfield site into a residential area with 500 dwellings.

▼ **Figure 3.3 United States: Whitney Apartment**

Source: An Examination of Public-Private Partnerships; and Elaine A. Vrooman.

The Whitney Apartment project situates in Bethesda in Washington. The residential project was jointly developed by the local authority and a team of developers. This PPP arose after the developers initiating a land exchange to assemble a larger and connected site for residential development. As a pre-condition of the land exchange, the developers were required to construct a new underground public carpark. This was considered beneficial to the urban development of the area.

Upon completion of the development, the government purchased the public carpark at a previously agreed price, and has undertook the maintenance and operation of the public space including the routes connecting the main road and the development.

The project was completed in 2006, raising development density of the area and providing a new and larger public carpark.

3.1.2 Composite development

As another avenue to provide developable space for public facilities, we have pointed out in our previous research report that there exists certain land resources in the urban area that could be more optimally utilised to achieve maximum efficiency. In particular, we have studied the possibility of composite development on sites zoned as "Government, Institution or Community" (GIC), by replacing the original dwarfed, single-use structure by a higher-rise, multi-use structure. The original facilities or businesses can be relocated in same levels of the new building. The remaining levels are then available for other public uses. For instance, we have explicitly stated that "we hope that these land resources…can at least be considered to support a denser development of other public facilities, such as community centres"[5].

In this connection, we are glad to see Mrs. Carrie Lam, our CE, has undertaken in her election manifesto that the Administration shall "consider a model of "multiple use" multi-storey development for existing Government land in order to consolidate facilities and release land for community use". She also committed to "continue to support "Active Ageing" with hardware and policies such as the construction of additional community centres in different districts to provide services and space to help the elderly to remain fit and alert".

On top of the researches we have previously conducted, we would like to provide two more examples of GIC sites where composite development might be possible:

(1) A refuse collection point on Fu Hing Street in North District (Figure 3.4); and

(2) A public toilet and refuse collection point at the junction of Tai Nan Street and Boundary Street in Sham Shui Po (Figures 3.5).

▼ **Figures 3.4 Refuse Collection Point, Fu Hing Street**

Source: Google Earth.

5. Please refer to Page 120 of "Rethinking Public Housing Policy, Building Sustainable Land Reserve" (October 2016), Our Hong Kong Foundation.

▼ Figures 3.5 Public Toilet and Refuse Collection Point, Tai Nan Street

Source: Google Earth.

In fact, we can generalize the principle of composite development to sites with other land uses, such as Open Space (O) and Other Specified Use (OU). Some facilities on these sites have the potential to be integrated into a composite structure.

For example, the Cheung Sha Wan Wholesale Food Market located on Yen Chow Street West (Figure 3.6). The site is currently zoned as OU. It covers an area of 10 hectares and accommodates a single-storey structure. The facility has the capacity to accommodate at least another storey for community centres run by Non-government Organisations (NGOs).

▼ Figure 3.6 Cheung Sha Wan Wholesale Food Market

Source: Google Earth.

Apart from pulling down and redeveloping existing structures, the government can also integrate the idea of composite development into upcoming development projects. For example, the previous-term government has committed in the 2017 Policy Address to earmark HK$20bn in the coming five years to launch 26 projects to develop new or improve existing sports and recreation facilities amounting to a total of 54. These facilities could be potential candidates for composite development to provide additional space for new public facilities, e.g. community centres for nearby residents.

Through composite planning on GIC sites, sports sites and other public space, more space is available for citizen's leisure and satisfying community needs. These community facilities are highly accessible because the sites are situated in the heart of the city with a mature transportation network. In the aforementioned examples, Cheung Sha Wan Wholesale Food Market is 4 minutes' walk from Nam Cheong MTR and 10 minutes' walk from residential area including Fu Cheong Estate and Nam Cheong Estate.

In practice, a series of town planning and other land development procedures are required for composite development. This may include Sections 12 and 16 applications submitted through the Town Planning Board (TPB) to relax the building height and to change the land use of the relevant sites. Assessments on transportation impacts, and special considerations in architectural designs to avoid noise and / or air quality nuisance are also called for.

3.1.3 Reviewing the effectiveness of demand management measures

As analysed in Chapter 2, the solid housing demand from genuine end-users, coupled with the lowest levels of housing supply in history, have naturally resulted in an era with one of, if not the tightest housing market supply-demand balance(s) of all times. Against this backdrop, the Hong Kong Monetary Authority (HKMA) and the government have rolled out multiple rounds of macro-prudential measures on property mortgages and additional stamp duties, since 2009 and 2010, respectively.

Understandably, these measures were put in place to:

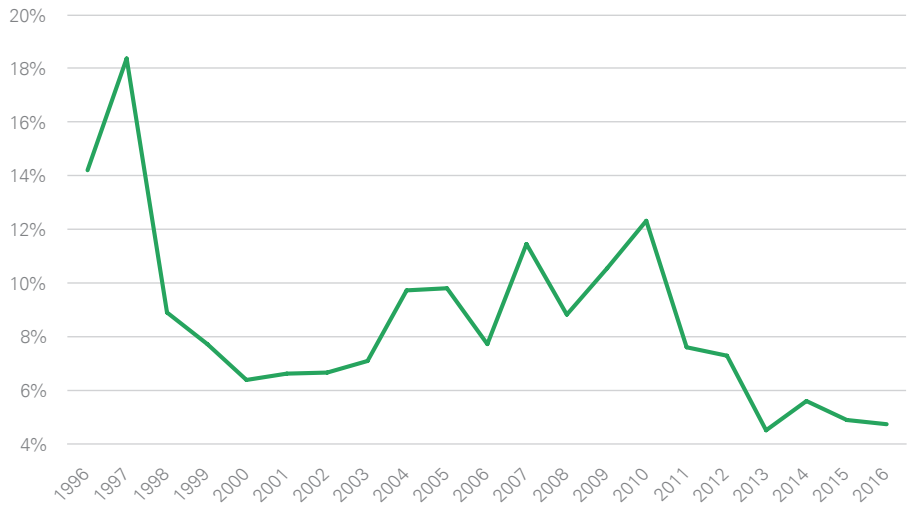
(1) Ensure that new buyers of private residential properties are financially strong enough to sustain significant shocks in the financial market in general, and the property market in particular, e.g. capping the LTV ratios and the introduction of stress-tests on mortgage applicants assuming interest rate would rise by 300 bps; and

(2) Discourage short-term speculators (e.g. the Special Stamp Duties (SSD) levied on short-term flipping), non-local buyers (e.g. the Buyers' Stamp Duties (BSD) levied on buyers who are not permanent Hong Kong residents), and long-term investors (e.g. the Double Stamp Duties (DSD) levied on buyers who already own a property at the time of purchase).

By doing so, the only buyers who are subject to neither punitive taxes nor stringent mortgage requirements, are the financially healthy, permanent residents of the city who wish to purchase private homes for self-use.

Given these demand management measures have been in place for the eighth year now, we believe it is high time the government thoroughly and objectively reviewed the costs and benefits associated with these said measures on the property market.

▼ **Figure 3.7 Private residential property transactions as % of total stock**



Sources: Rating and Valuation Department; CEIC.

First of all, with the host of demand management measures in place, private residential property transactions, particularly in the secondary market are sharply suppressed. Expressed as a share of total private housing stock, the turnover rate of private homes plummeted to an average of 4.9% over the past four years (2013 - 2016). This compares with the 20-year average since the Handover of 8.3% (Figure 3.7).

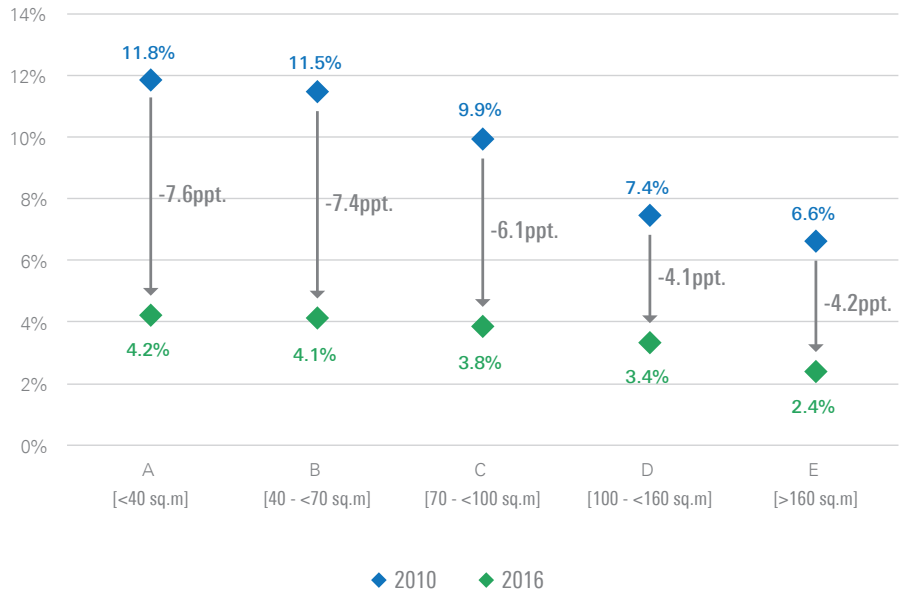
To give further context against which the figures could be viewed, notice that even in the year 2000, turnover rate of private homes stood at 6.4%, which was its lowest level in the whole first decade of the Millennium. That is still 36% higher than our latest reading of 4.7% in 2016. Given these demand management measures were aimed at eliminating all but local, genuine end-user demand for properties, if there were one period in history that would best approximate a market in which there were no (or the least amount of) speculative, non-local, or investment demands, then 1998 to 2003 would be a viable candidate.

In fact, given the said period was characterised by an unemployment rate that reached 8% and a successive deflationary period lasting 68 months, it is not exaggerating to state that property demands, be it from speculators or genuine end-users, should be at its trough as well. In other words, the demand management measures have suppressed transaction turnover to such an extreme extent that the current churn rate is even lower than the period characterised by the most severe economic and fiscal headwinds since the Handover.

Therefore, there is a case that these measures might not be affecting only investment and speculative demands, but are in fact, hurting end-users as well. This is not difficult to comprehend, especially with the macro-prudential measures imposed by the HKMA, e.g. requiring home buyers to pay upfront a 40% down-payment for properties with value below HK$7m, and even harsher LTV ratio restrictions for higher-priced properties. Such requirements have effectively tilted the balance of homeownership opportunities, strongly favouring those who are already endowed with other assets, be it other properties or access to parents' financial support at the time of purchase.

Equally importantly, another side effect of these measures is that it has frozen up the "trade-up chain" in the residential property market. Because of the stringent mortgage requirements, even families who originally own, say, a 500-sf two-bedroom apartment, might be unable to "trade up" and purchase a, say, 800-sf three-bedroom flat, even though home prices have appreciated substantially over their holding period. This is further exacerbated by the 15% Ad Valorem Stamp Duties payable (rebated if the sale of the old unit is completed within six months of the purchase of the new one) if the buyer in question wishes to purchase the new unit first and disposes of the old unit later.

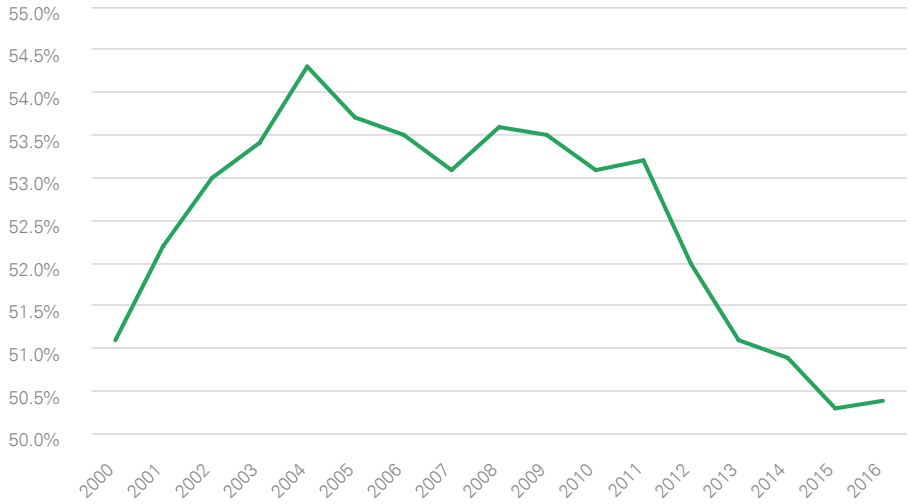
▼ **Figure 3.8 Transaction turnover rate of private homes by class**



Sources: EPRC; Rating and Valuation Department.

This conjecture is supported by a further analysis into the transaction turnover rates of our private residential property market. Specifically, if we breakdown the churn rate by unit class, it is revealed that the churn rates of Classes A and B units, which are smaller units for the mass market of newly-wedded couples and families with new-borns, have suffered much greater deterioration from 2010 (before many of the demand management measures were introduce) to 2016, compared with those of Classes D and E, which are larger units (Figure 3.8).

▼ **Figure 3.9 Homeownership rate**



Source: Census and Statistics Department.

This is also consistent with the observation that homeownership rate has been on a sharp decrease since 2011. As home prices soared against a supposedly growing housing demand stemming from solid demographics, newly-formed households, be it due to marriages or divorces, have to resort to other types of housing, including renting private flats or applying for public housing, if they cannot afford homeownership in the private market. As a result, homeownership rates for 2015 and 2016 were 50.3% and 50.4% respectively, both being the lowest levels since the onset of the Millennium (Figure 3.9).

Further confirming the existence of unsatisfied demand for homeownership is the rental market. Since the Handover, rental growths for Classes A and B units have been fairly in sync with the overall level. Typically, when the rental growth of Class A units exceeds that of the overall market by at most 10 ppt., the former would start to converge to the latter. This has always been the case until the aftermath of the GFC, when the rental growths for both Classes A and B units started to significantly outpace that of the overall market, staying well above their historical averages for seven years and counting, showing no signs of mean-reversion (Figure 3.10).

▼ **Figure 3.10 Private residential rents: accumulated growth for Class A and Class B units since 1Q 1997 relative to the overall market**

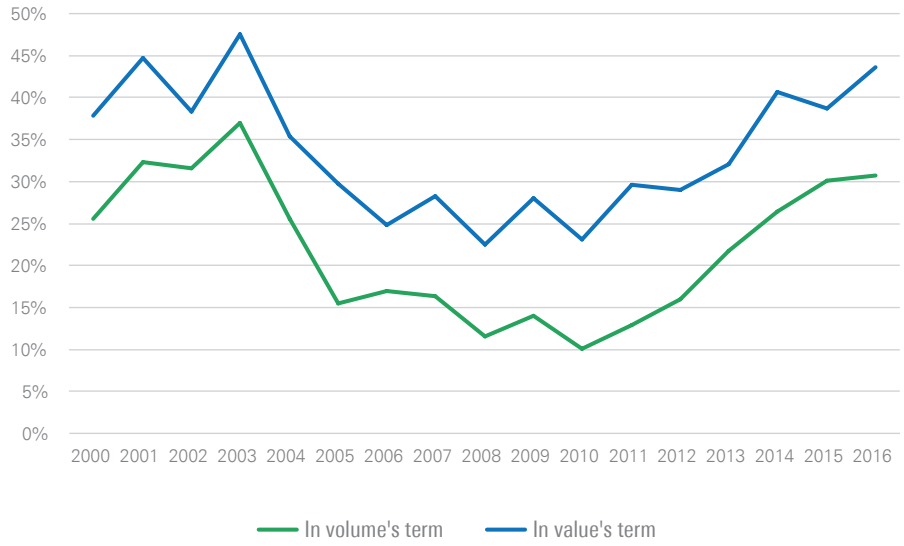
Source: Rating and Valuation Department.

This is yet another compelling piece of evidence showing that housing demand is supported by genuine end-users who really have the need to find new accommodation due to changes in their life courses. Because unlike home prices, which exhibited a similar pattern for smaller-sized units, residential rents are not affected by monetary phenomenon and external factors such as Quantitative Easing of overseas Central Banks.

Put another way, if we observed only the home prices of smaller units outpacing that of the general market, it might well be a result of changes in capital flows and interest rate environment. However, when the said pattern is observed in the private residential rental market, the only acceptable logical conclusion is housing supply is undershooting housing demand.

With the secondary market dried up by the demand management measures, aspiring homeowners who have genuine end-user needs have no choice but to resort to the primary market. In fact, the primary market accounted for 31% and 44% of the total private residential market, in terms of transaction volume and value, respectively, in 2016. Both figures are at their highest levels since 2004 (Figure 3.11).

▼ **Figure 3.11 Primary residential unit sales as % of total market**



Source: CEIC.

But one should note that, as discussed above, new housing supply of late measured only 1% of total stock, compared with the 2.8% in the early 2000s. The dominance of primary sales against scarce new housing completions means that the secondary market is disproportionately, if not unreasonably, suppressed. It brings questionable impact on consumers, as the primary market is arguably less information-transparent than the secondary market, equipping the sellers with possibly greater price-setting power.

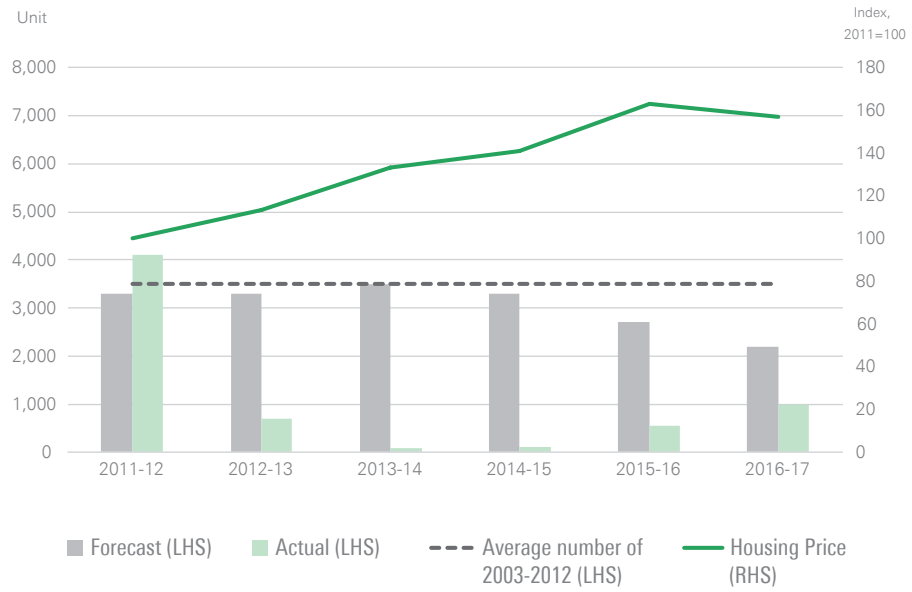
In conclusion, transactional analysis shows that the private residential market has seen noticeable distortion introduced by the various demand management measures over the past years. Whilst this report does not dispute that home prices could be even higher than today's level in the absence of these measures, we urge the government and HKMA to carefully and comprehensively review how effective these measures are, and what social costs, market distortions and wealth distributional effects are incurred in the process. We hold that an accurate understanding and perspective towards these issues are critical in formulating future housing policies. Either way, consistent with our analysis in Chapter 1, the government and the community should focus on how to boost land and housing supply instead of hoping to rely on administrative measures to cope with the housing problem, which in essence, is still a supply-demand problem.

3.2 Structural changes within the government

Alongside the pace and level of land supply, it is equally important for the government to enhance efficiency of land development procedures, streamline approval processes, and cut red tapes in the system, such that new land can turn into new housing supply that actually reaches the market as soon as possible.

3.2.1 Optimising the determination mechanism of land premium

▼ Figure 3.12 Original forecast and actual private redevelopment / development projects (in estimated flat numbers) subject to lease modification / land exchange and home prices, 2011-12 to 2016-17



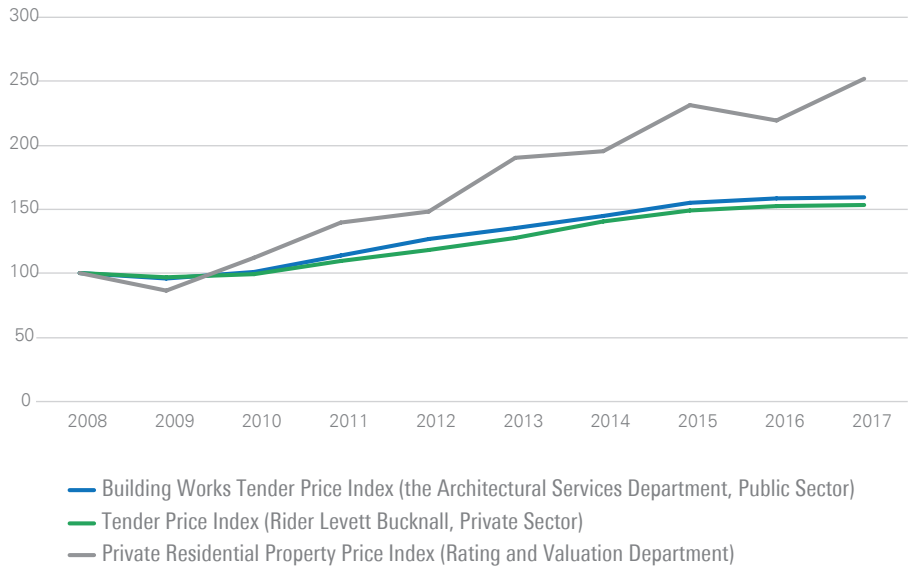
Sources: Annual Land Sale Programmes; Rating and Valuation Department.

Despite soaring home prices over the past few years and the government's efforts to increase housing supply, private housing developments through lease modification or land exchange have sharply slowed down. In fact, over the past five years, in terms of number of units, it fell short by more than 80% of the original forecast figure by the Development Bureau (Figure 3.12). Indeed, at an average of 490 units per year, housing supply from private development projects that needed lease modification / land exchange for the past 5 years was 86% lower than the corresponding average of 2003 to 2012.

After the government's decision in early 2013 to resume a regular programme of land sales by tender, local developers having large land reserves have been actively competing for these tendered sites, idling their own land banks. This is against a period in which home prices rose 152% since 2008, while construction costs grew no more than 60% over the same period (Figure 3.13). Given this considerable "profit gap", developers having large land banks still chose to leave their sizeable land reserves idle (Table 3.1).

Viewed from an economical perspective, these trends combined seems to suggest that the time and related costs of going through the planning procedures, followed by land exchange / lease modification processes, including premium negotiation, are prohibitively expensive, to the extent that the developers find it even more costly than the land prices achieved at government land tender.

▼ **Figure 3.13 Housing Price Index and Construction Cost Index (2008 = 100)**



Sources: Rating and Valuation Department; Rider Levett Bucknall; Architectural Services Department.

▼ **Table 3.1. Agricultural land held by selected developers (2016)**

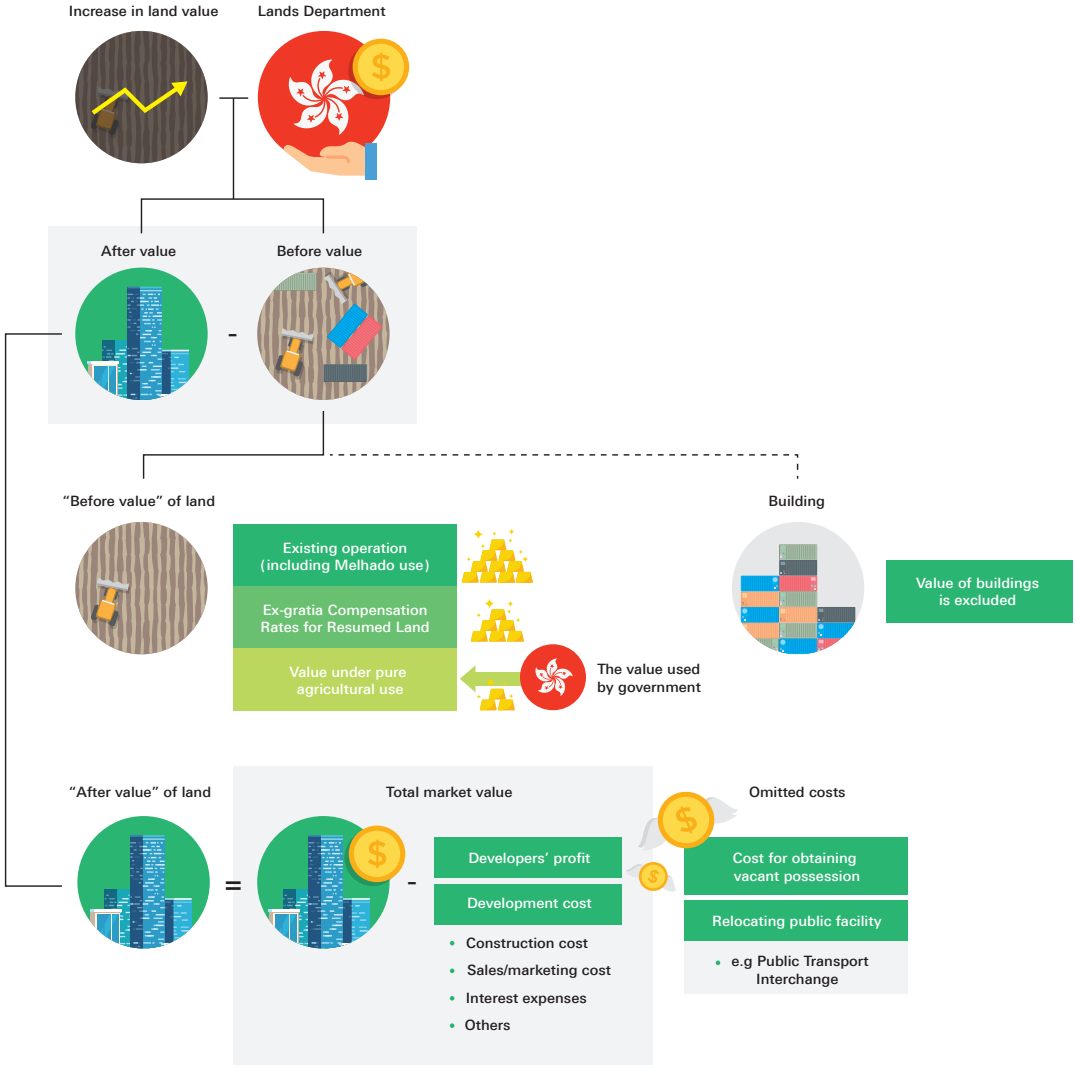
Developer	Agricultural land (hectares) held
Sun Hung Kai Properties	278.7
Henderson Land	416.2
New World Development	162.6

Source: Respective developers.

Given the absence of government land bank and severe housing shortage, in order to alleviate the housing crisis in the short run, it is sensible for the government to motivate private developers to better utilise their land reserves.

Under the current practice, there are two steps to go through before these agricultural sites can support housing or other developments. Firstly, land owners of these sites need to seek approval from TPB to rezone these sites for, say, residential or commercial uses. Afterwards, developers need to settle the payment of differential land premium to the government before the designated use of the land can be amended for housing or other uses. Using the conversion of agricultural land in the New Territories into residential use as an example, this section will focus on the second step as it has long been criticised that this process has slowed down private developments and redevelopments.

▼ Figure 3.14 Schematic representation of the land premium determination mechanism



Source: Our Hong Kong Foundation.

Under the prevailing mechanism, a 100% premium on the increase in land value as a consequence of the conversion of the site in question is charged. The premium is the difference between the government's assessed "after" (the value of the site "after" the conversion of land use) and "before" values (the value of the site under the existing lease conditions) (Figure 3.14).

Whilst the said calculation is acceptable in principle, disagreements between the developers and the government over assessed values have often resulted in substantial delay in the development of these sites. According to Mr. Roger Nissim, Adjunct Professor at Department of Real Estate and Construction of the University of Hong Kong; and Mr. John Corrigall, Former Deputy Director of Lands, some of the key assumptions adopted by LandsD in its assessment of both "before" value and "after" value are "unrealistic"[6], making the premiums well in excess of the actual increase in value.

6. "Land Supply – Why and how we need to unlock the private sector's land banks to help meet current housing need" (September 2016), The Real Estate Developers Association Hong Kong

(1) "Before" value

They argue that LandsD has underestimated the "before" value in two ways. Firstly, it values the agricultural land as pure agricultural site, and adopts this to be the "before" value, when in reality the site concerned may be under other uses including "Melhado use", which is significantly more valuable than a site solely for agricultural use. Neither would LandsD adopt the "Ex-gratia Compensation Rates for Resumed Land" as the "before value", despite the fact that the government has been compensating owners of agricultural land in the New Territories for many years when their land is to be resumed for a public purpose at the Ex-gratia Rates.

It should be noted that economically and from the perspective of the land owners, it makes no difference to them if the land is being bought by the government or by a developer. In Mr. Nissim and Mr. Corrigall's words, "Landowners have for many years used it as a benchmark for assessing what they consider to be the true value of their land…it is now true to say that these regularly updated ex-gratia figures have now become the equivalent to the open market value for such land as is ripe for development and should therefore be adopted as the basis when assessing 'before' values."

Furthermore, LandsD assesses the "before" value on a "cleared site value" basis, i.e. assuming there is no existing building on the site. However, in most cases where there is an existing building on the lot, the lot only becomes a redevelopment proposition with the benefit of the modified lease terms. Under the existing lease conditions, the value lies in the land and buildings, which is what the developer had to pay for the lot and, should the lease modifications not proceed, what he can sell it for.

For that reason, to reflect the true opportunity cost in the premium calculation, we propose that the government should adopt the Ex-gratia Rates in assessing the "before" value and also consider the value of existing building on the site before lease modifications.

(2) "After" value

Under the prevailing mechanism, LandsD calculates the "after" value by using "residual method", which is conducted by first estimating the value of the completed development, and then deducting the related development costs (e.g. developers' profit and construction cost) to compute the "after" value.

This method, however, has overestimated the "after" value in three ways. First, it does not take the time and cost for obtaining vacant possession into consideration. Secondly, it ignores costs contingent on development. For example, it disallows the costs of demolishing and rebuilding certain public facilities originally on the site, e.g. a pulbic transport interchange. Finally, LandsD tends to underestimate the development costs. For instance, to comply with the new regulatory regime in recent years, the ratio of sales and marketing costs to property sales has been rising but there is seemingly no corresponding increase in the government's premium calculation model. These factors combined would likely generate an artificially high "after" value, resulting in a premium amount beyond the increase in value that the lease modification could trigger.

Importantly, if the lot in question were to be put on tender or auction, the bid prices would be automatically adjusted to reflect these costs. However, given the lack of such market mechanism, it is difficult for premium set by LandsD to reflect the true development costs in the only one-to-one negotiations between LandsD and developers.

Hence, we suggest that LandsD should deduct the above costs to reflect the true development cost and discuss with the industry to adjust the parameters used in its premium calculation.

3.2.2 Speeding up land and housing development approval processes

Red tapes associated with the land development approval processes could be critical obstacles as far as the pace of land and housing supply is concerned. As practitioners often reflect, a development that would have taken four to five years to complete would now take seven to ten years.

In our previous reports, we have raised numerous recommendations to speed up the approval processes, which are echoed by professionals in the real estate sectors. A selection of these views are summarised below (Table 3.2):

▼ Table 3.2 Selected policy recommendations regarding streamlining land development approval processes

OHKF	The Hong Kong Institute of Surveyors (HKIS)	Tony Tse, Former LegCo member	The Association of Architectural Practices
On statutory time limit for approval			
• Set statutory time limit for approval process. Upon the expiration of such time limit, the development plan shall be automatically deemed as approved. • LandsD should set a time limit for other government departments to comment on a development plan.	• TPB should state clearly a deadline for departmental comments. After the deadline, and following a similar provision in the Buildings Ordinance, the relevant technical issue should be deemed to have been accepted by government.	• LandsD should only comment on one General Building Plan (GBP) submitted by the Authorised Persons (AP) to ensure the application can be approved within the approval time limit of 10 weeks, which can be extended for 2 weeks if needed.	• The government should set up a statutory time limit on all the applications of lands administrations, planning and housing affairs.
On Comprehensive Development Area (CDA)			
• TPB can set up a time limit for the development proposal applicant to assemble a certain share of ownership, based on the size of a specific CDA, distribution of ownership, etc. • If the time limit expires and the applicant fails to collect a specific share of ownership, the TPB should break the CDA into smaller zones or allow the CDA to be developed in phases, or even re-designate some CDAs that has been idle for too long for other uses.	• A broad-brush assessment on technical issues of CDA development should be accepted following the initial application vetting, whether the application is made by a private or a public organisation. • Set time limit for departmental comments on CDA development. • A large CDA should be subdivided into smaller pieces, or be considered for rezoning for other uses.		

On scope of approval for certain development / building plans

- Establish a set of simple and clear requirements for major plans such as the "Master Layout Plan" and the "Design, Deposition and Height (DD&H)".
- Approval should not be required for items outside the scope of those fixed requirements.
- Different departments should standardise the technical definitions of different items to be approved.

- The aforementioned broad-brush assessment on technical issues of CDA development should be adopted.
- On general applications, a clear set of guidelines should be issued to help an applicant understand what should be included in the application form.

- The examination of DD&H should be confined to 11 specified parameters ("Core Points"), including land use, GFA, Site Coverage, Building Height, etc.

- LandsD and the industry should reach consensus on a set of 20 to 30 criteria to focus on during the approval process.

On manpower and resources

- Increase manpower for approving authorities and make a better distinction between the relevant departments' approving functions and other administrative functions
- Establish one-stop set-ups for approval processes

- LandsD should be allocated more manpower and resources to ensure applications are examined at an acceptable pace in short term.

- A central and expanded Building Plan Unit should be dedicated in processing all GBP submissions without referring the cases back to the District Lands Office.
- A cross-departmental task force should be established for the approval of Landscape Master Plan.

- The approval process should be handed over to one department only so that contradicting comments from different departments can be avoided.

Sources: Our Hong Kong Foundation; Hong Kong Institute of Surveyors; Legislative Council; the Association of Architectural Practices.

In addition to real estate professionals, we are glad to see our CE, Mrs. Carrie Lam has stated explicitly in her Election Manifesto that she "will ask the approving departments such as the Planning Department, Lands Department and Buildings Department to examine the options available to speed up the approval process for land development. Such options include consolidating technical definitions and approval codes and standards". She has also committed that "Resources will be increased for relevant departments involved in land development to speed up their handling process to accelerate land and housing supply".

It is also encouraging to see that of late, some government departments have responded to some of these recommendations. Shortly after the commencement of new term of Administration, it is reported that LandsD and Planning Department shall calculate the area of recreational facilities in private housing projects using the Buildings Department (BD)'s standards.

The Development Bureau should continue to steer towards a standardised set of approval criteria and technical definitions of the three departments, i.e. LandsD, BD and PlanD especially in aspects where differences exist, such as the determination of site coverage and building height.

All in all, we believe the cutting of red tape and speeding up of land and housing development should follow three primary directions:

- Delegation and empowerment;
- Accountability and mandate; and
- Resources and manpower.

(1) Delegation and empowerment: establishment of the Director for Land Development's Office

Admittedly, the commitments made by the CE and the latest policy responses of the three key government departments involved in land development approval are important milestones towards a more efficient regulatory environment with minimal red tape. However, we still strongly urge the government to thoroughly review its approval systems and consider more aggressive reforms to these processes.

For instance, when it comes to obtaining land development approvals, it is not uncommon to hear practitioners in the related fields to characterise their first point of contact at the government, usually the PlanD or the LandsD depending on the conditions of the sites, as a mere "PO Box". In concrete terms, practitioners reflect that the department in question would just forward all the comments, queries and requests for revisions from other government departments on the submitted building / development plans directly to the developer concerned, instead of providing facilitation and / or assistance throughout the process. In light of this, the HKIS has proposed that PlanD should be empowered with the authority to determine whether the comments raised by other government departments on the submitted plans are reasonable, and even to override other departments' requests if deemed appropriate.

We fully support this general direction of "delegation and empowerment" to consolidate the approval power under one single office, and propose along the same line of thought that, the government should set up a position of "Director for Land Development" ("the Director" hereafter), possibly within the Development Bureau, to be formed with manpower borrowed from the approving departments including PlanD, LandsD, and BD. The Director (and his / her office) would be (a) empowered with the authority to not just coordinate, but to make overriding decisions regarding land development approvals; and (b) the first government point of contact for developers when they submit development / building plans. In other words, the Director's Office would serve as both the "first-stop" and "one-stop" interface between the Administration and the developers.

Our recommendation shares the same spirit of previous government initiatives to streamline approval processes. For example, the Development Opportunities Office (DOO) was set up under the Development Bureau in July 2009 to provide an effective platform for relevant bureaux and departments to jointly assess the merits of individual land development proposals and provide one-stop consultation and coordination services to projects carrying broader social or economic merits.

The DOO was tasked to assist proponents of land development projects in their liaison with the relevant bureaux and departments to resolve issues identified in their land development proposals. Up to end of October 2011, the DOO has provided assistance to 19 land development projects, which could involve total GFA up to 6m sf and capital expenditure of HK$13.5bn. These projects would typically involve NGOs, e.g. the in-situ redevelopment of the Scout Association of Hong Kong's regional centre in Wan Chai; and the relocation of Hong Kong Red Cross' headquarters to Yau Tsim Mong.

We believe a similar structure should be re-established within the government with greater delegated authority to oversee all land development projects in the territory. If needed, the government can set up one Director's office for each broad region of the city for a better division of work. This is also, in essence, analogous to the Energising Kowloon East Office (EKEO) set up in mid-2012 to steer, supervise, oversee, and monitor the development of Kowloon East, providing one-stop support to land development proposals with a view to facilitating its transformation into another premier Central Business District (CBD) of Hong Kong. Similarly, a special Director for Land Development might also be necessary for the pilot scheme of the PPP projects as discussed in Section 3.1.1 above.

(2) Accountability and mandate: setting land and housing supply targets, with clearly defined responsibility for their delivery

We make reference to the Steering Committee on Land Supply for Housing (HOUSCOM) set up in 1997/98, chaired by the Financial Secretary. The HOUCOM was tasked to ensure and oversee the annual target level of housing production, i.e. 85,000 private and public units, with a view to securing an even and adequate annual supply of flats.

In March 1998, the HOUSCOM submitted a LegCo paper explaining its structure and operations, and is largely replicated below:

To expedite housing supply, a new accountability system was installed by the HOUSCOM for monitoring flat production and resolving speedily problems affecting housing projects. Three key departments - the Housing Department (HD), LandsD and the Territory Development Department (TDD) - are charged with the responsibility for taking forward the housing projects on the control lists. They monitor the projects through different stages from site delivery to flat completion, and coordinate the efforts of different departments involved.

TDD is responsible for housing projects in New Towns, Strategic Growth Areas (SGAs) and major development areas until the concerned sites are handed over to LandsD for disposal for private housing production or to HD for public housing production. LandsD and HD are then responsible for these projects up to flat completion. For projects in other areas, LandsD and HD have overall responsibility for public housing and private housing projects respectively through all stages of the development process up to flat completion.

▼ Table 3.3 Mandate and responsibility of relevant government departments

Locations of projects	Projects within New Towns, SGAs and major development areas		Projects in other areas	
Housing Type	Public	Private	Public	Private
Site Delivery	TDD	TDD	HD	LandsD
Flat Completion	HD	LandsD	HD	LandsD

Source: Steering Committee on Land Supply for Housing.

A directorate officer, or "Project Director", in the concerned lead departments is responsible through his Head of Department to the Secretary for Housing and ultimately the Financial Secretary. He must keep strictly to the production timetable and endeavor to resolve problems holding up site delivery and flat production. He escalates any insurmountable difficulties at the district level to his Head of Department and, if necessary, the Housing Project Action Team chaired by the Secretary for Housing for individual projects or the panel headed by the Secretary for Housing and Secretary for Planning, Environment and Lands for quick resolution. HOUSCOM is the final decision making body for problems related to housing production that cannot otherwise be resolved.

Project Directors report every month on all housing projects in their portfolios to the Housing Bureau which will assume the central monitoring role for the overall flat production situation.

In short, behind the average of 68,200 public and private units completed during the five years from 1999 to 2003, was a system installed with clear mandate, accountability, well-defined delivery targets and timetable, which seems to be absent in today's government. Given the severe shortage of land and housing resources, we suggest the government to consider reinstating a similar structure as far as land and housing development is concerned. Such structure could be led by our proposed establishment of the Director for Land Development's Office.

(3) Resources and manpower: steeping up fiscal support for land development-related areas

We would like to emphasise that whilst we have put much focus on ways to improve efficiency in government processes, we are equally worried by the level of resources support given to the related bureaux and departments. In fact, as discussed above, even the practitioners in the field have opined that more manpower should be dedicated to the relevant departments to clear the backlog of development and building plans to be approved, especially given that both the government and private sector have been ramping up land and housing production in recent years, to catch up with the wide supply gap.

We have already pointed out in our previous report that recurrent fiscal resources allocated to the policy area of "Planning and Lands" actually grew slower than overall government expenditure during the previous-term Administration. We hold that sufficient manpower and resources dedicated to this policy area is of paramount importance, given Hong Kong has not witnessed large-scale land development programmes for more than a decade. To put it to the extreme, even cutting red tape requires additional headcounts and resources. For example, the setting up of the Director for Land Development's Office represent extra manpower needs, and significant up-front investments are needed so that a shared database for land development could be established for different government departments.

3.3 Long-term land development programme

While land supply in the short- to medium-term can rely on the rezoning of existing land and PPP to release private land reserve, land supply over the medium to long term rests on the timely completion of major land development projects, including all NDAs, the five near-shore reclamation sites, as well as the two proposed Strategic Growth Areas – East Lantau Metropolis (ELM) and New Territories North (NTN) (Table 3.4).

▼ **Table 3.4 Selected major medium- to long-term land supply projects**

Land Supply Project	Estimated Land Area (hectares)	Estimated Completion Time
Kwu Tung North and Fanling North NDA	320	2023-2031
Tung Chung New Town Extension	196	2023-2030
Hung Shui Kiu NDA	441	2024-2037
Yuen Long South Development	183	2027 and after
Tseung Kwan O Area 137	80	TBC
Sunny Bay Reclamation	80	Before 2030
Ma Liu Shui Reclamation	60	Before 2030
Lung Kwu Tan Reclamation	225	Before 2030
Tsing Yi (South West) Reclamation	100	TBC
Siu Ho Wan Reclamation	70	TBC
East Lantau Metropolis	1,000	After 2030
New Territories North	720	After 2030

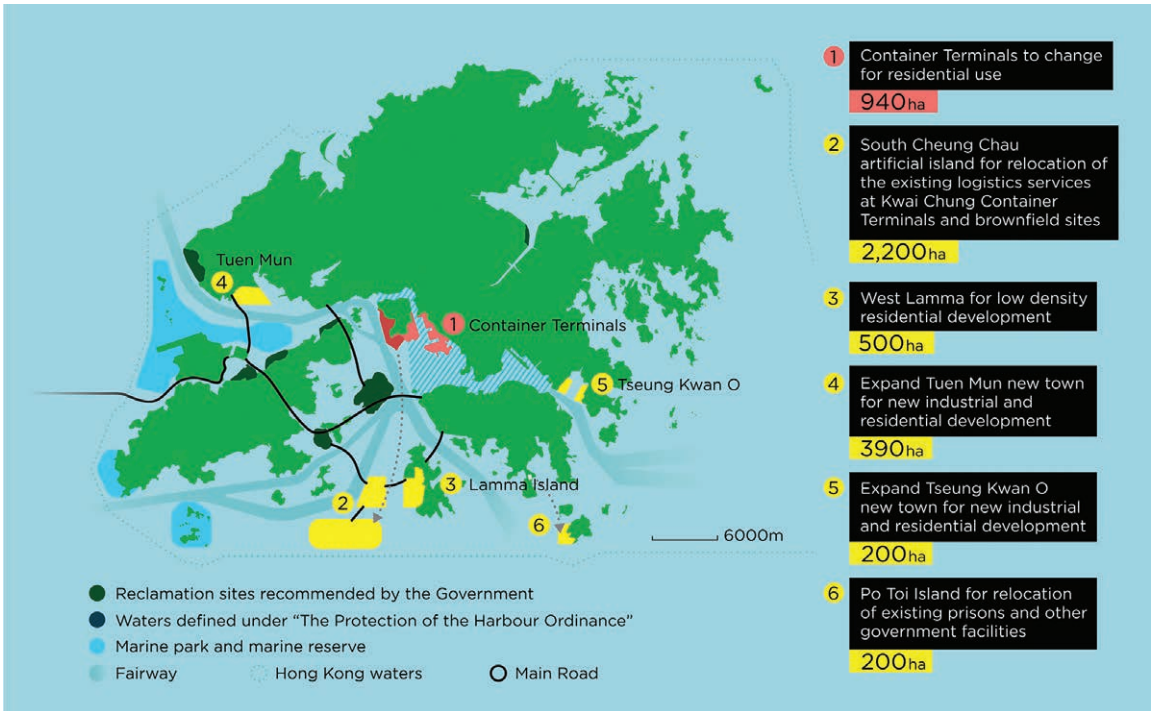
Sources: Development Bureau, Legislative Council; Our Hong Kong Foundation.

In its "Hong Kong 2030+" consultation, the government has estimated that all confirmed / planned land development projects, together with those still under consultation, could potentially provide some 5,300 hectares of land over the next 30 years. Should any of the above projects not be delivered on time, we would risk entering a window of no new land supply when all the short-term land creation method could be exhausted in five to 10 years' time.

Furthermore, in our previous reports, we have estimated that Hong Kong will need 9,350 hectares of land over the next 30 years, which roughly equals to the size of three Shatin new towns. That means even with this 5,300 hectares in place, this is still 4,000 hectares short off the estimated land demand. Therefore, a more ambitious plan of land creation is needed to fill the shortage that equals to the size of one-and-a-half Tai Po new town and support the city's long-term development.

To this end, we have argued in our last report that reclamation, which has been inextricably linked with the development of Hong Kong and in particular the development of new towns, is the best way to create land in the long-term. In this regard, with reference to the 25 potential reclamation sites initially proposed by the Government in 2012, we have sketched out a more aggressive preliminary concept map and wish to encourage the community to engage in serious and rational discussion regarding suitable reclamation sites (Figure 3.15).

▼ **Figure 3.15 OHKF proposed reclamation sites**



Note: The size and shape of reclamation sites on this plan are preliminary assumptions for the purpose of concepts expression only. They do not represent any future design to be implemented.
Source: Our Hong Kong Foundation.

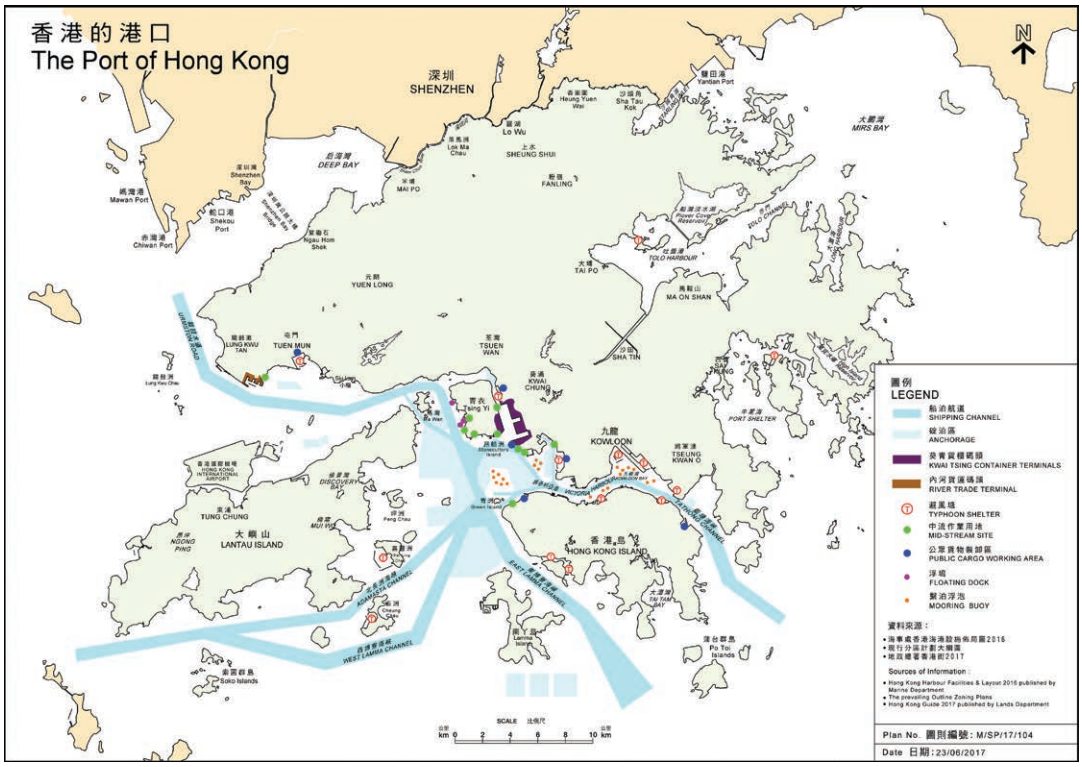
Firstly, the eastern part of the Hong Kong waters contain quite a number of coastlines with high ecological value, whereas the western waters have also been limited by a number of large-scale infrastructure projects. In contrast, the central waters has a relatively low ecological value and hence higher potential for development of artificial islands. Apart from the ELM, construction of an artificial island–of more than 2,000 hectares–could be considered in the south of Cheung Chau. If needed, the land so created may be considered for the relocation of the existing logistics services at Kwai Tsing Container Terminals and other port facilities, as well as those on brownfields, to make room for development. In addition, reclamation in Po Toi Island may be considered for redeployment of government facilities such as existing prisons. Together with the extension of Tuen Mun and Tseung Kwan O New Towns, and the reclamation in West Lamma, the above five reclamation sites can provide more than 3,500 hectares of land.

3.4 Consolidation of Port Facilities and Harbourfront Management

Currently, around three quarters of all container throughput in Hong Kong are handled at the Kwai Tsing Container Terminals (KTCT), while the remaining one quarter are handled through the River Trade Terminal (RTT) in Tuen Mun, as well as various mid-stream sties (MSS) and public cargo working areas (PCWAs). Nevertheless, according to the Government's "Hong Kong Port 2030+" consultation study, the utilisation rate of the RTT and PCWAs were both below 50% (the utilisation rate of MSS was not available). Furthermore, the same study also suggested that transhipment, in particular river-to-ocean transhipment, will likely account for an increasing share of the city's container throughput. This suggests that we might need an integrated port facility which can handle both small and large, river and ocean vessels in the same place.

Against this backdrop, we might consider relocating all the existing port facilities in the city, including the KTCT, RTT, as well as other MSS and PCWAs (Figure 3.16), to the South Cheung Chau artificial island, and consolidating them into a single integrated modern container terminal. This could on one hand increase the efficiency of our ports, while on the other hand release valuable land along the coast line in the urban area for residential development and other purposes to satisfy the city's socio-economic and livelihood needs.

▼ **Figure 3.16 Distribution of port facilities in Hong Kong**



Source: Hong Kong Marine and Port Board.

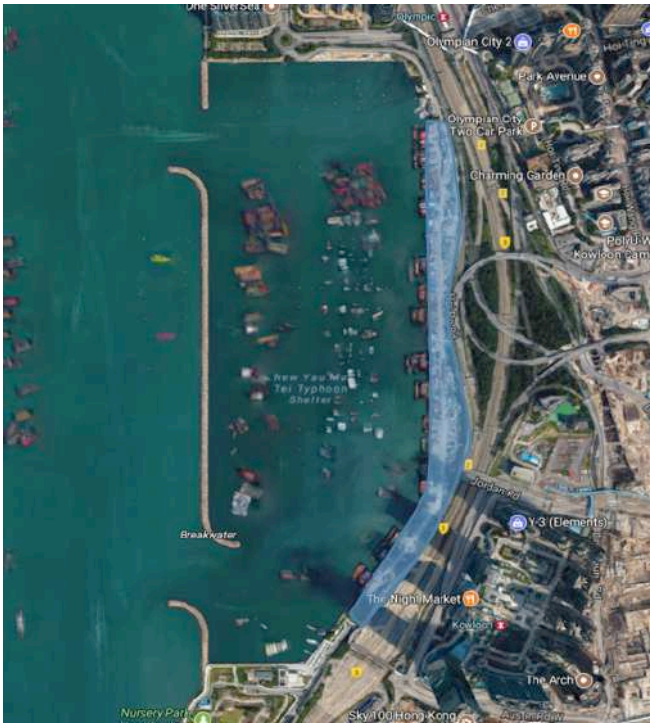
The existing KTCT, together with the surrounding logistics sites and the government's proposed reclamation in Tsing Yi South, have a combined area of nearly 1,000 hectares. They are located at the heart of urban areas with well-developed traffic network, and therefore can be considered for residential and commercial development. Besides, the existing RTT in Tuen Mun and its surrounding logistics and industrial facilities have a combined area of nearly 200 hectares. Together with our proposed Tuen Mun new town extension reclamation, the whole area can be considered for residential and new industrial uses. (Figure 3.17)

▼ **Figure 3.17 River Trade Terminal, its surrounding facilities and our proposed Tuen Mun New Town Extension**

Sources: Google Earth; Our Hong Kong Foundation.

For other MSS and PCWAs scattered around the city, large-scale development is unlikely given their small site area and long-and-narrow shape. For instance, the New Yau Ma Tei PCWA has a site area of only 6.8 hectares but occupies a 1.2 km long shoreline between Olympic and the future West Kowloon Cultural District (Figure 3.18), which roughly equals half of the length of Central Waterfront Promenade. Instead, we could consider converting the land of the existing MSS and PCWAs, which occupy longer than 5 km of the city's shoreline, into public leisure / open space (for example waterfront promenade). One such example would be the former Kwun Tong PCWA (Figure 3.19), which were decommissioned in 2011 and redeveloped as the current Kung Tong Promenade.

▼ Figure 3.18 New Yau Ma Tei Public Cargo Working Area



Source: Google Earth.

▼ Figure 3.19 Former Kwun Tong Public Cargo Working Area

Source: Planning Department.

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