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Quality Urban Living in Hong Kong: Shrinking Spaces

Bing Yang
Worcester Polytechnic Institute

Omri Flaisher
Worcester Polytechnic Institute

Rafi H. Hayne
Worcester Polytechnic Institute

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QUALITY URBAN LIVING IN HONG KONG: SHRINKING SPACES

OMRI FLAISHER, RAFI HAYNE, BING YANG

An Interactive Qualifying Project submitted to the Faculty of
WORCESTER POLYTECHNIC INSTITUTE
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REPORT SUBMITTED TO:

PROFESSORS CONSTANCE CLARK AND ZHIKUN HOU
WORCESTER POLYTECHNIC INSTITUTE

MICHAEL MA, DIRECTOR
WILFRED AU, ASSISTANT GENERAL MANAGER
PLANNING & DESIGN, URBAN RENEWAL AUTHORITY

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FEBRUARY 2014
ABSTRACT

This report, prepared for the Urban Renewal Authority, addresses the issue of a minimum dwelling size in metropolitan Hong Kong. Due to a steadily increasing population and relatively small developable land area, the region’s housing market is becoming increasingly unaffordable. In order to combat this phenomenon, our team found that a unit size of less than 300 square feet may provide an affordable yet comfortable option for those wishing to live in a Central Business District. To achieve a high quality of life in shrinking spaces, we suggest that future developments of this size employ intelligent layout design, space saving furniture, and multiple storage options while at the same time creating shared facilities that nurture community.
EXECUTIVE SUMMARY

Hong Kong, being one of the densest cities in the world, has been experiencing massive population growth over the past century. At the same time, Hong Kong is a mountainous region with limited space for housing construction, leading to inadequate housing stock and enormous demand. Therefore, housing prices in Hong Kong have been steeply rising while average salary hasn’t been increasing in a similar fashion. Housing in Hong Kong today is more unaffordable than it has ever been. Since property prices in Hong Kong are based on unit cost per square foot, building smaller units increases affordability for buyers. The balance between size and livability is the main issue that our sponsor, the Urban Renewal Authority, is concerned with. The URA currently has a minimum standard flat size of 300 square feet, developed with minimal justifications. Therefore, we were tasked to explore an adequate minimum unit size for the URA’s reference regarding future developments.

We approached the goal through four main objectives. First, we learned Hong Kong’s current situation by exploring urban living in Hong Kong. Upon arrival, we performed site visits to expand our understanding of Hong Kong’s various housing tiers and received first-hand exposure to smaller sized units. Secondly, we analyzed and identified the styles and changing patterns of urban living in Hong Kong. We performed targeted background research to grasp the causes of Hong Kong’s current housing predicament. The contributing factors include: rising land and construction cost, increasing population, and limited housing supply. Thirdly, we drew upon overseas experiences as examples for comparison. Although, Hong Kong has its own unique land restriction, it is only one of many cities with unaffordable housing issues worldwide. Cities in the United States, such as New York and San Francisco, where housing supply is much greater, are putting in legislation which decreases the minimum housing standards to 220-250 square feet in order to contest rising housing costs in centralized convenient locations. Some European and Asian cities are building units on the order of half that size to mend their housing problems. These cities around the world are reducing unit sizes to combat unaffordability by implementing innovative solutions to maintain living standards. Finally, we fully identified which elements are specific to quality urban living in Hong Kong by analyzing our observations during site visits, interviews, and overseas examples. It became evident that community and human relations vastly improve an individual’s general well-being and significantly brighten a small living quarter. Because quality urban living is interpreted differently from one individual to another, we tailored our recommendations to people who are willing to compromise unit size for conveniency of location. Taking into account everything that we learned and experienced, decreasing unit size is the most effective and worldly accepted solution for housing unaffordability.

We recommend the URA to lower their current minimum of 300 square feet to somewhere in the range of 220-250 square feet. In doing so, the URA should approach their unit design through a lens of usability and livability. Flats should be built with the potential to accommodate various space transformable furniture and substructure. Use of ceiling space needs to be optimized by building platforms for under-floor storage or
floor to ceiling wall storage. The URA should find a cost balance between furnishing such amenities and profit on the unit sold. As housing costs continue to rise, the initial investment of such features decreases and greatly incentivizes purchase of the unit. Along with efficient flat design, the URA should take planning measures to include communal spaces within the facility which stimulate human interactions. Function halls and other facilities which bring people together should be the main focus in the communal spaces built by the URA. By facilitating community and livability in small spaces, the URA will act their part in holding high regards towards the people’s interests and well-being.
ACKNOWLEDGEMENTS

During our time in Hong Kong we have grown and developed as individuals. Most visitors and many of Hong Kong’s residents would not have the opportunities and experiences we were given. We want to acknowledge and thank the following members of the URA for everything they have done for us:

- Mr. Michael Ma for sponsoring the project and providing us with his experienced insight and an irreplaceable view into Hong Kong’s culture
- Mr. Wilfred Au for supporting our group throughout the project and adding useful awareness to our topic when we required it
- Edwin Tang and Brian Wong for providing us useful information and backing towards our project

We want to thoroughly thank our project advisors Professor Clark and Professor Hou for supporting us as a team and the fruition of our project. Everything you have done for us and all of the students on this trip is greatly appreciated. You two are awesome!

We also want to thank Dan Turnbull for all of his hard work and support during ID 2050. We wish that you could have joined us for this experience but as the circumstance had it hope that you will be able to make your own.
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AUTHORSHIP

OMRI FLAISHER

Omri performed site visits, interviews, performed background research, a large portion of the writing, and some of the editing of this report.

RAFI HAYNE

Rafi performed site visits, interviews, performed background research, assisted writing the paper, a large portion of the editing, and typeset/format the document.

BING YANG

Lily performed site visits, translated for interviews, and did background research along with minor edits.
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INTRODUCTION

Hong Kong has been experiencing massive population growth over the course of the last century. The housing demand is enormous, but the supply is limited; leading to sky-rocketing prices. From December 2008 to December 2012 property prices in Hong Kong surged 117.2% (89.5% with inflation adjustment) (Global Property Guide, 2014). As the trend continues, living in Hong Kong is becoming increasingly unaffordable. The Hong Kong government implements public housing schemes which effectively aid eligible candidates in their quest for decent affordable housing. Those who do not aspire or are not eligible to live in public housing are left to fend for themselves in the private sector.

Housing developers in Hong Kong such as the Urban Renewal Authority are constructing high-rises to supply the large housing demand. When designing these buildings, developers must find a balance between affordability and standard of living. As property prices are based on cost per square unit of area; decreasing the unit size increases affordability for the buyer. The URA, a self-sustaining government founded authority must keep the buyers’ standard of living in high regards.

1.1 OBJECTIVES

We are tasked with the goal of analyzing an adequate minimum unit size for future URA developments. To successfully achieve this goal we specified four main objectives to facilitate our understanding of the situation.
1.1.1 Objective 1: To explore what is "Urban Living" in Hong Kong today.

We needed to explore what is urban living in Hong Kong today in order to understand the various housing situations of a range of economic conditions and demographics. We performed site visits which encompassed the full scope of housing tiers seen in Hong Kong: from poor subdivided units to rich lavish modern developments. We conducted interviews with people of lower, middle, and upper class status. Through this objective we not only learned the range of circumstances for Hong Kong residents and citizens but also the extent of living conditions that mainland women, immigrants, expatriates, non-local students and investment buyers face. Ultimately, witnessing the housing types in Hong Kong illustrated to us the factors that the people desire in quality urban living while facing shrinking spaces.

1.1.2 Objective 2: To identify and analyze the styles or changing patterns of urban living.

Along with understanding urban living as it is defined currently, it was necessary to identify and analyze the styles or changing patterns of urban living. This objective provided us useful insight on the history of Hong Kong urban development regarding housing size trends and population growth. In the early 1900’s to the pre-World War II era, housing sizes were vast and spacious in size. After World War II, average unit size began shrinking until the present day when the trend still continues. About the same time the average housing size began decreasing, the population began its exponential rise to its current day inhabitants of about seven million people. Rising land and construction costs along with limited housing supply drove property prices skywards, making Hong Kong housing the most unaffordable in the world (Saminather, 2014).
1.1.3 Objective 3: To draw upon overseas experiences as examples for comparison.

To gain better perspective on the situation in Hong Kong, we drew upon overseas experiences as examples for comparison. Cities around the world are dealing with limited housing supply and affordability issues. Micro-apartments have been current trends in modern United States, European and Chinese cities. The key to their success is efficient space transforming furniture and public function rooms, which provide the tenants aspects of quality urban living when housed in a small space. In addition to researching other metropolitan areas, we also drew on our own experiences from living in areas outside of Hong Kong. This background experience allowed us to approach the issues through a different lens than that of a lifelong Hong Kong resident. We drew upon these fruitful examples and our own experiential knowledge to build recommendations for the URA.

1.1.4 Objective 4: To identify which elements could improve the quality of urban living.

With the average housing size dropping and the population growing; the big question is to what extent can the trend continue? To hone in on the line between housing size and living standards we identified the elements that contribute to quality urban living. We learned that there is no universal standard of living. Some people prefer to be in the midst of it all where the city is their living room, while others prefer a more spacious housing size at the cost of convenience. When addressing a minimum size, it is essential to target those who refer to their location as home rather than their living quarters. Those who prefer a more spacious housing size must move further out when met with affordability issues. We deduced that the target demographic that is considered when designing the smallest unit in a building is a single person. We addressed the desires of these people in identifying which elements can improve quality of urban living in shrinking housing sizes.
1.2 DISCUSSION

By following these outlined objectives we were able to make suggestions towards reducing the URA’s minimum unit size. The Urban Renewal Authority will consider these suggestions when building future developments. It is our hope that the proposed reduction and recommendations will create a more affordable housing landscape in Hong Kong while still maintaining a quality living environment. We believe that a reduction can accomplish both these tasks by creating greater opportunities for first-time homeowners and by fostering a greater sense of community within modern developments.
2 | BACKGROUND

2.1 HISTORY OF HONG KONG

2.1.1 Humble Beginnings

In less than 200 years, the region known as Hong Kong was transformed from a small fishing village into an economic Mecca for Asian and worldwide trade. In parallel to this drastic change in economic landscape, Hong Kong experienced a sweeping surge in population. The history of this transformation began with the British colonizing the island upon realizing the importance of securing a military base and port in order to gain access to the Asian market. Due to its near perfect natural harbor, Hong Kong was selected for Britain’s entry into the region. Because the island was to be used firstly as a port for trade as opposed to an imperial takeover, regulations on business were extraordinarily lenient. These lax policies encouraged Chinese trading companies to select Hong Kong as their operational base in the late 1800s. In addition to industrious mainland entrepreneurs, refugees seeking asylum from the political unrest in Mainland China poured into the newly established port. As a result, by 1900, a mere 50 years after colonization, the once barren island’s population rose by 250,000 (Carroll, 2007, pp. 9-33). These immigrants were very poor and lived in huts built out of anything they could find. These houses were dense, small, unsanitary, and highly unregulated as British rule solely focused on trade.

2.1.2 World War II

At the advent of the 1900s, Hong Kong was producing a new class of highly educated, wealthy, and westernized Chinese. As political instability increased in Mainland China,
much of the wealthy and educated class began to question the stability of the Qing dynasty, moving to Hong Kong. The influx of an educated upper class further solidified Hong Kong’s economic prowess, beckoning a golden age of free trade. This encouraged and demanded an influx of lower class farmers from Mainland China seeking a higher quality of living. Many public works projects were completed in the 1920’s and 1930’s in response to extreme immigration, including the creation of hospitals, roads and schools. However, no public housing was created, causing many refugees to live in deplorable conditions in squatter villages (Carroll, 2007, pp. 63-88). An incoming upper class, the British hands off economic policy, and a continued lower class fleeing political oppression caused Hong Kong’s population to surge to nearly 1.5 million by 1941. However, this number drastically fell to 600,000 under Japanese occupation during World War II.

2.1.3 Political Unrest in Mainland

Following World War II Mainland China fell under civil war between Communist and Nationalist parties, once again sending refugees to neutral Hong Kong. The mass influx of refugees along with citizens displaced from the war returned the region’s population to just above 1 million people and left nearly a quarter of the city homeless. As a response the British rulers formed the Hong Kong Housing Society tasked with managing squatter communities and providing housing for reconstruction workers (Carroll, 2007, pp. 116-140).

In 1949, the Communists under Mao Zedong forced the Nationalists off the mainland and assumed power in China. Mao was very critical of foreign governments and immediately began reorganizing the country according to Communist values. Despite the fears of the west, Hong Kong remained a British colony, as the Communists made no attempt to reclaim the territory. As land was taken and redistributed on the mainland, many land owners and middle class Chinese fled to Hong Kong. The population of Hong Kong rebounded to 2.5 million by 1955. These refugees lived in homemade squatter huts. Densely populated and unregulated, the squatter villages were ignored by the colonial government, in part because of racism, but also because it was assumed that these were refugees who would eventually return to China as the situation there
improved. However, a massive fire in the Shek Kip Mei squatter settlement left 40,000 residents homeless and provoked extensive creation of public housing (Carroll, 2007, pp. 140-167).

2.1.4 Creation of Public Housing

In the 1960’s, Hong Kong continued to expand in population and economy. By the end of the decade, 500,000 people would be moved into public housing. The number of refugees was expanding, despite attempts by the Communists to keep people in, and the British to keep illegal immigrants out. Recognizing that public housing significantly raised squatters’ standards of living, the government further expanded their public housing programs. By the mid-1970’s almost 45% of people were living in public housing (Hong Kong Housing Society, 2010).

A new middle class was starting to develop, whose income exceeded the requirement for public housing, but who were still too poor to privately rent. In response, the government started a number of programs to counter these issues. In 1973, the governor of Hong Kong established a Ten Year Housing Plan with the goal of publicly housing 1.8 million people. The government began to build and encourage building in the new territories, to move people away from the crowded city center, and began the “home ownership scheme” to bring subsidized homes to the market. The Home Ownership Scheme would allow true ownership, a difference from the general government policy of providing rented homes. Throughout the ’70’s the economy of Hong Kong continued to expand due to continued overseas private investment. The housing market grew quickly, fueled by the further development of private residential buildings (Hong Kong Housing Society, 2010).

2.1.5 Modern Hong Kong

By the 1980’s the population of Hong Kong had reached 5 million. The Ten Year Housing Plan had found housing for 1.5 million people, close to the original goal of 1.8, but
still an underestimate of the demand. As a result, the government extended the original
by five years, and announced it would increase availability of both cheap purchasable
and rentable homes. The real estate market was becoming a major part of the Hong
Kong economy and investors continued to build private residences, selling them at very
high prices (Hong Kong Housing Society, 2010).

Today, Hong Kong’s population is just over 7 million people making it one of
the most densely populated areas in the world. After more than 60 years of sustained
economic growth many residents incurred increased incomes but housing unit sizes
remained relatively constant, a notable aspect to Hong Kong. This is in part due to the
territory’s small land area, further exacerbated by largely undevelopable mountainous
regions and steady population growth. As a result, residential development occurs
in extremely localized districts with large scale high-rise construction projects (Wong,
2012). Urban living in Hong Kong today is characterized by widespread overcrowding
and shrinking living spaces.

2.2 Public Housing

Since the early 1950’s the Hong Kong government has been building public housing for
its lower income citizens. In 1973 the Hong Kong housing authority was established to
implement the majority of Hong Kong’s public housing programs (Information Services
Department, 2013). An independent organization known as the Hong Kong Housing
Society was established in 1948 to provide for the community’s housing needs. In 2011,
about 3.4 million people or 47.7% of Hong Kong’s total population lived in public hous-
ing (Global Property Guide, 2014). One must be a Hong Kong citizen to be eligible for
public housing, along with meeting certain financial criteria. Generally, public housing
sites are built in remote locations, further away from MTR stops and central business
districts. Public housing in Hong Kong helps bridge a huge affordability gap for the
lower-income half of the population.
2.2.1 Public Rental Housing

There are about 2.09 million people renting public rental housing with approximately 766,300 available units (Information Services Department, 2013). Every two years the HKHA conducts a review on average household income of PRH tenants to properly adjust rent pricing. PRH rent is inclusive of management costs and maintenance expenses in order to reduce the monetary burden on tenants. As of March 31, 2013 PRH rent ranged from HK$ 290 to HK$ 3,880, with the average being HK$ 1,540 per month (Information Services Department, 2013).

The Wait-List

The target average waiting time for general applicants is about three years upon completion of the application. One person applicants under the age of 65 are subject to the Quota and Points System, where points are allocated based on age and time of registration. An applicant’s points determine the waiting time. The wait time for people over the age of sixty is on average only 1.5 years with about 521,000 tenants of this status. (Information Services Department, 2013)

Eligibility

To be eligible, applicants and family members must undergo income and asset evaluations. A full table of PRH income eligibility can be seen in Appendix C. Additionally, applicants cannot own or co-own property in Hong Kong and cannot hold more than 50% of shares in a company which owns domestic property in Hong Kong. Finally, in order to be eligible at least half of the family members must have lived in Hong Kong for at least seven years. Public rental tenancies cannot be passed on automatically from one generation to the next and long-term tenants whose income and assets have exceeded the prescribed income and asset limits are required to pay additional rent or vacate their units. (Information Services Department, 2013)
Supply and Demand

The amount of people applying for public rental housing is increasing but the Hong Kong government cannot build units quickly enough to satisfy this intense demand. According to Table 1, the number of allocated units per year has stayed relatively constant. By contrast, Table 2 shows an entirely different trend; the number of applications for Public Housing has steadily increased since 2007. In order to overcome this discrepancy in supply and demand the Hong Kong Government plans to provide a total of 470,000 public rental units in the next ten years with a goal of public housing accounting for 60% of all residencies in the Special Administrative Region, a 36% increase compared to the Government’s pledge in 2012 (Leung, 2014). Although the government does have extensive plans to address housing issues, the private sector must pick up the remaining burden to supply Hong Kong’s people with housing.

<table>
<thead>
<tr>
<th>Financial Year</th>
<th>Number of allocated PRH flats</th>
</tr>
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<tbody>
<tr>
<td>2003-2004</td>
<td>38,936</td>
</tr>
<tr>
<td>2004-2005</td>
<td>34,314</td>
</tr>
<tr>
<td>2005-2006</td>
<td>41,037</td>
</tr>
<tr>
<td>2006-2007</td>
<td>28,831</td>
</tr>
<tr>
<td>2007-2008</td>
<td>22,835</td>
</tr>
<tr>
<td>2008-2009</td>
<td>39,617</td>
</tr>
<tr>
<td>2009-2010</td>
<td>35,650</td>
</tr>
<tr>
<td>2010-2011</td>
<td>25,463</td>
</tr>
<tr>
<td>2011-2012</td>
<td>31,333</td>
</tr>
<tr>
<td>Average</td>
<td>33,113</td>
</tr>
</tbody>
</table>

Table 1: Number of Public Rental Housing flats allocated between FY2003-2004 and FY2011-2012 (Legislative Council Secretariat, 2013)
<table>
<thead>
<tr>
<th>Year</th>
<th>General Applicants</th>
<th>Non-elderly one-person applicants</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2007</td>
<td>70,600</td>
<td>36,700</td>
<td>107,300</td>
</tr>
<tr>
<td>March 2008</td>
<td>72,900</td>
<td>38,700</td>
<td>111,600</td>
</tr>
<tr>
<td>March 2009</td>
<td>71,300</td>
<td>43,100</td>
<td>114,400</td>
</tr>
<tr>
<td>March 2010</td>
<td>77,400</td>
<td>51,700</td>
<td>129,100</td>
</tr>
<tr>
<td>March 2011</td>
<td>88,600</td>
<td>63,800</td>
<td>152,400</td>
</tr>
<tr>
<td>March 2012</td>
<td>101,700</td>
<td>87,800</td>
<td>189,500</td>
</tr>
<tr>
<td>September 2012</td>
<td>110,400</td>
<td>100,000</td>
<td>210,400</td>
</tr>
</tbody>
</table>

Table 2: Number of applicants on the Waiting List for the Public Rental Housing during 2007-2012 (Legislative Council Secretariat, 2013)

Public Rental Housing Abuse

Even though there are measures in place to reduce misuse in PRH, loopholes exist in the system. Students who are studying in University meet the financial criteria for PRH if they receive little to no income during their studies. During this time students will queue up and receive a flat upon finishing school or shortly after. After 10 years tenants are required to declare household income every two years. Households that exceed two times the income limit have to pay 1.5 times the rent, while those with income exceeding three times the limit must pay double the rent. One is only considered no longer eligible for PRH if their income exceeds three times the income limit and their assets exceed 84 times the asset limit. Of the non-elderly PRH applicants, 34% were students at the time of application (Legislative Council Secretariat, 2013). One of the anonymous URA employees we interviewed explains, "I know many people [who] live in public housing [that] drive BMW’s and Mercedes" (See Appendix A.2 for full interview).
2.2.2 Subsidized Housing

Types of Schemes

Since 1978 about 467,800 units have been subsidized to low-to-middle income households under various home ownership schemes. The HKHA and HKHS have developed various subsidized home ownership schemes such as: Home Ownership Scheme, Private Sector Participation Scheme, Tenants Purchase Scheme, Flat-For-Sale Scheme, and Sandwich Class Housing Scheme. The largest of these schemes is the Home Ownership Scheme which was ceased in 2003 and reinstated in 2011. The Home Ownership Scheme has two goals:

1. To encourage more well off PRH tenants to vacate their flats in order to free up housing for the less fortunate
2. To provide an opportunity for home ownership to families that cannot afford market prices.

Under the Home Ownership Scheme, the government sells apartments to low income Hong Kong residents or those eligible for public housing at a rate below market value. Typically, this discount is 30-40% less than the private sector (Information Services Department, 2013).

Types of Applicants

There are two types of people who can be eligible for subsidized home ownership, green form and white form applicants. Green form applicants come from the public rental housing sector and are eligible under the same limits set by PRH. White form applicants come from the private sector. The income and asset limits for single applicants are HK$20,000 per month and HK$415,000 net assets. For family applicants the income and asset limits are HK$40,000 per month and the net asset limit is HK$830,000. (Legislative Council Secretariat, 2013)
Future Projections

The government has plans for 17,000 new flats to become available from the years 2016-2020 with an annual average of 5,000 new units provided thereafter. It is hoped that the first batch of about 2,100 units will be available during the 2016-2017 year. To provide short term supply during this time frame, the government has decided that the Tsing Luk Street project which was originally made for lease will be for sale for eligible buyers (Information Services Department, 2013).

2.2.3 Summary of Public Housing

Public Housing is a great resource for a large portion of Hong Kong’s populations but the supply simply can’t meet the demand. Many are left to fend in the increasingly unaffordable private sector where living conditions drastically vary.

2.3 PRIVATE HOUSING

Private housing is built by developers who price the property based on market demand without regard for public welfare. The developers sell the flats to investors who rent out the units or to single buyers who personally use the space. Within the private housing sector, there exist circumstances of unit subdivision where landlords partition a space to fit more households. In 2012, the private housing sector housed 52.8% of Hong Kong’s population (Information Services Department, 2013). The price of private housing is on a steep rise; leading to severe affordability issues.

2.3.1 Subdivided Housing

In Hong Kong, housing affordability is a deepening issue. The government provides public housing which houses about 47% of the population (Legislative Council Secretariat, 2013). However there is still a portion of low-income inhabitants demanding
housing in the private sector. Subdivided units supply the demand for the people who can’t afford full private housing quarters.

**Low Income Subdivided Units**

Subdivided units are small and sometimes ill-maintained. In 2013, the government’s Long Term Housing Strategy Steering Committee commissioned Policy 21 Ltd. to conduct a survey study on subdivided units in Hong Kong. Through their study they estimated that there are about 171,300 people living in SDU (subdivided units) with about 66,900 SDU’s throughout Hong Kong. The average subdivided unit was approximately 67.6 square feet with a monthly rent of HK$ 29.1 per square foot. In subdivided units, bathrooms, kitchens, and living spaces are commonly shared facilities. About half of the households encountered problems relating to their buildings such as water seepage, concrete cracking, messy electrical wiring and exposed reinforcement. 14.4% of the households were dissatisfied with hygiene within the building (Policy 21 Limited, 2013).

The main reasons for tenants to choose living in SDU were convenience of traveling to/from work or study (64.1%), lower rent than whole quarters (49.1%), and financial constraints of households (28.6%). The average duration a respondent would reside in subdivided housing was about 57 months (Policy 21 Limited, 2013).

About half of households living in SDU applied for public housing. For the other half that had not applied for public housing, 49% of households exceeded monthly income limit, 19.3% were unfamiliar with the process, and 15.1% had not been residing in Hong Kong for 7 years (Policy 21 Limited, 2013).

Although subdivided units are generally thought to be a last resort for housing, these statistics tell a much more nuanced story. For many, a subdivided unit provides the ability to live in a more central, convenient location.

**Luxury Subdivided Units**

Even though most of the subdivided units are designed for low-income people, there exist "luxury subdivided units" that are well maintained and nicely furnished. They are small but are typically in convenient locations and nice neighborhoods. The rent for
these units can compare to decent private rental housing in less preferable locations. A luxury subdivided unit in Central, Hong Kong Island can be around 300 square feet. Such a unit can cost up to HK$20,000 per month, targeting younger professionals who wish to stay within central business districts. (Wassener & Tsoi, 2013)

2.3.2 New Development

New developments in Hong Kong are generally luxurious properties targeting middle to upper class buyers. The price of a new development varies based on location. To purchase a new apartment in proximity to a Hong Kong Island or Kowloon central business district (CBD) costs approximately HK$28,000 per square foot (approx. US$3,650) while an apartment of similar quality in the New Territories would only cost about HK$10,000 per square foot (approx. US$1,300) (Global Property Guide, 2014). The average unit sizes of these new developments in CBD’s are usually smaller; about 300 to 500 square feet in total saleable area in comparison to the 700 to 1,000 square feet offered in the New Territories (Global Property Guide, 2014).

Property prices in Hong Kong have been drastically increasing; stemming from limited supply, rising land and construction costs, and low interest rates on mortgages. Alice Poon, a former executive of a Hong Kong real estate development company explained that high land costs are a result of the government’s "over-reliance on land-sale revenue for its fiscal health" (Hui, 2011). All land in Hong Kong is sold leasehold from the Government rather than freehold. This means that the government maintains the right to the land. Developers must pay a premium reflecting the current value of the land. When a new piece of land is put on the market, developers are given the chance to bid on the lease to the land. The demand on new site land is so high that developers will pay astronomical amounts for the bid. In order to profit they must maximize returns by building more units and increasing property prices.

To accommodate the increasing price and shrinking size of units, developers will build communal facilities such as club houses, swimming pools, and fitness centers which increase the overall quality of living for tenants. Government incentives push de-
velopers to design 5% of the total floor space as communal facilities (Building Authority, 2011).

2.3.3 Second Hand Private Housing

Between 2003 and 2012, over 80% of property transactions were made in the secondary market (Legislative Council Secretariat, 2013). Many first-time buyers choose second-hand units which are more affordable than new flats. Another contributor to the dominance in the secondary market versus the primary market is the tight supply of new developments in recent years. In 2012, only 10,149 new units were completed compared to 26,397 units in 2003. Second hand housing is typically 30-40% cheaper than a new development (Appendix A.2).

2.3.4 Unaffordability

Although the price of housing continues to rise, the median Hong Kong income has stayed steady. The Legislative Council Secretariat illustrates the rise in un-affordability through a home purchase affordability ratio, which is given as the percent of one’s income spent on home purchasing. The rise in un-affordability is illustrated in Table 3.

<table>
<thead>
<tr>
<th>Year</th>
<th>Home purchase affordability ratio (%)</th>
<th>Best Lending Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>21.1</td>
<td>5.0</td>
</tr>
<tr>
<td>2004</td>
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<td>5.1</td>
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<tr>
<td>2005</td>
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<td>36.4</td>
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<tr>
<td>2007</td>
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<td>7.1</td>
</tr>
<tr>
<td>2008</td>
<td>31.7</td>
<td>5.1</td>
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<tr>
<td>2009</td>
<td>38.2</td>
<td>5.0</td>
</tr>
<tr>
<td>2010</td>
<td>44.6</td>
<td>5.0</td>
</tr>
<tr>
<td>2011</td>
<td>45.7</td>
<td>5.0</td>
</tr>
<tr>
<td>2012</td>
<td>52.3</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Table 3: Home purchase affordability ratio and best lending rate during 2003-2012 (Legislative Council Secretariat, 2013)
2.3.5 Speculation and Government Regulations

The growing property prices in Hong Kong exhibit great potential for investment. To curb the growing bubble, the Hong Kong government introduced a series of measures starting in November 2010. The Special Stamp Duty was enacted to limit short term resale potential by forcing sellers to pay 20% of the transaction value or market value (whichever is higher) if he/she resells the property within 6 months of holding ownership of it, 15% if he/she has held the ownership for 6 to 12 months, and 10% if he/she has held the ownership for 12 to 36 months (Legislative Council Secretariat, 2013).

The demand for housing from non-local buyers has been increasing over the past few years. According to the Hong Kong government, in 2011, 19.5% of the transactions made in the primary residential property market were from non-local buyers; 60% of those were from Mainland China.

In responding to this growing demand, a Buyer’s Stamp Duty was introduced in October 2012 stating that a flat rate of 15% will be charged on all residential properties acquired by non-local buyers.

The measures introduced by the government to restrict housing prices are predicted to work successfully. According to financial service corporation Morgan Stanley, residential property prices in Hong Kong will decline by about 10% in 2014. Bank of America Corp’s Merrill Lynch and Swiss global financial services company UBS AG, project Hong Kong home prices to fall by 5% in 2013 and 15% the next year (Global Property Guide, 2014).

2.4 The Urban Renewal Authority’s Role in Hong Kong Housing

The URA was established under the Urban Renewal Authority Ordinance in May 2001, a government mandate which replaced the Land Development Corporation. In June 2002, the Hong Kong government issued the URA HK$10 billion (about US$1.3 billion)
which was allocated in five payments over the course of five years. After this initial disbursement the URA had to remain self sufficient. Essentially the URA is similar to a private entity in regards to finances but has adopted core business values of redevelopment, rehabilitation, preservation, and revitalization to create high quality and vibrant living in Hong Kong while making efforts to preserve the local heritage.

2.4.1 Rehabilitation

Rehabilitation is one of the URA’s core values to provide the public with quality urban living. The URA works with property owners, the government, and other partners to prevent the decay of buildings by facilitating adequate repair and maintenance, thus extending the useful life of buildings. Since 2004, the URA has encouraged owners to perform proper maintenance through material incentives and loan schemes. In 2011, the Integrated Building Maintenance Assistance Scheme was introduced to cover four major areas of assistance: subsidy for formation of Owners’ Incorporation, subsidized loans for work in common areas, subsidy and interest-free loans for work in common areas and interest-free loans for home renovations (Urban Renewal Authority, 2014b).

2.4.2 Preservation and Revitalization

The URA has a main business goal of preserving the heritage of Hong Kong. When there is public outcry to preserve a certain area or structure because it has sentimental value, the URA will work to meet this demand. They preserve heritage but also restore pieces of culture to their original vibrancy. The URA has seventeen preservation and revitalization projects throughout Hong Kong (Urban Renewal Authority, 2014a).

2.4.3 Redevelopment

The URA sustains itself through redevelopments. They either act as facilitators or implementers in order to respond to homeowners’ aspirations. As a facilitator, the URA
provides technical assistance during joint sale processes. As an implementer, the URA commences a redevelopment as a joint venture of typically old, dilapidated buildings with poor living conditions, targeting the desires of homeowners in the new development. Unlike the motives of most private housing developers of pure profits, the URA strives to plan and build sites that achieve environmental friendliness, quality living space, and communal facilities. While this is all true, the URA must operate as a self-maintaining entity and does not operate as a charity. All new developments are marketed towards middle to upper income buyers.

2.4.4 Minimum Size

To achieve the goals of meeting demands and needs of housing owners the URA must consider an absolute minimum unit size to follow in new developments. Currently the standard is set at 300 square feet. This figure was developed as more of a gut feeling and re-evaluation is required. Using our experiences and research obtained during our time in Hong Kong, we performed an extensive analysis regarding a recommendation for the URA’s minimum housing size.
3 | METHODOLOGY

3.1 INTRODUCTION

When building new revitalized developments the Urban Renewal Authority must ensure that the completed units maintain a certain standard of livability and comfort. In order to guarantee this standard of living, the URA has established a minimum dwelling size of 300 square feet for its new units. Because of the URA’s unique status as a private entity with government ties it must maximize profit while still providing a public good: in a way, two conflicting ideologies. Due to this conflicting ideology, the URA has a vested interest in not only creating units that will maximize profits, but additionally provide vibrant livable units to Hong Kong residents. Our team was tasked with determining the validity of this lower limit while following a provided framework of study outlined by the objectives in Section 1.1.

1. To explore what is "Urban Living" in Hong Kong today.
2. To identify and analyze the styles or changing patterns of urban living.
3. To draw upon overseas experiences as examples for comparison.
4. To identify which elements could improve the quality of urban living.

This framework follows the ideology that experiential knowledge is superior to passive desktop research. Our project sponsor vehemently believes that we needed to see Hong Kong with our own eyes rather than blindly studying it through literature. In order to answer the question of minimum livable space, every action described in the following methodology returned to this mind-set.
3.2 BACKGROUND RESEARCH

Prior to arrival in Hong Kong, our team was unable to truly follow the previously outlined philosophy. Instead, we aimed to best replicate its spirit by performing extensive background research first on Hong Kong’s broad historical past followed by a second round of research with a narrowed scope focused towards the history and current status of urban living. In order to accomplish this, we first read John M. Carroll’s excellent book *A Concise History of Hong Kong*. This book illuminated Hong Kong’s blending of both eastern and western culture; a point that was crucial to keep in mind for the entirety of our project. Next, we scoured the multitude of scholarly databases provided to us by WPI. These databases covered a diverse set of disciplines including economics, government policymaking, and newspaper articles.

In addition to researching urban living in Hong Kong, we additionally researched other metropolitan areas such as London, New York City, Tokyo, and Seoul. By researching other countries we were able to understand what policies and practices were specific to their respective countries and which would be applicable to Hong Kong. This allowed us to add another dimension of understanding to just our overseas experiences for objective 3 (Section 1.1.3).

This type of research could only provide so much insight to the issues at hand. While historical research revealed the unique background of Hong Kong, it was simply a shadow of the modern zeitgeist cast by an extinct colonial society. Culture cannot be understood simply through background; current experience is necessary. The present day research we conducted on Hong Kong was valuable, but often devoid of a human characteristic. Much of our research resided in reports put out by the government or financial institutions which are densely packed with statistics, trends and figures. However, the full realm of Hong Kong’s housing issues cannot solely be understood through tables created by a statistician. In order to obtain this necessary human aspect, a more localized approach needed to be taken.
3.3 SITE VISITS

In order to better facilitate our understanding of changing trends of urban living in Hong Kong we conducted a vast number of site visits, orchestrated by our sponsor’s connections, to buildings scattered throughout Hong Kong. At each site visit we took detailed notes on observations we made, as well as historical notes provided to us by URA employees. In addition to this, we kept a photo journal of each unit visited when pictures were permitted. These notes and photos allowed us to differentiate each specific unit in the large number of site visits conducted as well as facilitated the analysis required for Objective’s 2 and 3 (Section 1.1.2, and Section 1.1.3).

We first visited buildings that the URA had acquired but not yet redeveloped, or had preserved to maintain Hong Kong’s unique heritage. The buildings visited followed a historical progression from pre World War II to the present. At these visits we were exposed to deteriorating building conditions, extremely subdivided units, changing floor plans and changing public rental housing. However, because the URA had purchased the units we visited, they were all empty aside from a few belongings that the previous tenants did not deem worthy enough to remove. Occasionally we would see tenants living in units that the URA had not yet acquired, a reminder of the reality of the units we visited.

Next, we visited modern developments to see the culmination of Hong Kong’s changing urban living landscape. Here we followed the same protocol as before. Detailed notes and photos were kept in addition to collecting pamphlets the developer handed out to potential buyers.

To fully grasp the spectrum of housing in Hong Kong, we requested a visit to a middle class home. A URA employee gladly agreed to take us to his apartment and introduce us to his style of living. We questioned the URA employee to fill in gaps in our logic and once again, took detailed notes and photos.
3.4 INTERVIEWS

The site visits we conducted certainly gave a closer look into urban living, but we were still creating our own judgments. In order to obtain a well-rounded understanding of Hong Kong’s housing situation, we felt the need to directly speak with people living in the area. Our team interviewed a wide range of people in different socioeconomic brackets and different types of housing. Because of this, we custom tailored our interviews to the respondent rather than providing them with a one size fits all survey. Additionally, we aimed to conduct these interviews in a conversational manner rather than a simple question and answer format. All parties interviewed were assured total anonymity and no identifying data was collected. Interviews were conducted in teams consisting of one Mandarin speaker asking questions, and another Mandarin speaker translating to English speaking members of our team. The English speakers took notes and formulated further questions.

Our first interview conducted was with a woman living in subdivided housing provided by a non-governmental organization. We tailored our topics of interest to avoid her painful history, and upon learning she had children, wrote questions that revolved around her need to support them. For example, we asked how far she had to travel to pick up her son from school and if she had anyone that could watch her son while she ran errands. Next, we interviewed two people living in extremely subdivided units subsisting on very minimal wages. These interviews were much more geared toward space issues and communal living. Finally, we interviewed people working at the URA at multiple different hierarchies. We interviewed young professionals that were new to the organization, a middle class man who was employed for nearly a decade, and the upperclass director. These interviews aimed to identify aspirations for housing and perceived minimum unit sizes for comfortable living.

Because we approached these interviews as a conversation, we learned much more than we would have gained through a simple survey. Indeed, we cannot quantify the data we collected through these interviews, but often the person being interviewed illuminated a new issue that we had not previously considered. By speaking to these
people as humans rather than simply a statistic they were more willing to speak candidly about their situations.

3.5 SUPPLEMENTARY RESEARCH

Upon exploring urban living through site visits and interviews, our team realized that our initial background research was not nearly focused enough. Our research was very general and largely focused on areas we subsequently deemed irrelevant. On the other hand, we obtained a list of concepts and ideas from our exploration but needed to find further data to flesh out our report. By using the knowledge gained through first hand experiences we were able to guide our research and find significantly more relevant and detailed documents.
Subdivided units are built throughout Hong Kong, typically seen in older buildings which were constructed with large floor space. Landlords will buy out relatively sizable apartments to partition them into smaller units. Based on the original layout of the apartment landlords build subdivisions that maximize profit. Some units provide shared facilities such as bathrooms, kitchens, and living rooms while supplying an individual family with their own bedroom. Other units construct small kitchens and toilets for each partition to provide greater privacy to the tenant at the expense of smaller facilities. Subdivided units provide cheap private homes for poor families and although may be small and sometimes under maintained, there is still a market for the households throughout all of Hong Kong.

4.1.1 Prince Edward Unit

These units, which in present day Hong Kong would be considered massive, are located on Prince Edward Road in Kowloon, Hong Kong. The buildings were constructed during the 1920’s by French builders as luxury single family households with an approximate floor area of 1500 square feet. Because of the large floor area, the unit was once subdivided to house many more than its originally intended single family. The unit pictured has been rehabilitated by the URA and is sold far below market price to Non-Government Organizations working for social causes.
In Figures 1a and 1b one can see the unit’s massive open area and high ceilings. This area, prior to URA rehabilitation, would have been partitioned into multiple different rooms. Figure 1c shows a large balcony that extends approximately 8 feet. The original developer built this unit with a large balcony in order to provide a view of Hong Kong’s hills. During the unit’s subdivided history, this balcony was enclosed and used as an individual unit for a family.

4.1.2 Shanghai Street Units

The units visited on Shanghai street are located in the Mong Kok area of Kowloon, Hong Kong, originally built in the 1940’s as family households. One dwelling provided roughly 800 square feet of living space for a single family which typically included a kitchen, bathroom, spacious living room, dining room, one to two balconies, a master bedroom, and a spare bedroom. In later years, a single 1940s unit was subdivided to house 7 families. The landlord accomplished this by abusing the development’s significantly high ceilings. He divided the apartment into two levels effectively doubling saleable area at the cost of living quality for tenants. Because of the extreme subdivision, tenants shared a communal bathroom and kitchen. The left hand side of Figure 2 shows the contrast of the original to the subdivided unit, as well as the difference in ceiling height. The right side of the figure shows a ladder leading up to the fabricated second story as well as the second floor’s extremely low ceilings.
The Shanghai Street units were some of the most haunting sites we visited due to the sheer amount of uncleared personal belongings which added a human connection to the unit. A calendar found in the unit, set to two months prior to our visit, drove home the reality of Hong Kong’s housing issues. In other units it was easy to convince oneself that these subdivisions were historical remnants of the past; that extreme subdivision was an issue already solved. The forgotten furniture and belongings forced us to acknowledge the very real fact that people had indeed lived in these subdivisions, and continue to do so throughout the city.
Wing Lee Street is located in the Central area on Hong Kong Island. The buildings on Wing Lee Street were built in the 1950s with an approximate unit size of 600 square feet. Like the other units visited, prior to URA acquisition these buildings were subdivided for low-income housing. Situated near SoHo, a wealthy gentrified neighborhood filled with boutiques and antique shops, the Wing Lee Street subdivisions show that Hong Kong’s subdivisions are not localized to only poorer neighborhoods. Property value in the area is very high, yet subdivisions were still prevalent.

The URA acquired this site with the intention to build a high rise residential unit. However, this plan met much resistance from the surrounding neighborhood. Wing Lee Street is characterized by a large alleyway that was once home to one of Hong Kong’s open air markets. URA critics felt that redevelopment of the area would cause this unique aspect of Hong Kong heritage to be forgotten. In an effort to appease the public, the site was negotiated to not exceed four stories as well as halting plans of redevelopment. Although redevelopment was now out of the question, the URA proceeded to renovate the units it had acquired because the buildings were meeting their engineering life expectancy. Today, the luxurious renovated units are rented out to artists as studios well below market price. Unfortunately the URA was unable to obtain every unit on the street. Figure 3 shows the contrast between a renovated and original unit. In Figure 4a the darker building on the left is an original, while the yellow building has been renovated by the URA.
4.1.4 Kwun Tong

The subdivided units visited in the Kwun Tong Area are located in Kowloon, Hong Kong. The buildings were constructed during the 1960’s as decently sized single family households with an approximate unit size of 500 square feet. Even though Kwun Tong units are originally smaller than the Shanghai Street units mentioned in Section 4.1.2, its subdivided units had private kitchens and bathrooms instead of shared communal facilities. Because of this, the livable areas of the units were some of the smallest visited at around 100 square feet in size. The extremely small size of one of these units is portrayed in Figure 4c where a full grown man’s arms nearly stretch from one side to the other.

![Figure 4: Kwun Tong Site Visit](image1)

These buildings were constructed with reinforced concrete, which has an engineering lifespan of approximately 50-60 years. Landlords neglected the maintenance these buildings truly needed, accelerating the wall and floor decay seen throughout Figure 4. As the building reached the end of its lifespan, the URA feared the building would collapse under the increased stress of the many added bathrooms and kitchens that did not meet the building’s original zoning requirements. Unfortunately, the URA could not continue redevelopment because it couldn’t acquire all units in the building. During our visit we passed a floor that was still inhabited and likely subdivided. A man peered out at us from the shadows of his dark apartment, hidden behind a strong iron
door that immediately forced parallels of a prison cell. We couldn’t help but wonder if he lived in units as bad as the ones we found only a floor above.

4.2 NEW DEVELOPMENT SITE VISITS

Hong Kong’s chic, modern, glass-clad high-rise developments tower over their older dilapidated concrete low-rise counterparts. While the developments’ external modern aesthetic and gross height difference create a distinct narrative of Hong Kong’s unique blend of old and new, their interior tells a different story altogether. The appliances and decor of these new skyscrapers match their outside appearance while their livable area is in stark contrast to their large exterior identity. Many of the show units visited consisted of less than 350 square feet including a government mandated service balcony; a considerably smaller amount of floor space when compared to their older counterparts. The costs of these developments, located in pristine locations range from 22,000HK$ to 28,000HK$ per square foot. When contrasting the different show flats visited, it becomes very clear that a well thought out floor plan often has more effect towards comfortable urban living than more raw area.

4.2.1 DIVA

The units in the Diva development are some of the largest seen out of the modern development site visits. The units on sale range from 439 to 1400 square feet. However, the smallest unit easily felt the least livable. The layout was long and narrow in an attempt to maximize natural sunlight through windows on opposite walls (Figure 5b). This made the unit feel significantly smaller than units in other developments exhibiting fewer square feet. The unit consisted of one large open room with an open air kitchen and space for a living and dining room. In addition to this there was a small bathroom, a master bedroom, and one other room labeled spare bedroom on the floor plans. Unfortunately, an adult male laying down stretched fully from one end of the room to the
other could barely fit in the spare bedroom (Figure 5a). The sales tactic of the Diva development was so over the top the chic aesthetic crumbled to gaudy. For example, teams of sales representative line the block outside of the development pushing sales brochures on bystanders. Prior to entering the show unit one is forced to watch a sales video consisting of young western individuals dressed in gowns and tuxedos.

(a) “Spare Bedroom”
(b) Example of Elongated Floor-plan

Figure 5: DIVA Site Visit

4.2.2 8 South Lane

Although the units at 8 South Lane were the smallest of all modern site visits ranging as low as 304 square feet, they felt significantly more livable than their Diva counterparts. Using a square floor-plan, 8 South Lane maximized its small footprint with a smart layout and space saving techniques. For example, a retractable sliding partition fashioned with a flat screen TV divided the bedroom and living room (Figure 6c) allowing for both a more spacious living room when retracted and an intimate home theater when pulled out. Additionally, there was a small two-in-one washer and drying machine below one of the kitchen countertops. While the space in these tiny units was used extremely intelligently, it was clear that no more than a couple could live comfortably.
The Avenue development had multiple show units available ranging from 339 square feet to as high as a luxurious 2006 square feet in order to meet a wide range of lifestyles. We saw two units on our visit to the Avenue showroom, but were only allowed to photograph the smallest unit offered. Although the units seen at the Avenue had some of the most lavish decor of any development visited, it still maintained a trustworthy and practical air. For example, a small extra room is labeled a storage room as opposed to the spare bedroom label seen at the Diva site visit (Section 4.2.1). The Avenue development had a large number of features that made its smaller units feel significantly larger and livable. Firstly, its floor plan utilized multiple pathways between the same rooms to curb congestion with multiple people living in the unit. Additionally, by removing portions of the walls, smaller rooms felt less claustrophobic. Second, its developer went through extensive planning to offer its tenants a wide range of shared facilities from rentable party rooms to a bowling alley. Life at The Avenue is meant to be spent in its multitude of shared facilities and within the bustling proximity of the complex, as opposed to solely in its units.
While this practice is becoming more common in new developments, it takes extensive planning from the developer. Not all developers are willing to spend more time on a project in order to increase quality of life at the extent of profits.

![Image](a) Interior of Smallest Unit  (b) Bathroom of Smallest Unit

Figure 7: The Avenue Smallest Unit

4.2.4 Country Garden Huizhou

Just across the border of Hong Kong into Shenzhen, Mainland China there is a surge of urban development. Roughly an hour and a half commute to Central Hong Kong, Shenzhen is becoming a prospect location for middle class housing buyers looking for cheaper larger residence. The team visited a show flat located in Hong Kong advertising beach front properties in the neighboring town to Shenzhen of Huizhou. The units ranged from 600 square feet to 3000 square feet at about 540HK$ per square foot, about a twentieth of the cost of living at some of the prestigious locations mentioned above! By purchasing a flat size 50 square feet smaller in Central, Hong Kong, the money saved could be used to by a beach front vacation home two hours away.

Originally our team investigated housing in Shenzhen as a possible area for professionals working in Central to live in. The commute of one and a half hours
seemed fairly reasonable; we know many people who commute this long to work in the US. We eventually learned through an interview with a URA employee (Appendix A.2) that our original assumptions were fairly naive. First, we had not considered that one would be required to cross through customs during their commute between Mainland China and Hong Kong. Second, we had not realized that Shenzhen was a city with nearly 10 million residents. This is a great example as to how immersing ourselves in the issue at hand broadened our understanding of an issue. We would have eventually come to these realizations through further desktop research, but by speaking with a resident we came to this realization much sooner.

4.3 INTERVIEWS

4.3.1 Interview with a Mother living in Central

The first interview we had was with a mother living in a subdivided unit in Central, Hong Kong Island. She had two children aged 2 and 7 years old. For reasons unknown to us, she became separated from her husband without any financial support. Originally from Mainland, she moved to more expensive Hong Kong in order to provide a better
education for her sons. Her situation is relatively special in that she lives in a subsidized subdivided unit provided by an NGO. The apartment is 322 square feet shared with another single mother and her two children. Each family has their own room while the living room, kitchen and bathroom are shared communally.

While living in such a small space is not ideal, communal living in this case has proven to be in many ways beneficial. The kids are fairly close in age and are able to help each other with their homework as well as play. The two mothers are able to cook together, and watch each other’s kids freeing up time to run errands in the surrounding city.

The woman is currently in the queue for public rental housing, but her wait time may be longer than usual. She has specified a preference for public housing in an urban area, which is understandably more popular and subsequently takes longer to obtain. She explained that the convenience of living in an urban area makes being a single mother with two children more manageable. She would undoubtedly continue living in Central if she could afford the lifestyle.

Refer to Appendix B to read the full interview transcript.

4.3.2 Kwai Chung Interviews & Site Visits

The subdivided units visited in the Kwai Chung area in Kowloon, Hong Kong were built in the late 1960’s to early 1970’s. The main source of transportation is through bus as there are no nearby MTR stations. Three different households were visited in two buildings. Unlike the previously mentioned site visits, at the Kwai Chung site visits we were given the opportunity to experience the lives of people living in these environments firsthand.

**Older Man Household Visit**

This unit consisted of a shared common space, kitchen and bathroom between three tenants. He has his own bedroom which was roughly 60 to 75 square feet. The man was 63 years old and works as a food delivery driver. He is a diabetic which limits him to roughly three hours of work per day five days per week. He is paid minimum wage
and earns about HK$ 3500 per month with HK$ 1300 going to rent. This leaves him with roughly HK$ 30 a day for food, roughly half the amount we have been spending on a single meal. He lives on the top floor of the seven story building which has no elevator adding an extra burden to his daily activities. He explained that the condition of his section of the building and his unit are relatively good in comparison to some other sections and units within the complex. The man has been a tenant at this residence for about two years, with no close family in the area. He says that during the day he spends his time either working or in a local park and at night watches TV in his small bedroom. He is a Hong Kong citizen but won’t accept any social welfare feeling that his situation is not bleak enough to warrant charity while many others in better predicaments gladly do. When looking into his eye’s there is a sense of loneliness, a barren feeling which held more weight than any other singular site visit.

Pictures of his home can be seen in Figure 9

Figure 9: Residence of Kwai Chung Anonymous Older Man
Single Mother with Two Girls

In the same building as the older man, a partition which housed a single mother supporting her two girls was visited. The household was better furnished in respect to the wall and floor construction. They had their own bathroom and kitchen along with an open living space which consisted of two beds, a desk, and a small sofa. At the time of the visit, the mother was away at work; she was normally gone from 10:00AM to 12:00AM. Within the unit there are three partitions. The girls expressed that they don’t feel safe with some of their neighbors and don’t see them often. The two attend school, the oldest in 8th grade and the younger one in 6th. They complete their homework at the school until around 7:00PM. After that, the two come back to their home, cook dinner, and perform some house work such as cleaning and laundry. The family has been living in this unit for five years now, and they seem happy where they live. Rent is HK$ 5500 a month and the mother works long hours to support their lifestyle; a classic example of the single working mother, pushing to create a better life for her children. Pictures of their home can be seen in Figure 10.

![Figure 10: Residence of Kwai Chung Single Mother with Two Girls](image)

Single Mother with One Girl

The building was constructed in the 1970s. There is one elevator in the building with two apartments per floor. It was easy to infer that the original apartment was of decent
size. The unit we visited was subdivided into 10 smaller partitions. As shown in Figure 11, this entire partition is only about 100 square feet. It consists of a larger room that the mother and daughter sleep and eat in, and a smaller room that serves as both a bathroom and kitchen (Seen in Figure 11a. The mother sleeps on the lower half of a bunk bed while the daughter sleeps and studies on the top.

The mother, originally from Mainland, married a Hong Kong native. Unfortunately they split up before her husband applied for her Hong Kong citizenship. This has created quite a predicament for the family, because the mother cannot work legally in Hong Kong. Additionally, she cannot bring her 10 year old daughter back to Mainland because she is unable to afford the increased school tuition for a Hong Kong citizen. As a result, the family must live on the daughter’s monthly welfare check of HK$ 2,300. After paying HK$ 1,500 for rent, the two of them only have HK$ 800 for food, leisure and transportation. A major portion of this is being spent on the daughter’s transportation to and from school. What is left is spent on food. The mother is actively trying to volunteer and find any work possible with hopes of improving her situation, but there is extremely limited availability in her area.

![Figures](a) Kitchen / Bathroom  (b) Mothers Bed  (c) Daughters Bed

**Figure 11:** Residence of Kwai Chung Single Mother with One Girl

4.3.3 Younger URA Member

Upon completing our site visits and interviews of subdivided units, we felt the need to interview potential buyers or renters of the new URA developments. To facilitate this, we started by interviewing a professional in his mid-twenties working with us at the
URA about his housing aspirations. The anonymous young professional explained that the housing market is too expensive for him to purchase his own place; he has been living with his parents for the last 5 years since he graduated from university. He hopes to purchase his own place within the next three years.

We asked if he would consider living in a Central Business District such as Central. The young professional explained that he would not live in a unit smaller than 700 square feet, essentially exiling himself from living in any CBD. He would prefer to trade a longer commute time for a larger living space which makes his life happier.

Refer to Appendix A.1 to read the full interview transcript.

4.3.4 Older URA Member

As a follow up to our interview with a young professional, we interviewed a member of the URA in his mid-thirties who recently moved out of an apartment in Central to start a family in the new town Sha Tin. In the interview he explained that when he was young and single all he needed was room for a bed. He spent all of his free time in Central; the convenience ranked higher than any amount of free space. However, when he decided to start a family he realized that he would need more room, leading him to purchase a 700 square foot unit in Sha Tin for the same price as a 300 square foot unit in Central.

Refer to Appendix A.2 to read the full interview transcript.

4.3.5 Older URA Member Site Visit

After completing our interview, we asked the URA member if we could visit his home located near Sha Tin. After work one day, he took us on a 40 minute MTR ride spanning 4 different lines. We were able to directly exit the station onto the grounds of the development he lived in. The development gave off an air of luxury, making it feel more like a hotel than a place of permanent residence. His 700 square foot unit felt large, with large windows and high ceilings. In order to reduce clutter, the unit had floor to ceiling
storage in many rooms with beds built on platforms for additional storage. This storage can be seen in Figures 12c and 12d.

The ground floors of the high-rise were dedicated to communal facilities. These facilities include many couches, a gym, a pool, a basketball court, multiple children’s playgrounds and playrooms, a music recording studio, and even a bowling alley (Figures 12a and 12b). The purpose of these facilities is to give residents the ability to escape from their apartments, relax, and interact with their neighbors. Unfortunately, many of these facilities, like the basketball court, music studio and bowling alley must be rented out on an individual basis. Because of this, the URA member explained to us that he rarely used the communal facilities. In addition to the offerings of the development, the surrounding area offered many distractions. A short 10 minute, waterside walk through multiple parks concludes at a large shopping mall and the public library.

(a) Private Bowling Alley   (b) Basketball Court   (c) Floor to Ceiling Storage   (d) Platform Storage

Figure 12: Older URA Member Facilities

4.4 HOUSING PRICES ON THE RISE

Hong Kong property prices are becoming increasingly unaffordable. The population in Hong Kong continues to rise, driving the housing demand up. Hong Kong is a
mountainous region with limited space to construct housing. Basic economics states that when demand is high and supply is low, the price increases. The graphs seen in this section will illustrate the rise in Hong Kong’s housing market by purchase prices, rent prices, construction costs, and land costs. Around 1997, peaks will be seen because of a crash in Hong Kong’s housing market bubble. In 2003, troughs are noticed because of the outbreak of SAR’s in the region. In 2008, the global economy crashed manifesting itself in Hong Kong’s housing market. Since then, a steady rise in cost is visible. This trend is projected to slightly decrease in the next coming years due to taxes and regulations imposed by the Hong Kong government in order to curb a housing bubble. Details of the taxes and regulations are reviewed in the Private Housing section of the Background (Section 2.3).

Figure 13 shows graphs generated by data taken from (Rating and Valuation Department, 2014) which illustrates the rise in average housing purchase prices on Hong Kong Island, Kowloon, and the New Territories. The prices have nearly doubled since the previous high in 1997, before the housing market crashed.

![Average Purchase Price by Location](image)

**Figure 13: Average Purchase Price by Location**

Increases in housing prices reflect rises in rent. Figure 14 shows graphs that portray rent trends since 1986. Although rent isn’t skyrocketing to the extent that housing prices have been, it still exemplifies the difficulty in attaining affordable housing in Hong Kong.
The reason for high housing prices is that land and construction costs are on the rise, pushing housing developers to raise property prices in order to turn a profit. Figure 15 is a graph taken from a report published by Rider Levett Bucknall, a property construction provider. This graph shows the increase in Hong Kong’s construction costs based on tender price indices since 1991 (Rider Levett Bucknall, 2013). The tender price is the developer’s estimated full price for the completed construction. The blue line is for private sector developments while the red line is for public sector developments. From the report, the main factor for increases in construction costs is a rise in labor wages for workers. Material costs have remained relatively constant over the last decade.
The graphs in Figure 16 are rendered with data taken from records of land sales since 1986 provided by Hong Kong’s Government Lands Department (Lands Department, 2014). Land costs have been increasing in Kowloon, The New Territories, and Hong Kong Island, the three main sections of Hong Kong. A large reason that the government can charge such high land premiums is that they tightly limit the supply of new construction zones. In 2012, the Hong Kong Government earned HK$ 69,563 million on land premiums, accounting for almost 16% of the government’s total revenue (Census and Statistics Department, 2013).

![Average Land Cost for Kowloon](a) Kowloon

![Average Land Cost for Hong Kong Island](b) Hong Kong Island

![Average Land Cost for New Territory](c) New Territories

**Figure 16: Land Costs by Region**

The rise in Hong Kong housing prices does not correlate with average salaries in Hong Kong. As seen in Table 3 the home affordability ratio (Described in Section 2.3.4) has increased from 36.1% in 2005 to 52.2% in 2012 - a clear depiction of the growing unaffordability in Hong Kong’s housing. The most effective way to combat this trend is to reduce unit sizes.
4.5 Market Analysis

In this section we are obtaining conclusions to the financial benefits of purchasing smaller units in Hong Kong. In the analysis we use statistics from our target demographic of young professionals, who are most likely to be purchasing these units.

Banks offer various home mortgage plans based on initial down-payments and expected repayment periods. As seen in Appendix E Bank of China offers mortgage down-payments for as low as 10%. All loans charge a single premium as a percent of the total loan where the percent of the loan increases with longer repayment periods. On down-payments less than or equal to 25% of the total loan value there are annual premiums calculated as a percent of the loan amount which increase with longer payment periods. The most cost effective approach as a loan-taker is to pay a down-payment greater than 25% of the total loan with a 10 year repayment period. To perform affordability analysis assumptions had to be made. Following are the assumptions made and a discussion on their validity.

Most young professionals between the age of 25-35 work as associate professionals or clerical support workers according to Appendix D.1 which shows the number of workers in certain occupations by age group. According to Appendix D.2, most associate professionals and clerical support workers make HK$ 20,000 to HK$ 30,000 a month. Based on the graph in Appendix D.3, we calculated the average change in salary between the 20-24 and 25-34 age groups to be 5% per year. Using this finding our analysis assumes a salary of HK$ 25,000 per month and an annual 5% increase in salary. The price of an apartment in proximity of a central business district is about HK$28,000 per square foot (Global Property Guide, 2014). This number was used in calculating the amount required for mortgage down-payments on various unit sizes.

The maximum repayment program a bank is allowed to impose on a loan taker is 50-60% of income where the higher range of this limit is meant to be for high income candidates (Hong Kong Monetary Authority, 2011). As the assumptions used in this analysis don’t consider high income candidates we will use the 50% as a maximum savings value. We model both high and low savings habit by considering an individual who saves 30% or 50% of their income. In the analysis we use a down-payment per-
cengage of 10% and 30% comparing unit sizes of 225, 250, and 300 square feet. Table 4 portrays the amount of years required to save up for a down-payment regarding the various parameters we analyzed.

<table>
<thead>
<tr>
<th>Unit Size (sqft)</th>
<th>10% Down-Payment</th>
<th>30% Down-Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>30% Savings</td>
<td>50% Savings</td>
</tr>
<tr>
<td>225</td>
<td>5.9</td>
<td>3.7</td>
</tr>
<tr>
<td>250</td>
<td>6.5</td>
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</tr>
<tr>
<td>300</td>
<td>7.7</td>
<td>4.9</td>
</tr>
</tbody>
</table>

**Table 4: Years of Savings Required for Downpayment**

By comparing the results in the table above, several conclusions can be made. When considering a 10% down payment, the time saved by buying a 225 or 250 instead of a 300 square foot unit is 23% and 16% for a 30% savings plan and 25% and 17% for a 50% savings plan. When considering a 30% downpayment, the saving time is reduced by 17% and 11.5% for a 30% savings plan and 19% and 13% for a 50% savings plan. A young professional can begin a mortgage much faster if they choose to purchase a smaller unit. A 50% savings plan is more ideal for ambitious buyers because not only will the overall saving time decrease; the percentile savings for smaller units is higher.

Table 5 is a table based on a 20 year repayment period which calculates the total payment accumulated by the end of the loan.

<table>
<thead>
<tr>
<th>Unit Size (sqft)</th>
<th>10% Down-Payment</th>
<th>Mortgage Payment</th>
<th>Total Payment</th>
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<td>225</td>
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<td>$5,958,266.00</td>
<td>$6,588,266.00</td>
</tr>
<tr>
<td>250</td>
<td>$700,000.00</td>
<td>$6,921,178.00</td>
<td>$7,621,178.00</td>
</tr>
<tr>
<td>300</td>
<td>$840,000.00</td>
<td>$8,305,411.00</td>
<td>$9,145,411.00</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit Size (sqft)</th>
<th>30% Down-Payment</th>
<th>Mortgage Payment</th>
<th>Total Payment</th>
</tr>
</thead>
<tbody>
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<td>225</td>
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<td>$4,438,665.00</td>
<td>$6,328,665.00</td>
</tr>
<tr>
<td>250</td>
<td>$2,100,000.00</td>
<td>$4,931,850.00</td>
<td>$7,031,850.00</td>
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<tr>
<td>300</td>
<td>$2,520,000.00</td>
<td>$5,918,220.00</td>
<td>$8,438,220.00</td>
</tr>
</tbody>
</table>

**Table 5: Loan Payment Breakdown with 20 Year Repayment Period**
For a 10% down payment the percentage saved by purchasing a 225 or 250 square foot unit is 28% and 17%, respectively. While for a 30% down payment the percentage saved by purchasing a 225 or 250 square foot unit is 25% and 16%, respectively. Purchasing a smaller unit provides two beneficial repayment options. The first allows for a faster repayment of the loan while the second allows a decreased monthly payment over the same time period. By being less constrained to housing payments, one can use their income for other investments or purchases.

### 4.6 Micro Apartments

Micro-Apartments are a recent trend of urban developments in Europe, Asia, and United States where rent and population densities are high. These compact units have been common in European cities such as Paris and Barcelona for some time, where housing supply is limited to low-rises in the vibrant heart of the city. Another benefit of smaller units is reduced utility costs as heating requires less energy. The keys to micro-apartments are space saving designs and built in multi-purpose furniture. These smaller units appeal to young single professionals who want the convenience of living in a city. According to Graham Hill, trained architect and owner of LifeEdited a housing developer organization, "living in small units makes a lot of sense in dense–but even more important, attractive-cities" (Grecu, 2013).

#### 4.6.1 New York

In 2013, Mayor Bloomberg of New York City announced that the Monadnock Development LLC would design, construct, and operate the city’s first micro-unit apartment building through the adAPT project. The micro units developed as part of this pilot will measure between 250 and 370 square feet. Mayor Bloomberg has stated that "the growth rate of one- and two-person households greatly exceeds that of households with three or more people, and addressing that housing challenge requires us to think creatively and
beyond our current regulations” (LaVorgna, Wood, & Bederman, 2013). Even in New York, a city with less constrained land supply, the government is considering smaller unit sizing as housing options.

Within the units, the efficient apartment design includes ample floor-to-ceiling storage, a bathroom, space efficient furniture, and a compact kitchen with a pull out pantry, full-height fridge, and stove. The ceilings are 9-10 feet in height. To invite resident interaction and improve the overall tenant living quality, an attic garden, den areas, ground-floor porch with picnic tables, and a multi-purpose lounge will be included within the property. While providing inhabitants space to entertain guests and meet other residents, the common spaces are meant to open up the home feel beyond the individual living quarters. New York Deputy Mayor for Economic Development Robert Steel states that “We’ve clearly seen that developers believe there is a robust market for smaller apartment sizes . . . today’s announcement is a milestone for new housing models.” (LaVorgna et al., 2013)

![Kitchen Layout](image1)
![Pulldown Bed](image2)

*Figure 17: New York City Micro Unit Designs Published in (Sophia, 2013)*

4.6.2 San Francisco

In San Francisco similar housing models are sprouting around the city. According to San Francisco Supervisor Scott Wiener “forty percent of San Franciscans live alone . . . we need to think outside the box in providing housing for our population.” (Said, 2013). In 2012, Wiener sponsored legislation to allow micro-apartments of a minimum 220 square feet total area with no less than 150 square feet of livable area including a bathroom,
kitchen, and closet. No more than two people may live in one of these units (Weiner, 2012). The city agreed that 375 micro-units could be built as a test and now there are over 120 under construction in the Mid-Market area (Said, 2013). Buyers and renters are willing to sacrifice space to afford the convenience of living blocks from work and the amenities that the city offers.

Bay Area developer Patrick Kennedy of Panoramic Interests believes tiny dwellings will "get huge". He argues that about 220 square feet is the "sweet spot" for micro-units while 160 square feet is getting near the minimum endurable standard (Jaffe, 2012). He discusses the four main challenges in designing an attractive micro-apartment to be noise issues and locations of television, bed, and dining room table. With less space to buffer noise from other units, the developer invests a great deal into sound-proofing by constructing thicker walls, acoustical mats, additional sheet rock, and specially made electrical outlets. Figure 18 shows photographs supplied by Panoramic Interests that illustrate their design layouts for future micro-units which adhere to the furniture placement challenges. The queen size bed in the figure can be turned into a dining table.

Figure 18: Design Layouts for Micro-Apartments in San Francisco Photos Published in (Jaffe, 2012)
4.6.3 Paris

In Paris, where city living is desirable but household supply is low, modern space saving ideas are booming. A city like Paris is easily used as one’s living room rather than their specific living quarters. Architects Marc Baillargeon and Julie Nabucet converted a previous 130-square-foot bedroom into a sleek modern apartment for a single buyer/renter living in one of Europe’s largest cities. Almost every piece of furniture smoothly transforms to perform various functionalities. The bed, which also converts to a sofa, is pulled out like a drawer from beneath the kitchen landing. Storage is found in every possible nook, from high ceiling cabinets to stairs with built in storage. The unit also includes a small kitchen and a bathroom. This beautiful design is a testament to the transformability of small spaces into open-feeling, uncluttered, livable apartments (Minnetian, 2013).

Figure 19: 130 Sq/Ft Paris Micro Unit Design Published in (Minnetian, 2013)

4.6.4 Hong Kong

Architect Gary Chang ingeniously designed a 344 square foot micro-apartment which transforms into 24 different rooms by utilizing sliding walls and fold-away furniture. The walls, suspended from steel tracks bolted into the ceiling, shift around to transform
the apartment into a large manner of spaces: kitchen, library, laundry room, dressing room, a lounge with a hammock, an enclosed dining area, a bedroom, a wet bar, and other variations. He believes that using reflective materials and appropriate lighting can add essential openness to a space. Mr. Chang has converted 344 square feet into a luxurious space comparable to a unit three to four times its size and is determined to see his ideas put to use in new multi-unit buildings (Gardiner, 2009). His design innovation provides breakthroughs into the future of luxurious small spaces.

![Figure 20: Architect Gary Chang’s Innovative Micro-Apartment](image)

4.6.5 Examples of Space Efficient Furniture

Along with smart unit layouts, space efficient furniture is essential in transforming a micro-unit into a lively home. A queen size bed is 35 square feet which is 10% of a 350-square-foot apartment, 10% of a living space that is exclusively used while sleeping (Friedlander, 2013). A Murphy bed is a decent solution which allows the user to fold the bed up into the wall. A more recent innovation allows the bed to be folded into a sofa, desk, or other utility. Study Bed Company sells a product that folds from a bed into a study desk. They designed the product to balance items on the desktop while transforming. Photos of its operation can be seen in Figure 21.
Fold down, retractable tables and collapsible chairs provide the same effect of space utilization. A product designed by James Phipps is perfect for a small apartment. The sleek chair folds into an easily storable shape for when it is not in use. Figure 22 is a photograph of the product taken from his Product Catalog.

Figure 22: Example of Folding Chair Published in (Phipps, 2008)

By constructing lofts and floor to ceiling storage, ceiling space is used in an intelligent manner, a necessity in limited space apartments. Another method of utilizing ceiling space is a ground approach where floor storage is built as a platform. BedUp has taken ceiling operation to a new level by creating a bed that is stored on the ceiling. When you go to bed, just pull it down. Figure 23 is two pictures showing the BedUP in use and the space saving potential it possesses.
Japanese designer Atelier OPA has designed a series of collapsible utilities including a kitchen, sleeping area, and work study. The products are easily maneuvered around a space and can be stored when not in use to fractions of the outlaid size. The full series almost provides all of the necessities of a living quarter. Figure 24 is two pictures showing the items outstretched for use and folded for storage.

Figure 23: Example of BedUP Bed Published in (Decadrages, 2014)

Figure 24: Example of Atelier OPA furniture in (Sugihara, 2010)

4.7 MINI-STORAGE FACILITIES

As housing square footage becomes increasingly expensive, it’s difficult to justify keeping more belongings. A solution to this problem comes in the form of mini-storage facilities. These facilities are typically located in industrial buildings that are not zoned for residential use, where floor space is cheaper. Companies rent out these storage
spaces offering a wide arrangement of rental time options and unit sizes. Table 6 shows various unit prices for different rental time periods based on square-footage of the space.

<table>
<thead>
<tr>
<th>Sqft</th>
<th>Standard Price</th>
<th>Prepaid 3 Months</th>
<th>Prepaid 6 Months</th>
<th>Prepaid 12 Months</th>
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<td>11</td>
<td>680</td>
<td>578</td>
<td>544</td>
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<td>58</td>
<td>3,200</td>
<td>2,720</td>
<td>2,560</td>
<td>2,400</td>
</tr>
</tbody>
</table>

Table 6: Pricing for Mini Storage

When we visited two micro-storage facilities we immediately noticed the high level of safeguarding from the barred entrance to the multitude of security cameras monitoring each hallway. A security guard inquired on our interests and after we told him we were interested in renting a space, he unlocked the gate and let us in. The safety of one’s belongings should be of no concern in one of these facilities. The pictures in Figure 25 illustrate the layout of a mini-storage place.

Figure 25: Mini-Storage Facility Hallway & Unit
A downside to these amenities is the inconvenience of their location since industrial buildings which house these services are generally in remote locations. Traveling to and from these facilities with your belongings can be troublesome.
When discussing quality of life with regards to housing, unit size will undoubtedly be a primary talking point; very few people willingly sacrifice floor area. However, as the world population continues to grow, free space becomes an increasingly scarce resource. An extreme of this trend can be seen in Hong Kong, which has been enduring massive population growth over the last several decades. Housing this growing population is an increasingly difficult task within the country’s fixed inhabitable land. In response, Hong Kong’s housing landscape has become distinguished by densely packed high-rises. With such an enormous demand and insufficient supply, affordable housing is becoming a memory of the past. Since the beginning of the twentieth century, construction size of residential units has been shrinking as a solution to unaffordability and limited housing supply. The trend of shrinking living space has a hindering effect on the inhabitant’s quality of living. The Urban Renewal Authority tasked us with evaluating their minimum development size of 300 square feet while ensuring a high quality of life in an urban setting.

We began our project by defining a scope for our minimum sizing considerations. We first recognized that affordability and unit size are directly related. Hong Kong’s super rich do not need to be addressed by a minimum unit size while lower income citizens are not part of the URA’s target demographic (Section 2.4); they are living in the public sector where minimum unit size is already dictated by the government. This limited our project scope to the middle class. Additionally, we believe the current URA minimum of 300 square feet is already too small to raise a family in, further limiting our project scope to single residents or couples without children. Finally, all URA developments are constructed in proximity of a central business district. We thusly define our target demographic as a middle to upper middle class single person or couple wishing to live in a central business district. Unfortunately, at over HK$ 7,000,000 for
a 300 square foot unit in a new development, this demographic either sacrifices their quality to balance affordability or sacrifices their locality to business districts by moving further away.

One immediately perceived solution to quality urban living in Hong Kong is larger unit sizes. Indeed, every person we spoke to would like a larger living space, but few could afford one. In the face of Hong Kong’s political landscape and free economy, private housing prices will at a minimum remain constant. As a result, for all but the super rich, larger affordable housing is simply a dream. In order to maintain a high quality of life for everyone despite shrinking spaces and rising land costs, we must attempt to maximize variables other than unit size that dictate quality of life. Throughout our study in Hong Kong for the URA, we have identified other elements that contribute to quality urban living and have formulated recommendations that aim to improve these factors.

By performing site visits and listening to the lives of people affected by the extensive housing unaffordability of Hong Kong, we were able to pinpoint the key attributes that facilitate quality urban living. A sense of community where people are able to work, interact, and enjoy life together is an irreplaceable phenomenon which adds to the human spirit. When we compared the various people who gave us the opportunity to view life through their lens we fully comprehended the extent to which human relations aggrandize a life.

As described in Section 4.3.2 of the older man interview, we were hard hit by the lonely aura that this man emanated. His family has no part in his life and his immediate surroundings provide little facilities for interacting with others. The man is alone yet resides in one of the most densely populated areas in the world. In Section 4.3.2 we described our visit and discussion with the single mother from Mainland China living with her daughter in an SDU. Although she can’t work due to her lack of Hong Kong residency, she desperately yearns to contribute to society. As a large portion of income goes to the daughter’s school transportation costs, there is no extra money for personal transportation expenses in her monthly budget; she is exiled to her remote location where opportunities to give back are minimal. This woman’s situation has forced her into a state of depression which was expressed to us when she mentioned sporadic
thoughts of suicide. There are countless lives in Hong Kong with similar predicaments who could flourish with the proper environment to interact and relish living with others. In contrast to these two situations, was the other single mother from Mainland China who lived in a SDU with her two boys (Section 4.3.1). Within her unit lived another single mother with two children of similar age to her two boys. She expressed to us that the children play and aid each other with homework. The two mothers take turns watching over the children while the other runs errands. The community that is formed within their household is of great benefit to both families. Immense opportunities have surfaced for their family because of their location in Central, Hong Kong Island. The boys are in close proximity to good schools and with the help of her landlord the mother was able to start a small business selling clothing that she knits as she waits for Hong Kong citizenship. Overall, the small space that her family inhabits hasn’t conflicted with their ability to live a quality life.

The contrast in livelihoods amid the people we met, living in some of the most confined places in Hong Kong, lead to useful conclusions that identified factors that improve urban living. Human relations are fundamental to achieving happiness and fulfillment in life and an environment that facilitates these interactions can overshadow any small confinement. A location that fosters social activity such as Central, Hong Kong Island or any centralized district, is an ideal setting when faced with small homes.

As the trend of shrinking spaces in Hong Kong endures, housing developers must strive to build homes that enable such aspects of quality urban living. Communal spaces such as fitness rooms, children playrooms, pools and other accommodations are excellent measures taken by developers to add openness to small dwellings. However, as we learned through our visit with the mid-thirties URA employee (Section 4.3.4), many communal spaces built within complexes don’t foster community. In fact, they prohibit the collective sense by exclusively renting out features such as bowling alleys, music rooms, or basketball courts in order to make residents feel like royalty. We recommend to the URA that future developments harness truly shared accommodations such as function halls, gardens with picnic areas, gaming rooms, and children playrooms. A basketball court which encourages pick-up basketball games instead of being rented
out as a private activity is a more inviting atmosphere. We believe that promoting such exchanges between people will vastly enrich life in metropolitan settings.

In Hong Kong, every square foot is precious floor space in one’s home. Optimizing the usability of the space is crucial in such an environment. Developers must design floor plans that make a space feel open. When performing site visits to modern developments we quickly noticed flaws in design that made the space feel smaller. As mentioned in section 4.2.1 the floor plan at DIVA was long and narrow giving the unit a more confined feel in comparison to units two-thirds of the size at The Avenue or 8 South Lane which utilized squarer floor plans. Along with an effectual initial floor plan, space transformable infrastructure and storage needs to be provided. As discussed in Section 4.6.5 of the results there are many innovative techniques that improve the usability of a room. Pre-planning units to accommodate such technology is essential to relieve the claustrophobic effect in small dwellings. Providing facilities such as mini-storage (Section 4.7) within the complex could be an attractive selling point of small units. The developer would receive compensation by charging rent while tenants benefit from the convenience of accessing their belongings within their building rather than traveling to industrial locations. The developer must find a balance between costs and consumer livability in deciding what kind of technologies and facilities to implement when converting a small space into a vibrant open home.

To adhere to the desires of single professionals the URA should reduce its minimum unit standard. Small residential units are not unique to Hong Kong. Many cities around the world including Manhattan, San Francisco, and Paris are implementing units below 300 square feet to meet their housing demand. A common theme in building these units are intelligent designs and space saving furniture coupled with communal facilities. The URA should set its standard in the range of 220-250 square feet based on standards set by cities in the United States where housing supply is much more available and regularly spacious. Facilities that encourage communal interactions and space efficient units need to be priorities when planning future smaller units. Even if the URA continues its current standards, by implementing the proposed suggestions, housing in Hong Kong will offer greater benefits to the inhabitants’ quality of living.
BIBLIOGRAPHY


A.1 INTERVIEW WITH ANONYMOUS URA EMPLOYEE 1

Group: Where do you currently live?
URA Employee: In Aberdeen. South side of the Hong Kong Island
Group: How big is the space?
URA Employee: Around 600 salable floor area
Group: Do you rent or buy?
URA Employee: Rent
Group: How much do you pay for rent?
URA Employee: About 10,000 HKD
Group: Where would you like to buy?
URA Employee: In Aberdeen too because there will be a future railway built. It’s a nice neighborhood area
Group: How long is your commute?
URA Employee: Depends on traffic. 20 minutes on a good day and over 45 minutes when the traffic is bad
Group: Would you ever consider moving to a commercial business district with a smaller place?
URA Employee: I prefer a bigger space and to spend more commute time. I want to live bigger. It’s kind of like a psychological feeling, if I finish work and its more crowded I don’t feel comfortable.
Group: Do you feel that purchasing housing in Hong Kong is a solid investment?
URA Employee: Yes, because Hong Kong mainly relies on property/financial market. If you don’t want your money to depreciate in value; property is one good way.
Group: Do you live alone?
URA Employee: No, I’ve lived with my parents for 5 years since I got back from University in UK. I’m too young to get my own place. It’s too expensive.
Group: How long do you think it will take you before you can buy your own place?
URA Employee: Luckily, within 3 years. Fingers crossed.
Group: Do you plan to pay a 30% down payment?
URA Employee: If I only pay 10% there’s an extra fee. If you pay 30% you can exclude the extra payment.
Group: Are you going to buy firsthand or second hand?
URA Employee: Second Hand, First hand is just too overpriced and too small.
Group: How long does a mortgage like that last?
URA Employee: Around 20 years.

Group: Do you see yourself starting a family at your first home purchase?

URA Employee: I’m targeting to get 700 square feet or above two to three bedrooms so yes I do think so.

Group: From an affordability aspect do you think that people would start giving up space to live in good locations?

URA Employee: For me, if I need to spend more time on traveling I wouldn’t mind. In England it took me an hour to get to school, so I’m used to it. Hong Kong is used to quick efficient commutes. If it takes more than an hour to get to work, they might think it’s a problem. Personally I’m okay with it. I wouldn’t sacrifice my living space for commute time.

Group: Is there a minimum space you would live in?

URA Employee: I think 700 sqft is livable. 300-350 sqft is way too small. I can’t see myself living in a studio. Not even when I’m single. It’s too small. I want to buy property low and sell it high and keep switching.

Group: Do you think it is easier to sell 700 sqft vs. 250-300 sqft?

URA Employee: The housing demand is so high and the supply is so small that everything sells.

Group: Have you ever considered public rental housing?

URA Employee: I can’t but when I was in university and not working my mother told me I should queue up for public rental housing to have more affordable housing. I believe that public rental housing is for those who need it so I wouldn’t want to take advantage of the system. Many people don’t feel the same way.

Group: Do you think there is a lot of public rental housing abuse?

URA Employee: Oh yes, many people who are studying in University apply and get in but then get good jobs after school. Then they have cheap housing and spent their money on other things like cars. I read an article that a couple wanted to get into public rental housing so the man quit his jobs so he could apply.

Group: Any general comments?

URA Employee: One thing you can mention is I think housing can relate to education. Education system in Hong Kong is better than in China. If you go to school in Hong Kong you need to be a Hong Kong resident or have property in Hong Kong. Parents sending kids to school here also will benefit from smaller spaces because the students don’t need much and parents want to afford it.

URA Employee: I’m thinking instead of buying an apartment in Hong Kong. I could buy a unit in an industrial building. They’re bigger, higher ceilings. I would renovate it. It’s illegal but because it is so cheap it is worth it. The government doesn’t have time or resources to look into something as petty as a single man renovating an industrial floor to a residential place.
A.2 INTERVIEW WITH ANONYMOUS URA EMPLOYEE 2

Group: Do you buy or rent?
URA Employee: Bought it

Group: If you don’t mind us asking, how much was it to purchase?
URA Employee: 1 million US - internal 700 square foot

Group: What percent of the purchase was your downpayment?
URA Employee: 30%. Actually I think it might have been more. 30? 40? I can’t remember details

Group: What was the interest rate?
URA Employee: The net effective mortgage interest rate is 2.15

Group: Did you feel that this purchase is an investment which will earn you money in the long run?
URA Employee: In the long run maybe. Okay, put it this way - I bought it sometime, I think it was June 2012. Now, if you really believe what the agents say - they said that I bought it for 1 million US and now they’re saying it’s worth 1.3 or 1.4 million. If you really believe that, but I…Okay I would probably say it hasn’t gone down in value. It may have gone up a bit, but the extent of which the way the agents say I doubt it very much. But I would see it as a way to preserve wealth rather than looking for an upside investment opportunity in the long run.

Group: Where did you live before you moved?
URA Employee: I lived in a place called mid levels before which is a good half an hour walk from here uphill. Mid levels is a district where it’s described as not quite the peak, but halfway down.

Group: Were you renting?
URA Employee: Yeah I was renting at that time. The actual square footage I think it was 600 something internal floor area. It’s a three bedroom just like the one i’m living in now.

Group: What was the rent cost?
URA Employee: The rent was - It was 23500 which works out to be what … 2,200 US a month. No - 3,300 something like that.

Group: Was that second hand?
URA Employee: Yes of course. That one has been built for about 22-23 years.

Group: Why did you decide to buy a house? Is it just because you saved up enough money?
URA Employee: No it’s not that - it’s … i’m trying to remember why. Okay, back then, the prices are going up constantly and just before my lease expired I sort of figured that it’s going to be a 20% markup on my existing rent, if not more. And then I sort of got the calculator out put some numbers together and I reckoned that the actual mortgage repayment every month would be cheaper. So I just thought if I can actually afford my own place that is actually owned by myself instead of paying rent and paying of somebody else’s mortgage I might as well pay my own. So that was one of the reasons why. Then I sort of checked the bank account - I did save up a bit. Its just about getting the down payment sorted out.
Group: Do you have kids or a family?

URA Employee: Yeah one of the reasons that - because I just had a baby daughter born back then. I was looking for more of a permanent base. I had been renting apartments for about 10 years or something. So it's literally like moving every two years. With a kid it's probably time to settle down have a fixed space within that district so that schools, playground and all that sort of peripheral bits come together. So I needed to have a permanent base.

Group: If you could have made a permanent base in central, would you have rather done that for your family?

URA Employee: Yeah, but its an affordability issue at the end of the day. Just looking at the bank account and see how much I can afford and what I can afford and choose where to live.

Group: Do you think that if you had gotten an equivalently priced place in central but smaller you would have been able to raise a family there?

URA Employee: No I think its a balance between more space and more close to the central business district. But then again we are living in hong kong - how rural and how suburban can you really get. I mean, let's face it, 1 hour traveling time as opposed to half an hour walking time. One hour is not exactly the end of the world. I'm sure pretty much when you're back in the US is very common. But you do miss it, because you know, you can run out of bed at 8 o’clock and still make it to the office in time because in the morning your’e walking down a 20 minutes walk. I mean, it's nice, but you know - it’s not my own place. It would have cost double that if not more if I chose to stay in central or mid levels. The trade off is a balance.

Group: If you were a single person would you have considered buying a smaller place in order to live in central?

URA Employee: Not really. I mean, it would be worth renting. It’s an affordability issue.

Group: But would you pay the same amount for a smaller place?

URA Employee: No. Because, okay, buying a flat is like a long term commitment. It’s not like you can pay off the mortgage in like 5 years. And then, you know, being single - in the short term you see yourself being single a year or two years. Not necessarily being single for five years. Now if property price keeps going up maybe. It’s looking at whether its really worth putting up so much. Being single, renting a place that I don’t have to cough up so much. I have actually a bit more money in the bank account that I can dispose of at ease. Whereas if I take that money away and put it in a mortgage, put a downpayment get a mortgage - then i’m really starting from a negative base. Which for a single person is not so ideal. Unless you’re really looking for long term commitment otherwise you wouldn’t put down money; that sort of money.

Group: If you were single, what would you say is the smallest size apartment you would be willing to live in.

URA Employee: One bedroom would be alright. When I first started out I think it was 250 square foot. Literally. Just one bedroom.
Group: You felt okay with that space?
URA Employee: All I need is one bed to sleep in. I mean, okay it’s nice to invite friends for a few drinks or whatever, but how large does that living room need to be? For a single guy, small is not really an issue. If you hang out, you don’t hang out at home really. There are various factors. One of it is just purely for investment. One of it is just that, you know, you get too drunk when you’re out in town then you just need a place to crash in and sleep it off until the morning. There are people that if they have that much money to spend will live really further out and just need a place to crash on the weekend.

Group: Who do you think can actually afford these new developments?
URA Employee: Okay put it this way, when people hang out its not restricted to the young and rich. There are old and rich who hang out too. Okay, There are lots of luxurious downtown serviced apartments. Some, or actually many cases that its actually those very rich people who live in big houses - just further out in less central areas but they will keep a serviced apartment right in the middle of town so that - I don’t know - they can meet people and have a place to go at night after they get too drunk. It’s quite common in Hong Kong. In Admiralty there’s a place called Hong Kong Park which is just off the Pacific Place Mall. On top of that park, there’s two towers - serviced apartments - called Parkside. And a lot of rich people have a sort of rented a permanent base in that serviced apartment Parkside. Because it’s close to central, they can just have a few drinks - too drunk to drive then nip out and sleep. It’s quite normal. And then the convention center in Wan Chai - that big convention exhibition space - the tower above that is also serviced apartments and a lot of people have that. Rich people especially. Places like park side places like the convention center serviced apartments they’re not 200 square foot. They are more luxurious types because they are rich. One of the other things is that sometimes for - okay - there are overseas students. Particularly a lot are from mainland. Their parents tend to find them a place for them to live in while they are studying at college. So, some of the demand is actually from mainland parents looking for a place of residence for their kid. Then again, if it’s bigger enough so when the parents come down they can spend the night - that’s just convenient instead of living in a hotel.

Group: We read an article that was saying that 30 - 40% of new home sales in Hong Kong come from mainland china. Do you think its quite that much?
URA Employee: Okay, first of all you’ve gotta define what is mainland China. I.E. a person who does not necessarily have a Hong Kong ID card? Or not? Because bear in mind, since the handover - you’re talking 1997 - nearly, not quite, but nearly 20 years a lot of people who came during that time you know - In Hong Kong it only takes about seven years before you’re given your permanent residency. So those that came in 2000-2007 became Hong Kong residents so they still have loads of money because some of the business is still in mainland China. So do you call that Hong Kong or not?
Group: We’re not sure.

URA Employee: Exactly. So I mean, you say 30 or 40. Probably they’re referring to literally those newcomers. But, you know, the same study could have been done 3 or 4 years ago. But 3 or 4 years on maybe half of them are Hong Kong residents. So there’s a very fine line between where that 30 and 40 is defined. For the rich, the super rich, or the mainland Chinese, buying a flat is a commodity rather than necessity. It’s like an investment product. When you are that rich you diversify your portfolio. You carve up certain amounts of wealth into property, certain amount in stocks, certain amount in bonds or whatever. So every year they review the wealth portfolio - they think - ah this is below the 20% benchmark so I need to top it off up to 20%. Then they go, ah alright this amount X million that fits. That’s how the wealth management guys teach people to management their portfolios these days. If one side gets a little to much, you realize some of that profit and put it into something else. So that’s why private bankers these days advice these mainland super rich people to diversify into Hong Kong real estate.

It’s no different. When I was a foreign student going to the UK a lot of parents would buy up flats for their kids so that during christmas or during half term their kids can be away from school and live in that area. During term time they will live in college. Outside of term time they will live in their residence. So, it’s no different. Only that now in Hong Kong the scale is so much bigger. You talk about 1.3 billion people as opposed to previously 500 million people from Hong Kong.

Group: How often do you hear of people commuting from places like shenzhen to work in Hong Kong because it’s just so much cheaper.

URA Employee: Depends where you work. I do know that there are students who study in Chinese University of Hong Kong which is in rural, suburban areas who do choose to live in shenzhen. They commute, take the train from shenzhen to attend lectures in the day time - go back home at night. Because it’s literally from downtown shenzhen down to the university in Hong Kong - you’re talking about an hour and a half max travel time. When you’re a student that’s okay. And the other thing is that the train ride from shenzhen to the university, you’re talking about 5-6 US. From a US standard its not bad at all. So there is always that option. But for work, if you work in central it’s kind of difficult. It’s a good two hours. There’s always immigration which is a hassle. You’ve got to take into account that. But if you’re working in New Territories, the more northern suburban areas it’s not really an issue. If it’s cheaper. But then again it’s just cheaper. It’s not like half the price of what you’d do in Hong Kong. But more often than not it’s retired old age pensioners who chose to live up there because it’s cheaper.

Group: Generally, what do you think of the housing situation in Hong Kong? To us it seems like central just seems to be becoming more and more unobtainable?

URA Employee: Yeah but, then again do you need to live in central?
Group: People seem to want it
URA Employee: It’s a vanity issue. Of course you spell out your address when living in a rich area and it makes you feel good. When you’re single you can afford to look for, or trade money for vanity. But when you’re a married man with a single job and have education to think about you need to be more realistic and move out where you can afford. The place I rented was second hand. The place I bought was first hand. The reason why I bought first hand is because in Hong Kong, most of these apartments are fitted rather completely. In one way I would save some decoration sort of fitting out cost. The other thing is that, if you have issues with down payments. IE you do not have enough to pay off the downpayment. A lot of developers will offer you a second mortgage to top up. For example there’s a law saying that if it costs more than a million US you have to cough up 40, if not 50% downpayment. Now sometimes if you’re struggling to come up with that 40% the developer will offer you whatever the difference is between what the bank offers and what you need. Now it will be a bit higher than the bank rate but its still manageable and you will have your own home. When you think about it, now for second hand you can’t find a second financial institution that will help you out with the short fall on deposit. That’s why a lot of young people tend to go for a first hand property because it’s easier for them to get their foot in the door. It all boils down to affordability. That’s why in the really rural areas you still have long queues of people viewing it and actually pay money because the developers tend to help you out with deposit.

Group: If you were to buy a second hand apartment in central, how much cheaper is it generally as opposed to first hand?
URA Employee: Okay, let’s not restrict it to central because there are not that many... Central Business Districts in general
URA Employee: Let’s say, the one you saw - DIVA. It’s going rate was about 3,000 per square foot. Getting a second hand around that DIVA place you’re talking about 2,000. So 30-40% less second hand. But some of that is undermined by okay its 10 to 20 years old. It may cost more to refurbish it. Then affordability issues. The bank won’t necessarily help out with the mortgage. So that’s why it makes it more attractive to buy first hand. But then again, if the second hand is 30-40% less what it means is that you pay a 30-40% premium to get it first hand. Now whether that premium is really worth it is up to your personal position. But it’s new for start, and it’s pretty much fully fitted. You can just move in some furniture and you’re ready to live in it. Bring in a suitcase and you’ll be alright.

Group: So generally people would want to somehow afford a first hand place?
URA Employee: I think it really does depend on the person. I think for a 30 or younger person buying one of the main concerns is affordability. The deposit amount. Now if a developer can offer a certain amount to top up the difference in their savings and the deposit amount they
would go for it. And sadly its only the first hand properties that can offer you that.
Did you see the one really really far out Marina Cuff, Double Cuff or something? That one is really out in the outskirt. But still on the average the price is 5 million hong kong which is 800 or 700 thousand US? I actually worked out that if I put down that half a million hong kong, which is 1/10th of the price, I can buy that flat. Now saving up for you know 1.5 million hong kong is difficult. But saving up for half a million if you’ve been working for a few years and not a big spender is certainly doable. That’s why people are very willing. Despite it being really further out. Because having your own property does mean something.
Buying it new if there’s any little thing that you’re unhappy with the developer who built the place will step in and fix it for you because it’s still under defects liability.

Group: We’ve read that Hong Kong is the most unaffordable housing in the world. How much further do you think it can actually go?

URA Employee: The fact of the matter is, there’s still a lot of people who have enough cash in Hong Kong. That’s the crux of the issue. I’ve read somewhere that for all the property owners out there in Hong Kong - I think it was 70 - 80% who do not have a mortgage. If you’ve already payed off your mortgage then what? If it goes down in value, so what? It only goes down in value because people need money. They want money instead of the property. Some of that reason could be because the bank is saying, “Okay, right, i’m no longer going to support you another 10 years for your mortgage. You need to pay me another half a million so I can keep your mortgage. But in the case of when 80% or 70% have already payed off all their mortgages - going down in value doesn’t mean anything. Well it does mean the wealth in fact would have shrunk, but they’re not exactly going to be without bread to eat tomorrow. So it went from 1.5 million down to 1 million. I reckon I will just sit there and do nothing. Seriously, I mean there’s no pressure. I’ve already payed off the mortgage. You could sell it and then rent it, but not many people do that because the transaction cost is also very high. You’ve got your lawyers, you’ve got your insurance this and that - it adds up. So I reckon how far its going to go is pretty high. Unless the feds raise the interest rate it will remain. There’s always that demand. The rich people in China are still coming. So even if it goes up, they still have that money. The US still keeps printing money, interest rates are historically low. Then what? People still have money. People say the feds keep printing money, but so does the Chinese government. You just don’t know it because they’re not open as in the feds. So if you keep printing money people will go, “Alright i’ll buy this and that”. It’s a long way to go. I mean its not - you compare Manhattan, London, even downtown Taipei, Singapore - property prices are all going up. It’s not localized in Hong Kong. Okay the extent or the scale might be more severe in Hong Kong, but when you talk about whole global trends I can’t see it from going up. It may plateau, but it won’t crash.
Group: What do you think about half of Hong Kong’s population living in Public Rental Housing? It’s just such a class difference.

URA Employee: You say it’s class difference, but I don’t have a car, right? But I know many many people live in public housing drive BMWs, Mercedes.

Group: Have you ever considered doing that?

URA Employee: Now I can sit on my ivory tower and say that, “Ah yes public rental housing - it’s purpose is a safety net, it’s not an entitlement”. Whereas the youth these day see public rental housing as an entitlement. The thing started out as being a safety net. As if you can’t climb up then fall back down then here’s a cushion. These days it’s becoming an entitlement. Mind you I saved up - i’m 35 now - I’ve been working since I was 22. I saved up what 12-13 years of my life before I could get my first property. Young people want to think that "Oh yeah I should get my property about 5-6 years down the line". But its just not realistic. Sometimes, you just have to get your head down and sweat a little before you can get what you want. That’s my view anyway. Old fashioned but. Literally yeah 12-13 years working.
INTERVIEW WITH AN ANONYMOUS MOTHER LIVING IN CENTRAL

Lily: Hi, my name is Lily, thanks for taking this interview. So where are you from?

Mother: Hi, I’m originally from Zhejiang, Mainland China.

Lily: Oh, Zhejiang, that’s close to where I’m from! I’m from Shanghai. So what made you decide to move to Hong Kong?

Mother: I moved to Hong Kong for my son. I wanted him to have better education here. I got married to a Hong Kong citizen and had one kid with him at first. At that time both my son and I were waiting for our Hong Kong residency to be approved and we moved to Shenzhen which is closer to Hong Kong than Zhejiang. My son was in kindergarten when our identity got approved. As you may know, the kindergarten in Hong Kong is so expensive so I decided to stay in Shenzhen because I didn’t have much money. However, when it came to the time that my son was ready for primary school, I knew it was time to move to Hong Kong.

Lily: I see. So how long have you been in Hong Kong right now?

Mother: I’ve been here for five years now. And I had a second two years ago by accident. It wasn’t in my plan because of my financial condition.

Lily: So how did you find out about this Light Home?

Mother: A social worker helped me with this. The social workers in Hong Kong are really helpful.

Lily: And how long have you been living there?

Mother: I’ve been living here for about 9 months.

Lily: Where were you living before you moved to this Light Home then?

Mother: I used to live with my sister in Sai Wan, which is about 20 minutes by bus from here. Sai Wan is also where my older son goes to school right now.

Lily: How do you like your new home now?

Mother: I like it a lot. In terms of sizes, this one is 100 square feet larger than my sister’s apartment and we actually have less people in total. I used to live with my sister’s family in a 215 square feet apartment. Her family has four people and mine has three, which makes it 7 people sharing 215 square feet. Right now I’m sharing a 322 square feet apartment with another family of three. The other family is also a single mom with two kids. We are only sharing common facilities such as living room, kitchen, and bathroom. We each have our own bedroom. There is plenty natural light. The landlord is really nice and helpful, too. Learning that I have two kids, he prepared a bunk bed for us in the bedroom. All the furniture is new.

Lily: Oh wow, I can see why you are happy with that. What about other aspects? For example, the condition of the neighborhood or convenience of commuting around?

Mother: This is a very nice neighborhood. It is in the central of urban area. I’m actually very surprised that I will be able to live in a nice apartment in this
area. I take my sons just to walk around the neighborhood a lot. There are bus stops and MTR stations within walking distance. There are plenty shops and restaurants around here but I don’t go in them too much because of my financial condition.

Lily: Oh I’m sorry to hear that but I’m glad you like the neighborhood though. Do you mind if I ask about your financial condition?

Mother: Oh no, it’s fine. So I actually don’t go to work right now because I can’t. My 2-year-old son can’t be home alone. Therefore, we’re living on government subsidy which is about HK $6,000 per month. The rent for the Light Home is about HK $3,000 per month.

Lily: Wow that’s really cheap! We’ve been looking around these days and the housing in Hong Kong is amazingly expensive.

Mother: Yeah I know. That’s why I’m so grateful to the social workers and the landlord. The Light Home Scheme targets people like me, single mom with kids in financial difficulties. That’s why we can live in this nice place for a rent much lower than market price.

Lily: I see. It is really cheap comparing to the market prices but that is still half of your monthly income though!

Mother: Yes, that’s true. So I also do knitting and sell them on the internet. The social workers are helping me on that because I actually don’t have any knowledge about the internet.

Lily: I’d have to say that you are lucky among the people in difficulties. I’m actually wondering, what you think are the advantages and disadvantages living with another family and sharing facilities?

Mother: I actually enjoy having another family under the same roof because we can actually look after each other. The mom of the other family sometimes cooks with me together. Our kids play together and also do homework together. My older son is one year older than hers, so sometimes my son can help her son with things her son doesn’t understand.

Lily: That is really nice. You must both be easy to get along with. But I’ve heard that you can only live in the Light Home for up to three years. Is that true?

Mother: Yes, it is true.

Lily: So do you have any plans after that?

Mother: Yes. I’m actually queued up on the waiting list for public housing. It has already been two years so it shouldn’t be too long to go. The waiting time was going to be way longer but I got my second son and it shortened the waiting period because my household size becomes larger. I also plan on getting a job after my younger son goes to school. My landlord helped me getting into this Basic English course. Now I already know Mandarin and Cantonese, if I can know at least some English when I apply for a job that will be great.

Lily: That sounds great. You have a really positive attitude towards life! Have you ever considered which area you would like to live in once you get the public housing?

Mother: Yes. If I don’t need to consider other aspects I would want to live as far from the central as I can because the rent is going to be much cheaper. But I hope
to still live in urban area because that is better for my kids. They don’t need
to commute far for school and will just have a better environment.

Lily: You are such a great mother that you have done so much for you kids. Thank
you again for taking this interview and I hope you get what you want in the
future!
### INCOME AND TOTAL NET ASSET LIMITS FOR SINGLE PERSONS AND FAMILIES

(Effective from 1.4.2013)

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<th>Total Net Asset Limit</th>
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<tr>
<td>7 Persons</td>
<td>$31,630 ($33,295)</td>
<td>$560,000</td>
</tr>
<tr>
<td>8 Persons</td>
<td>$33,810 ($35,589)</td>
<td>$587,000</td>
</tr>
<tr>
<td>9 Persons</td>
<td>$37,850 ($39,842)</td>
<td>$648,000</td>
</tr>
<tr>
<td>10 or more Persons</td>
<td>$39,740 ($41,832)</td>
<td>$698,000</td>
</tr>
</tbody>
</table>

### INCOME AND TOTAL NET ASSET LIMITS FOR UNRELATED ELDERLY PERSONS

(Effective from 1.4.2013)

<table>
<thead>
<tr>
<th>Family Size</th>
<th>Maximum Income Limit (per month)</th>
<th>Total Net Asset Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Persons</td>
<td>$16,500 ($17,368)</td>
<td>$572,000</td>
</tr>
<tr>
<td>3 Persons</td>
<td>$21,970 ($23,126)</td>
<td>$748,000</td>
</tr>
<tr>
<td>4 Persons</td>
<td>$26,570 ($27,968)</td>
<td>$872,000</td>
</tr>
</tbody>
</table>

Remarks:
1) Asset limits for households of 1 to 4 persons whose members are all Elderly Persons (aged 60 or above) are $424,000, $572,000, $748,000 and $872,000 respectively.
2) Figures in (   ) denote the effective income limits should an applicant and all family members be contributing 5% of their income under the Mandatory Provident Fund (MPF) or Provident Fund Scheme as required by the law.

HD 273A (Rev. 3/2013)

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**Figure 26: Public Rental Eligibility Standards**

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D | INCOME AND OCCUPATION CHARTS

D.1 NUMBER OF WORKERS IN CERTAIN OCCUPATIONS BY AGE GROUP

<table>
<thead>
<tr>
<th>Place of Birth / Age Group</th>
<th>Managers and administrators</th>
<th>Professionals</th>
<th>Associate professionals</th>
<th>Clerical support workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>3 704</td>
<td>10 496</td>
<td>55 821</td>
<td>88 444</td>
</tr>
<tr>
<td>15 - 24</td>
<td>72 601</td>
<td>88 784</td>
<td>218 627</td>
<td>169 507</td>
</tr>
<tr>
<td>25 - 34</td>
<td>119 349</td>
<td>68 986</td>
<td>188 620</td>
<td>135 307</td>
</tr>
<tr>
<td>35 - 44</td>
<td>11 329</td>
<td>45 706</td>
<td>164 586</td>
<td>121 808</td>
</tr>
<tr>
<td>45 - 54</td>
<td>43 244</td>
<td>14 619</td>
<td>56 537</td>
<td>34 053</td>
</tr>
<tr>
<td>55 - 64</td>
<td>8 490</td>
<td>2 780</td>
<td>10 412</td>
<td>3 080</td>
</tr>
<tr>
<td>Total</td>
<td>359 717</td>
<td>231 371</td>
<td>694 603</td>
<td>552 199</td>
</tr>
</tbody>
</table>

Figure 27: Number of Workers In Certain Occupations by Age Group (Population Census Office, 2011b)

D.2 NUMBER OF WORKERS EARNING VARIOUS MONTHLY INCOME RANGES BY OCCUPATION

<table>
<thead>
<tr>
<th>Sex / Monthly Income from Main Employment (HK$)</th>
<th>Managers and administrators</th>
<th>Professionals</th>
<th>Associate professionals</th>
<th>Clerical support workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unpaid family workers</td>
<td>346</td>
<td>55</td>
<td>911</td>
<td>2 166</td>
</tr>
<tr>
<td>Sub-total</td>
<td>121 407</td>
<td>95 443</td>
<td>316 336</td>
<td>369 817</td>
</tr>
<tr>
<td>&lt; 6,000</td>
<td>2 225</td>
<td>1 089</td>
<td>22 634</td>
<td>45 143</td>
</tr>
<tr>
<td>6,000 – &lt; 10,000</td>
<td>4 797</td>
<td>1 076</td>
<td>59 016</td>
<td>182 391</td>
</tr>
<tr>
<td>10,000 – &lt; 20,000</td>
<td>46 473</td>
<td>41 943</td>
<td>288 104</td>
<td>257 998</td>
</tr>
<tr>
<td>20,000 – &lt; 30,000</td>
<td>63 045</td>
<td>48 736</td>
<td>165 251</td>
<td>48 569</td>
</tr>
<tr>
<td>≥ 30,000</td>
<td>214 518</td>
<td>131 358</td>
<td>132 012</td>
<td>9 141</td>
</tr>
<tr>
<td>Unpaid family workers</td>
<td>519</td>
<td>104</td>
<td>1 484</td>
<td>2 707</td>
</tr>
<tr>
<td>Total</td>
<td>331 577</td>
<td>224 306</td>
<td>668 501</td>
<td>545 949</td>
</tr>
</tbody>
</table>

Figure 28: Monthly Income by Occupation (Population Census Office, 2011c)
D.3 MONTHLY INCOME BY AGE GROUP

Figure 29: Monthly Income by Age Group (Population Census Office, 2011a)
<table>
<thead>
<tr>
<th>Mortgage type</th>
<th>Loan-to-value ratio</th>
<th>Loan tenor (years)</th>
<th>Single premium payment (as % of the loan amount*)</th>
<th>Annual premium payment (as % of the loan amount*)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>First year</td>
<td>Renewal</td>
</tr>
<tr>
<td>Floating rate</td>
<td>Above 70% and up to 75%</td>
<td>10</td>
<td>0.55%</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
<td>0.60%</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
<td>0.65%</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>0.70%</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30</td>
<td>0.75%</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Above 75% and up to 80%</td>
<td>10</td>
<td>1.00%</td>
<td>0.50%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
<td>1.15%</td>
<td>0.60%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
<td>1.40%</td>
<td>0.70%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>1.50%</td>
<td>0.75%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30</td>
<td>1.65%</td>
<td>0.85%</td>
</tr>
<tr>
<td></td>
<td>Above 80% and up to 85%</td>
<td>10</td>
<td>1.55%</td>
<td>0.70%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
<td>1.80%</td>
<td>0.80%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
<td>2.15%</td>
<td>0.90%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>2.30%</td>
<td>1.00%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30</td>
<td>2.40%</td>
<td>1.10%</td>
</tr>
<tr>
<td></td>
<td>Above 85% and up to 90%</td>
<td>10</td>
<td>2.15%</td>
<td>0.90%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
<td>2.50%</td>
<td>1.09%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
<td>2.98%</td>
<td>1.28%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>3.35%</td>
<td>1.46%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30</td>
<td>3.55%</td>
<td>1.65%</td>
</tr>
</tbody>
</table>

Figure 30: 90% Mortgage Plans (Bank of China, 2014)
GLOSSARY

URA: Urban Renewal Authority
PRH: Public Rental Housing
HKHA: Hong Kong Housing Authority
HKHS: Hong Kong Housing Society
SDU: Subdivided Unit
CBD: Central Business District
NGO: Non-Government Organization
SARs: Severe Acute Respiratory Syndrome