Surviving Hong Kong:
A Case Study of Areas at the Intersection of Traditional Areas and Future Development

An Interactive Qualifying Project Report
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Sponsoring Agency: Urban Renewal Authority

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Abstract

This report, prepared for the Urban Renewal Authority, details the results of a study of two areas in Hong Kong that are threatened by redevelopment: Kowloon City and Kowloon East. The individuality and unique characteristics of these areas suggest that it is worthwhile to retain their original qualities. We suggest that developers consider policies to preserve Kowloon City. We determined that 13 and 5 streets are not important enough to preserve and suggest that future redevelopment be allowed to proceed.

Acknowledgements

Authorship

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Denver performed site visits, conducted background research, created all maps used in data analysis, wrote the executive summary, assisted in the writing the background and results and analysis, and edited the executive summary, introduction, methods, and results and analysis chapters.

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Matthew performed site visits, conducted background research, created all presentations, wrote up chapter outlines, wrote the abstract, acknowledgements, methods, and conclusion and recommendations, and edited the intro, methods, abstract, background, results and analysis, and conclusion and recommendations chapters.

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Executive Summary

      Urban redevelopment is an issue that faces many districts within Hong Kong due to the ever changing social and economic environment. In this report we will look at four areas that undergo urban redevelopment, then look at two distinct areas in Hong Kong. The first area is Kowloon City and the second is "13 and 5 Streets", both located within the Kowloon East District. Our goals for this report are to outline the current forces in the area that are causing redevelopment and look at what, in particular, needs to be preserved in the community. We go about this by direct observation of the two impacted communities and interviews with stakeholders within them.

      Kowloon East once had a booming demand for vehicle maintenance and repair shops as the Kai Tak Airport and the Vehicle Inspection Centre were in close vicinity. The airport was relocated to a different area in Hong Kong in 1998 and the Inspection Centre is going to move from Hong Kong's Kowloon East, making the need for car repair shops in this area no longer as essential to the same degree as they were in the past. Most, if not all, of these car repair shops are located on the ground floor of residential buildings, making them an integrated part of the community due to their large presence in the area. In 2015, there was an accident in which a vehicle in a repair shop exploded and caused great damage to the repair shop and building, the blast also killing 3 people. Due to this accident, car repair shops in residential buildings are under the spotlight for redevelopment, as they are deemed too unsafe for residential complexes.

      Kowloon City is a large section of Kowloon east but specifically contains a thriving neighborhood with a strong Thai subculture. This neighborhood makes for one of the many very unique experiences that can be had in Hong Kong. This dense Thai subculture offers unique

services such as Thai food markets, Thai eateries, and Thai religious shops all in one neighborhood. This area is currently under constant redevelopment pressure from developers to redevelop the area into more profitable high-rise buildings instead of the low-rise buildings that exist there at present. This pressure to redevelop the area poses a high risk of making this unique Thai subculture disappear as can already be seen to the western section of Kowloon City where such redevelopment has already happened.

Our sponsor, the Urban Renewal Authority (URA), and the City of Hong Kong must decide what is unique and should be preserved in these neighborhoods in the face of constant redevelopment pressure. The URA values the opinions of the affected parties and would like to take the appropriate approach to make sure these unique subcultural areas are not changed for the worse. To accomplish our goal we used interviews with stakeholders in both areas as well as archival research and direct observation. We were able to determine the general opinions of the stakeholders that directly use this area as well as what each area contributes that is unique and worthy of sustaining in terms of current and future redevelopment.

Through our analysis of both areas we found that one aspect that they both contained was a synergy based on many factors. In Kowloon City we recommended that preservation of all the Thai subculture be had, while we discovered that the "13 and 5 Streets" car repair shops need to not be preserved in lieu of their lacking synergy with the surrounding areas and businesses.

1. Introduction

Urban renewal, the rehabilitation of city areas by renovating or replacing dilapidated buildings with new housing, public buildings, parks, roadways, and industrial areas, often in accordance with comprehensive plans, has emerged as an important issue associated with immense growth in many urban areas (Dictionary.com, 2016). Often urban renewal will result in the displacement of businesses that had once thrived in these areas but were forced to leave in order to make room for rebuilding and repurposing. While it is inevitable for this process to proceed in a redeveloping area, the existing businesses are often left to fend for themselves. Despite this, it is possible to redevelop a location while still maintaining the area's original qualities through preservation and revitalization (URA, 2015d).

Between 1980 and 2000, Hong Kong saw some of its greatest economic changes since its beginnings as a city, due to the opening of the Chinese economy to foreign trade in 1979 and Hong Kong's return to China in 1997 (Sung & Wong, 2000). As the economic changes continued, many areas of the city were repurposed to increase economic efficiency. With these transformations, however, came the often overlooked issues associated with repurposing districts; how does this redevelopment impact the existing businesses and residents? Even though many places in Hong Kong are locations for potential redevelopment, it is often unclear what kind of development should occur, what should be preserved of the existing area, and what could undergo change without too many negative consequences to the local community and larger community of Hong Kong.

The issue of urban redevelopment is not only an issue that Hong Kong faces. For example, India and various neighborhoods in the United States have had to handle urban redevelopment. Though these locations do not have the exact same issues, they offer a great deal of insight on

how urban redevelopment has gone well or poorly in different environments. Many of these locations have taken a top-down approach with regards to their redevelopment and have not fully viewed the area through the lens of revitalization and/or preservation. The most recent research on the area in Kowloon East can be found in the District Urban Renewal Forum (DURF) report. This report was the accumulation of forums that were held in order to gain a better understanding of the local stakeholders and how they would want to see their community renewed.

We were tasked with studying two different areas in Hong Kong that have the potential for urban renewal. One of these locations has a plethora of car repair shops that have withstood the passage of time in Kowloon East and the other area is one with a vibrant Thai community that had its building height restriction increased in Kowloon City. It remains unknown why the two areas of interest have remained mostly untouched despite recent pressures for redevelopment. Unfortunately the data from the DURF report is outdated and focused on residents of the specified area, not shop owners, thus new research is necessary to make relevant decisions regarding future redevelopment. In the Kowloon East area, there is a high density of car repair shops, which make the area unique from the rest of Hong Kong. These shops use much of the narrow streets to work on their customers' vehicles, often resulting in cars being parked on the sidewalk as well as in the road. Similarly, an area of Kowloon City has a very high density of restaurants that predominately serve Thai cuisine. This area had its building height restriction increased due to the relocation of the Kai Tak airport. This has led many private real estate developers to consider redevelopment in this area. Although the unique qualities of this area may be contributing to its survival, it is still unclear what has protected it from redevelopment. Our sponsor wishes to gain a better understanding of the two neighborhoods so that the best outcome

may be achieved, whether it be redevelopment, preservation, revitalization, or a combination of the three.

The goal of our research was to assess to what extent redevelopment in the two areas in Kowloon East and Kowloon City under review should occur, if at all, in order to maintain the unique characteristics of these areas. We gathered information through direct observation and interviews with shop owners in the Kowloon City area. The results of our data analysis and findings will hopefully assist the URA in their decision making process, giving them a more complete view on how to proceed with redevelopment in the specified areas.

2. Background

No city can stay the same forever. There are many factors that cause change. The focus of this chapter is to identify the factors of urban change and discuss examples of urban development. Understanding urban change and development is extremely important as it can have a massive effect on a community and the lives of the people within it. Urban development involves interaction among the community members, government, and businesses. Urban development consists of replacing old with new, while changing the elements that make up an area. In this chapter we discuss four areas in the world as examples of how urbanization and development work in both positive and negative ways. Though these locations are differ from our focus in Hong Kong, they offer a great deal of insight on urbanization as a whole. A background on Hong Kong is also provided focusing on East Kowloon and Kowloon City as well as the factors in that area's development.

2.1 Importance of Urban Development

Urban development is important in a city where change is taking place. The urban environment changes constantly due to many factors. Some of the factors that play a role in when an area has increased pressure for redevelopment are aesthetics, congestion, crowding, and decay (Hamnett, 1991). Gentrification is a type of redevelopment, and it occurs through a set of processes related to socio-economic forces. Gentrification relies on the large scale for the ability of financial institutions to provide resources to individual stakeholders to buy plots of land to redevelop or on the small scale ability of individual tenants to fix up their own plots of land into nicer ones. Once an area or specifically an entire building has been determined to need large scale development, regeneration, or renewal the local government usually steps in due to the amount of work that needs to be done.

The local government can be an important driving force in urban renewal as it has the manpower and funding to delegate out tasks related to the renewal process (URA, 2014b). There are a few important factors when deciding upon the renewal process. These factors are the people of the area and their needs and the land itself. Urban development can give new life to parts of a city that have fallen into abandonment. There are issues that can arise during redevelopment. One issue that can arise is when there is underlying problems that are uncovered during redevelopment. One issue called brownfield land, is unsuitable for redevelopment easily due the toxic and chemical content of the ground soil. This can potentially be an issue as well as the social impacts when redevelopment happens. The final outcome of urban development is giving part of a city a new or preserved "character".

Urban development is specifically important to keep a city working well and "fresh". Development takes away the old and replaces it with new. New buildings, streets, and infrastructure are all results of urban development, and this not only brings a city to a new refreshed state, but also allows the citizens of the city to prosper as well. One important aspect of redevelopment is what historical pieces of the city or community do you preserve? This question will be one of the most important aspects of city redevelopment.

2.2 Urban Development Examples

To fully understand what makes urban change successful or not we will provide some examples of urban change and development around the world and discuss the factors that played a role when this process was taking place.

2.2.1 Fulton Fish Market, New York City

The relocation of the Fulton Fish Market on South Street in New York City is an example of government intervention and urban planning that went well. The Fulton Fish Market is the

world's second largest fish market behind Tokyo's Tsukiji fish market (Graddy, 2006). It was established in 1822 on South Street in Lower Manhattan next to the East River. It was a place where fishermen could unload fresh fish off their boats (The New Fulton Fish Market Cooperative at Hunts Point Inc., 2015). The Fulton Fish Market's prime location in downtown Manhattan in proximity to the South Street Seaport and Wall Street made it a location of interest for redevelopment. Lower Manhattan has astronomically high real estate prices, and because of that, developers are always looking to redevelop land into more profitable uses (Hughes, 2015). This creates more money for the city by bringing in income from tourists and commercial activities.

The land the Fulton Fish market was built upon was land that was leased by the New York City government (Hanania, 2014). In the early 2000s the market had showed signs of aging. It lacked many of the necessary modern amenities and safety equipment that would bring it up to the code with the current Food and Drug Administration (FDA) recommendations (Davisson, 2005; DiNapoli, 2008). The piers nearby used to be the way the fish got from the boats to the market, but over time transport by vehicles became the dominant way fish made their way to the market. The market thus brought in a lot of commercial traffic as well as the pedestrian traffic of restaurateurs. This led to congestion in the local area due to large commercial vehicles that were carrying in fresh fish or carrying out fish to restaurants in the area and other smaller non-wholesale markets.

The consumption of fish in the US increased 10 percent from 1999 to 2003, but the Fulton Fish Market in lower Manhattan did not see the same increase in sales in the same time frame (Bowen, 2005). With the problems growing over the existing market, the New York City government decided to build a new market in a new location.

In 2005 the NYC completed work on an 85 million US dollar, 400,000 square foot, state of the art fish market in the Hunts Point section of the Bronx (DiNapoli, 2008). See Figure 2.1 below for the location of the previous market and the brand new market location.
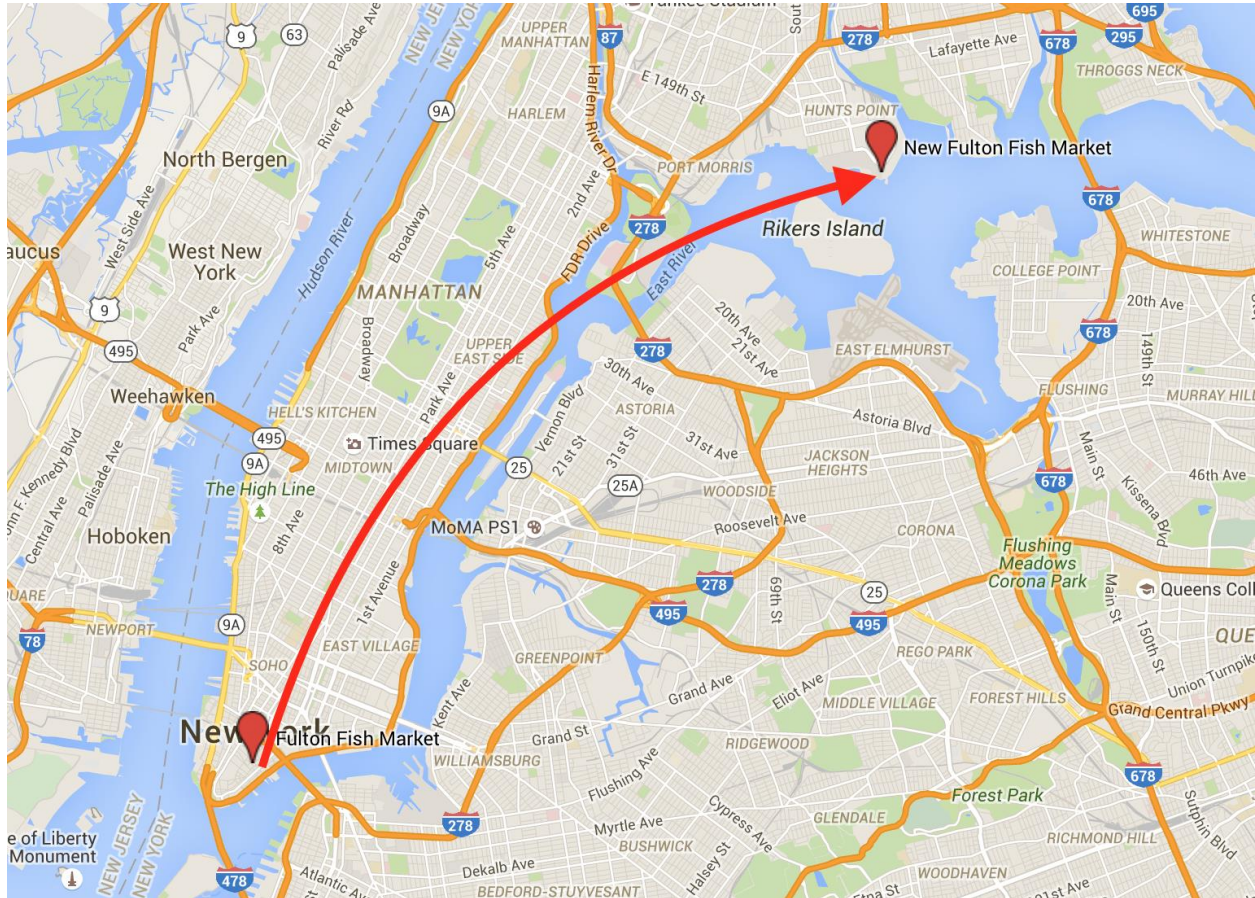
Figure 2.1: Fulton Fish Market Old Location to New Location (Google, 2015)

For many of the wholesale fish sellers at the old Fulton Market in lower Manhattan the brand new facility was beneficial to their business (Dominguez, 2005). The new facility addressed many of the previous concerns the sellers had with storage of fish and provided a modern building with special new machinery (Bowen, 2005). The new location of the fish market in proximity to Hunts Point wholesale food market has the potential to increase sales at the fish market due to an already established clientele coming into the area for other produce.

The move to the new location at Hunts Point was successful. Overall, there were only a few merchants who did not move to the new location at Hunts Point (Bowen, 2005). This example shows how moving to a new location that has been carefully picked can be beneficial to the livelihood of a business. At the end of the move, NYC was able to preserve the merchants' businesses while providing new, modern facilities, and it was able to have the ability to redevelop and renovate the old site of the market in lower Manhattan.

In this example, careful planning of the move location provided a large benefit to the merchants while also providing the re-use of the old site for new purposes. New York City carefully assessed the needs and wants of the merchants and customers of the market before deciding upon the new location in the Bronx. Due to careful planning, the merchants were able to increase their sales because of other customers that were in the area for other produce. New York City government was able to repurpose the old site to new developers for renovation. This example applies to our project because it shows how redevelopment can be successful when careful planning of the new location is done to benefit both the customers and the merchants while preserving the old fish market building for new livelihood. This example is useful as it highlights the need to be certain that the new development location fits the needs of the stakeholders, be it the customers or the merchants, being moved. As a result of careful planning, NYC was able to keep the fish market merchants providing fish to the tri-state area while achieving their own goals and preserving the old market's building and history.

2.2.2 East Liberty, Pittsburgh, Pennsylvania

The neighborhood of East Liberty in Pittsburgh, Pennsylvania, is one that has experienced the tragedy of poor urban planning. From the 19th to the early 20th century there was a golden age of progress for East Liberty (East Liberty Development Inc., 2015). Industry,

education, and social life all flourished during that time period. Unfortunately different factors led to the decline of East Liberty, such as the Great Depression and fires. This led to the destruction of several landmarks and buildings in East Liberty. During the Great Depression in the 1920s and 1930s many of the industrial leaders had moved or died, leaving many of their mansions to be divided into apartments or demolished all together, and the residents of the community also began to disappear (East Liberty Quarter Chamber of Commerce, 2015). The leaders of the city saw a need for urban redevelopment in hopes that it would revitalize the area. See Figure 2.2 for a map of the general area of East Liberty in Pittsburgh, Pennsylvania.
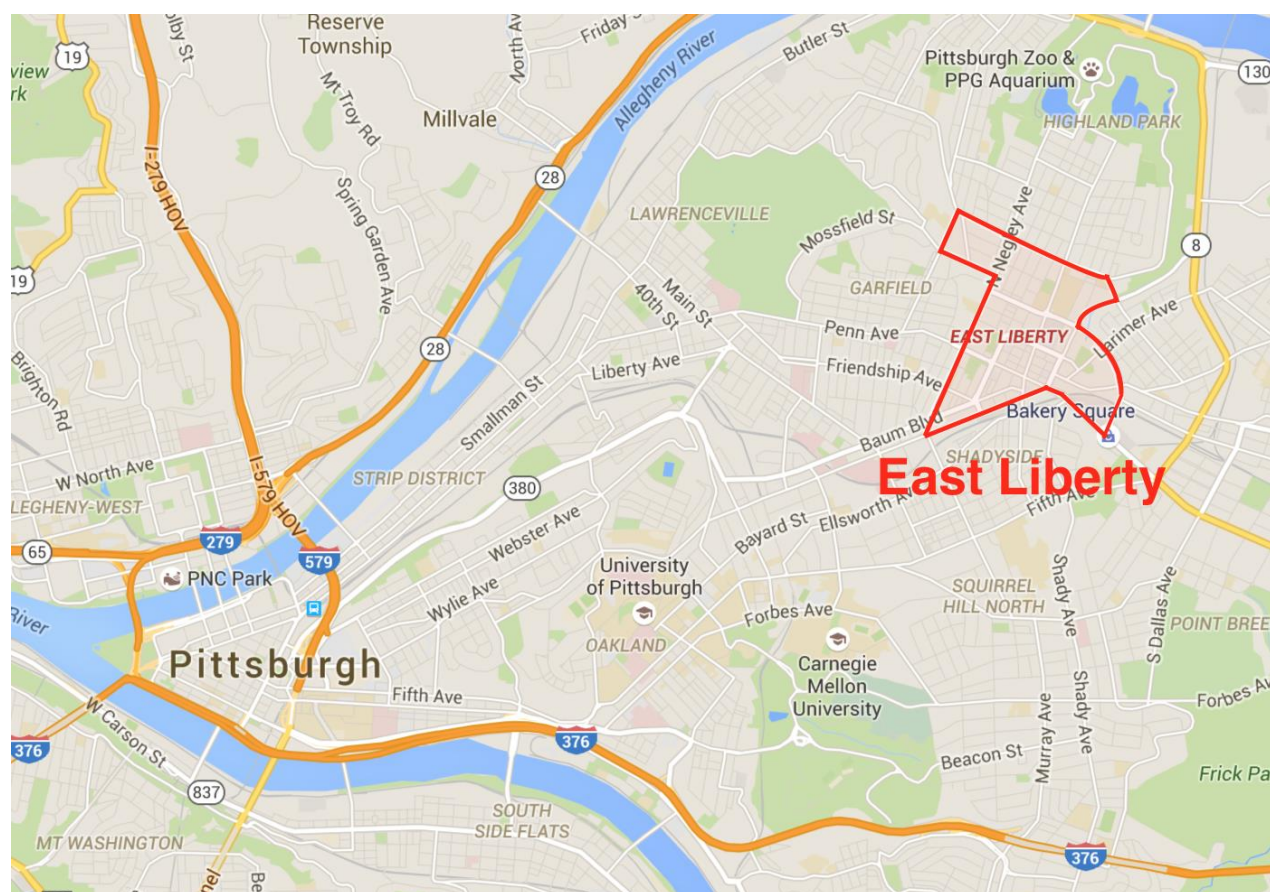
Figure 2.2: Map of East Liberty in Reference to Pittsburgh (Google, 2015)

In the late 1950s Pittsburgh's Urban Redevelopment Authority (URA) began devising plans that were intended to make the district a popular commercial destination (East Liberty Quarter Chamber of Commerce, 2015). The top-down approach that the urban renewal program

utilized had good intentions but was not executed properly. The URA demolished 1,200 homes, reduced the size of the shopping district by 1 million square feet, and closed the middle of East Liberty to automobiles. All this resulted in the loss of hundreds of small businesses and thousands of people from the area (Fitzpatrick, 2000). One of the reasons for this was that the demolition of areas had outpaced the construction of new areas and resulted in the loss of 1 million square feet of real estate (East Liberty Development Inc., 2015). Many residents and citizens were outraged by the redevelopment and even went to the length of having a billboard that read "Attention: City Hall and the URA, NO Redevelopment Beyond This Point" (Fitzpatrick, 2000, para 108). Many groups had formed to fight off the large scale renewal project. Many wanted the city to drop the demolition plans and focus on anti-poverty programs, rehabilitation and preservation of old buildings and construction of new, affordable housing for the poor and minorities living in the area. Because of the failure to bring the city back to life, the economy in large portions of East Liberty remained stagnant for roughly 30 years (East Liberty Quarter Chamber of Commerce, 2015). Urban redevelopment left a large void in East Liberty, although it had promised a bright future.

The negative effects of urban redevelopment required the residents of East Liberty to rebuild the area at a slow pace (East Liberty Quarter Chamber of Commerce, 2015). In the late 1970s and early 1980s East Liberty began the process to reverse the damages done by urban renewal (East Liberty Development Inc., 2015; East Liberty Quarter Chamber of Commerce, 2015). Companies such as Home Depot, Whole Foods, and Target have given the area a well-needed economic boost. Commercial development also attracted many companies such as Google to the area, as well as inspired innovative new workspaces for entrepreneurs (ImaginePittsburgh, 2015). Though the introductions of newer companies have helped bring

more attention to the area, there is still much to be done internally for the residents of the area. The URA and the city have many plans to create affordable housing for the inhabitants of East Liberty, who are mostly low income residents (Fontaine, 2015; Jones, 2015).

East Liberty teaches us that while a top-down plan may sound good and show promising results it does not always go as planned and may result in an even greater amount of effort to reverse those changes. The people of East Liberty were not consulted during the process of redevelopment, and so many were against the idea as redevelopment showed its true nature. The top-down approach rarely considers preservation of historical buildings or the opinions and needs of the local community. The lack of consideration of these factors in this area shows how much damage can be done. Another pitfall of this redevelopment was poor planning which can be seen when the URA destroyed buildings much faster than they could create them. This shows some of the things planners should watch out for when carrying out any project as poor planning and a lack of communication with all of the stakeholders can lead to disastrous results that need to be mended afterwards. When done correctly, urban renewal can bring about a great and positive change, but when it is done poorly in an ineffective manner, it can lead to the demise and stagnation of an area and require great efforts to reverse those effects.

2.2.3 Chinatown, Boston, Massachusetts

Boston's Chinatown is another example of urban redevelopment and gentrification. Chinatown has often been a safe haven for many Chinese immigrants, who desire to begin a new life in the United States, but this haven is slowly disappearing due to the actions of gentrification and lack of a greater authoritative body governing the area in a manner that improves the situation (Nguyen, 2014).

The haven the residents of Chinatown created was born from a much darker history (DeCanio, 2011). Chinatown used to have an area known as the Combat Zone; this was a "red-light" district, which is an area typically associated with adult entertainment and sex-oriented businesses, such as sex shops, strip clubs, adult theater, etc. The Chinatown community and the city worked at great lengths to clean up the area in order to force out many of the strip clubs and other adult businesses so that the area could be changed into a place that invites a wider population, especially families. Many residents of Chinatown have put in a great deal of effort to help mold the neighborhood to be a more acceptable place to live and are unwilling to abandon the hard work they have done to make it so. Much of the recent redevelopment in Chinatown has been by force. An NBC reporter reported on how the residents in Boston's Chinatown face removal due to increases in rent, and the small business owners are struggling to maintain their leases (Nguyen, 2014). The reporter claimed that Chinatown had the highest median rent of all neighborhoods in Boston meaning that tenants in this neighborhood are paying way more for the same housing that others would be paying elsewhere. This statistics represents how the government and members of the wealthier class, as they are the ones who are owning property in this area, have increased the rent for housing to the point where the residents are forced to leave their homes and relocate. Aside from the forced relocation, many residents experiencing gentrification are reluctant to leave due to their desire to maintain the culture in that area. Many people have lost their livelihoods when they have been forced to move and make room for a change in the city. This has been especially true for small business owners who needed their shops to succeed in order to stay afloat.

This top-down approach has left many, if not all, affected residents to fend for themselves in the aftermath of gentrification without careful consideration of aspects to preserve the area (K.

Lee, personal communication, January 12, 2016). Many of the wealthier class businesses are taking advantage of the loopholes that exist in the poorly written contracts with the tenants and the fact that leases may not need to be renewed in order to gain land rights to the property. Though this method is not illegal, it can be viewed as unethical, as it uses an underhanded method of acquiring land. When situations like this arise, where companies or the higher class seize property, many of the residents are forced to fend for themselves as they are not very protected from events like this.

Some attempts have been made to combat gentrification in Chinatown, but they have produced mixed results (K. Lee, personal communication, December 5, 2015). Some residents refused to move but in the end were still forced out. This happened to some of the residents on Tyler Street in Chinatown. Residents posted signs saying they refused to leave, and many stayed in their homes for as long as possible until they were eventually forcibly removed.

The Dudley Street Neighborhood Initiative is a non-profit organization that is combating gentrification by purchasing land, turning it into affordable, low income housing, and providing protection for the families who live there from the wealthier class, who try to buy the land (K. Lee, personal communication, December 5, 2015; Dudley Street Neighborhood Initiative, 2015; Loh, 2015). In all cases the Chinatown community was strongly against the forced relocation of the residents who were affected and sought to take a stand and make a change in a place against the unwanted urban renewal.

Chinatown is another example of top-down redevelopment. While it may have taken into account the goals and needs of the city, it did not consider its people and the aspects that make the community unique. Chinatown is an example of how the people of an area pull together to grow their city only to have their hard work taken away. The changes were done by force and did

not do much in terms of compensation for those who were evicted. This led to many people revolting and others seeking safe housing. This example is important to show that a sense of community should be preserved and should be taken into consideration if redevelopment is to be successful. Though Chinatown is an example of a rough and uncompassionate redevelopment, there is much to learn from it to bring about a smooth and successful redevelopment that takes the views and opinions of the residents into consideration.

2.2.4 Mumbai, India

India is one of the top 25 countries in the world with the greatest population density as of 2014, with roughly 436 people per square kilometer of land (The World Bank, 2015b). This density has been steadily increasing since 1981, as seen in Figure 2.3.
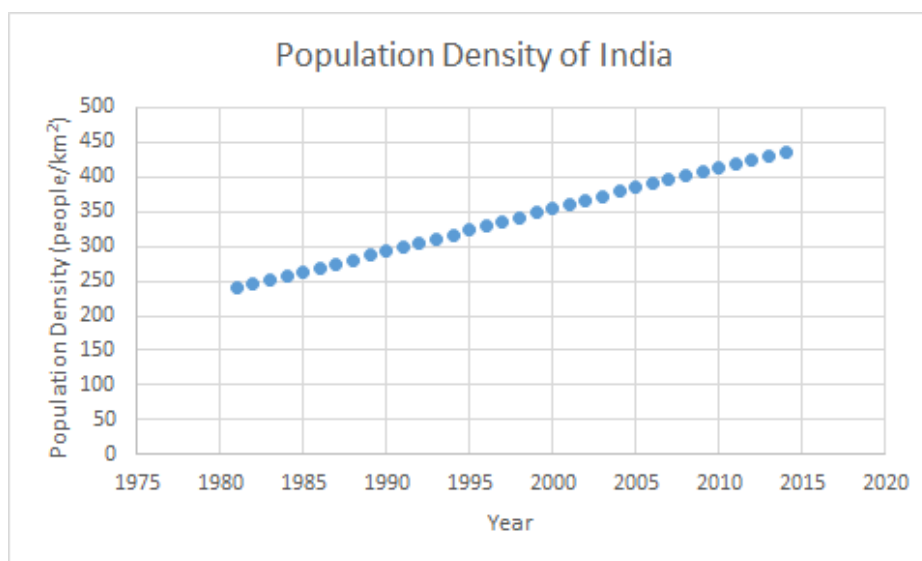
Figure 2.3 Trends in population density of India between 1981 and 2014 (The World Bank, 2015b)

This increase in population density has led to the need for urban redevelopment. With an ever growing population and a finite area of land, India needs to optimize the space it has in order to support its people as best as it can, while also keeping the country financially afloat. This need for urbanization is driving the economy in many cities of India and has been necessary (Raparthi, 2015).

Although urbanization in India has had a major influence on the economy, it has also spawned many problems regarding the environment, transportation, and public health because urbanization in India has generally been fast and not well planned (Raparthi, 2015). This, however, can be counteracted with a well-structured plan as can be seen in the urbanization of Mumbai.

Mumbai, India, is an example of how urban redevelopment has been carried out well (Nallathiga, 2014). During the 1980s Mumbai had begun experiencing a decline in many factors, such as demographic, economic and physical changes. The population in the suburbs began to increase dramatically, while the main city maintained a relatively stable growth rate. This trend can be equated to a decline in importance of the main island city, especially for residential and business buildings. Mumbai had also had a change in its economy, which had been predominantly based on industry. The physical aspects of the city had also suffered as many buildings were poorly maintained and transportation, sanitation, housing, and traffic conditions began to deteriorate.

Renewal in Mumbai was neglected until the Heritage Conservation Program of the local government and several other private institutions led the revival of some important buildings in Mumbai (Nallathiga, 2014). This led to many important banks, such as Standard Chartered Bank and HSBC Bank, locating their country headquarters in Mumbai as they began to see Mumbai's potential for growth.

The previous renewal sparked interest and showed Mumbai's need for redevelopment. (Nallathiga, 2014). This led to the creation of Bombay First, formed by many private corporations and businesses under the umbrella of the Bombay Chamber of Commerce & Industry. Bombay First had drawn much of its inspiration from London First, both of which seek

to make their city into a globally competitive city. The main difference is that Bombay First focused on solving and addressing the issues of the city through partnerships among the government, businesses and the civil society, while London First uses dialogue, expert assistance and advocacy to influence decisions made about the city. Bombay First worked in an effective manner by first conducting studies and surveys to understand the city and its problems, determining possible solutions to those problems and then piloting small-scale projects. Many of these projects demonstrated the potential for improvements in civic services especially in reference to solid waste management, design and management of public spaces, creating signage systems and initiatives for maintaining cleanliness and hygiene. These often led to the creation of many non-government organizations (NGOs) to assume new roles as community- based advocacy groups.

Vision Mumbai formed from the efforts of Bombay First to continue the renewal of the city into one that is to be globally competitive by 2028 (Nallathiga, 2014). This plan includes making housing more affordable and available, improving transportation, boosting economic growth, raising money to fund the projects, upgrading infrastructure, and generating momentum through quick successes. Vision Mumbai also reports the changes and ongoing projects in an effort to keep the public informed and supportive of the redevelopment.

Mumbai shows that urban redevelopment is necessary to prevent a further decline of a city, and that proper planning can allow a city to grow into a bigger and better city. Despite the negative consequences that have been associated with redevelopment in India, renewal in Mumbai has been successful due to extensive research and planning (Nallathiga. 2014; Cities Alliance, 2016). Success can also be attributed to visible, quick successes that help motivate investors and stakeholders to continue redevelopment on a larger scale. Public awareness has

also helped in maintaining the momentum for change in Mumbai (Cities Alliances, 2016). These factors, of proper pre-planning, quick successes, and public awareness, were deemed important to the growth and development of Mumbai and should be considered when redevelopment needs to take place.

2.3 Economic History of Hong Kong

Hong Kong has had a frequently changing economy that has been best suited to the interests of the Hong Kong government and business community (Carroll, 2007). Hong Kong went from a trade and fishing based economy to a manufacturing economy in the early 1950s. This was because embargos were placed on Hong Kong in the 1950s, by the United Nations and United States, preventing the citizens of Hong Kong from trading efficiently. Some people resorted to smuggling to continue their livelihood while others began to change and began the process of manufacturing. The citizens of Hong Kong began manufacturing everything from textiles to small electronic toys and raw aluminum stock metal for use in manufacturing. This change was brought on by many factors including: cheaper labor in mainland China and a stable trading position with their new merchandise. Eventually Hong Kong's economy shifted to focus on financial and other services for China and the rest of the world, and that focus remains today. By 1990, around 90% of the factories had moved from Hong Kong to mainland China, mainly due to the lower cost of labor in China. Kowloon East has been transitioning to be part of the service economy.

2.4 Urban Renewal in Hong Kong

The Urban Renewal Authority in Hong Kong tries to understand the people in an area of potential redevelopment in an attempt to lessen the impact of the changes on the people and businesses in the area, see Appendix A for more details. The URA has held different public forums where people can voice their concerns and provide new ideas, one such instance of this is the District Urban Renewal Forum (DURF) report. Redeveloping an area generally includes the removal of current residents in order for the new structures to be built. More often than not these residents and business owners are forced to relocate and do not receive much compensation, if at all. The URA wishes to lessen this impact by assisting the residents and business owners' relocation with compensation. In order to do this the URA must have a good understanding of the affected area, the residents of the area and the businesses there.

2.5 Kowloon East

Kowloon East is a constituency formed in 1998, made up of smaller constituencies in the south eastern land area of Kowloon Peninsula (Urban Renewal Authority, 2014b). Kowloon East refers to a grouping of local municipalities. These include To Kwa Wan, Lung Tong, Ma Tau Kok, Hung Hum, and Ho Man Tin. In To Kwa Wan there is the Kai Tak Development Area near the old airport. Lung Tong is the area that includes the old Kowloon Walled City and Kowloon Tong. In this area there are approximately 1,000 old buildings. An old building is considered one that was built more than 50 years ago.
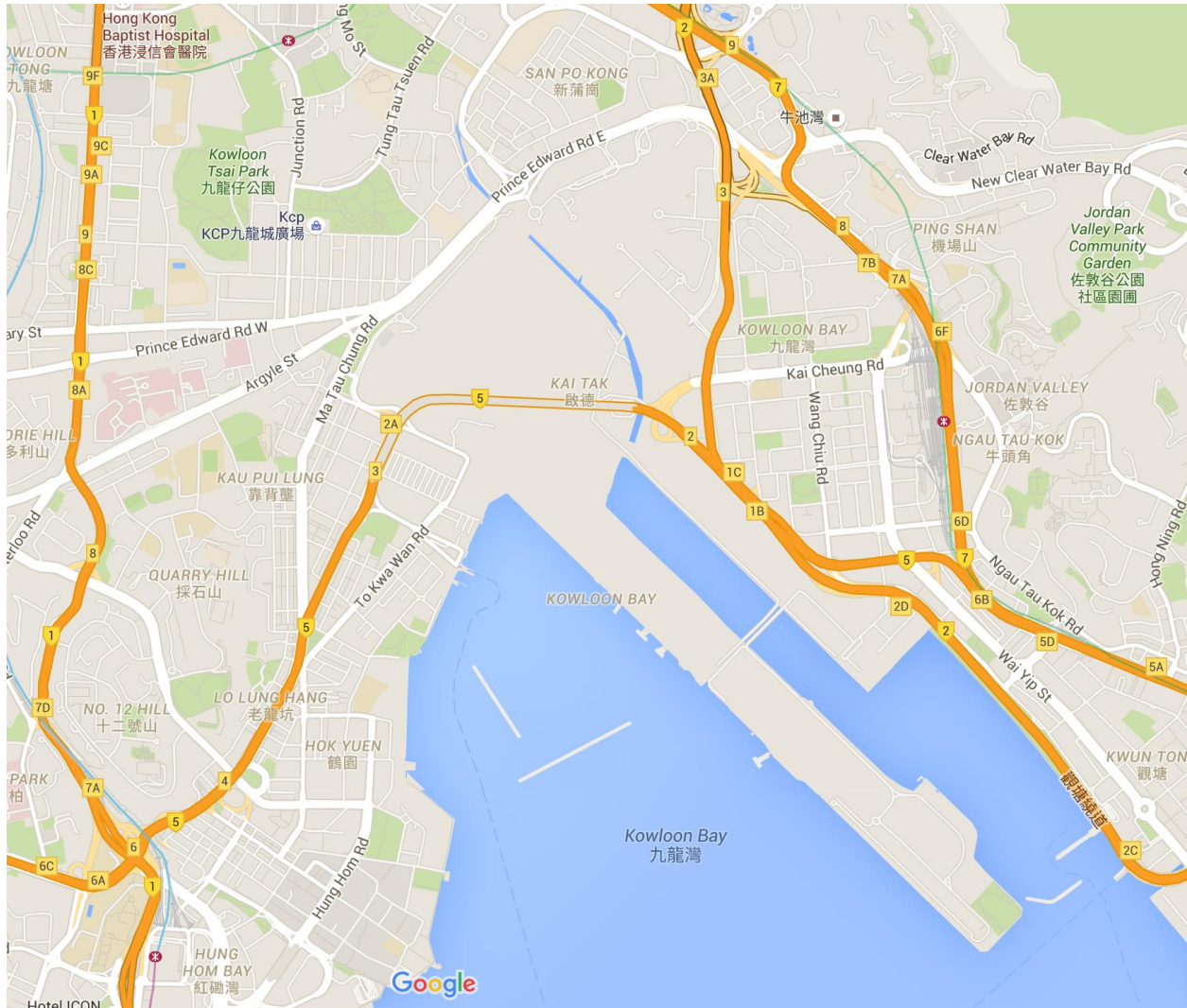
Figure 2.4 Kowloon East Map (Google, 2015)

There is a large concentration of old buildings at "5 streets" and "13 streets" in the Ma

Tau Kok area. The old buildings account for around one fourth of the total number of buildings

in this area. Over time both 13 streets and 5 streets accumulated a large number of car repair

shops over time. The vehicle repair shops reside on the ground floor of most of the residential

buildings. This large, organic, and unintentional concentration of vehicle repair shops occurred

due to the proximity of the Kai Tak Airport and the Vehicle Inspection Centre. These two

important locations brought many cars to the area, an airport with its taxi and passenger vehicles

and the Inspection Centre due to its law-required vehicle inspections (M. Ma, personal

communication, February 25, 2016). The amount of cars in the area brought about the density of vehicle repair. Both of these locations, the Kai Tak Airport and the Vehicle Inspection Centre, have been relocated to Chek Lap Kok and Tsing Yi, respectively while the repair shops have remained (Transport Department-The Government of the Hong Kong Special Administrative Region, 2016a, 2016b).

Figure 2.5: "13 and 5 Streets" (Google, 2015)
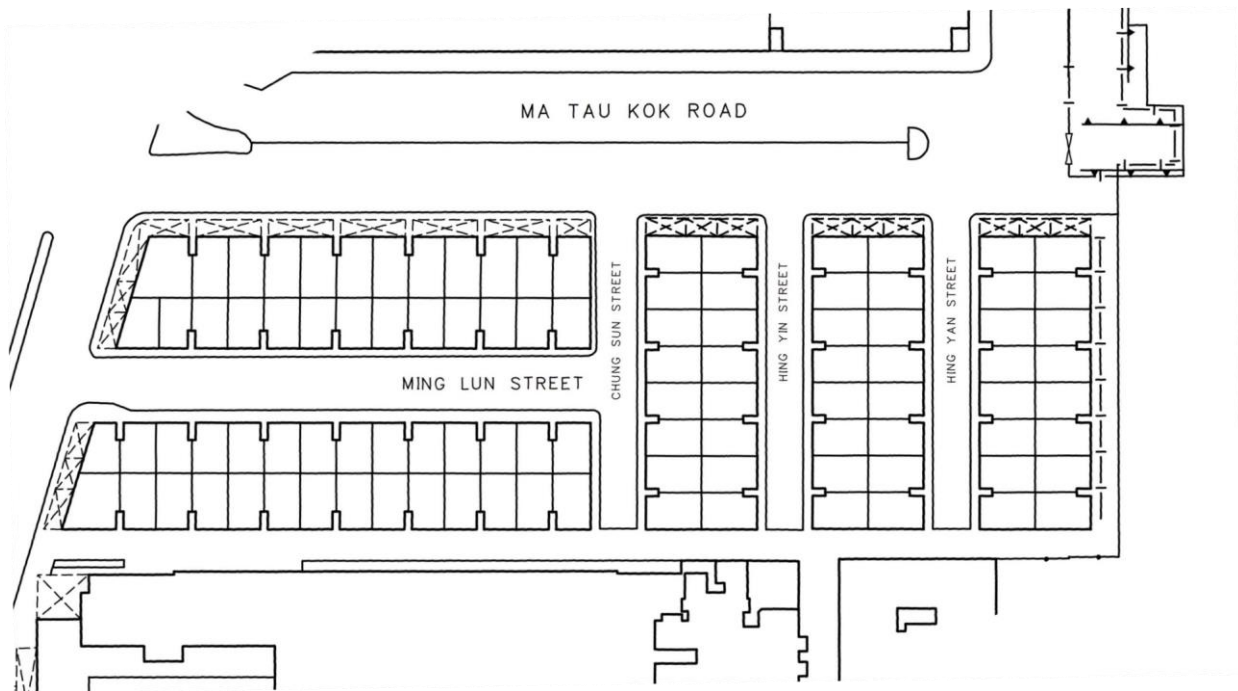
Figure 2.6: "5 Streets" Expanded (URA, 2016)
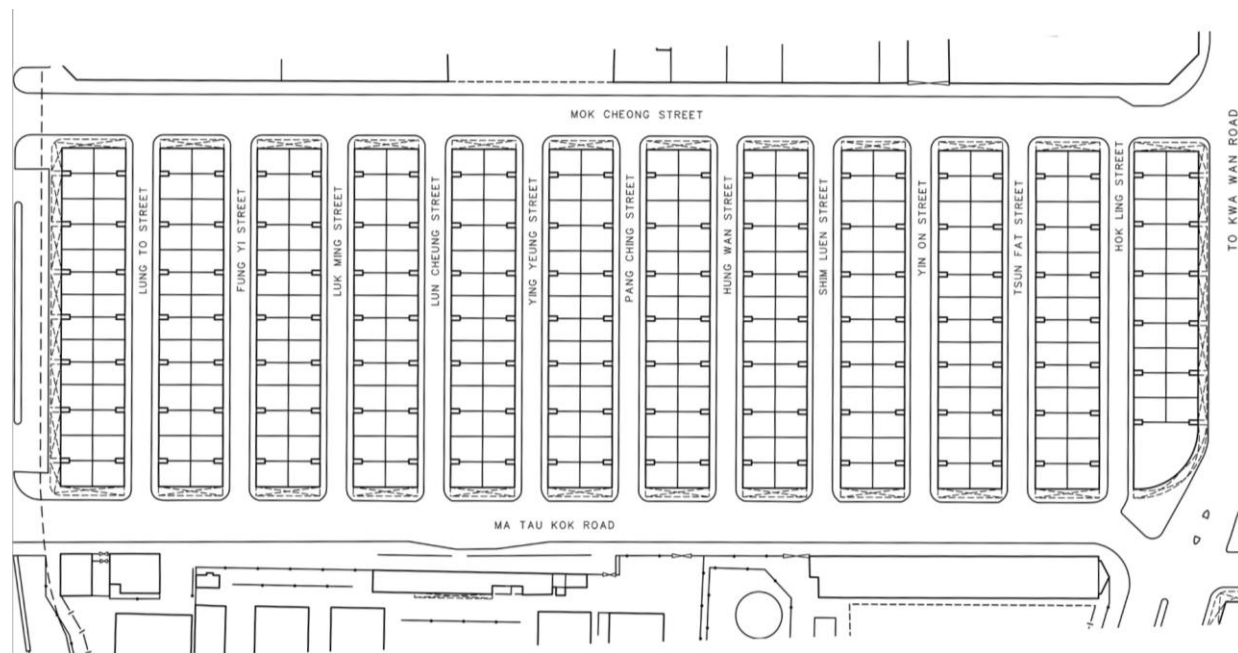
Figure 2.7: "13 Streets" Expanded (URA, 2016)

2.6 Kowloon City Area

The Kowloon City area near the old Kai Tak Airport had been and was still, at the time of our research, predominantly a Thai influenced district with many Thai restaurants and shops in the area that are unique to Hong Kong (M. Ma, personal communication, January 12, 2016). This area had organically grown to have such a large density of ethnic Thai businesses (M. Ma, personal communication, January 12, 2016). This area had recently been considered for redevelopment by many developers in Hong Kong due to new regulations. The area has and used to have many low rise buildings. This was mainly due to the height restrictions that had been placed on buildings in that area when the Kai Tak Airport was still functional. The height restriction had been imposed due to the flight path of aircraft ascending out of and descending on to the runway. Due to the relocation of the airport in 1988 the height restrictions on buildings in this area had been removed, and this has lured many real estate developers to view this area as a prime location for redevelopment. The area has slowly been changing with many new high-rise buildings being built that do not retain the character of the older sections.
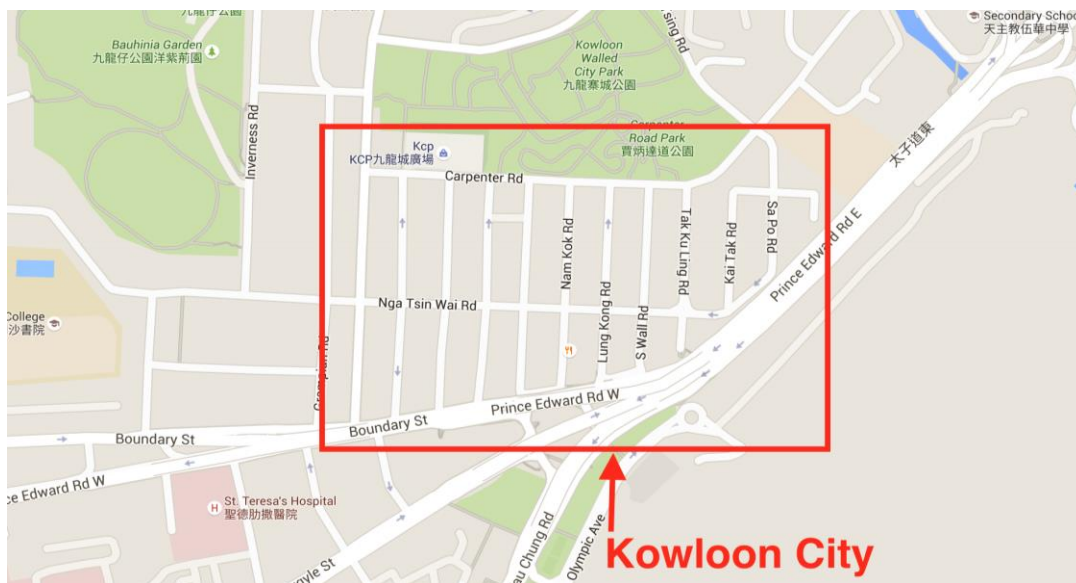
Figure 2.8: Kowloon City Area Outlined (Google, 2015)

2.7 District Urban Renewal Forum (DURF) Report

The District Urban Renewal Forum report from the Urban Renewal Authority (2014b) highlights the different proposals to be used to help make the redevelopment process go more smoothly in Kowloon East. The report points out three major pieces of the Urban Renewal Plan (URP). The first piece is a planning study to be done, the second is a social impact assessment (SIA), and finally there is a public engagement (PE) process. The URA uses a "People First, District-based and Public Participatory" approach. This approach is a people first approach that takes into consideration some of the concerns of the Kowloon East residents and tenants as well as the wealthier stakeholders who are trying to develop the area in Kowloon East. The report outlines local forums held with community members to discuss varying actions to be taken regarding urban renewal in the Kowloon East area. In section 6.4.2.7 of the report the URA points out a long term goal of identifying suitable relocation sites for vehicle repair workshops as a medium to long term proposal. A medium to long term proposal is one that is complicated and requires more government intervention and resources than a short term one. More time is needed to implement the plan due to its resource heavy needs. So far, no plan to accomplish the relocation of the vehicle repair workshops has been developed beyond an initial need to do so expressed by the Hong Kong government.

2.8 Summary

In this chapter we discussed four places in the world that have gone through urban redevelopment and what can be learned from the examples. Since many factors influence a city, how to carry out successful urban redevelopment in Hong Kong is still an ongoing question. In the next chapter, we will describe the methods we used to determine the best ways to redevelop

the two areas in Kowloon East, which currently contains over 200 vehicle repair workshops and a Thai dominated neighborhood, respectively.

3. Methodology

The goal of this project was to formulate recommendations on the extent of preservation in two regions of Hong Kong that are pressured by the need for change: the 13 streets and 5 streets areas of Kowloon East and the Thai neighborhood in Kowloon City. To accomplish our goal we determined both the importance that the services in both areas provide to the surrounding and at large communities as well as the importance the locations may have to the cultural survival of those areas. What follows is a detailed description of the methods we used, why we chose them, and how they helped us achieve our research objectives.

3.1 Determining Importance of Services

Often businesses provide essential services to a community. This in turn provides profits to the businesses selling their services. As communities and environments change, services that were once critical to a community may no longer be necessary. The community directly around a business providing a service could change or the larger socioeconomic environment within a city can change. The following sections describe our methods of assessing the importance of the services that can be found in both Kowloon City as well as in 13 and 5 streets.

3.1.1 Vehicle Repair Shops in 13 streets and 5 streets

As previously mentioned in Section 2.5, this area in Kowloon East has a very high density of vehicle repair shops. While the vehicle repair shops are the dominant businesses in the area, they are not the only ones. In order to identify the importance of the services that are offered in this area, we decided to use the following methods.

We decided to map the areas in order to properly determine how many vehicle repair workshops there are in 13 streets and 5 streets, as well as any other businesses in the area. To

do this we took a map of the area and gave each plot a coded name so that we would know which plot we were referring to internally. This map is instrumental in organizing the data that we would be collecting.

Once our map was complete, we then determined how active each of the shops was. Three site visits were conducted at different times and days in order to gain more complete data regarding how active the shops are throughout the work day. During each site visit, each business would be marked Open or Closed depending on what was seen at the time. We defined a vehicle repair shop as being active if the shop was open during every visit. This information can be seen more in detail in Appendices E and F. This data helped us draw different conclusions regarding the importance of the services offered by the businesses in the area.

We grouped the businesses we found into 4 main categories: vehicle repair, vehicle related, other businesses, and unknown. Vehicle repair shops strictly consist of shops that repair automotive vehicles such as cars, motorcycles, dirt bikes, and mopeds. Vehicle related businesses refer to businesses that supply parts to repair shops such as car parts, batteries, and tires, as well as businesses that work mainly on the aesthetics of a car: car washes, car body wrapping, detailing shops, and car audio work. "Other businesses" consist of ones that did not pertain to vehicle repair such as hair salons, metal and woodworking shops, recycling depots, and restaurants. Plots or shops in the "unknown" category referred to locations whose uses were not identifiable during site visits due to inactivity.

Interviews with vehicle repair shop owners and workers were also attempted in hopes of gaining more insight into their opinions regarding urban renewal and their businesses' operations. Unfortunately all of the interviewees were too busy or simply declined our request for an interview. Interviews were deemed important in identifying if the vehicle repair shops

had linkages with larger companies. Linkages between repair shops and large companies would greatly increase the importance of the shop, as it would show a dependency a larger company might have. We nonetheless assessed this aspect through direct observation of the vehicles being repaired.

We created a Vehicle Repair Workshop Quick Assessment Rubric to help determine the importance of the vehicle repair shops (see Appendix C for more details). We developed this ranking sheet in order to get a more detailed view of the services the shops offer. The aspects that we chose to observe in our ranking helped solidify whether or not these repair shops were actually providing worthwhile services. Shops that work on a greater number of more expensive cars while using advanced tools would ultimately be of greater importance than shops that were frequently closed or not as well suited for work. Though this assessment gave a brief glimpse of the shop's importance, it was unreasonable to complete for all of the repair shops in this area. Twenty-six repair shops were chosen, with a random number generator, to be assessed by our assessment sheet. This gave a margin of error of less than 20% and a confidence level of 95% from our total population size of 243 repair shops (Raosoft Inc., 2004). We determined that these values were suitable for our randomized sample approach for our assessment sheet to be representative of the whole area of 13 and 5 streets.

Two questions on our Assessment sheet required input from shop owners to get an accurate answer. These questions referred to the number of linkages the repair shop had and the number of cars it serviced per week. Due to the lack of response from the shop workers we determined the answer to the above questions using the following methods. For the number of potential linkages we inferred based on if taxis, commercial trucks, or cars with a company name were present during the time of the assessment. While this allowed us to record the

visible linkages, it may be an underrepresentation of the total number of linkages that a vehicle maintenance shop may have with larger companies. The number of cars serviced per week was based on the number of cars being worked on at the time. The justification for this method is that most vehicles take multiple days to be completely serviced.

3.1.2 Restaurants and Unique Shops in Kowloon City

Our objectives for the area in Kowloon City were to answer 3 questions: Is there a local subculture in this area? If so, what is that subculture? Is the redevelopment taking place in the area endangering this subculture? In order to answer the first two questions, the following methods were used. The methods used to determine if redevelopment taking place in the area is endangering that subculture can be found in Section 3.2.2.

In order to determine if there is a local subculture in the targeted area of Kowloon City, we defined a subculture as an ethnic, regional, economic, or social group exhibiting characteristic patterns of behavior sufficient to distinguish it from others within an embracing culture or society (Merriam-Webster Dictionary, 2015a). We decided to use the predominant characteristic of the area to define as our basis for categorizing the subculture in the area. This characteristic was the large number of businesses, mainly restaurants and eateries. We used the online database OpenRice to identify all the listed restaurants and eateries in the target area. This database uses different cuisine categorizations as a filter for finding different desired restaurants. This categorization was used to determine the distribution of the different types of cuisine in the area.

The different types of stores were also observed and analyzed through direct observation. These shops played an important role as they contributed to the subculture of the area. We

observed the overall ethnic background of the shops to determine if they reflected the same subculture that we determined through our analysis of the restaurants and eateries in the area.

Informal interviews were conducted with a restaurant owner and street vendors. These interviews were conducted to gain a more complete image of the subculture of the area (see Appendix B for more details). These interviews were also analyzed to determine how the local community perceived the subculture of the area.

3.2 Determining the Importance of the Location

The location in which a business operates is critical to the success or demise of the business. Different locations have advantages and disadvantages. Businesses have a customer base that they sell to in order to generate a profit, and this becomes the basis for the business. The business must be accessible to the customer base and the business must be able to sell to that customer base, while also being able to obtain the necessary materials to operate. The location of the business is critical to this. As an example, a car repair shop with no roads would not be able to sell its services to its customers, and a restaurant with no supplier of its raw ingredients would not be able to sell its food. In this section we discuss the methods used to determine the importance of the locations in Kowloon City and "13 and 5 streets".

3.2.1 13 and 5 Streets

Thirteen and 5 streets have so far avoided the urban redevelopment that has been occurring in the surrounding areas. In order to assess if the location of these shops is important to the overall businesses in these two areas, we used archival research on the surrounding area assessed the mobility of the shops.

Archival research is able to reveal how an area relies on other areas surrounding it. We researched how the former Kai Tak airport and the former vehicle inspection center at To Kwa Wan had an impact on the need for the vehicle repair shops in this location. This helped us gain a more concrete perspective on just how heavily the surrounding areas impacted the success of the car repair shops.

The mobility of the shops was also assessed in order to see how able the shops would be to relocate to another location in Hong Kong. This was accomplished mainly through direct observation and our Vehicle Repair Workshop Quick Assessment Rubric (seen in Appendix C). The main factor in assessing mobility on the assessment rubric is the number of shops that have vehicle lifts. This was determined to be the most influential factor, as these would increase the need for assistance in regard to moving the shops to another location.

3.2.2 Kowloon City

Though restaurants are often seen as being in competition with each other, the high density of restaurants that exist in Kowloon City reveal how the area's businesses coexist with one another. This is an indication of how the location may be important to the survival of the community and subculture.

Multiple site visits were conducted to assess the atmosphere and synergy of the area. Specific focus was placed on areas that have been redeveloped as well as areas that are farthest from the redevelopment, as depicted by Figure 3.1. Site 1 denotes the area of recent redevelopment and site 2 highlights the area farthest from redevelopment.

Figure 3.1: Kowloon City Area and Sites of specific focus (Google, 2016)

These areas were chosen in order to be able to assess the effects of urban redevelopment in the area and how it may affect the subculture of the area. The areas farthest from the redevelopment give a baseline of how the area was when it had organically grown, while the areas of redevelopment show how the area may change if the redevelopment were to continue in this area.

Informal interviews were conducted with a restaurant owner and a street food vendor in order to gauge local opinions on the location in which their business is located (see Appendix C for more details.) These interviews were used in determining the unique qualities of the area.

The accessibility of the Kowloon City area is also a factor to be taken into consideration with regards to the importance location has with respect to the survival of the culture and businesses in the area. Current and future accessibility to the area was researched through direct

observation and archival research on future plans. This allowed us to present recommendations

on how the area could or should be developed in the future.

3.3 Summary

The methods presented above outline the research approaches we used to collect our

data in the two study areas of "13 and 5 streets" and Kowloon City. The 2 areas are different in

their needs and nature and so required different methods in order to properly assess the 2 areas.

In the next chapter we present our results of this data collection and our analysis of the data.

4. Results and Analysis

The goal of this project was to determine if two unique areas in Hong Kong were at all threatened by potential redevelopment and to what extent they should be preserved if they were to be redeveloped. In order to achieve this goal, we first needed to identify certain characteristics of each area, such as overall significance of the businesses and their respective location, and use these traits to recommend how the areas should be handled in the future. This chapter includes the results of our research and their analysis focusing on the "13 and 5 streets" area as well as the Thai neighborhood in Kowloon City. The complete data set, in its original form, is located in the appendices.

4.1 Importance of Services

Our first major objective in these areas was to determine the importance of the different services offered in each location, mainly through how active the businesses were, but also through grouping of specific types of shops and services. While the locations required different methods to obtain this data, the end goal was the same for both.

4.1.1 13 & 5 Streets

In order to assess this area we focused on trying to answer one main question. Are the businesses, mainly car repair shops, important to the area as measured by how active the businesses were? We were able to confirm the presence of 89 businesses in the area of 5 streets and 397 businesses in the area of 13 streets. Based on our categorizations of our data, detailed in section 3.1.1, we created the following maps. Figures 4.1 and 4.2 highlight the sheer number of vehicle repair shops that are in this small area of land, and Figures 4.3 and 4.4 provide a general

idea of their activity level based on whether the shops were open or closed when we conducted

our site visits of the area.
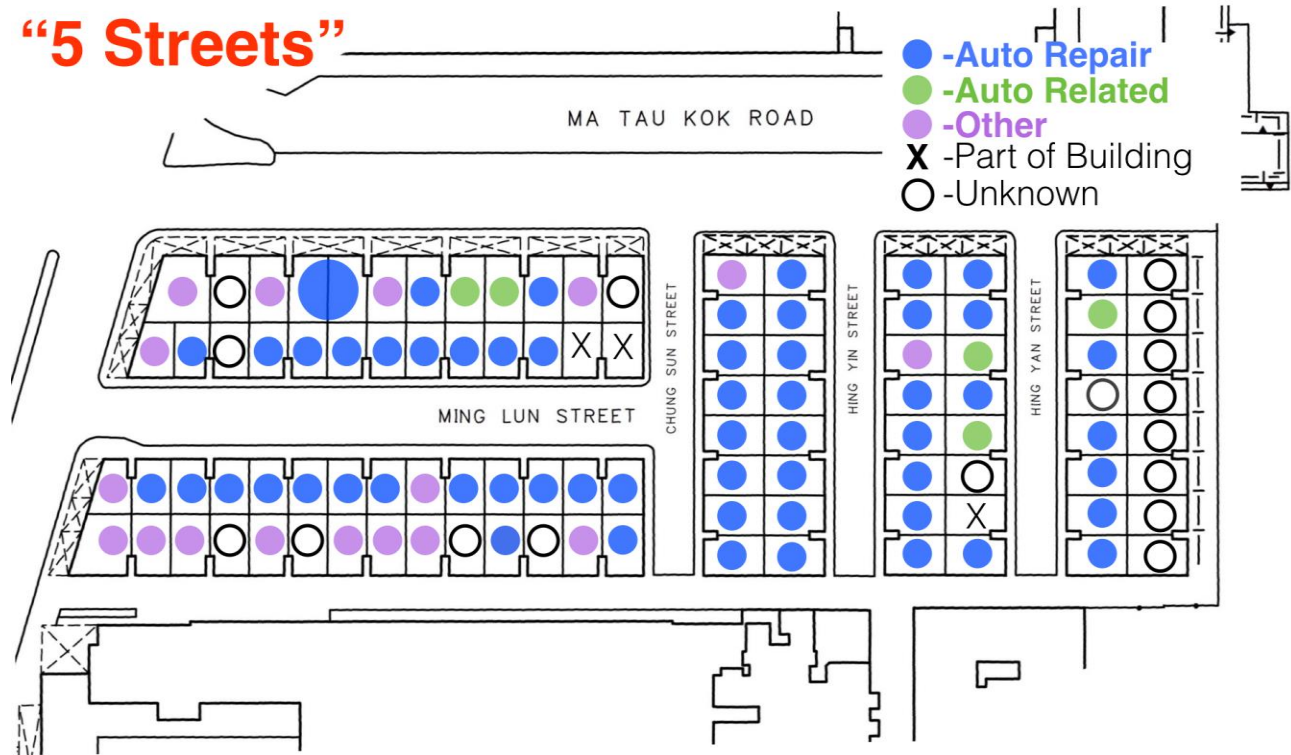
Figure 4.1: 5 Streets Categorization Map
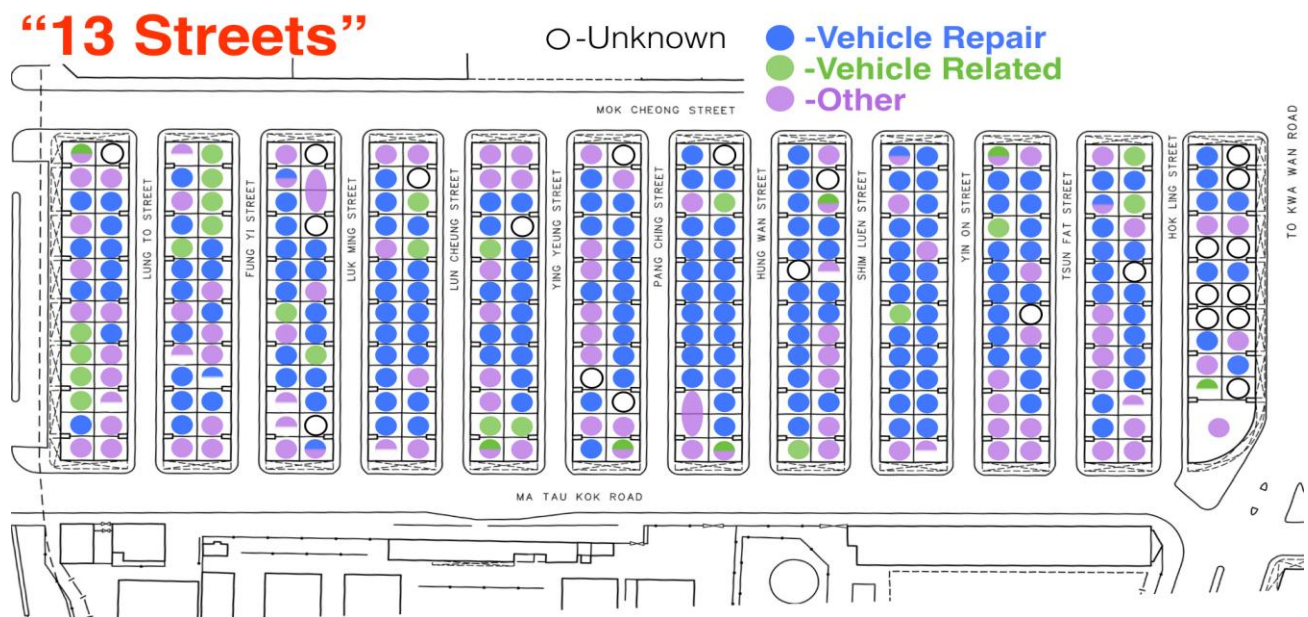
Figure 4.2: 13 Streets Categorization Map
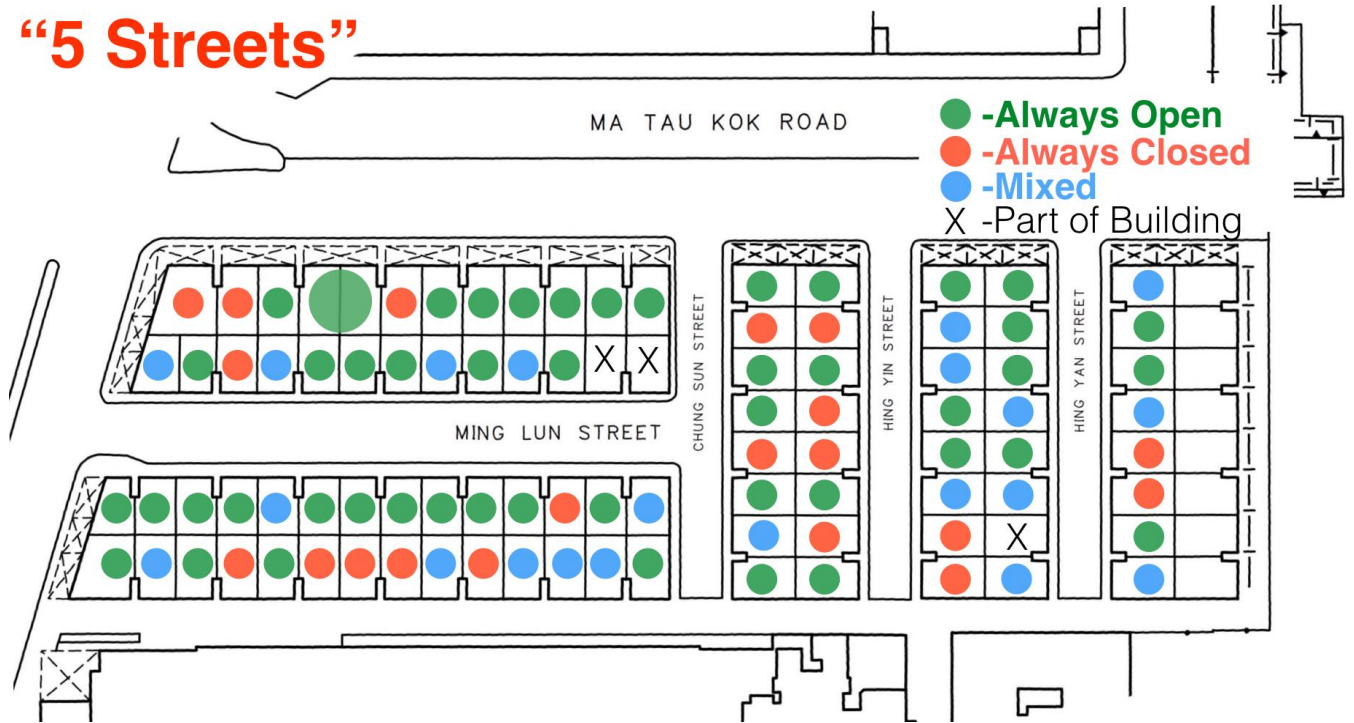
Figure 4.3: 5 Streets Activity Map
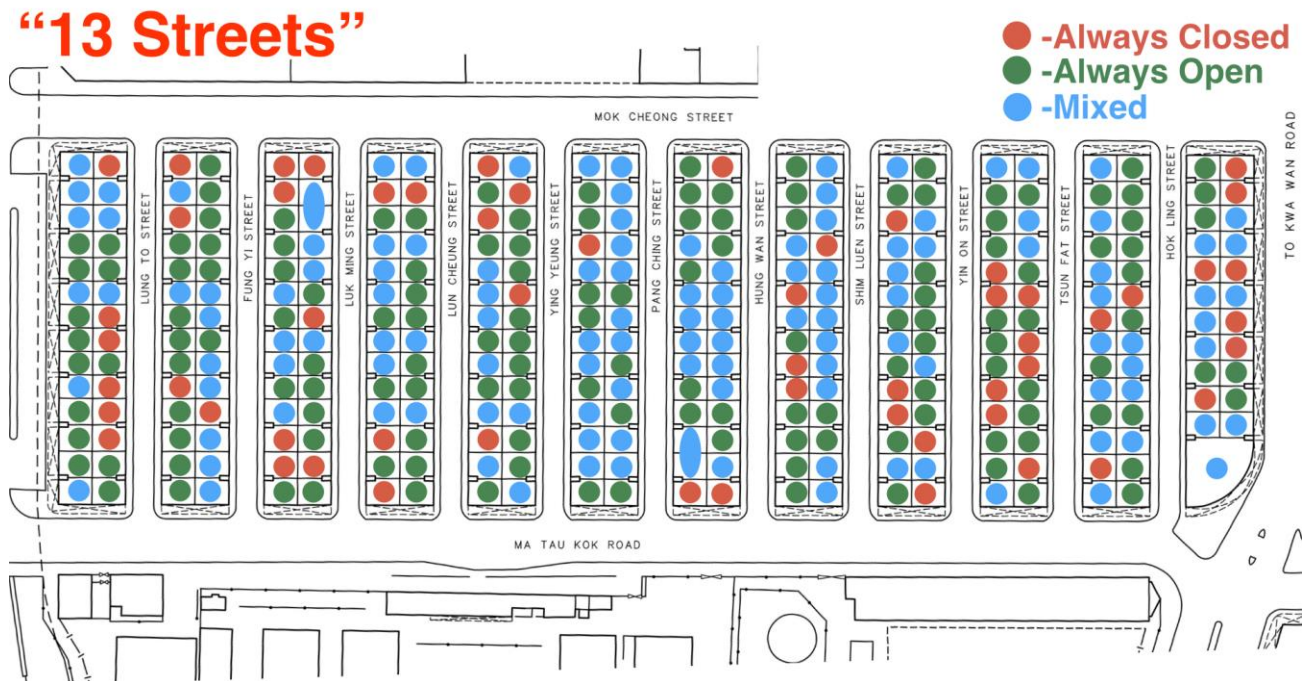
Figure 4.4: 13 Streets Activity Map

We determined that vehicle repair shops made up 64% of the total businesses in the 5

streets area and 47% of the total businesses in the 13 streets area. This results in 50% of the total

businesses in both the 13 and 5 streets area comprised of vehicle repair shops, as seen in Figure

4.5. We determined that 58% of vehicle repair shops in 5 streets and 55% of vehicle repair shops in 13 streets were consistently open every time a site visit was performed. This resulted in 56% of vehicle repair shops being open every time site visit was performed, as depicted in Figure 4.6. The data used for these figures can be found in Appendices E and F.
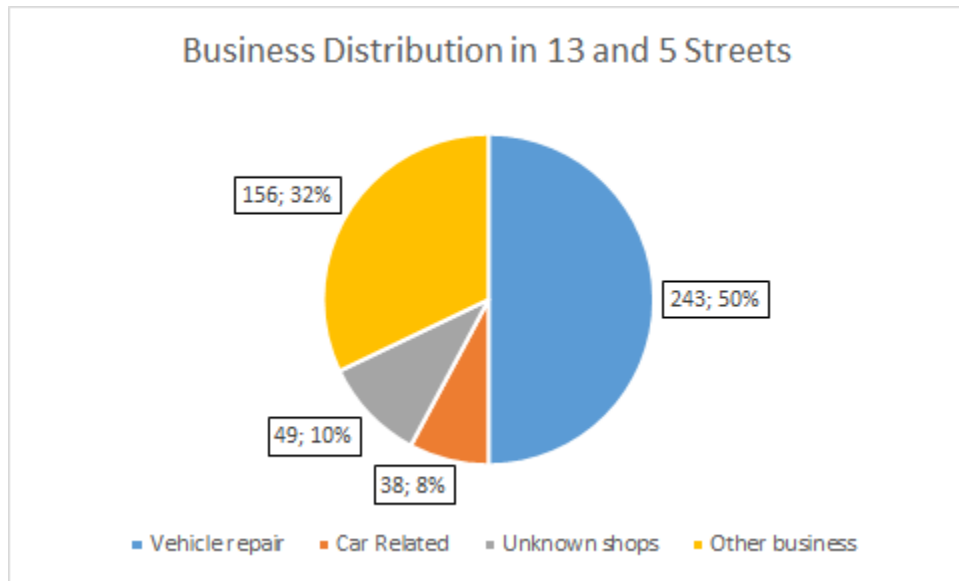
Figure 4.5: Business Distribution in "13 and 5 Streets"
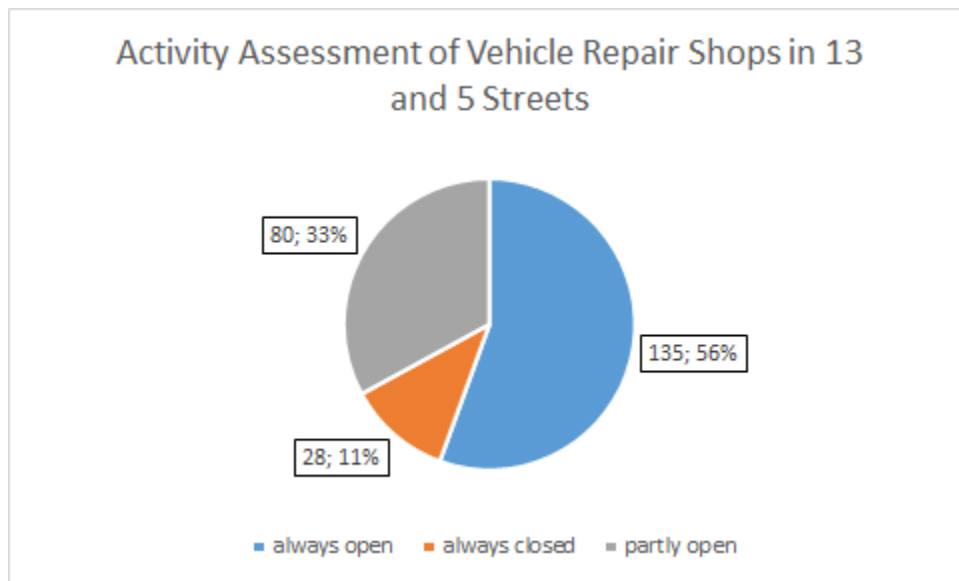
Figure 4.6: Activity Assessment of "13 and 5 Streets"

These numbers spoke volumes about the overall importance of the shops in the area. With their high density and consistent activity, we observed that the services that these shops

provide are frequently utilized and are important. Based on the data gathered from the multiple on-site visits, we determined that the businesses were active enough to justify their importance to the customers in Hong Kong, as roughly 89% of the shops were always or partially open and active when we visited them, as seen in Figure 4.6. This statistic shows that there is a need to provide a service to the people of Hong Kong at large that the vehicle repair shops offer. Much like the Fulton Fish Market in New York City, where the service the Market provided was crucially important to many restaurants in the surrounding area, removing the vehicle repair shops could have a major impact, especially if the service is eliminated completely.

Another important characteristic that we noticed when observing these shops was that they appear to work with taxi companies, commercial transport vehicles, and even a local construction company. Details on how we determined potential linkages can be found in section 3.1.1. We found that 6.45% of the shops in 13 streets and 7.02% of the shops in 5 streets were working on taxis or commercial trucks during our visits. While these numbers are small, we noticed that the taxis and trucks were located at different shops each time we went. This suggests that there are likely more shops that work with the taxi and truck companies that simply were not servicing these vehicles at the time we visited. These linkages show that the services are not only beneficial to private car owners, but also provide essential repairs to the various companies that keep Hong Kong functioning.

Though we were unable to gain direct information from shop workers through interviews, the fact that many workers were too busy with work to give us an interview is an indication of how active the repair shops were.

4.1.2 Kowloon City

Similar to 13 and 5 streets, our objective in Kowloon City was to answer three questions: Is there a local subculture in this area? If so, what is that subculture? Is the redevelopment taking place in the area endangering this subculture? We found that roughly 19% of the restaurants in the area served food based on Thai cuisine. Though this may seem like a low percentage, it was the second highest percentage of any ethnic cuisine in the area when compared to the other cuisines there, as seen in Figure 4.7. The largest percentage comes from Hong Kong style, but this is expected as it is the main culture of Hong Kong. It is also worth noting that while the Western cuisine restaurants were roughly 13% of the restaurants in the area, Western cuisine is a term that often refers to the cuisines of Europe and other Western Countries. This means that while this value is relatively high, it is actually a combination of many different types of restaurants and cannot be seen as just one style of eatery. The OpenRice database allows for multiple categories to apply to the same restaurant. This allows some restaurants to be counted as both Western and its specific type of cuisine.
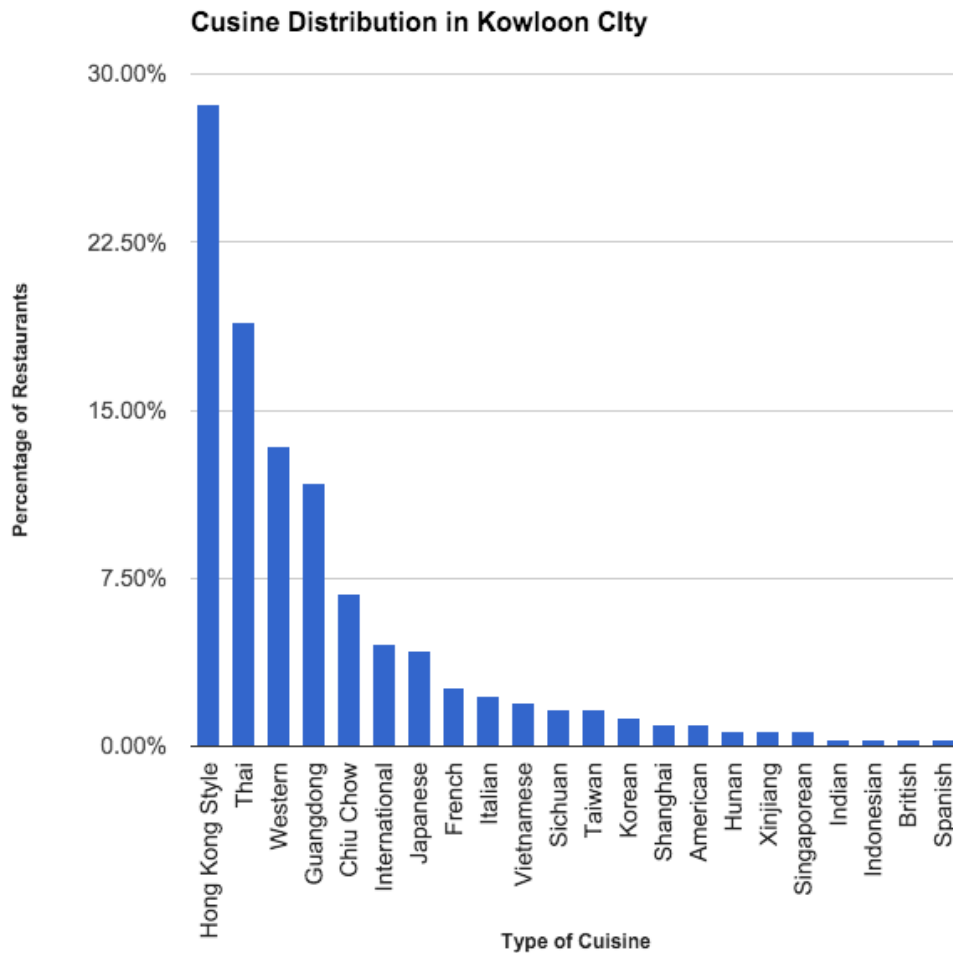
Figure 4.7: Cuisine Distribution in Hong Kong

We also noted that some of the businesses sold different Thai cultural products such as Thai Buddha sculptures or religious candles in addition to dry food products such as spices that are often used in Thai cuisine. One food vendor we interviewed during the Chinese New Year holiday thought the area was predominately a Thai neighborhood, but that it may have a mix of both Thai and Chinese cultures. We noticed that many of the restaurants in the area were closed for the Chinese New Year, while most of the restaurants that had remained open served Thai food. The street food vendor believed that any restaurant that was open during this time was most likely operated by a person of Thai ethnicity who did not celebrate the Chinese New Year holiday. While this made sense, we did notice that some of the Thai restaurants had also

remained closed during this time. One restaurant owner, as well as our sponsor, had suggested a potential explanation for this situation. Both mentioned that the restaurants may have been closed for economic reasons. When the New Year holiday is celebrated, many people go on vacation or cook their own food with their families, thus they would not go to a restaurant to eat. If there would be no customers, many restaurants may have chosen to close their doors to save money. Our sponsor mentioned that most restaurant owners are required to pay their employees 1.5 times the regular pay for working during the Chinese New Year holiday, and that might be another deterrent to being open. The restaurant owner we interviewed agreed that some Thai restaurants may have been closed for economic reasons, as she said that her restaurant is normally closed during this time, or at least had turned off some of her lights in order to conserve energy and save money. These findings supported the idea of a Thai subculture, and the rarity of the products and concentration of services justified the importance of these Thai related businesses. This subculture has given the area a reputation as one of the best places to get Thai food in Hong Kong. The large concentration of small, family-owned Thai restaurants have noted that their customers come from various regions of Hong Kong to enjoy their cuisine. Along with these restaurants there are several Thai herb shops and souvenir shops that provide products that are not found elsewhere in Hong Kong. At first glance, this area appears to be one where these businesses are all competing against one another. Upon further investigation, we found that the close proximity is what makes all of these businesses more successful as a whole. This synergy assists in maintaining the success and prosperity of these businesses. If they were separated in different areas of Hong Kong, it is likely they would not have as much business because people might not know where to go for Thai ingredients, Thai cultural objects or Thai food, and these services would not have as high of a concentration.

4.2 Importance of the Area

Alongside the services that these two areas provide, the locations that they exist in also contribute to the overall significance of the shops. This impact can be positive or negative, and may have changed in the recent past to reflect the development that has already occurred.

4.2.1 13 and 5 Streets

Although the services the vehicle repair shops provide is very important, the location of these shops is not as important. The areas of 13 streets and 5 streets used to have great synergy with the nearby airport and vehicle inspection station. The close proximity, as seen in Figure 4.8, that these areas shared contributed greatly to the relevance of having such a high concentration of repair shops in this area. Initial research showed how the Kai Tak Airport and a nearby Vehicle Inspection Centre have contributed to the success of the vehicle repair shops in 13 and 5 streets. With the relocation of the Airport and Vehicle Inspection Centre more ties would be needed in order to make the location of the repair shops necessary and important to their survival. The former airport and the inspection station were deemed the most important factors in the area due to the synergistic attributes that vehicle repair shops had with them. The airport provided a demand for vehicle repair that were needed for the vehicles that served it, and the Inspection Centre provided a convenient reason for vehicle owners to have their vehicles serviced in the 13 and 5 streets area.
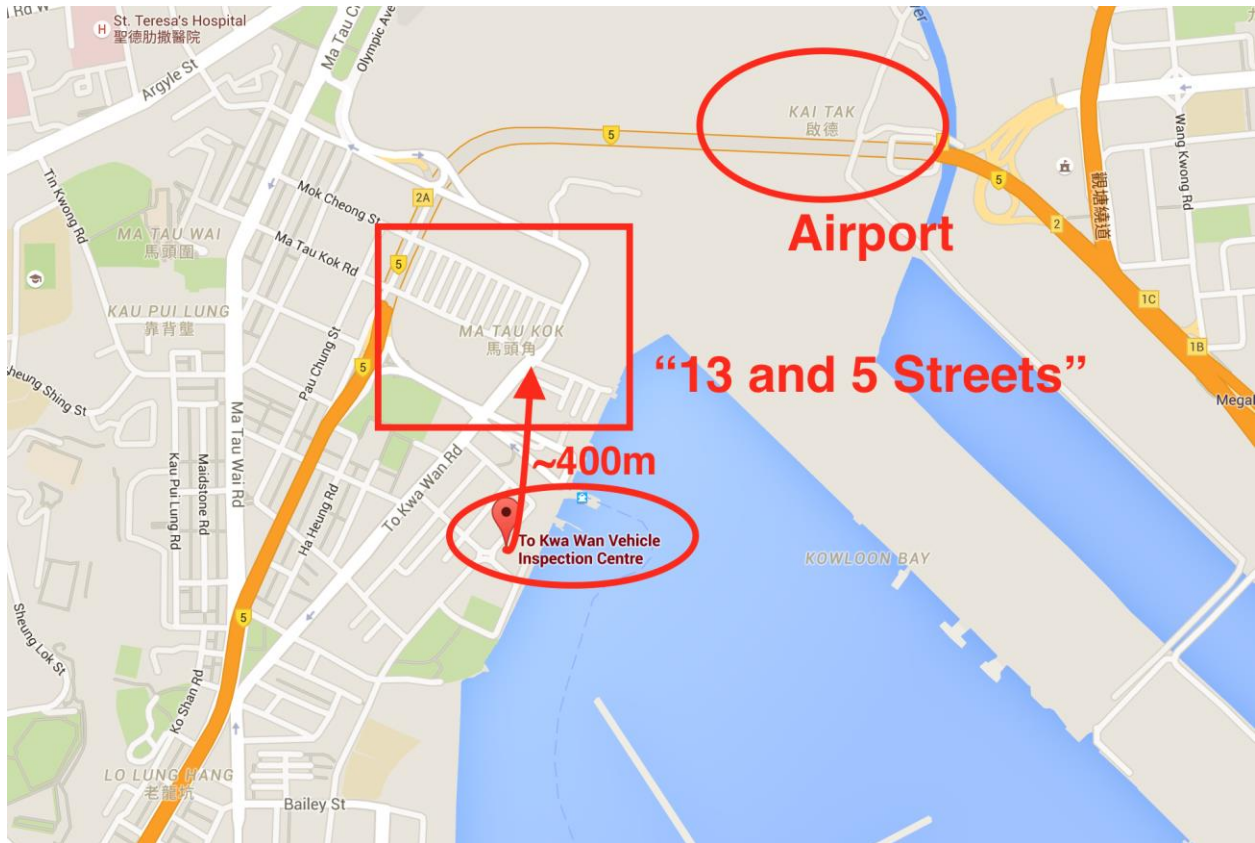
Figure 4.8: Locations of Inspection Shop and Kai Tak Airport (Google 2016)

The Kai Tak Airport was decommissioned in 1998 and the Vehicle Inspection Centre closed in

2015 (M. Ma, personal communication, February 25, 2016), and as such the sheer number of

repair shops is no longer necessary in this neighborhood. There are now plans for the inspection

Centre to relocate from Kowloon East to Tsing Yi. With the significant synergistic factors in the

area gone, we can draw comparisons to the Fulton Fish market in New York. One key

comparison to make between the vehicle repair shops of "13 and 5 streets" and the Fulton

market is that the location was of little importance to the service providers, thus when the market

was moved to a new location not only did it not impact sales, it increased them as a result of

proper planning and appropriate placement of the market. The "13 and 5 streets" area mimics the

current pre-move Fulton fish market in the sense that the location is currently not ideal for them

and lacks many modern features you would expect in the location, specifically an adequate

amount space to work. With the loss of the two most significant sources of business, the relevance of the high concentration of repair shops in 13 streets and 5 streets areas can be considered insignificant and unimportant from an economic and social standpoint. The flow of traffic has been stunted by the loss of the airport while the convenience of having an inspection station nearby has been lost.

When considering whether the area has lost its importance but the services have not, we began to question how to combat the differing significance. During our fieldwork observations we uncovered a key factor in determining how easily a business could be relocated if it were required to move, that is, its mobility. Some businesses have more mobility than others as they have an operation and scale that could fit anywhere. Others are tied to a specific location either due to the equipment being used, or the customers who patronize the business. The mobility of businesses within 5 and 13 streets was determined by using our ranking guidelines sheet, which can be found in Appendix C. The calculations derived from the ranking sheets yielded the results seen in Figure 4.9.
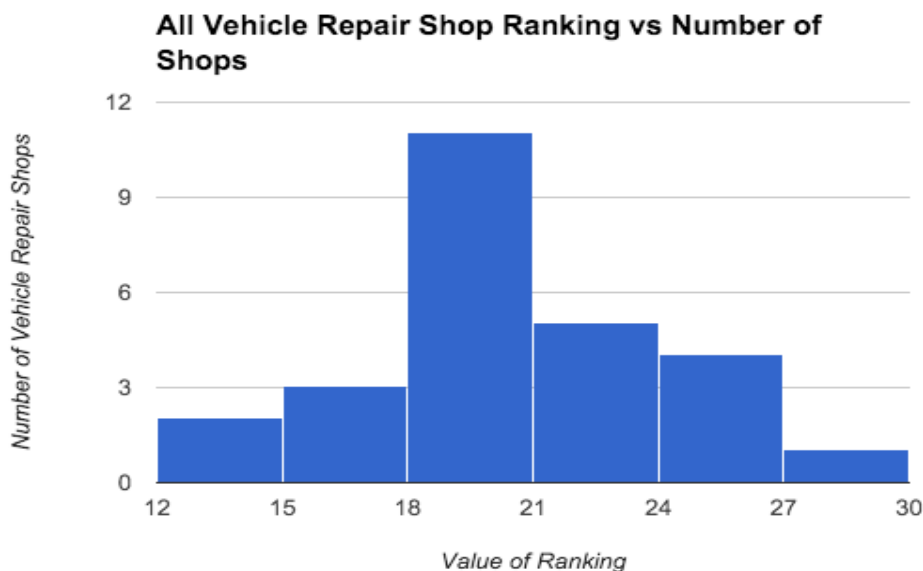
Figure 4.9: All Ranking vs. Number of Shops

We found that the majority of the auto repair shops in both the 13 and 5 streets areas have a relatively low ranking. This leads to the conclusion that the majority of auto repair shops would be easy to move. Figure 4.9 shows a normal distribution between all 26 shops. This shows most of the repair shops perform at a relatively similar level. One important characteristic of the shops that was singled out was whether or not they had lifts. This characteristic was singled out as the greatest determining factor that would make relocating the shops easy or not. The percentages of shops in both 5 streets and 13 streets as a whole that had lifts can be seen in Figure 4.10. The large number of vehicle repair shops that do have lifts in them would require additional assistance in moving the lifts to a new location.
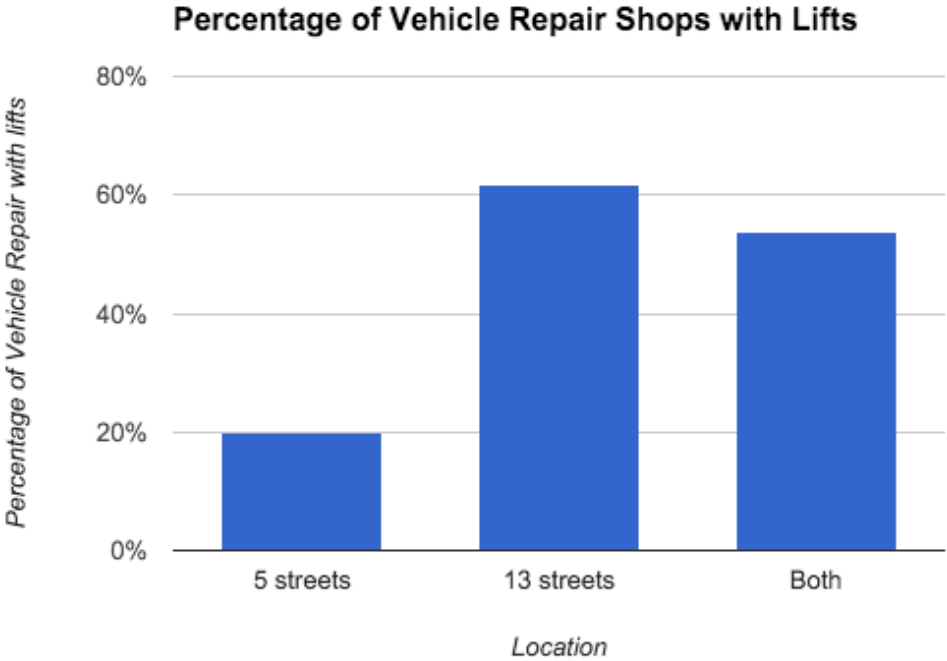
Figure 4.10: Percentage of Vehicle Repair with Lifts

We found a total of 38 auto related businesses in both the 13 streets and 5 streets areas, as seen in Figure 4.6. These shops were selling small general parts and supplies, such as lubricants, paints, oil filters, air filters, batteries, alternators, and accessories or any car specific parts in a

box or general car parts in commercial sale packaging. We determined that these stores are potentially very mobile, since the shops would only require the movement of their supplies and a location to operate in, ideally near vehicle repair shops, in order to optimize their business. The 156 non-vehicle related businesses in the 13 streets and 5 streets areas have also been deemed as highly mobile. Very few businesses in this area require the use of large machinery that would require additional efforts to move. Some of these businesses include restaurants, laundromats, and metal/wood working workshops (see Appendix E and F for more details). These shops would require the relocation of the appliances and machinery that would allow their businesses to function, but none of this equipment is particularly difficult to move.

4.2.2 Kowloon City

After our initial walkthroughs of the Kowloon City area we made two simple observations. The first was that the areas that have newly built high-rise residential buildings tended to be less vibrant with respect to the shops and businesses. The glass front shops had fewer customers and were typically less busy than the open front shops that had yet to be redeveloped. These glass front shops also tended to be businesses that we have seen elsewhere in Hong Kong. These factors contributed to a noticeable monotony that was not present in the areas that have yet to be renovated. The areas we looked at where there were mainly local shops located on the ground level of low-rise buildings tended to be more vibrant, with long lines and crowds of people shouting and purchasing various goods. We defined the term vibrant to refer to a location having or showing great life, activity, and energy (Merriam-Webster Dictionary, 2015b). A new high-rise building either does not allow ground level shops, orallocates space to shops that have brand new glass fronts and tend to attract wealthier customers than those on the ground floor of an older building that caters to a local crowd.

A second observation is that the older area seems to be predominately filled with many different restaurants and eateries. Because of this second observation we decided to base our definition of the area's subculture on the cuisines found there. We asked what the street food vendor as well as the restaurant owner thought were the most significant features of the area. In both cases they stated that there was not much in this area that could be considered significant other than the diversity and large number of eateries. These responses supported our idea of defining and identifying the Thai subculture in the area by the cuisine found there. The restaurant owner also believed that many of the Thai restaurants are either owned by people who are ethnically Thai, or have hired people of Thai ethnicity to work in their restaurant in order to maintain the authenticity of a Thai restaurant. We observed many signs and restaurant menus in the area that were written in Thai script. All of these factors suggest that the Thai subculture is not only very well seated here, but relies on the characteristics of the area for its success. With no other notable attractions in the area, the real focus falls on the high concentration of Thai restaurants, as well as the Thai shops, such as incense shops, herb shops, book stores, grocery stores, and antique stores. As mentioned earlier, these shops offer unique services and products that are not very available elsewhere in Hong Kong. This area is very similar to Chinatown in Boston, which we discussed in section 2.2.3. Both are segregated subcultures that formed naturally overtime, and both are facing dissociation at the hands of redevelopment. In both circumstances, the area plays a large role in the success of the businesses that populate them. While there are other Chinese restaurants in Boston and other Thai restaurants in Hong Kong, these two areas have separated themselves as centers for obtaining their respective cuisines. Should the restaurants in these areas be separated and spread apart, the overall appeal associated with having a special area for a certain type of food or product is gone. The rarity and uniqueness

of the shops distinguish them in the area, and the lack of other attractions in the area serves to amplify that uniqueness, therein validating the importance of the area.

It is also important to acknowledge the current construction of a new MTR line that will have a stop within walking distance of Kowloon City. While the area is currently only accessible by taxi or bus, the addition of an MTR stop will bring a much larger crowd of people to the area that may not have previously ventured there.

4.3 How do they Connect?

While our goal was focused primarily on discovering how important 13 and 5 streets and the Thai neighborhood in Kowloon City are, the information that we gathered in this study also allowed us to draw connections between these two areas that were not immediately apparent and that may not have been found if the areas were studied independently. These similarities have helped us decide whether or not these areas are worth protecting. Both areas are currently under heavy pressure for redevelopment after the removal of the Kai Tak airport. They both possess high concentrations of specific businesses that grew in number naturally over time. They have each withstood redevelopment that has happened in surrounding areas, and it is not exactly clear how. Furthermore, and perhaps most importantly, both of these areas have or had a strong synergistic quality that allowed for the high concentration of services to flourish. Each of these areas is unique, offering a specific service or product that dominates business, and while there are other areas that express similar characteristics found elsewhere in Hong Kong, each one has different unique services to offer. These areas could prove to be very valuable, but they could also be a hindrance to any redevelopment in the area that the city as a whole might find more useful. Such comparisons link these two areas as being some of the most similar in Hong Kong. The differences arise predominantly in the types of businesses found in each area, as well as the

presence of unique defining subcultural characteristics. For 13 and 5 streets, we focused on how the repair shops performed as businesses in order to get a better idea of their significance. What we found showed that the shop's services are important, but the concentration of these services is no longer necessary. In the Kowloon City area, we focused more on what the services meant for the area, and specifically identified characteristics that made the area important. The data we collected revealed that business performance and cultural characteristics are specifically tied to the proximity of similar shops and the synergy they produce as a whole. Despite the similarities that these areas possess, our data collection processes were very different and produced different results. However, the same similarities are what helped to strengthen our findings. The comparisons we drew allowed us to focus our goals around the specific traits that both areas share, rather than having to separate them and divide our research and analysis. This unity then amplified the impacts of the findings that were different, and allowed us to then cater our recommendations to each area.

5. Conclusions and Recommendations

From the analysis of the data we collected, we were able to solidify conclusions that represent our findings clearly and concisely. The similarities between the areas resulted in some conclusions that were similar, but the differences brought about some conclusions that are quite contrasting. This chapter will outline the conclusions that we have drawn for both the 13 and 5 streets area and Kowloon city, and detail our recommendations for moving forward.

5.1 Conclusions

From the analysis of our results, we were able to draw conclusions concerning each area's importance, individuality, and synergy. We determined that these characteristics were the most relevant to the problems we were presented with and the goals and objectives we outlined. These conclusions, detailed below, provide the foundation for our recommendations.

5.1.1 13 & 5 Streets

- The services in this area are frequently utilized and are important.
- There are several repair shops that have important linkages with taxi companies/commercial transport companies/construction companies.
- The removal of the Kai Tak airport and closing of the local Vehicle Inspection Centre have removed the synergy and the main reason for the organic growth of repair shops in this area.

5.1.2 Kowloon City

- The services in this area are frequently utilized and are important.
- The services in this area provide products that cannot be found elsewhere in Hong Kong.

- The success and reputation of the businesses in this area are derived from the high concentration of Thai related restaurants/shops.

- There is a thriving Thai subculture in Kowloon City, which further reinforces the synergistic aspects already present with the restaurants/shops.

5.2 Recommendations

The recommendations that follow are suggestions on how to move forward with the 13 and 5 streets area and Kowloon City neighborhood in planning future development in these areas. Since our task was to decide how and if the areas should be preserved, our recommendations will fall on a spectrum between full preservation and no preservation whatsoever. We are making these recommendations based on the conclusions that we have drawn about the two areas. As mentioned in section 5.1, the contrasting aspects of the conclusions have given way to vastly different recommendations.

5.2.1 13 & 5 Streets

There is no lack of contribution provided by the businesses that operate out of 13 and 5 streets. They remain open frequently and service many different vehicles, with some even providing repair services for commercial trucks and city taxis. While the reason for such a high concentration of repair shops in this area may have been lost, the reason behind keeping the shops in business has not. The pressure for redevelopment in this area is reported to be incredibly high. In light of this, our recommendations are as follows:

- Redevelopment of 13 and 5 streets should proceed however it is seen fit.

- Should redevelopment involve the need for removal of the car repair shops in the area, steps should be taken that would assist or compensate owners in relocating these shops to areas where they can continue to provide their services.

- Further research should be done with repair shop owners in order to gauge to what extent support and compensation should be provided.

5.2.2 Kowloon City

Kowloon City faces a similar situation to 13 and 5 streets, in that it is under great pressure for redevelopment. Our conclusions have pushed for rather different recommendations. They are as follows:

- Any future redevelopment should ensure that Thai restaurants and shops are able to remain in Kowloon City should they so choose to stay there. Subsidies through the use of public money may be necessary, but this seems justified based on our findings.

- Future development would benefit from capitalizing on the already famous Thai subculture in Kowloon City, potentially making it a tourist attraction for visitors to Hong Kong.

- Further research is necessary to discover what factors contributed to the growth of the Thai subculture in order to properly protect it in the future.

Our hope is that the conclusions we have drawn and the recommendations we have provided will encourage future developers to take more time to consider the importance of the areas they target before moving forward with development. The research we have done revealed that there are unique and important characteristics that exist in every area, and to ignore this fact is to destroy something that may be treasured by the community. There is more research to be done, however, specifically through interviews with the shop owners and residents of both areas. The

thoughts and opinions of the people in these areas are valuable in determining what the extent of preservation should be. For 13 and 5 streets, where the relocation of the repair shops is likely, it will be important to first gather the opinions of the shop owners. Their opinions will help find where the best relocation sites could be. We hope that the two areas we have studied are properly cared for when and if they are redeveloped, and that the characteristics we have identified as important are preserved.

References

Beacon, S. (2006, January 25). Chinatown's long-time residents forced to leave homes. *The Berkeley Beacon*. Retrieved from http://www.berkeleybeacon.com/news/2006/1/25/chinatown039s-longtime-residents-forced-to-leave-homes

Bowen, D. (2005, March 23). Fulton Market Looks Forward To Bronx Dawns. *The New York Times*. Retrieved from http://www.nytimes.com/2005/03/23/style/dining/fulton-market-looks-forward-to-bronx-dawns.html

Carroll, J. M. (2007). *A Concise History of Hong Kong*. Lanham, MD: Rowman & Littlefield Publishers.

Chan, G. (2015, July 29). Discounted flats for the middle class; URA to sell 338 homes in Kai Tak at prices 20 per cent below market rate. *South China Morning Post,* p. 3. Retrieved from http://www.lexisnexis.com/hottopics/lnacademic

Chan, W.-k. (2007, December 29). Why these tenement buildings must not be demolished. *South China Morning Post,* p. 12. Retrieved from http://www.lexisnexis.com/hottopics/lnacademic

Chan, Y. (2015). The Future of Graham Street Market. *HK-Magazine*. Retrieved from http://hk-magazine.com/city-living/article/future-graham-street-market

Cheung, A. (2013). Hong Kong's Economic Development. Retrieved from http://www.savantas.org/?p=1169

Cities Alliance. (2016). Transforming Mumbai into a World-Class City | Cities Alliance. Retrieved from http://www.citiesalliance.org/node/4395

Das, P. (2014, March 12). Ecology Rights and City Development Plans: The Case of Mumbai | The Nature of Cities. Retrieved from http://www.thenatureofcities.com/2014/03/12/ne-ecology-rights-and-city-development-plans-the-case-of-mumbai/

Davisson, J. (2005, May 2). Fulton Fish Market Moving to Bronx. *Columbia Daily Spectra*. Retrieved from http://web.archive.org/web/20070526191332/http://media.www.columbiaspectator.com/media/storage/paper865/news/2005/05/02/News/Fulton.Fish.Market.Moving.To.Bronx-2030745.shtml?norewrite200606101621&sourcedomain=www.columbiaspectator.com

DeCanio, L. (2011). Boston's Dark Side: The Hub's Red-Light District. Retrieved from http://bostinno.streetwise.co/2011/10/06/bostons-dark-side-the-hubs-red-light-district/

Dictionary.com. (2016). The Definition of Urban-Renewal. Retrieved from
    http://dictionary.reference.com/browse/urban-renewal

DiNapoli, T. P. (2008, December). *An Economic Snapshot of the Hunts Point Food Distribution Center*. Retrieved from https://www.osc.state.ny.us/reports/economic/huntspoint08.pdf

Dominguez, M. F. (2005). Fulton Street Fish Market. *Gastronomica, 5*(4), 20-24.
    doi:10.1525/gfc.2005.5.4.20. Retrieved from
    http://www.jstor.org/stable/10.1525/gfc.2005.5.4.20

Dudley Street Neighborhood Initiative. (2015). Dudley Neighbors, Inc. Retrieved
    from http://www.dsni.org/dudley-neighbors-inc/

East Liberty Development Inc. (2015). History | East Liberty. Retrieved from
    http://www.eastliberty.org/about-east-liberty/history

East Liberty Quarter Chamber of Commerce. (2015). History Of East Liberty. Retrieved
    from http://www.eastlibertychamber.org/History-of-East-Liberty

Emmerton, R. (2008, February 10). Laws of concrete jungle preferable to URA's policies of city
    desertification. *South China Morning Post,* p. 8. Retrieved
    from http://www.lexisnexis.com/hottopics/lnacademic

Fitzpatrick, D. (2000, May 21). The story of urban renewal: In East Liberty and elsewhere,
    Pittsburgh's dominant public policy tool didn't work out as planned. *Pittsburgh Post-Gazette*. Retrieved from http://old.post-
    gazette.com/businessnews/20000521eastliberty1.asp

Fontaine, T. (2015, April 9). Pittsburgh Urban Redevelopment Authority approves $2.1M in
    loans for Larimer, East Liberty housing project. Retrieved from
    http://triblive.com/news/allegheny/8140480-74/apartments-larimer-million

Graddy, K. (2006). Markets: The Fulton Fish Market. *The Journal of Economic Perspectives, 20*(2), 207-220. Retrieved from http://www.jstor.org/stable/30033657

Hamnett, C. (1991). The Blind Men and the Elephant: The Explanation of
    Gentrification. *Transactions of the Institute of British Geographers, 16*(2), 173-189.
    doi:10.2307/622612

Hanania, J. (2014, January 24). Duel at the Old Fulton Fish Market. *The New York Times*.
    Retrieved from http://www.nytimes.com/2014/01/26/nyregion/duel-at-the-old-fulton-
    fish-market.html

Hiatt, M. E., Zhou, C., Waechter, P. R., & Harmony, Z. D. (2015). *Promoting Universal
    Accessibility of the East Kowloon Harbor Front* (Undergraduate Interactive Qualifying
    Project No. E-project-031415-111006). Retrieved from Worcester Polytechnic Institute

Electronic Projects Collection: http://www.wpi.edu/Pubs/E-project/Available/E-project-031415-111006

Hong Kong Institute for Monetary Research. (2015). Hong Kong Economic History Database. Retrieved from http://www.hkimr.org/content-id20

Hong Kong Special Administrative Region Government. (2011). Monetary Stability. Retrieved from http://www.hkma.gov.hk/eng/exhibition/2.pdf

Hong Kong Special Administrative Region Government. (2015). *Hong Kong: The Facts, Hong Kong as a Service Economy*. Retrieved from http://www.gov.hk/en/about/abouthk/factsheets/docs/service_economy.pdf

Hu, F. Y. (2006, October 16). Anger over Macau's breakneck development. *South China Morning Post,* p. 2. Retrieved from http://www.lexisnexis.com/hottopics/lnacademic

Hughes, C. J. (2015, September 25). The Stress of New Construction. *The New York Times*. Retrieved from http://www.nytimes.com/2015/09/27/realestate/the-stress-of-new-construction.html

ImaginePittsburgh. (2015). East Liberty. Retrieved from http://imaginepittsburgh.com/explore/east-liberty

Jones, D. N. (2015, September 10). Pittsburgh mayor, URA devise plan for low-income residents in East Liberty. *Pittsburgh Post-Gazette*. Retrieved from http://www.post-gazette.com/local/city/2015/09/10/Peduto-asks-URA-to-approve-affordable-housing-plan-for-East-Liberty/stories/201509100178

Kao, E. (2015, July 1). Traditional restaurant serves up its last meal; Kwan Lok diner gives way to development after a decade of serving local fare. *South China Morning Post,* p. 2. Retrieved from http://www.lexisnexis.com/hottopics/lnacademic

Kasthurba, A. K. (2013). Sustainable Develoment of Urban Heritage At Fort Kochi, Kerala, India. *AEI*, 924-933. doi:10.1061/9780784412909.090

Keith, J. A. (2014, May 12). Boston's Chinatown Is Changing, Yet Again. *Boston Magazine*. Retrieved from http://www.bostonmagazine.com/property/blog/2014/05/12/boston-chinatown-changes/

Koslow, D. (2008, May 5). URA is the last thing we need to invigorate old neighbourhoods. *South China Morning Post,* p. 12. Retrieved from http://www.lexisnexis.com/hottopics/lnacademic

Loh, P. (2015, January 28). How One Boston Neighborhood Stopped Gentrification in Its Tracks. *YES! Magazine*. Retrieved from http://www.yesmagazine.org/issues/cities-are-now/how-one-boston-neighborhood-stopped-gentrification-in-its-tracks

Loures, L. (2015). Post-industrial landscapes as drivers for urban redevelopment: Public versus expert perspectives towards the benefits and barriers of the reuse of post-industrial sites in urban areas. *Habitat International, 45*, 72-81. doi:10.1016/j.habitatint.2014.06.028

Merriam-Webster Dictionary. (2015a). Definition of Subculture. Retrieved from http://www.merriam-webster.com/dictionary/subculture

Merriam-Webster Dictionary. (2015b). Definition of VIBRANT. Retrieved from http://www.merriam-webster.com/dictionary/vibrant

Mok, P. S. (2015, April 27). Three killed in Wong Tai Sin blast; Police to investigate cause as firefighters battle blaze for three hours. *South China Morning Post,* p. 1. Retrieved from http://www.lexisnexis.com/hottopics/lnacademic

Mowris, R. P., Eisenberg, S. C., Cook, S. M., & Bouffard, D. D. (2013).*Investigating the Relationships between Urban Design, Microeconomics, and Livability: A Case Study of Hong Kong* (Undergraduate Interactive Qualifying Project No. E-project-022713-123428). Retrieved from Worcester Polytechnic Institute Electronic Projects Collection: http://www.wpi.edu/Pubs/E-project/Available/E-project-022713-123428

Nallathiga, R. (2014). *From decline to growth path: the experience of urban renewal in Mumbai*. Retrieved from https://www.researchgate.net/publication/259997352_From_decline_to_growth_path_the_experience_of_urban_renewal_in_Mumbai

Nguyen, S. V. (2015, November 17). Boston's Chinatown Sees Declining Asian Population as Cost of Living Grows - *NBC News*. Retrieved from http://www.nbcnews.com/news/asian-america/bostons-chinatown-sees-declining-asian-population-cost-living-grows-n459971

Nicol, C. (2015, February 6). On the up; Upper Station Street is proving a magnet for restaurants. But will the businesses change the character of the area, asks Catharine Nicol. *South China Morning Post,* p. 6. Retrieved from http://www.lexisnexis.com/hottopics/lnacademic

Raosoft Inc. (2004). Sample Size Calculator by Raosoft, Inc. Retrieved from http://www.raosoft.com/samplesize.html

Raparthi, K. (2015). Assessing Smart-Growth Strategies in Indian Cities: Grounded Theory Approach to Planning Practice. *Journal of Urban Planning and Development, 141*(4). doi:10.1061/(ASCE)UP.1943-5444.0000267

Schenk, C. R. (2008). Economic History of Hong Kong. Retrieved from https://eh.net/encyclopedia/economic-history-of-hong-kong/

Shah, M. (2013, July 17). A closer look at Mumbai redevelopment. Retrieved from
http://www.constructionweekonline.in/a-closer-look-at-mumbai-redevelopment/

Sung, T. (2015, July 31). Safety campaign will drive us out, say garage owners; 1,300 car repair
shops face prospect of closure after government issues letter saying they cannot operate
under residential buildings. *South China Morning Post,* p. 2. Retrieved from
http://www.lexisnexis.com/hottopics/lnacademic

Sung, Y. W., & Wong, K. Y. (2000). Growth of Hong Kong before and after its reversion to
China: The China factor. *Pacific Economic Review, 5*(2), 201-228.

The Heritage Foundation. (2015). 2015 Index of Economic Freedom: Hong Kong. Retrieved
from http://www.heritage.org/index/country/hongkong

The New Fulton Fish Market Cooperative at Hunts Point Inc. (2015). The New York
Stock Exchange of Seafood. Retrieved from
http://www.newfultonfishmarket.com/about.html

The World Bank. (2015a). Land area (sq. km). Retrieved
fromhttp://data.worldbank.org/indicator/AG.LND.TOTL.K2

The World Bank. (2015b). Population density (people per sq. km of land area). Retrieved
from http://data.worldbank.org/indicator/EN.POP.DNST?order=wbapi_data_value_2014
+wbapi_data_value+wbapi_data_value-last&sort=desc

Tong, A., Niro, A. C., & Guzman, M. A. (2013). *Preserving heritage in the face of urban
development in Hong Kong* (Undergraduate Interactive Qualifying Project No. E-
project-022713-230650). Retrieved from Worcester Polytechnic Institute Electronic
Projects Collection: http://www.wpi.edu/Pubs/E-project/Available/E-project-022713-
230650

Transport Department-The Government of the Hong Kong Special Administrative Region.
(2016a). 2.2 Addresses of Office and Vehicle Examination Centres. Retrieved from
http://www.td.gov.hk/en/public_services/vehicle_examination/vehicle_examination/inde
x.html

Transport Department-The Government of the Hong Kong Special Administrative Region.
(2016b). List of Designated Car Testing Centres.

Urban Renewal Authority. (2014a). About URA. Retrieved from
http://www.ura.org.hk/en/about-ura.aspx

Urban Renewal Authority. (2014b). *Kowloon City District Urban Renewal Forum: Urban
Renewal Plan for Kowloon City*. Hong Kong: URA.

Urban Renewal Authority. (2015a). Heritage Preservation & Revitalisation. Retrieved
from http://www.ura.org.hk/en/projects/heritage-preservation-and-revitalisation.aspx

Urban Renewal Authority. (2015b). Rehabilitation. Retrieved from
http://www.ura.org.hk/en/schemes-and-policies/rehabilitation.aspx

Urban Renewal Authority. (2015c). URA Board. Retrieved from
http://www.ura.org.hk/en/about-ura/corporate-governance/board-and-committees/ura-board.aspx

Urban Renewal Authority. (2015d). Urban Renewal Authority - Our Projects. Retrieved from
http://www.ura.org.hk/en/projects.aspx

Urban Renewal Authority. (2015e). Vision, Mission and Values. Retrieved from
http://www.ura.org.hk/en/about-ura/vision,%20mission%20and%20values.aspx

Worcester Polytechnic Institute. (2015). Interactive Qualifying Project. Retrieved
from https://www.wpi.edu/academics/igsd/iqp.html

Yang, B., Hayne, R. H., & Flaisher, O. (2014). *Quality Urban Living in Hong Kong -- Shrinking Spaces* (Undergraduate Interactive Qualifying Project No. E-project-022514-213943). Retrieved from Worcester Polytechnic Institute Electronic Projects Collection: http://www.wpi.edu/Pubs/E-project/Available/E-project-022514-213943

Yetiskul, E., Kayasü, S., & Ozdemir, S. Y. (2016). Local responses to urban redevelopment projects: The case of Beyoğlu, Istanbul. *Habitat International, 51*, 159-167. doi:10.1016/j.habitatint.2015.10.019

Young, A. (1992). A tale of two cities: factor accumulation and technical change in Hong Kong and Singapore *NBER Macroeconomics Annual 1992, Volume 7* (pp. 13-64). MIT press.

Zhao, F. W. (2015, April 1). URA stuck in crisis of confusion; Uncertainty over the role and direction of the controversial authority has led to conflicts and the resignation of the managing director. *South China Morning Post,* p. 3. Retrieved
from http://www.lexisnexis.com/hottopics/lnacademic

Appendix A: Sponsor Description

The Urban Renewal Authority (URA) was founded in 1999 as a quasi-government contractor to facilitate urban renewal/regeneration in Hong Kong (Zhao, 2015). In 2001 the URA finally established itself with the core values it shares today. The URA is a for profit organization. The URA is funded partly from the government and through the sale of URA owned land.

The vision of the URA (2015e) is to create and rejuvenate urban cityscapes in Hong Kong to make Hong Kong a world class city. This is through accelerated redevelopment of aging environments, buildings, and local character. Urban decay is one of the focuses of URA's mission statement. Maintenance is another focus. Through Maintenance and accelerated redevelopment, URA is able to provide rejuvenated cityscapes throughout Hong Kong. URA partners with affected communities, the Government, Development professionals, and academics to make sure they have the best knowledge and insight for the problems they face within the Hong Kong environment.

The URA (2015e) works closely with the people of Hong Kong to meet its mission's goals. It is a transparent and publically accountable organization. They allow for auditing of their financials and board member interests. The structure of the URA is shown below in the Figure A.1
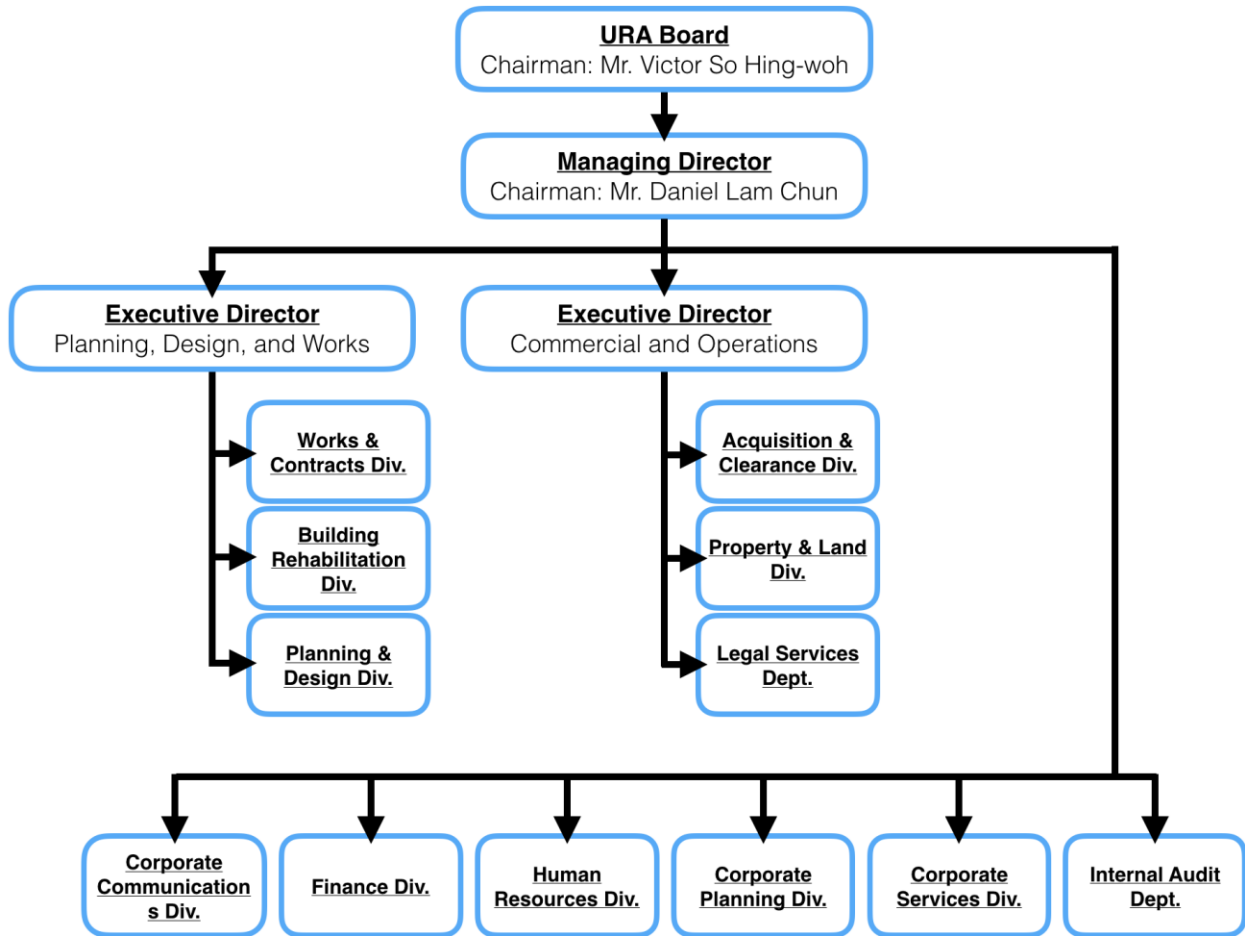
Figure A.1: Organizational Chart of Urban Renewal Authority (URA, 2014a, 2015c)

The URA (2014a) has a board of well-established individuals from many backgrounds who help develop proposals and direct the Managing Director. The Managing Director takes care of day to day duties and oversees the completion of proposals from the board.

The URA (2015e) not only has strong ties with the government in Hong Kong but with Land Developers and Realtors as well. The URA is able to bring its strong ties with government and land developers to help achieve its core mission of redeveloping land. URA also works closely with banks and financial institutions to be able to provide the funds needed to accomplish its goals.

URA Locations

URA has presence in the following locations:

Headquarters:

- 26/F, COSCO Tower, 183 Queen's Road Central, Hong Kong

URA Neighborhood Centers:

- Shop C, G/F, 182 Fuk Wa Street, Sham Shui Po, Kowloon

- 1/F, 6 Fuk Tsun Street, Tai Kok Tsui, Kowloon

- Shop A, G/F, Maid Shine Court, 426 - 430 Mai Tau Wai Road, To Kwa Wan, Kowloon

- Unit C, 1/F, Yue Wah Mansion, 34 - 62 Yue Man Square, Kwun Tong, Kowloon

Public Enquiry Service Centers at District Offices

1. Central & Western

2. Wan Chai

3. Kowloon City

4. Kwun Tong

5. Sham Shui Po

6. Yau Tsim Mong

7. Tsuen Wan

Appendix B: Interview Protocol and Summaries of Interviews Conducted

B.1 Interview Protocol

Interviews were conducted using face--to--face interaction, as this was determined to be the most effective way to gather information from the subjects we were looking to gather information from. Subjects were greeted, informed that we are students conducting a study on a unique area of Hong Kong, and asked if they would like to participate in our research study to help us learn more. Interviews were between 20 and 30 minutes and consisted of questions directly related to the subject's position/perspective on the situation. Interview questions were left open-ended in an attempt to open up communication for further questioning later in the research period.

B.2 Summary of Interview with a Restaurant Owner in Kowloon City

We conducted this interview by having lunch in this restaurant during Chinese New Year. Due to the fact we went at an off time the owner was sitting at an adjacent table and we were able to converse with her. We asked her about where she lives in regards to how far she commutes, she told us she lived in a nearby area and lives close. We then asked about where her customer base comes from. Her customer base comes from all over Hong Kong with no special area of interest. We asked if she mostly receives people who relate themselves to being Thai, but she says that most of her customers are of varied ethnicities and races.

We asked a question about why she was open and other restaurants including Thai restaurants nearby are not. She told us that some restaurants are owned by Thai Natives and some are owned by Chinese and hire Thai staff to do the cooking. She talked about that she

usually is closed during this period to save money but this year that she was open. She usually will conserve during this time by shutting off lights or just some general thing around the restaurant that would conserve energy or money. She claims that during this time of the Chinese New Year holiday there is less customers due to many Chinese customers celebrating this holiday do not come in to eat. She claims that this is the reasoning behind many restaurants closing due to less customers so it does not make sense to stay open.

B.3 Summary of Interview with Street Food Vendor in Kowloon City

The interview was conducted at random of a street food vendor in the Kowloon City area. The interview was conducted during the Chinese New Year Holiday. The vendor was asked about why many restaurants in the area were closed including specifically the Thai cuisine ones. She told us that the ones that were run by Thai natives and had Thai staff were most likely to be open due to the fact they would most likely not be celebrating the Chinese New Year but celebrating the Thai New year later in the year. Restaurants run by Hong Kong or Chinese natives were going to be closed due to the holiday and their observance to it.

We asked directly what they thought was unique of the area. The response was mostly that the area was not very unique and that if we wanted to see something unique to go to a temple. The temple they recommended was not inside our study area and not Thai related directly but may be of religious importance to Thai people who practice the same religion.

Appendix C: Vehicle Repair Workshop Direct Observation Guidelines

1. What kind of shop is it?
2. Vehicles being serviced
   a. type of vehicle
   b. expense of vehicle based on MSRP of vehicle during its introduction
   c. extent of repairs
      i. e.g. engine work vs total crash vs minor paint detail work
3. Open or closed (might need to check this one multiple times)
4. How many people are working there (might need to check this one multiple times)
5. How many lifts does it have
6. Number of cars serviced in a given time period
7. Parts on hand
   a. stock of tires/brakes/or expensive items
8. Number of land plots taken up
9. Kinds of tools being used
   a. Expense of tools used
      i. welder and machine shop tools vs. wrenches/hand tools
10. Linkages to local community businesses
11. Expertise in car repair

Vehicle Repair Workshop Quick Assessment Rubric

	Assessment Level				
Criteria	+1	+2	+3	+4	+5
Vehicle Being Serviced	<10,000USD	10,00-20,000USD	20,000-50,000USD	50,000-100,000USD	>100,000USD
Open vs closed	0-25%	26-50%	51-75%	75-99%	100%
People working there	1	2	3	4	>4
Lifts	0	1	2	3	>3
Number of cars serviced	1 per week	2 per week	3 per week	4 per week	>5 per week
Number of Garages/Land Plots	0	0.5	1	2	>2
Number of linkages with local community or businesses	0	1	2	3	>3 or community critical link
Expense of tools used	<10,000USD small hand tools only	10,000-20,000USD welder, small hand tools	20,000<50,000 USD sheet metal tools, welder, small hand tools	50,000<100,000 USD car specialty tools(diagnostic systems), sheet metal tools, welder, small hand tools	>100,000USD machining tools, car specialty tools(diagnostic systems), sheet metal tools, welder, small hand tools
Parts on hand/inventory	Car Body Parts	tires and brakes	tires, brakes and engine components	tires, brakes, engine components and specialty parts	car specific specialty parts

Appendix D: Ranking Sheet Results

	Shop #	Vehicle Being Serviced	Open Vs Close	People Working	Lifts	#cars serviced p	Land Plot #	Com Linkage	Expense of Tool	Parts on Hand	Time In Business	TOTAL
5 streets	AR7	<10K	100.00%	1	0	2	1		<10K	Body Parts		16
5 streets	BR2	<10K	66.67%	1	0	2	1		<10K	Tires+Brakes		15
5 streets	BL1	<20K	100.00%	3	0	1	1	1	<20K	tires+brakes+e		24
5 streets	DR5	<50	100.00%	1	1	2	1		<50K	tires+brakes+e		25
5 streets	DL2	<100K	100.00%	1	0	2	1		<20K	Tires+Brakes+		22
13 streets	BL 11	<20K	100.00%	1	2	1	1		<50K	No significant		19
13 streets	CR4	<10K	100.00%	3	1	1	1		<10K	Tires+Brakes+		20
13 streets	EL12	<10K	100.00%	2	1	2	1	1	<10K	No significant		18
13 streets	FR8	<50	100.00%	1	0	3	1		<10K	No significant		18
13 streets	FR12	<50	100.00%	1	0	3	1		<10K	No significant		18
13 streets	FL2	<20K	100.00%	1	2	3	1		<20K	Tires+Brakes+		23
13 streets	FL10	<20K	33.33%	1	0	1	1		<10K	Body Parts		13
13 streets	GL8	<50	66.67%	1	0	2	1		<20K	Tires+Brakes+		19
13 streets	HR3	<20K	100.00%	1	1	2	1		<10K	No significant		17
13 streets	HL5	<20K	100.00%	2	1	3	1		<10K	No significant		19
13 streets	IR4	<50	100.00%	1	2	2	1		<50K	Tires+Brakes+		24
13 streets	IL10	<50	100.00%	2	2	3	1		<50K	Tires+Brakes+		26
13 streets	IL12	<100K	100.00%	1	1	2	1		<20K	No significant		20
13 streets	JR6	<50	66.67%	1	0	1	1		<10K	No significant		14
13 streets	JR13	<20K	100.00%	2	0	1	1	1	<10K	Tires+Brakes+		20
13 streets	KR4	<20K	100.00%	4	0	1	1		<10K	Tires+Brakes+		21
13 streets	KL11b	<20K	66.67%	4	1	2	0.5		<20K	No significant		18
13 streets	LL3	<50	66.67%	2	1	2	1		<20K	Tires+Brakes+		21
13 streets	LL9	<100K	100.00%	3	0	2	1		<10K	No significant		20
13 streets	M5	<50	100.00%	1	1	2	1		<20K	Tires+Brakes+		22
13 streets	M13	<100K	100.00%	3	2	4	1		<20K	Tires+Brakes+		28

5 Streets		13 Streets		Total	
Points		Points		Points	
Mean	20.4	Mean	19.9047619	Total Mean	20
Mode	#N/A	Mode	20	Total Mode	20
Median	22	Median	20	Total Median	20
Lowest Point Value	15	Lowest Point Value	13	Lowest Point Value	13
Highest Point Value	25	Highest Point Value	28	Highest Point Value	26
Shops	5	shops surveyed	21	Total shops surveyed	26
Lifts	1	lifts	18	Total lifts	19
# of shops with lifts	1	# of shops with lifts	13	Total # of shops with lifts	14
% of shops with lifts	20.00%	% of shops with lifts	61.90%	% of shops with lifts	53.85%

Location	Percentage of shops with lifts
5 streets	20%
13 streets	61.90%
Both	53.85%

Plot Lettering	Plot Numbering	Description	Category	% Open	Date:1/25, Time:2:46~4:10 Open/Closed	Notes	Date: 2/2 Time: 5:25-7:07pm Open/Closed	Notes	Date: 2/3,Time: 12:25-2:04 Open/Closed	Notes	Linkages?
A	1	??	?	0.00%	C		C		C		
A	2	??	?	0.00%	C		C		C		
A	3	bike shop	Vehicle Repair	33.33%	C		O		C		
A	4	Musical instrume	business	66.67%	C		O		O		
A	5	??	?	0.00%	C		C		C		
A	6	dirt bike shop	Vehicle Repair	66.67%	O		O		C		
A	7	??	?	0.00%	C		C		C		
A	8	??	?	0.00%	C		C		C		
A	9	"Tough vision lin	business	100.00%	O		O		O		
A	10	dirt bike shop	Vehicle Repair	100.00%	O		O		O		
A	11	some office	?	33.33%	C		C		O		
A	20a	contractor (unde	business	0.00%	C	abandoned	C	abandoned?	C		
A	20b	interior design	business	100.00%	O		O		O		
A	20c	clothes	business	66.67%	O		O		C		
A	20d	office of some s	?	66.67%	C		O		O		
BR	1	car wash	Vehicle Repair	100.00%	O		O		O		
BR	2	"Shun Hing Moto	Vehicle Repair	100.00%	O	Taxis	O	taxis	O		y
BR	3	Scooter/moped	Vehicle Repair	100.00%	O		O		O		
BR	4	Car service cent	business	33.33%	C		C		O		
BR	5a	??	?	33.33%	O		C	hydraulics?	C		
BR	5b	Kong Tao Agenc	business	0.00%	C		C		C		
BR	6	cr	Vehicle Repair	33.33%	O		C		C		
BR	7	Clothing/storage	?	66.67%	O		C		O		
BR	8	food??/living spa	?	66.67%	O		O		C		
BR	9	cr	Vehicle Repair	100.00%	O		O		O		
BR	10	Metal working	metal/wood wc	0.00%	C		C		C		
BR	11a	Car painting	Car Aesthetics	100.00%	O		O		O		
BR	11b	??	?	0.00%	C		C		C		
BR	12	Ancestral burnin	business	66.67%	O		C		O		
BL	1	tires	Car Aesthetics	100.00%	O		O		O		
BL	2	cr	Vehicle Repair	100.00%	O		O	comercial trucks	O		y
BL	3	detailing	Car Aesthetics	100.00%	O		O		O		
BL	4	Printing	business	100.00%	O		O		O		
BL	5	bikes/moped	Vehicle Repair	100.00%	O		O		O		
BL	6	??	?	0.00%	C		C		C		
BL	7		Vehicle Repair	100.00%	O		O		O		
BL	8	cr	Vehicle Repair	66.67%	O		O		C		
BL	9	cr	Vehicle Repair	33.33%	C		O		C		
BL	10	Bike shop	Vehicle Repair	33.33%	C		O		C		
BL	11	cr	Vehicle Repair	100.00%	O		O		O		
BL	12a	Air Conditioning	business	33.33%	O		C		C		
BL	12b	water/drinks stor	?	33.33%	C		C		O		
BL	13	Restaurant	Food	100.00%	O		O		O		
BL	14a	Restaurant	Food	100.00%	O		O		O		
BL	14b	hair mall salon	business	100.00%	O		O		O		
CR	1a	construction con	business	66.67%	O		C		O		
CR	1b	Kum Shing Cons	business	33.33%	C		C		O		
CR	2	cr	Vehicle Repair	100.00%	O		O		O		
CR	3a	bike shop	Vehicle Repair	33.33%	C		O		C		
CR	3b	detailing	Car Aesthetics	33.33%	C		O		C		
CR	4	kay fung	Vehicle Repair	100.00%	O		O		O		
CR	5	bikes/moped	Vehicle Repair	66.67%	O		O		C		
CR	6	paint	Car Aesthetics	66.67%	O		C		O		

				%				Notes			
CR	7	motorcycle	Vehicle Repair	0.00%	C		C		C		
CR	8	signs	business	66.67%	O		C		O		
CR	9	Recycle depot	business	100.00%	O		O		O		
CR	10	Construction con	business	33.33%	C		C		O		
CR	11	cr	Vehicle Repair	100.00%	O		O		O		
CR	12	cr	Vehicle Repair	33.33%	C		O	Construction truc	C		y
CR	13	cr	Vehicle Repair	0.00%	C		C		C		
CR	14b	Appliance shop	business	100.00%	O		O		O	may have storage next door	
CR	14a	Decoration insta	business	33.33%	C		O		C		
CL	1	auto parts storag	storage	66.67%	O		C		O		
CL	2	CR	Vehicle Repair	100.00%	O		O	has a kum shiny	O		y
CL	3	Cr	Vehicle Repair	66.67%	O		C		O		
CL	4	cr	Vehicle Repair	66.67%	O		C		O		
CL	5	bike shop	Vehicle Repair	100.00%	O		O		O		
CL	6	chat shing engin	business	0.00%	C		C		C		
CL	7	cr	Vehicle Repair	100.00%	O		O		O		
CL	8	?	?	0.00%	C		C		C		
CL	9	Helen Engineerir	business	0.00%	C		C		C		
CL	10	cr	Vehicle Repair	100.00%	O		O		O		
CL	11	cr	Vehicle Repair	100.00%	O		O		O		
CL	12	cr	Vehicle Repair	100.00%	O		O		O		
CL	13	real estate	business	0.00%	C		C		C		
CL	14a	convenience sto	Community	100.00%	O		O		O		
CL	14b	convenience sto	Community	100.00%	O		O		O		
DR	1a	car supplies	Car Parts	66.67%	O		C		O		
DR	1b	material compan	business	33.33%	O		C		C		
DR	2	cr	Vehicle Repair	100.00%	O		O		O		
DR	3	cr	Vehicle Repair	100.00%	O		O		O		
DR	4	car paint	Car Aesthetics	100.00%	O		O		O		
DR	5	cr	Vehicle Repair	0.00%	C		C		C		
DR	6	cr	Vehicle Repair	0.00%	C		C		C		
DR	7	cr	Vehicle Repair	100.00%	O		O	Detailing and bor	O		
DR	8	cr	Vehicle Repair	100.00%	O		O		O		
DR	9	cr	Vehicle Repair	100.00%	O		O		O		
DR	10	cr	Vehicle Repair	0.00%	C		C		C		
DR	11	Concord Asia in	business	0.00%	C		C		C		
DR	12	toy making shop	business	100.00%	O		O		O		
DR	13	restaurant	Food	100.00%	O		O		O		
DR	14a	restaurant	Food	100.00%	O		O		O		
DR	14b	drinks	Food	100.00%	O		O		O		
DR	14c	hutac company	metal/wood wc	66.67%	C		O		O		
DL	1	cr	Vehicle Repair	100.00%	O		O		O		
DL	2	cr	Vehicle Repair	100.00%	O		O		O		
DL	3	cr	Vehicle Repair	66.67%	C		O		O		
DL	4	cr	Vehicle Repair	33.33%	C		O		C		
DL	5	Oi yau machiner	business	100.00%	O		O		o		
DL	6	bike shop	Vehicle Repair	100.00%	O		O		O		
DL	7	cr	Vehicle Repair	100.00%	O		O		O		
DL	8	cr	Vehicle Repair	100.00%	O		O		O	taxi	y
DL	9	cr	Vehicle Repair	33.33%	C		O		C		
DL	10	cr	Vehicle Repair	100.00%	O		O		O		
DL	11	cr	Vehicle Repair	100.00%	O		O		O		
DL	12	cr	Vehicle Repair	0.00%	C		C		C		
DL	13	motorcycles	Vehicle Repair	33.33%	O		C		C		
DL	14a	electronics supp	business	66.67%	C		O		O		

DL	14b	under constructi	?	0.00%	C		C	under constructi	C			
ER	1a	bike parts	Vehicle Repair	66.67%	C		O		O			
ER	1b	Car batteries	Car Parts	100.00%	O		O		O			
ER	2		Vehicle Repair	100.00%	O		O		O			
ER	3	ADVERTISING	business	0.00%	C		C		C			
ER	4		Vehicle Repair	66.67%	O		O		C			
ER	5		Vehicle Repair	66.67%	O		C		O			
ER	6		Vehicle Repair	33.33%	C		C		O			
ER	7		Vehicle Repair	100.00%	O		O		O			
ER	8	detailing	Car Aesthetics	66.67%	O		O		C			
ER	9		Vehicle Repair	100.00%	O		O		O			
ER	10		Vehicle Repair	0.00%	C		C		C			
ER	11	NO SIGN	Vehicle Repair	0.00%	C		C		C			
ER	12		Vehicle Repair	100.00%	O		O	oil changing	O			
ER	13	bike shop	Vehicle Repair	33.33%	C		O		C			
ER	14	Real estate	business	100.00%	O		O		O			
EL	1a	workshop	business	100.00%	O		O		O			
EL	1b	cafe	Food	66.67%	O		C		O			
EL	2	?	?	66.67%	O		C		O			
EL	3a	detailing	Car Aesthetics	66.67%	C		O		O			
EL	3b	part making	business	66.67%	O		C		O			
EL	4	Omega Asia ltm	Vehicle Repair	0.00%	C		C		C			
EL	5		Vehicle Repair	33.33%	C		C		C			
EL	6a	storage of some	?	33.33%	C		C		O			
EL	6b	small store	business	100.00%	O		O		O			
EL	7		Vehicle Repair	33.33%	O		C		C			
EL	8		Vehicle Repair	66.67%	O		C		O			
EL	9	metal/glass shop	metal/wood wc	33.33%	O		C		O			
EL	10	decor	business	33.33%	C		C		O			
EL	11	Hardware store	business	100.00%			O		O			
EL	12		Vehicle Repair	100.00%	O		O		O			
EL	13	frozen street foo	business	66.67%	O		C		O			
EL	14	home goods	business	100.00%	O		O		O	Might be split between 2 shops		
FR	1		Vehicle Repair	100.00%	O		O	taxi	O	taxi	y	
FR	2		Vehicle Repair	100.00%	O		O		O			
FR	3		Vehicle Repair	100.00%	O		O		O	TAXI	y	
FR	4		Vehicle Repair	33.33%	O		C		C			
FR	5		Vehicle Repair	66.67%	O		C		O	TAXI	y	
FR	6	?	?	0.00%	C		C		C			
FR	7		Vehicle Repair	33.33%	C		O		C			
FR	8		Vehicle Repair	100.00%	O		O		O			
FR	9		Vehicle Repair	0.00%	C		C		C			
FR	10		Vehicle Repair	0.00%	C		C		C			
FR	11		Vehicle Repair	100.00%	O		O		O			
FR	12		Vehicle Repair	100.00%	O		O		O			
FR	13		Vehicle Repair	100.00%	O		O		O			
FR	14	auto parts	Car Parts	100.00%	O		O		O			
FL	1a	??	?	0.00%	C		C		C			
FL	1b	???	?	0.00%	C		C		C			
FL	2		Vehicle Repair	100.00%	O		O		O			
FL	3	car wash	Car Aesthetics	100.00%	O		O		O			
FL	4		Vehicle Repair	100.00%	O		O		O			
FL	5	tools	Vehicle Repair	33.33%	C		O	split?	C			
FL	6		Vehicle Repair	33.33%	O		C		C			
FL	7		Vehicle Repair	66.67%	C		O		O			

FL	8		Vehicle Repair	66.67%	O	C	O	
FL	9		Vehicle Repair	66.67%	O	C	O	
FL	10		Vehicle Repair	33.33%	C	C	O	
FL	11	bikes	Vehicle Repair	100.00%	O	O	O	
FL	12		Vehicle Repair	100.00%	O	O	O	
FL	13		Vehicle Repair	66.67%	O	C	O	
FL	14a	electronics/fridge	business	100.00%	O	O		
FL	14b	building material	business	0.00%			C	
FL	14c	car parts	Car Parts	66.67%	O	C	O	
FL	14d	car parts	Car Parts	100.00%	O	O	O	
GR	1		Vehicle Repair	100.00%	O	O	O	
GR	2		Vehicle Repair	100.00%	O	O	O	
GR	3	Electrical Works	business	100.00%	O	O	O	
GR	4		Vehicle Repair	33.33%	C	C	O	
GR	5		Vehicle Repair	100.00%	O	O	O	
GR	6		Vehicle Repair	33.33%	C	O	C	
GR	7		Vehicle Repair	33.33%	C	C	O	
GR	8		Vehicle Repair	33.33%	C	C	O	
GR	9		Vehicle Repair	33.33%	O	C	C	
GR	10		Vehicle Repair	100.00%	O	O	O	
GR	11		Vehicle Repair	100.00%	O	O	O	
GR	12,13	car/omuda+othe	business	66.67%	O	C	O	
GR	14	book store	business	0.00%			C	
GR	14a	SALON	business	66.67%	C	O	O	
GR	14b	RESTAURANT	Food	66.67%	O	C	O	
GR	14c	RESTAURANT S	Food	66.67%	O	C	O	
GL	1a	food place? cate	?	66.67%	O	C	O	
GL	1b	food place? cate	?	66.67%	O	C	O	
GL	2	overseas grocery	Food	33.33%	O	C	C	
GL	3		Vehicle Repair	66.67%	O	O	C	
GL	4		Vehicle Repair	33.33%	C	O	C	
GL	5		Vehicle Repair	66.67%	O	C	O	
GL	6		Vehicle Repair	100.00%	O	O	O	
GL	7		Vehicle Repair	66.67%	C	O	O	
GL	8		Vehicle Repair	66.67%	C	O	O	
GL	9		Vehicle Repair	100.00%	O	O	O	
GL	10		Vehicle Repair	66.67%	O	C	O	
GL	11		Vehicle Repair	100.00%	O	O	O	
GL	12	??	?	33.33%	C	C	O	office of some sort?
GL	13a	laundry	Community	100.00%	O	O	O	
GL	13b	east canton com	business	33.33%	O	C	C	
GL	14a	real estate	business	100.00%	O	O	O	
GL	14b	car parts	Car Parts	100.00%	O	O	O	
HR	1a	STORAGE	storage	33.33%	C	C	O	
HR	1b	caltex store	business	66.67%	C	O	O	
HR	1c	ENGINEERING	business	33.33%	O	C	C	
HR	2		Vehicle Repair	100.00%	O	O	O	TAXIS	y
HR	3		Vehicle Repair	100.00%	O	O	O	
HR	4		Vehicle Repair	0.00%	C	C	C	
HR	5	CONSTRUCTIO	business	33.33%	C	C	O	
HR	6	METAL GRATIN	metal/wood wc	100.00%	O	O	O	
HR	7		Vehicle Repair	100.00%	O	O	O	
HR	8	METAL MACHIN	metal/wood wc	66.67%	O	C	O	
HR	9	WINDOW SHUT	metal/wood wc	100.00%	O	O	O	
HR	10	GLASS WORKS	business	33.33%	C	C	O	

HR	11	?	?	33.33%	C		C		O
HR	12		Vehicle Repair	66.67%	C		O		O
HR	13	METALWORK	metal/wood wc	33.33%	C		C		O
HR	14a	Restaurant	Vehicle Repair	100.00%	O		O		O
HR	14b	streetfood baker	Vehicle Repair	100.00%	O		O		O
HL	1a	jack hammer par	business	66.67%	O		C		O
HL	1b	tools	business	100.00%	O		O		O
HL	2	Myca Board	business	0.00%	C		C		C
HL	3		Vehicle Repair	100.00%	O		O		O
HL	4	food?	?	100.00%	O		O		O	frozen food storage?
HL	5		Vehicle Repair	100.00%	O		O		O
HL	6		Vehicle Repair	0.00%	C		C		C
HL	7		Vehicle Repair	100.00%	O		O		O
HL	8		Vehicle Repair	100.00%	O		O		O
HL	9		Vehicle Repair	100.00%	O		O		O
HL	10		Vehicle Repair	100.00%	O		O		O
HL	11		Vehicle Repair	66.67%	O		C		O
HL	12		Vehicle Repair	100.00%	O		O		O
HL	13	car Audio work	Car Aesthetics	100.00%	O		O		O
HL	14c	convenience sto	business	100.00%	O		O		O
HL	14b	laundry	Community	100.00%	O		O		O
HL	14a	real estate	business	66.67%	C		O		O
IR	1a	construction tool	storage	66.67%	O		C		O
IR	1b	HVAC MECHAN	business	0.00%	C		C		C
IR	2	cafe	Food	100.00%	O		O		O
IR	3		Vehicle Repair	0.00%	C		C		C
IR	4		Vehicle Repair	100.00%	O		O		O
IR	5	PAINT CAR	Car Aesthetics	33.33%	C		C		O
IR	6	METAL WORK	metal/wood wc	66.67%	C		O		O
IR	7		Vehicle Repair	66.67%	O		C		O
IR	8	service for Dome	business	66.67%	O		C		O
IR	9		Vehicle Repair	100.00%	O		O		O
IR	10		Vehicle Repair	66.67%	O		C		O
IR	11	METAL WORK	metal/wood wc	100.00%	O		O		O
IR	12	MACHINE FACT	business	0.00%	C		C		C
IR	13	auto parts	Car Parts	66.67%	O		C		O
IR	14a	convenience sto	business	100.00%	O		O		O
IR	14b	auto parts	Car Parts	100.00%	O		O		O
IL	1	restaurant	Food	66.67%	O		C		O
IL	2a	museum?	?	33.33%	C		C		O	some kind of museum
IL	2b	Friends of cool s	?	0.00%	C		C		C
IL	3	detailing	Car Aesthetics	100.00%	O		O		O
IL	4		Vehicle Repair	66.67%	O		C		O
IL	5	car painting	Car Aesthetics	100.00%	O		O		O
IL	6		Vehicle Repair	100.00%	O		O		O
IL	7		Vehicle Repair	100.00%	O		O		O
IL	8		Vehicle Repair	33.33%	C		O		C
IL	9		Vehicle Repair	100.00%	O		O		O
IL	10		Vehicle Repair	100.00%	O		O		O
IL	11	metal work	metal/wood wc	33.33%	O		C		C
IL	12		Vehicle Repair	100.00%	O		O		O
IL	13		Vehicle Repair	100.00%	O	taxi	O		O	taxis	y
IL	14	restaurant	Food	100.00%	O		O		O
JR	1a	FOOD	Food	66.67%	O		C		O
JR	1b	food restaurant	Food	100.00%	O		O		O

JR	2		Vehicle Repair	0.00%	C		C		C		
JR	3		Vehicle Repair	100.00%	O		O		O		
JR	4		Vehicle Repair	66.67%	O		C		O		
JR	5a	Windows	business	33.33%	O		C		C		
JR	5b	windows	business	66.67%	O		C		O		
JR	6		Vehicle Repair	66.67%	O		C		O		
JR	7		Vehicle Repair	100.00%	O		O		O		
JR	8		Vehicle Repair	66.67%	O		O		C		
JR	9		Vehicle Repair	66.67%	O		O		C		
JR	10		Vehicle Repair	100.00%	O		O		O		
JR	11		Vehicle Repair	66.67%	O		O		C		
JR	12		Vehicle Repair	0.00%			C		C		
JR	13		Vehicle Repair	100.00%	O		O	TAXI	O	TAXI	y
JR	14a	real estate	business	100.00%	O		O		O		
JR	14b	convenience sto	Community	100.00%	O		O		O		
JR	14c	???	?	0.00%	C		C		C	NO SIGN	
JL	1	???	?	0.00%	C		C		C		
JL	2,3	knife sharpening	business	66.67%	O		C		O	2,3 merge	
JL	4	???	?	66.67%	C		O		O		
JL	5		Vehicle Repair	66.67%	O		C		O		
JL	6		Vehicle Repair	100.00%	O		O		O		
JL	7	?	?	0.00%	C		C		C		
JL	8		Vehicle Repair	66.67%	O		C		O		
JL	9		Vehicle Repair	100.00%	O		O		O		
JL	10	paint /car wash	Car Aesthetics	100.00%	O		O		O		
JL	11		Vehicle Repair	100.00%	O		O		O		
JL	12		Vehicle Repair	100.00%	O		O		O		
JL	13a	potential storage	?	0.00%	C		C		C		
JL	13b	?	?	0.00%	C		C		C		
JL	14b	doctor	business	100.00%	O		O		O		
JL	14a		Vehicle Repair	100.00%	O		O		O		
KR	1a	Flowers	business	0.00%	C		C		C		
KR	1c	CONVIENCE ST	business	100.00%					O		
KR	1b	Watch	business	100.00%	O		O		O		
KR	2a	glass	Vehicle Repair	66.67%	O		C		O		
KR	2b	iron works	metal/wood wc	0.00%					C		
KR	3		Vehicle Repair	100.00%	O		O		O		
KR	4		Vehicle Repair	100.00%	O		O		O		
KR	5		Vehicle Repair	100.00%	O		O		O		
KR	6		Vehicle Repair	66.67%	O		C		O	MERGE WITH 7	
KR	7		Vehicle Repair	100.00%	O		O		O		
KR	8	PAINT	Car Aesthetics	66.67%	O		C		O		
KR	9	Metal work	metal/wood wc	66.67%	O		C		O		
KR	10		Vehicle Repair	100.00%	O		O		O		
KR	11		Vehicle Repair	66.67%	O		C		O	TAXI	y
KR	12a	woodshop	metal/wood wc	66.67%	O		O		C		
KR	12b	???	?	0.00%	C		C		C		
KR	13a	convenience sto	business	100.00%	O		O		O		
KR	13b	???	?	0.00%	C		C		C		
KR	14a	real estate	business	100.00%	O		O		O		
KR	14b	food	Food	100.00%	O		O		O		
KR	14c	real estate	business	100.00%	O		O		O		
KL	1	windshields	Car Parts	100.00%	O		O		O		
KL	2	windshields	Car Parts	100.00%	O		O		O		
KL	3	windshield	Car Parts	100.00%	O		O		O		

								Notes
KL	4	windshield	Car Parts	100.00%	O		O		O	
KL	5		Vehicle Repair	100.00%	O		O		O	
KL	6		Vehicle Repair	66.67%	O		C		O	
KL	7	glass	business	33.33%	O		C		C	
KL	8		Vehicle Repair	100.00%	O		O		O	
KL	9	metal shop	metal/wood wc	66.67%	O		C		O	
KL	10a	windows (house)	business	66.67%	O		O		C	
KL	10b	metal working	metal/wood wc	33.33%	C		C		O	
KL	11b		Vehicle Repair	66.67%	O		C		O	
KL	11a	???	?	0.00%	C		C		C	storage?
KL	12a	metal works	metal/wood wc	66.67%	O		C		O	
KL	12b	metal work	metal/wood wc	33.33%	C		C		O	
KL	13b	restaurant suppli	business	100.00%	O		O		O	
KL	14a	convenience sto	Community	100.00%	O		O		O	
KL	14b	restaurant	Food	100.00%	O		O		O	
LR	1a	metal	metal/wood wc	33.33%	O		C		C	
LR	1b	???	?	0.00%	C		C		C	
LR	1c	WELD/metal wor	metal/wood wc	33.33%	C		C		O	
LR	2		Vehicle Repair	66.67%	O		C		O	
LR	3	REAL ESTATE	business	0.00%	C		C		C	
LR	4		Vehicle Repair	100.00%	O		O		O	
LR	5	detailing	Car Aesthetics	100.00%	O		O		O	
LR	6		Vehicle Repair	66.67%	O		C		O	
LR	7		Vehicle Repair	100.00%	O		O		O	
LR	8	METAL WORK	metal/wood wc	100.00%	O		O		O	
LR	9		Vehicle Repair	100.00%	O		O		O	
LR	10a	?	?	0.00%	C		C		C	
LR	10b	?	?	0.00%					C	
LR	11		Vehicle Repair	100.00%	O		O		O	
LR	12		Vehicle Repair	100.00%	O		O		O	
LR	13		Vehicle Repair	100.00%	O		O		O	
LR	14a	convenience sto	business	100.00%	O		O		O	
LR	14b	construction	business	100.00%	O		O		O	
LR	14c	haircut	business	100.00%	O		O		O	
LL	1	?	?	0.00%	C		C		C	
LL	2	metal working	metal/wood wc	66.67%	O		C		O	
LL	3		Vehicle Repair	66.67%	O		C		O	
LL	4		Vehicle Repair	100.00%	O		O		O	
LL	5		Vehicle Repair	100.00%	O		O		O	
LL	6		Vehicle Repair	66.67%	C		O		O	
LL	7		Vehicle Repair	0.00%	C		C		C	has pictures of taxis on signs
LL	8	window shutters	business	0.00%	C		C		C	
LL	9		Vehicle Repair	100.00%	O		O		O	
LL	10	investment	business	0.00%	C		C		C	
LL	11	Hydro power eng	business	0.00%	C		C		C	
LL	12b	arts	Community	0.00%	C		C		C	
LL	12a	???	?	0.00%	C		C		C	
LL	13	metal working	metal/wood wc	100.00%	O		O		O	
LL	14a	shoe stand	business	100.00%					O	
LL	14c	Music (cd)	business	100.00%	O		O		O	
LL	14b	Electronics	business	100.00%	O		O		O	
M	1a	electrical compo	business	33.33%	C		C		O	
M	1b	car batteries	Car Parts	100.00%	O		O		O	
M	1c	tools	business	100.00%	O		O		O	
M	2	tools	business	66.67%	O		C		O	

M	3			Vehicle Repair	66.67%	O		C		O	
M	4	restaurant		Food	100.00%	O		O		O	
M	5			Vehicle Repair	100.00%	O		O		O	
M	6b	electrical contrac		business	33.33%	O		C		C	
M	6a	laundry		Community	100.00%	O		O		O	
M	7			Vehicle Repair	100.00%	O		O		O	
M	8b	Tools		business	100.00%	O		O		O	
M	8a	Hair		business	100.00%	O		O		O	
M	9	Rim		Car Aesthetics	100.00%	O		O		O	
M	10	Air Conditioning		Car Parts	66.67%	O		C		O	
M	11	tires/wheels		Car Aesthetics	100.00%	O		O		O	
M	12	Car wrapping		Car Aesthetics	100.00%	O		O		O	
M	13			Vehicle Repair	100.00%	O		O		O	
M	14	Taxi Service		business	66.67%	O		C		O	

Total businesses	397			Businesses that are Always Open		% of business that are always open	
Vehicle Repair shops	186	Vehicle Repair Shops/Total Businesses	46.85%	Businesses that are Always Open	185	% of business that are always open	46.60%
Vehicle related	33	Vehicle Related Businesses/Total Businesses	8.31%	Businesses that are Always Closed	63	% of Businesses that are always closed	15.87%
		Vehicle Repair and Vehicle Related Businesses/Total Businesses	55.16%	Repair Shops that are Always Open	102	% Vehicle Repair shops that are Always Open	54.84%
Unknown Businesses	41	Unknown Businesses/Total Businesses	10.33%	Repair Shops that are Always Closed	17	% Vehicle Repair Shops that are Always Closed	9.14%
Other Businesses	137	Other Business/Total Business	34.51%	Repair Shops Partly Open	67	% Vehicle Repair thar are Partly Open	36.02%
Known Linkages	12	Vehicle Repair Shops with known Linkages/Total Businesses	6.45%			% of Vehicle Repair Shops that Have Been Open	90.86%

Appendix F: Data from "5 Streets"

Location:	5 Streets				Date: 1/25, Time: 1:30~2:30,		Date: 2/2, Time: 4:53-5:19pm		Date: 2/3, Time: 12:05-12:21pm			
Plot Lettering	Plot Numbering	Description	Category	% Open	Open/Closed	Notes	Open/Closed	Notes	Open/Closed	Notes	Linkages?
AR	1		Vehicle Repair	66.67%	C		O		O		
AR	2	CAR PAINTING	Car Aesthetics	100.00%	O		O		O		
AR	3		Vehicle Repair	100.00%	O		O		O		
AR	4	Not a shop	building	ERROR							
AR	5		Vehicle Repair	0.00%	C		C		C		
AR	6		Vehicle Repair	0.00%	C		C		C		
AR	7		Vehicle Repair	100.00%	O		O		O		
AR	8		Vehicle Repair	66.67%	C		O		O		
AL	1		Vehicle Repair	100.00%	O	commercial t	O		O		y
AL	2		Vehicle Repair	100.00%	O		O		O		
AL	3	Car sound insulati	Car Aesthetics	100.00%	O		O		O		
AL	4		Vehicle Repair	33.33%	C		O		C		
AL	5	Car paint	Car Aesthetics	100.00%	O		O		O		
AL	6	?	?	66.67%	C	under constr	O		O		
AL	7	part of building	building	ERROR	n/a						
AL	8		Vehicle Repair	33.33%	C		O		C		
BR	1		Vehicle Repair	100.00%	O	commercial t	O		O		y
BR	2		Vehicle Repair	66.67%	C		O		O		
BR	3	Group Consulting	business	33.33%	O		C		C		
BR	4		Vehicle Repair	100.00%	O		O		O		
BR	5		Vehicle Repair	100.00%	O		O		O		
BR	6		Vehicle Repair	66.67%	O		C		O		
BR	7		Vehicle Repair	0.00%	C		C		C		
BR	8		Vehicle Repair	0.00%	C		C		C		
BL	1		Vehicle Repair	100.00%	O		O		O		
BL	2		Vehicle Repair	0.00%	C		C		C		
BL	3		Vehicle Repair	100.00%	O		O		O		
BL	4		Vehicle Repair	0.00%	C		C		C		
BL	5		Vehicle Repair	0.00%	C		C		C		
BL	6	D's Car beauty co	Vehicle Repair	100.00%	O		O		O		
BL	7		Vehicle Repair	0.00%	C		C		C		
BL	8		Vehicle Repair	100.00%	O		O		O		
C	1	restaurant	Food	100.00%	O		O	not busy	O		
C	2		Vehicle Repair	0.00%	C		C		C		
C	3		Vehicle Repair	100.00%	O		O		O		
C	4		Vehicle Repair	100.00%	O		O		O		
C	5		Vehicle Repair	0.00%	C		C		C		
C	6		Vehicle Repair	100.00%	O	taxis	O		O		y
C	7		Vehicle Repair	66.67%	C		O		O		
C	8		Vehicle Repair	100.00%	O	basically has	O		O		
DR	1	part of building	building	ERROR	n/a						
DR	2	part of building	building	ERROR	n/a						
DR	3		Vehicle Repair	100.00%	O		O		O		
DR	4		Vehicle Repair	66.67%	O		C		O		
DR	5		Vehicle Repair	100.00%	O		O		O		
DR	6		Vehicle Repair	66.67%	C		O		O		
DR	7		Vehicle Repair	100.00%	O		O		O		
DR	8		Vehicle Repair	100.00%	O		O		O		
DR	9		Vehicle Repair	100.00%	O		O		O		
DR	10		Vehicle Repair	33.33%	C		O		C		
DR	11	under construction	?	0.00%	C		C	under constructi	C	CONSTRUCTION	
DR	12		Vehicle Repair	100.00%	O		O		O		
DR	13	Barber shop	Community	33.33%	C		O		C		

DL	1		Vehicle Repair	66.67%	O		O		C		
DL	2		Vehicle Repair	100.00%	O		O		O		
DL	3		Vehicle Repair	0.00%	C		C		C		
DL	4		Vehicle Repair	100.00%	O		O		O		
DL	5		Vehicle Repair	100.00%	O		O		O		
DL	6	machine shop	metal/wood worl	100.00%	O		O		O		
DL	7		Vehicle Repair	100.00%	O		O		O		
DL	8		Vehicle Repair	100.00%	O		O		O		
DL	9		Vehicle Repair	100.00%	O		O		O		
DL	10		Vehicle Repair	66.67%	O		O		C		
DL	11		Vehicle Repair	100.00%	O		O		O		
DL	12	convenience store	business	100.00%	O		O		O		
DL	13		Vehicle Repair	100.00%	O		O		O		
DL	14	Restaurant	Food	100.00%	O		O		O		
E	1	storage?	?	100.00%	O		O		O		
E	2	red envelope store	business	100.00%	O		O		O		
E	3		Vehicle Repair	100.00%	O		O		O		
E	4	car wash	Car Aesthetics	100.00%	O		O		O		
E	5	Freedom parts su	Car Parts	100.00%	O		O		O		
E	6		Vehicle Repair	100.00%	O		O		O		
E	7	Shun Fat Decorat	business	0.00%	C		C		C		
E	8,9	"Chun Tat Service	Vehicle Repair	100.00%	O		O		O		
E	10	massages	Healthcare	100.00%	O		O		O		
E	11	?	?	0.00%	C		C	lots of flyers	C		
E	12	The Full Cup Cafe	Food	0.00%	C		C		C		
F	1		Vehicle Repair	100.00%	O	Taxis	O	taxis	O		y
F	2	Venus Choice Lin	business	50.00%			O		C		
F	3	storage?	?	33.33%	C		O	PRIVATE?	C		
F	4	Bike repair	Vehicle Repair	66.67%	O		O		C		
F	5	?	?	0.00%	C		C		C		
F	6	Engineering office	business	66.67%	C		O		O		
F	7	Competence Kitcl	business	0.00%	C		C		C		
F	8	Malaysia Property	business	0.00%	C		C		C		
F	9	?	?	0.00%	C		C		C		
F	10	Town Laundry	Community	100.00%	O		O		O		
F	11	?	?	0.00%	C		C		C		
F	12	Restaurant	Food	100.00%	O		O		O	construction workers	
F	13	Cutie Pets Store	business	66.67%	O		O		C		
F	14a	Chase Property A	business	100.00%	O		O		O		
F	14b	Clothing Store	business	100.00%	O		O		O		

Total businesses	89							
Vehicle Repair shops	57	Vehicle Repair Shops/Total Businesses	64.04%	Businesses that are Always Open	49	% of business that are always open	55.06%	
Vehicle related	5	Vehicle Related Businesses/Total Businesses	5.62%	Businesses that are Always Closed	20	% of Businesses that are always closed	22.47%	
		Vehicle Repair and Vehicle Related Businesses/Total Businesses	69.66%	Repair Shops that are Always Open	33	% Vehicle Repair shops that are Always Open	57.89%	
Unknown Businesses	8	Unknown Businesses/Total Businesses	8.99%	Repair Shops that are Always Closed	11	% Vehicle Repair Shops that are Always Closed	19.30%	
Other Businesses	19	Other Business/Total Business	21.35%	Repair Shops Partly Open	13	% Vehicle Repair thar are Partly Open	22.81%	
Known Linkages	4	Vehicle Repair Shops with known Linkages/Total Businesses	7.02%			% of Vehicle Repair Shops that Have Been Open	80.70%	

Appendix G: Distributions from "13 and 5 Streets"

Repair shops							
5 streets			13 streets			Both	
total	57		total	186		total	243
always open	33		always open	102		always open	135
always closed	11		always closed	17		always closed	28
partly open	13		partly open	67		partly open	80
All shops							
5 streets			13 streets			Both	
Total	89		Total	397		Total	486
Vehicle repair	57		Vehicle repair	186		Vehicle repair	243
Car Related	5		Car Related	33		Car Related	38
Unknown shops	8		Unknown shops	41		Unknown shops	49
Other business	19		Other business	137		Other business	156

Appendix H: OpenRice Data

Type of restaurant	# of restaurants	% of restarants	Type of restaurant	# of restaurants	% of restarants
Hong Kong Style	88	28.66%	Shandong	0	0.00%
Thai	58	18.89%	Shanxi (Jin)	0	0.00%
Western	41	13.36%	Shanxi (Shan)	0	0.00%
Guangdong	36	11.73%	Shunde	0	0.00%
Chiu Chow	21	6.84%	Village Food	0	0.00%
International	14	4.56%	Yunnan	0	0.00%
Japanese	13	4.23%	Australian	0	0.00%
French	8	2.61%	Lebanon	0	0.00%
Italian	7	2.28%	Malaysian	0	0.00%
Vietnamese	6	1.95%	Middle Eastern	0	0.00%
Sichuan	5	1.63%	Napalese	0	0.00%
Taiwan	5	1.63%	Phillippines	0	0.00%
Korean	4	1.30%	Sri Lank	0	0.00%
Shanghai	3	0.98%	Austrian	0	0.00%
American	3	0.98%	Belgian	0	0.00%
Hunan	2	0.65%	Dutch	0	0.00%
Xinjiang	2	0.65%	German	0	0.00%
Singaporean	2	0.65%	Greek	0	0.00%
Indian	1	0.33%	Irish	0	0.00%
Indonesian	1	0.33%	Jewish	0	0.00%
British	1	0.33%	Mediterranean	0	0.00%
Spanish	1	0.33%	Portuguese	0	0.00%
Beijing	0	0.00%	Russian	0	0.00%
Fujian	0	0.00%	Swiss	0	0.00%
Guangxi	0	0.00%	Turkish	0	0.00%
Guizhou	0	0.00%	Argentinian	0	0.00%
Hakka	0	0.00%	Brazillian	0	0.00%
Huaiyan	0	0.00%	Cuba	0	0.00%
Hubei	0	0.00%	Mexican	0	0.00%
Jiang-Zhe	0	0.00%	Peruvian	0	0.00%
Jingchanhu	0	0.00%	African	0	0.00%
Mongolia	0	0.00%	Egyptian	0	0.00%
Northeastern	0	0.00%	Moroccan	0	0.00%
Total Restaurants	307				
DIfferent Types of	22				

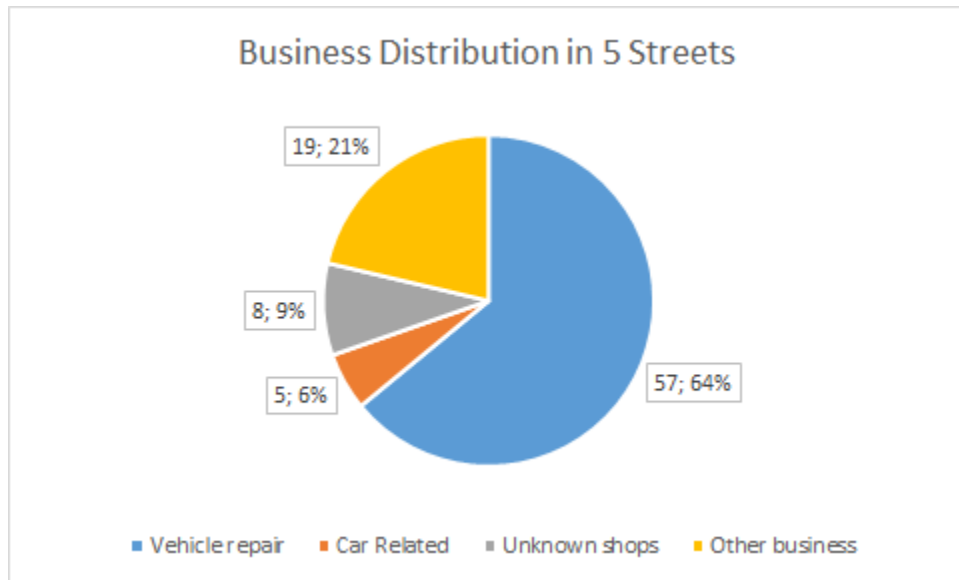# Appendix I: Unused Graphs

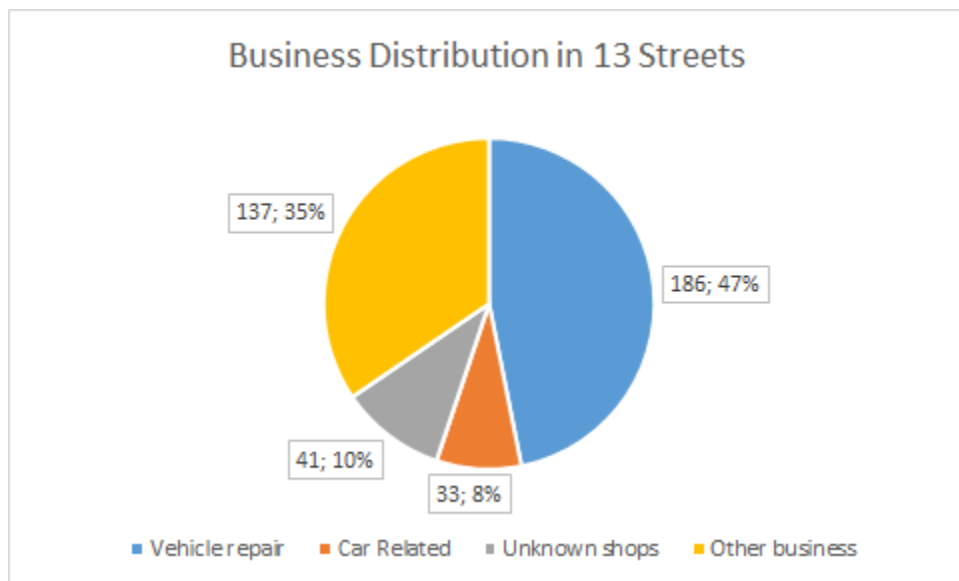**Figure I.1: Business Distribution in "5 Streets"**

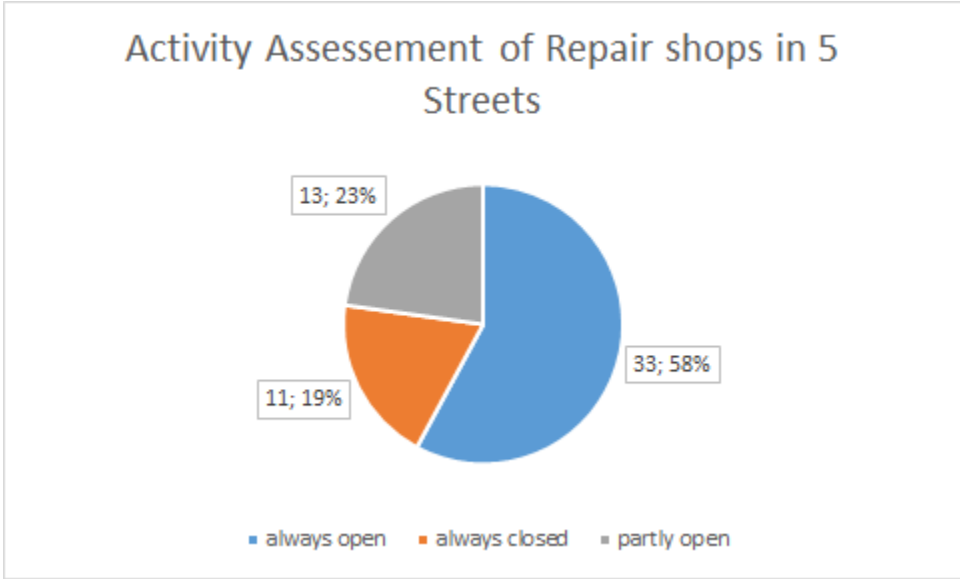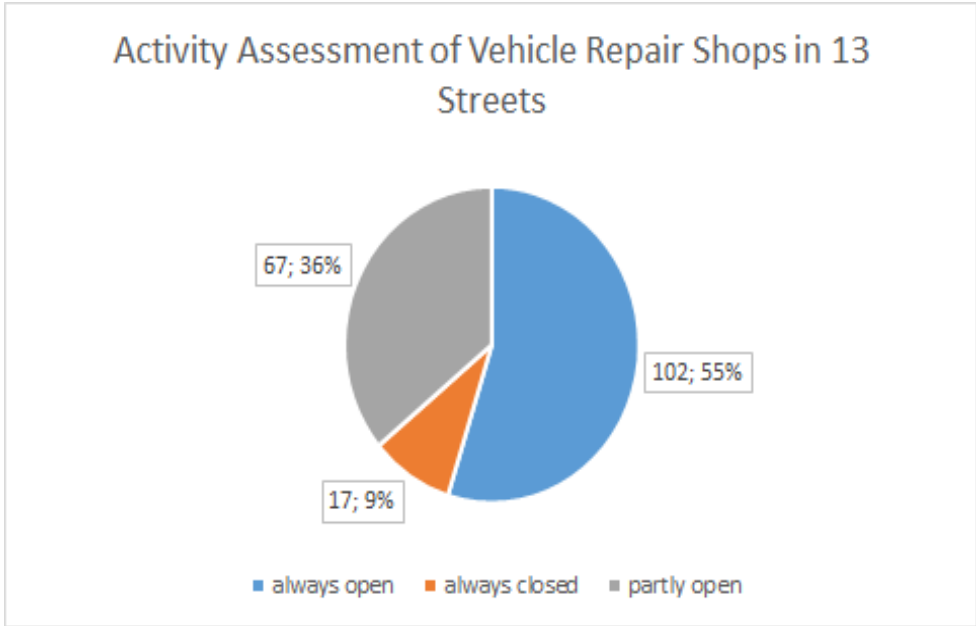**Figure I.2: Business Distribution in "13 Streets"**

Figure I.3: Activity Assessment of "5 Streets"

Figure I.4: Activity Assessment of "13 Streets"