

# **Urban Planning and Development of Kai Tak Area**



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**February 24, 2006**



**URBAN PLANNING & DEVELOPMENT OF**

**KAI TAK AREA**

**An Interactive Qualifying Project Report**

**Submitted to the Faculty**

**of the**

**WORCESTER POLYTECHNIC INSTITUTE**

**in partial fulfillment of the requirements for the**

**Degree of Bachelor of Science**

**by**

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## **Abstract**

This project investigated how the land in Kai Tak should be best developed to serve the Hong Kong community based upon our assessments of public needs and interests. Analysis was accomplished by evaluating historical data, obtaining professional opinions, and visiting existing facilities similar to those under discussion for development. The study concludes that proper planning of facilities such as a cruise terminal, sports complex, and metro park is necessary to utilize this substantial area located on Victoria Harbor's waterfront.

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## **Acknowledgements**

The authors of this report wish to thank their liaison, Christine Loh, for her support, knowledge, and guidance throughout this project. Without the expertise of Christine and Civic Exchange, this project would not have been possible.

The authors also wish to thank their advisors, Yiming “Kevin” Rong and Karen Lemone, for their encouragement, patience, and expert advice throughout the project and report.

The authors also acknowledge those who have contributed their time, knowledge, literature, and experiences. This paper could not have been written without the invaluable help of:

John Bowden, Save Our Shoreline

Steven Brown, Economist

Ian Brownlee, Urban Planner

Kelvin Chan, Hong Kong Planning Dept.

Winston Chu, Society for the Protection of the Harbour

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## **Executive Summary**

This project investigated the Kai Tak area in South East Kowloon, and how the land should be developed to serve the Hong Kong community. Talk of providing more open space, housing as well as the development of a cruise terminal, and sports facility has led to intense debate about the use of the site. There are currently a number of plans for Kai Tak's development but final decisions appear still some way away.

Planning studies have been evolving since the early 1990's yet they have not been finalized. This has been due to the fact that previous plans presented by the government which focused heavily on providing housing (1998) have proved to no longer be relevant with Hong Kong's much lower population growth rate. That plan also involved substantial reclamation that would effectively destroy the entire Kowloon Bay. Since then, there has also been much more public interest in how Hong Kong should develop its entire harbor front without further reclamation or only minimal reclamation where absolutely necessary.

The purpose of this project is to study the options for the development of the Kai Tak site based upon our assessments of public needs and interests. We formulated three objectives to assess the various development options: evaluating historical data and professional opinions concerning Kai Tak, evaluating the different facilities that could be developed on Kai Tak, and to consider what are the public needs and interests.

The primary needs and interests of the general public are to minimize the amount of land that is reclaimed from Victoria Harbor, to make the harbor front area aesthetically pleasing, and to have a vibrant economy. There is no conceptual disagreement among

citizens, professionals and the government that these are important goals although there are competing plans and perspectives as to what will work best to achieve the goals.

We supported our findings through interviews, archival research, and colloquiums. From these different data collection methods, we were able to obtain a substantial amount of current Hong Kong statistics as well as professional opinions on the development plans of Kai Tak. The main development plans that we evaluated were: the sports facility and the cruise terminal. We will also comment on residential housing, open space and an environmental solution to the Kai Tak Approach Channel.

We offer our preliminary views on developing Kai Tak. These are not definitive recommendations since we acknowledge that Hong Kong itself is still debating the options and there are many unknowns that still need to be discussed. Firstly, the main decision for Hong Kong to consider is whether it should go into a large cruise terminal home port operation business, and if so, where to site it. It would appear that Kai Tak is a suitable site.

Secondly, building a multi-purpose year-round sports complex is a less complicated endeavor than developing a large cruise terminal business. If the sports facility is to be sited at Kai Tak, then it would seem sensible for the cruise terminal decision to be taken first and then to ensure the sports facility is optimally placed within the Kai Tak site after proper evaluation of infrastructure support for both facilities. We note there is a weak sport culture in Hong Kong and thus to invest in a mega sports facility, we believe it must be debated within the context of a well articulated sports policy. Housing and commercial developments should be considered after these crucial decisions have been taken and whatever the ultimate plan, the waterfront should be kept

for water recreation activities and the Kai Tak approach channel should be environmentally treated through tides and a channel cut in the runway.

# 1. INTRODUCTION

Harbors have historically been of great importance to the foundation of human civilization. Transportation of goods via water was the most efficient method of trading back when cities began to form, and it is still the most financially feasible method of moving goods from one land mass to another. Many of the greatest cities and areas of trade sprung up as a result of their convenient location to harbors, examples include the Upper New York Bay in New York City and Victoria Harbor in Hong Kong. It is not the market value of the traded commodity that bears the most influence, but the convenience of the actual act of trading, thanks to the presence of a harbor. As a result, the importance of such bodies of water should not be underestimated.

The presence and proper development of harbors are vital for shoreline cities such as Hong Kong. In past history, harbor front development was used mainly to facilitate trade. Today, harbor fronts and their natural beauty are being utilized to support a certain vibrant quality of life for the residents, various economic activities to generate revenues and to enhance tourism opportunities. Development along the harbor, however, has resulted in the creation of highly dense communities as people move closer along the harbor front to take advantage of its offerings. To accommodate the population growth, reclamation of harbors has been a method used by the government to increase land, thus providing more area to support the population.

The Hong Kong government has been reclaiming land from Victoria Harbor to increase its land mass. Since 1945, reclamation has consumed more than 50% of the harbor's size. One of the largest reclamation projects was the former Kai Tak airport site

in South East Kowloon. In 1998, the airport was closed, leaving the Hong Kong government with a substantial vacant area open for development.

In 1998, the government proposed to create substantial housing there as well as to site some industrial and utilities usages including reclaiming the whole of Kowloon Bay. The plan was rejected by the then Legislative Council, which would need to approve funding for works to begin. Subsequent population rise has also been much lower than government projection in 1998, and that plan is no longer regarded as workable today. Other usages are now being debated. The proposed development of an additional cruise terminal was reviewed. Also, the development of some housing, as well as a world-class sports facility has been put forward. We compared the multiple proposals in order to evaluate the feasibility of each plan to arrive at a preliminary view.

The goal of this project was to provide an analysis on possible use of the substantially large and valuable piece of land on the Kai Tak site. We explored the Town Planning Board's harbor development principles in correlation to the three major developments proposed on Kai Tak.

## **2. BACKGROUND**

Typically, the development of land involves the removal of natural assets, such as forests and trees. In the case of Hong Kong, land development in the urban area facing the waterfront was done by reclaiming Victoria Harbor.

Hong Kong in Chinese literally translates into “Fragrant Harbor”. Victoria Harbor is the heart and soul of Hong Kong, which is famous as being one of the world’s greatest commercial and trading centers. Its natural harbor is capable to support even the largest ships because of its natural depth of more than 50 feet (Coggins, 2005). The harbor has shrunk significantly over the years due to reclamation. The distance between the tip of Kowloon Peninsula and Hong Kong Island has decreased by nearly 50%. With the rise of containerization from the 1970s, the port of Hong Kong has shifted somewhat to the western side of the harbor with Kwai Chung being the container terminal.

### ***2.1 History of Reclamation in Hong Kong***

At the end of the Opium War in 1842 and the Treaty of Nanking, Hong Kong Island fell into the hands of the British from the Ching Dynasty (Chu, 2004). The British’s motive behind choosing Hong Kong was the existence of the harbor. The harbor, at the mouth of the Pearl River, was a major hub connecting the ten Far Eastern countries for example, Singapore, Thailand, Malaysia, China’s Coast, and Japan. Hong Kong was composed of a ten by five mile undeveloped area, with hardly any flat land on the waterfront. This left only 15% of the total land acquired by the British to be deemed developable.

Since Hong Kong had such limited land, it was mainly developed as a trading port. All port cities require housing capacity and other infrastructure to uphold the incoming visitors. As the amount of visitors increased, there was a need for more land near the harbor. The solution that the British used was reclaiming Victoria Harbor. In 1890, the Praya Reclamation Project increased the waterfront by 26 hectares to necessitate further commercial growth.

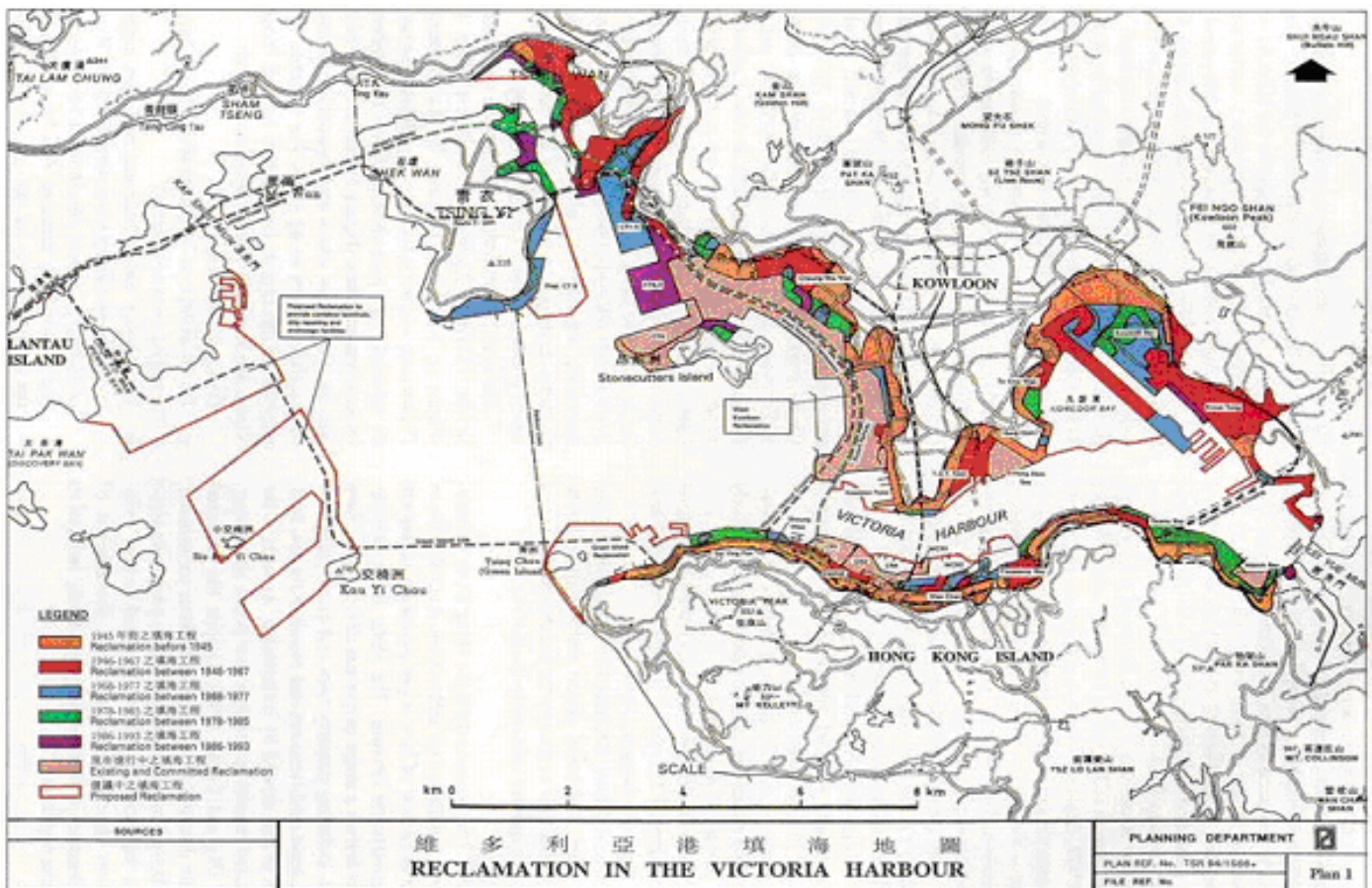


Figure 2.1: Victoria Harbor Reclamation from 1945 to Present

Further reclamation continued throughout the years to transform Hong Kong into the thriving metropolis it is today. However, the beauty and economic importance of Victoria Harbor have been seen by all the stakeholders of Hong Kong. In 1997, future reclamation projects ceased with the passing of the Protection of the Harbor Ordinance. The value of the scarce land surrounding Victoria Harbor, such as Kai Tak, has greatly increased due to this Ordinance. Principles of land development were created to assure the demands of all stakeholders involved. Only through properly evaluated proposals, can the remaining harbor front land be developed for the people and to its true potential.

## ***2.2 History of Kai Tak***

In 1924, the Kai Tak site was owned by Ho Kai and Au Tak, who planned to build private housing. The plan failed and the reclaimed piece of land was given to the government. Kai Tak was used by the Royal Air Force until 1936, when it was transformed into an airport. It closed in 1998, due to the need for a much larger state-of-the-art airport. Chek Lap Kok, a larger Hong Kong International Airport, was constructed in its place.

In 1993, the government proposed the first plans for developing the Kai Tak site. However, this proposal became outdated after a census was conducted in 1996, which indicated a higher increase in population. An updated proposal was created in 1998, stating a need for 300 hectares of reclaimed area to support the growing population. The proposal was not justified by the rate of population. Any new plan made by the Hong Kong Planning Department was based on “no reclamation” as the starting point. It has been realized that in order to develop the Kai Tak site, the public’s needs and interests need to be involved. In 2004, Stage 1 of public participation regarding the urban



development of Kai Tak was undertaken. (HK Planning Department, 2005) A well planned proposal of Kai Tak was necessary to satisfy these stakeholders' demands.

### ***2.3 Land Use and Urban Design Principles***

“To achieve a world-class Harbor District, the limited land available around the Harbor must be optimized to provide foremost a vibrant, active and accessible foreshore catering for both residents and tourists.” (HK Planning Department, 2004) Based on this land usage principle, the government has taken various steps through stage planning to include the stakeholders in consultations, surveys and forums. The stakeholders' vision for the future of Kai Tak was obtained through these consultations and forums.

“The public wants a foreshore which balances functionality with an active harbor and a vibrant experience, including convenient pedestrian mobility, ample open space, visual access, entertainment, arts, culture, sports, retail, hospitality, accommodation, and food and beverage facilities.” (HK Planning Department, 2004) The public also wants Kai Tak to be planned as an environmentally friendly area because they are now concerned with their quality of life as well as the necessities to produce a world class harbor.

Working with the stakeholders, the planning department has produced these planning principles

- To bring the people to the Harbor and the Harbor to the people;
- To create a coherent community supported by a variety of commercial, social and recreational facilities
- To provide territorial/regional facilities and uses to meet the demand of the adjacent communities and the overall Hong Kong people
- To capture the opportunities of the Study Area for tourism and recreational uses

- To preserve key heritage features
- To enhance the connectivity of the study area with the adjacent districts
- To attain high urban design and landscaping qualities for Kai Tak based on environmental-friendly principle
- To accommodate major transport infrastructure required to serve the metropolitan area (HK Government Planning Department, 2005)

In accordance with the above principles, it was decided that Stage 1 of public participation was not sufficient. Further research lead to The Stage 2 Public Participation: Outline Concept Plans was released and focused on the development of a cruise terminal, multi-purpose stadium, public housing sites, and open space.

## ***2.4 Current Condition in Hong Kong***

The Kai Tak area could be developed for many different purposes but the facilities that already exist in Hong Kong should be taken into account. The Leisure and Cultural Services Department (LCSD) manages open space facilities such as local city parks, gardens, and twenty-two major parks (Hong Kong, 2003). One of the major parks, the Hong Kong Park consists of an aviary, conservatory, garden plaza, squash centre, and children's playground. Within this eight hectares park, there are artificial waterfalls and ponds to provide the public with pleasurable scenery. The LCSD also manage another 1,350 smaller local parks and gardens. Besides open space facilities, the LCSD managed sports and recreational venues as well.

The major sports stadium is the Hong Kong Stadium with a capacity of 40,000 seats (Hong Kong, 2003). Football and international rugby matches are held annually with an attendance of 504,000 spectators in 2003. Other such stadiums located in Hong

Kong would be the Hong Kong Coliseum and the Queen Elizabeth's Stadium. These are multi-purpose stadiums in which pop concerts, musicals, international sporting events, and conventions are held. The 12,500-seat coliseum and 3,600-seat stadium held 392 performances in 2003 with an attendance of 1,732,400 people.

Currently, Hong Kong has the Ocean Terminal for cruise ships. This 381 meters finger pier consists of two berths, accommodated cruise vessels such as Queen Elizabeth 2, Norway, and the Star Princess (Harbour City Ocean Terminal, 2005). As for housing facilities, Hong Kong Housing Authority (HKHA) provided 689,450 public rental housing flats, 394,630 subsidized home ownership flats and 1,279,330 privately owned flats (Hong Kong, 2003). According to 2003 statistics, approximately 2.3 million people lived in public rental housing flats and with an overall density of 6,300 people per square kilometer. The Hong Kong Planning Department should take all these current facilities and developments into account when deciding what to construct on Kai Tak.

### **3. METHODOLOGY**

To determine the different interests of stakeholders involved in the process of developing Kai Tak, we employed a variety of methods which helped us achieve our objectives. The team obtained data through a variety of methods. We used colloquiums, interviews, direct observations and archival research to acquire these different types of data.

#### ***3.1 Identify the Citizen's, Government's, and Professionals' Demands Involved with the Development of the Kai Tak Site***

To help us identify the issues regarding the development of Kai Tak, Civic Exchange provided the opportunity to attend a number of colloquiums with specialists (See Appendix D). These specialists explained the developmental issues surrounding Kai Tak, providing the group with the interests of the citizens and professionals. Follow-up interviews were conducted, further disclosing information on the demands of stakeholders. These interviews consisted of non governmental officials (NGOs), the public and private stakeholders. We compiled the data from the interviews and compared the stakeholder's issues to the current proposals for the Kai Tak site.

#### ***3.2 Evaluate Historical Data, Case Studies, as well as Professional Opinions Concerned with the Kai Tak Site***

We were able to collect a vast amount of data on the Kai Tak site from different archival materials. A majority of these materials were provided by Civic Exchange's collection of documents regarding harbor reclamation. These materials gave key components to the development of Kai Tak and what types of projects were being looked

into and provided views from both the government and non-governmental sides. We had access the Hong Kong Polytechnic University library which provided us with different research materials. Aside from those materials, we used the World Wide Web to collect further needed data, such as posted governmental documents concerning the Kai Tak site. We also gained archival materials from NGO's, such as Save Our Shorelines (SOS) and the Society for Protection of the Harbour (SHP), who analyzed the stakeholder's needs of the Kai Tak site. Once the historical data was collected we compared it to the current plans and issues, we obtained from the stakeholders.

To determine the current state of the Kai Tak area and the potential for development, we directly observed the site. We did this through a detailed tour of the pre-developed site, which gave us a clear understanding of the actual size and potential of Kai Tak. We also toured the pre-reclaimed site of Western and the current reclamation happening in the Central & Wan Chai areas. Directly observing these sites furthered our understanding of how harbor reclamation projects are conducted in Hong Kong. It is also crucial to gain an understanding of past reclamation sites and how they relate to our sites future development. Aside from reclamation sites we tour existing facilities throughout Hong Kong to see if the need for upgraded models on the Kai Tak site was necessary.

### ***3.3 Evaluate the Different Development Plans and Provide Our Perspective on What Facilities are Needed***

Based on our direct observation, interviews with stakeholders' representatives and experts, and participation in a stakeholders' conference, the three proposed outline concept plans for developments were evaluated. The needs and interests of the Hong Kong's citizens and the developmental impacts of other related areas were considered.

Finally, we were able to develop our own perspective of the demands of stakeholders and current standpoint of the Kai Tak site. With this new understanding we provided our preliminary view on possible options for development.

## **4. RESULTS & ANALYSIS**

This chapter describes the group's results and analysis of the topic concerning Kai Tak's development, as obtained through our experience studying in Hong Kong. Our on-site experience resulted in the exploration of the interests of various stakeholders involved with the development of the Kai Tak site. Specifically, we explored the concerns of development options such as a sports complex, cruise terminal, residential housing, park area and environmental issues of the Kai Tak Approach Channel.

### ***4.1 Stakeholders Demands***

The group identified the various demands of Hong Kong citizens and government, as well as the needs for Hong Kong according to harbor reclamation and urban planning experts. The demands were all obtained through the application of our methodology, which involved literary research, site visitations, colloquiums, and follow-up interviews.

#### ***4.1.1 Hong Kong Citizens' Demands***

The citizens of Hong Kong want to see the development of more natural recreational areas. Based upon our interview with experts, citizens are more interested in their quality of life than they were in the past, mostly due to the growing income per individual. Hong Kong has a number of large parks which are filled with various recreational facilities like the zoo exhibits at the Hong Kong Zoological and Botanical Gardens and Hong Kong's walk-in aviary. These parks and facilities allow people to be surrounded by nature but not in a quiet and relaxing way. This is due to the vast number of locals and tourists that frequently spend time there, 12.2 million in April 2005 (HK

Park Authority, 2006). A direct observation of Hong Kong Park was that it felt more like being in an amusement park with people shoving each other to make way, rather than a tranquil park to peacefully enjoy.

People of Hong Kong also desire a more accessible and aesthetic harbor front. Currently, it is not possible to walk along the entire waterfront, without being diverted away inland or reaching a dead end. A more accessible waterfront may be used for people to leisurely stroll or used as a beautiful marathon route along the harbor. The group attempted to walk from the current site of the Western Kowloon Cultural District to the Kai Tak site in South East Kowloon; however the path along the harbor led the group to a restricted cargo site, with notably uncomfortable air pollution.

The citizens of Hong Kong desire more natural recreational areas, especially along the harbor. The people of Hong Kong demand more open space to enjoy at their leisure. During the great economic boom in Hong Kong, skyscrapers sprouted at an unprecedented rate leaving little time for thought in planning for leisure and recreation, especially in an aesthetically pleasing fashion. The experts and people of Hong Kong are interested in the development of a more accessible waterfront. People want to be able to walk up to the waterfront, and enjoy its natural beauty. There is also a need for more open parks for children to play, instead of staying indoors in their apartments playing video games. Also, the development of places for people to sit and enjoy the harbor-cafes, restaurants, benches, would be a way to optimize the natural beauty of the harbor.

#### ***4.1.2 Hong Kong Government's Demands***

The Hong Kong government is interested in developing facilities to maintain and strengthen the economy. These facilities include both the cruise terminal and a major



sports facility. The creation of a new cruise terminal will allow Hong Kong contend for the position of being “The Miami of the East”. Hong Kong already has the major factors which draw tourists to travel- a dizzying array of shopping arcades and the natural beauty of Hong Kong’s harbor and mountains. The cruise industry could be a huge market that Hong Kong may tap to increase the amount of money spent by tourists on housing, eating, and enjoying what the country has to offer.

The development of a major sports facility may also diversify and strengthen Hong Kong’s economy. (HK Government Planning Department, 2005) Currently there are multiple sports facilities and recreational facilities for the people of Hong Kong to enjoy. However, the government believes it is vital to create an up to date sports facility to support the recreational sports market, which has not been utilized to its full potential. The government wants to invest heavily in a sports stadium in order to be competitive with other venues on the scale of the Asian Games, as well as day-to-day sporting events.

While the government believes the development of a sports facility is a vital pursuit for Hong Kong to become an international renowned city, there are people who believe another stadium is not necessary. Experts the group spoke with express puzzlement for the government’s adamant need to develop a sports facility, as there are multiple sports facilities in Hong Kong that are rarely ever used to their capacity. This includes the Hong Kong Coliseum, which is known for holding more pop concerts than sports events. In addition, when the stadiums are indeed being used for their intended purpose of sports, the seats are not filled with the expected amount of attendants.

### ***4.1.3 Hong Kong Experts' Demands***

Experts demand that the government follow through with their promised plans for the development of Kai Tak, which includes no further reclamation, proper installation of infrastructure, and an environmentally sound solution to the Kai Tak Approach Channel. In past reclamation projects, promised proposals released by the government did not fulfill their descriptions. On Western Hong Kong Island, the end result of the development of the Sheung Wan site was not anywhere near what the government had initially proposed. As we observed in Sheung Wan the walkways along the harbor are not aesthetically pleasing, nor welcoming, as it is simply a concrete walkway with a wire fence to block it off from a parking lot. In addition, experts demand that the government take care in creating proper infrastructure to support the areas under development. The lack of vital infrastructural services will lead to unforeseen traffic problems, and possibly further reclamation to solve the issue.

The experts want to see that the environmental hazards in the Kai Tak Approach Channel are properly resolved. The government has investigated the serious odor problem and water pollution of the Approach Channel, and claims the most feasible method is to reclaim the land. Experts believe there are other methods to solve the environmental issues of the channel without the need for further reclamation. The experts want the government to take careful thought of the needs and interests of the citizens in regards to the development of land along the harbor.

The citizens and stakeholders of Hong Kong all noted the desire for more natural recreational areas, especially along the harbor. The people of Hong Kong demand more open space to enjoy at leisure. Residential and business towers sprouted during the great economic boom in Hong Kong, leaving little regard for the development of recreational

areas and aesthetically pleasing waterfront views. The experts and people of Hong Kong are interested in the development of a more accessible waterfront. People want to be able to walk up to the waterfront, and enjoy the harbor's natural beauty. There is also a need for more open parks for children to play, instead of staying indoors in their apartments playing video games. Also, the development of places for people to sit and enjoy the harbor would be a way to optimize the natural beauty of the harbor.

#### ***4.2 Historical Data and Professional Opinions on the Current Kai Tak Situation***

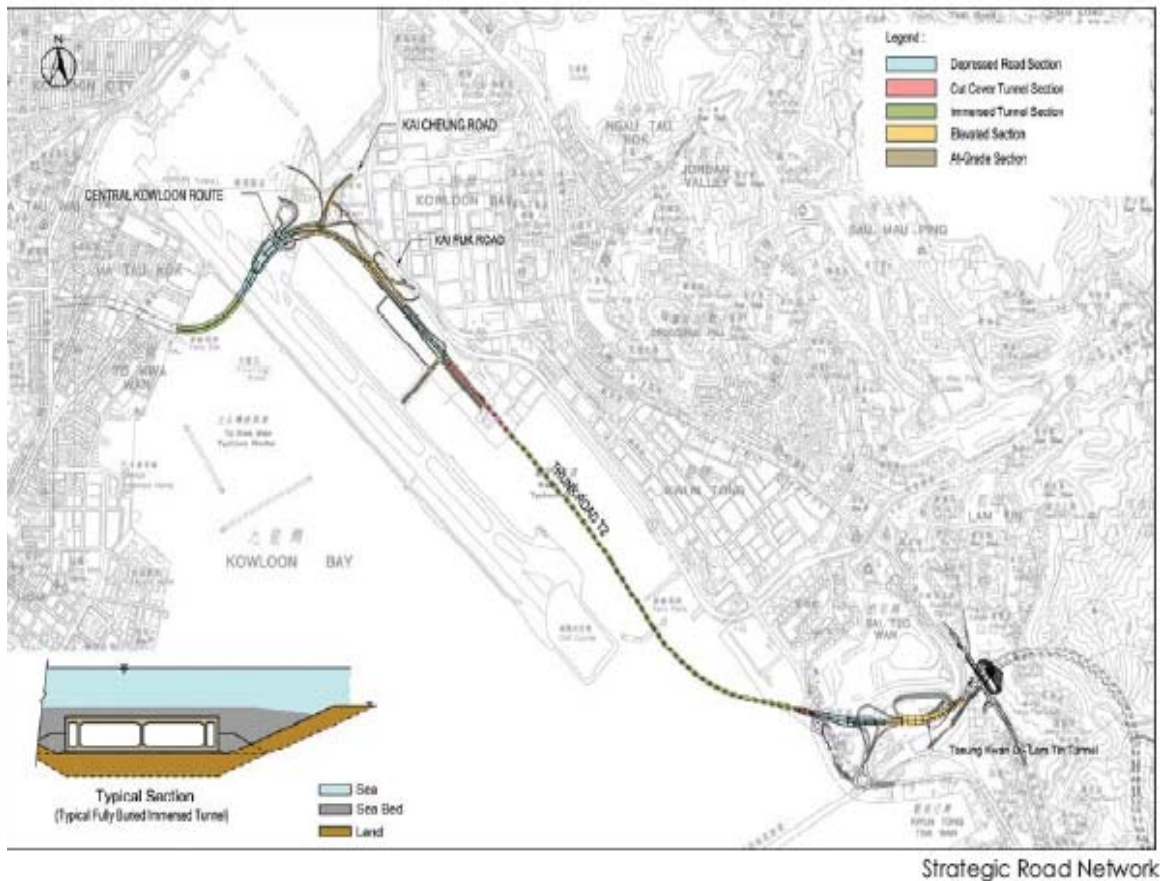
Currently the Kai Tak site is an inaccessible, barren, concrete wasteland. Figure 4.1 shows illustrates how the site is currently under utilized- used only for a small golf area and temporary parking for buses. The entire area is fenced off from the public and seems separated from the rest of Hong Kong. The government is currently gathering a public consensus on the development of Kai Tak through a three stage public participation plan. (Kai Tak Planning Review, 2005) They have completed the first stage and are currently in the second part of the second stage. To facilitate public discussion, the government has published a Public Consultation Digest, which was widely distributed. To involve the public more in the development of Kai Tak, the government has held three public forums, a community workshop, exhibitions of consultation and discussion subjects, and relevant consultation materials have been displayed in the Planning Department Mobile Exhibition Centre and Hong Kong Planning and Infrastructure Exhibition Gallery.



**Figure 4.1 January 8, 2006 Photograph of Kai Tak**

Through these different opportunities, the public has openly voiced their demands. One important demand obtained was, “To bring the people to the Harbor and the Harbor to the people.” (HK Government Planning Department, 2005)

Currently the closet MTR to Kai Tak is at Kowloon Bay and requires approximately a 25 minute walk. There are roads passing by the site, but none of them pass through it because they are closed off. Figure 4.2 illustrates the government’s proposed solution to the transportation issue, in order to facilitate the accessibility of Kai Tak.



**Figure 4.2 Proposed Transportation to Kai Tak (HK Planning Review, 2005)**

In the OCP's, Western Kowloon will be connected to Eastern Kowloon by the Central Kowloon Route (CKR). (HK Planning Review, 2005) Further east at Tseung Kwan O, the Trunk Road T2 will be connected to the Kai Tak site. All the OCP's have followed this development principle to ease the accessibility of Kai Tak. The placement of an MTR station at the apron of the Kai Tak site may provide public transportation into the region.

The Hong Kong citizens also want “to create a coherent community supported by a variety of commercial, social and recreational facilities.” (HK Government Planning Department, 2005) The OCP's address these demands through the development of a

cruise terminal, multi-purpose stadium, public housing, and metro park in them. These developments would provide housing, open space, leisure activities, and jobs.

One of the major factors involved with this economic advance, is the proposed multi-purpose stadium. A stadium is being proposed because the government believes the sports facilities currently available are inadequate for the population. These are the current Hong Kong sports facilities capacities and usage rates from January-December 2004.

Venue	Seating	Year created	Usage
Hong Kong Stadium	40000	1994	34 events per yr
Hong Kong Coliseum	12500	1983	96.90%
Mong Kok Stadium	9600	1961	98%
Queen Elizabeth	3515	1980	72.40%

**Figure 4.3 Table of Current Hong Kong Stadiums and Specifications (Sports Commission Secretariat, 2005)**

The current stadiums are not being used as originally intended, as it has been observed most stadiums are used for singing concerts rather than their original purpose of sports events. The government is interested in developing a sports facility for both the people of Hong Kong and its visitors, such as major sports teams, to enjoy.

### ***4.3 Addressing the Economic and Development Issues of Kai Tak***

Data collected by the group was applied to develop our conclusions on how the Kai Tak site may be developed to satisfy the needs of the interest groups. This data was obtained from literary research, visits to existing facilities, and interviews.

### ***4.3.1 Sustaining Hong Kong's Economy***

The stakeholders of Kai Tak all noted the need for Hong Kong to maintain and strengthen its economy. The citizens of Hong Kong expressed a need for more jobs, especially those of which are stable. Facilities proposed to be developed in Kai Tak may satisfy this need. Hong Kong is a fast-paced city that is under constant construction, as can be observed by noting the dozens of cranes atop towering skyscrapers under development, and structures supported with dried bamboo as scaffolds. While construction jobs may be plentiful, once a tower or infrastructural upgrade is completed the construction worker must wait for another project to arise. In this process of waiting, the construction worker is unemployed and lacks a steady income. These gaps in employment varies anywhere from a few weeks to months.

The Hong Kong government has identified the four main sectors in the economy- financial services, tourism, trading and logistics, and professional and producer services. In 2003, tourism generated the least amount of income at \$27,500 million HKD.

Sector	1999	2000	2001	2002	2003
Financial Services	132,000	149,200	140,400	141,500	147,900
Tourism	27,000	29,200	27,700	34,200	27,500
Trading & Logistics	269,400	299,300	302,500	308,300	316,900
Professional & Producer Services	126,100	128,200	129,000	127,000	124,100

\* Numbers in HKD millions

**Figure 4.4 Table of The Four Key Industries in Hong Kong's Economy (HK Census Bureau, 2006)**

The government is aware of the need for more stable jobs, and is taking steps to diversify the market to address this issue. One sector that is being aggressively approached is tourism. Tourism is becoming an important industry in Hong Kong, and influences the employment of more than a quarter of a million people. Without a doubt, one of the biggest tourist attractions in Hong Kong is Victoria Harbor.

#### ***4.3.2 The Demand for a New Cruise Terminal***

The government proposed the development of a new cruise terminal to support as well as upgrade facilities and increase the tourism industry. Figure 4.5 shows the current cruise terminal Western Kowloon. However this current facility is not able to handle the capacity necessary for a larger cruise industry. Hong Kong's Victoria Harbor is gaining prominence globally as a major cruise destination.



**Figure 4.5 Current Cruise Terminal in Western Kowloon**



First, the current facility only has two ports of call and is a homeport. A homeport is essential for developing a major cruise terminal because it is where a cruise starts and ends. Homeports encourage tourists to arrive a few days earlier or to leave a few days later, spending more time at the homeport city. This will benefit hotels, retail outlets, and tourism as a whole in Hong Kong.



**Figure 4.6 Current Cruise Terminal Pier in Western Kowloon**

The government's cruise terminal proposal at the Kai Tak site includes only two ports of call, which is not sufficient for Hong Kong to become a world-class cruise center. As of yet, there is no one major cruise terminal in the Far East. Singapore is already building a large international cruise terminal, which can accommodate more than

half a dozen of the latest cruise liners. Hong Kong needs to take advantage of this rare opportunity to be the first major player in the Far East in the cruise industry. Therefore, it is vital for the government to develop a cruise terminal proposal with more than two ports, one which should be a homeport.

Winston Chu proposes the development of a cruise terminal at the Kai Tak site with a minimum of ten berths with the potential of twelve berths. Chu recommends that all of the Kai Tak Airport Runway should be preserved for the tourism industry to provide an International Cruise Terminal as can be seen in Figure 4.7. This is necessary for Hong Kong to have a world-class passenger port. The land along the harbor should be utilized for its natural resource- the water for shipping. A cruise terminal is dependent on water along the harbor, while structures such as residential housing do not need to be built near the water front.



**Figure 4.7 Winston Chu’s Homeport Plan for Kai Tak**

In addition, if the government creates only two ports and demand exceeds capacity, reclamation may be necessary to create the additional land needed to birth more ships. Expansion of a cruise terminal in the future may be at the expense of more reclamation of the harbor.

A second issue of concern is whether Victoria Harbor can support the newer and larger fleet of cruise ships. In 2005, the luxurious Diamond Princess came into Hong Kong and was forced to berth at the Container Terminal in Kwai Chung. The cruise terminal in Western Kowloon was not deep enough to accommodate the 180,000 ton Diamond Princess. The government and stakeholders of Hong Kong all believe the need for the cruise terminal exists.

The topic of most debate is where the cruise terminal should be placed- upgrade and enlarge the current facility in Western Kowloon or create a new cruise terminal at the former Kai Tak landing approach. The location of the cruise terminal is crucial in determining its success and to best maximize the facility.

Advocates for upgrading and simply enlarging the current facility in Western Kowloon, note its close proximity to multiple shopping arcades and museums. Tourists who arrive in Western Kowloon find themselves at the steps of major shopping arcades, cinemas, and restaurants.

Tourists may simply take a step off of the cruise ship and arrive on Nathan Road, “The Golden Mile” of shopping. Infrastructure may be created to facilitate in transporting tourists from South East Kowloon to Western Kowloon. However, some experts believes placing the cruise terminal in South East Kowloon is not logistically smart, moving tourists from one end of Kowloon to the other. The convenience of the

cruise terminal remaining in Western Kowloon is a strong argument, but there are major natural issues if the terminal were to remain at its existing site.

A number of experts believe the Kai Tak Approach is a more suitable site for the cruise terminal as its natural assets may allow for a more successful terminal. In addition to the government's minimalist plan of having only two ports, which are not enough to support a large cruise terminal industry, some experts believe the water in Western Kowloon is not deep enough to accommodate larger cruise ships. The Kai Tak runway was reclaimed from the harbor several times since its initial construction and is currently 3390 meters in length. (Wikipedia, 2006) The runway extends out into the ocean, and as a result the waters surrounding the approach are deep enough to support larger cruise ships, up to 50 meters deep.

Although South East Kowloon may not be as huge a tourist destination as Western Kowloon, properly supported transportation infrastructures help to ease this issue. For example, the MTR transports tourists to Disneyland with ease. Tour buses may be employed to move tourists from one destination to another. It is not unusual for tourists to take an organized tour bus to specific tourist destinations. While Hong Kong is known for its major shopping destination in Tsim Sha Tsui of Western Kowloon, tourists come to Hong Kong to experience its natural beauty.

<b>Attraction</b>	<b>Avg. Score</b>	<b>Respondents</b>	<b>Respondents who scored 10</b>
Street Markets	7.2	260	73
Pedestrian Shopping Areas	6.9	261	52
Historical Buildings	6.7	248	64
Outlying Islands	6.7	233	52
Chinese Festivals	6.5	225	57
Temples/Antique Shops	5.7	228	43
Nature Reserves	5.6	229	42
Beaches/Mountains	5.2	238	39
Urban Nature Trails	5.1	219	31
Dolphin Trips	4.8	215	32
Folk Museums	4.8	230	33
Theatre/Concerts	4.5	221	28
East-West Health Centre	3.6	214	18
Adventure Sports	3.6	215	26
Disney Theme Parks	2.5	222	20
Casinos	1.6	206	9

**Figure 4.8 Survey Results on What Tourist Do in Hong Kong (Hong Kong Tourism Board, 2006)**

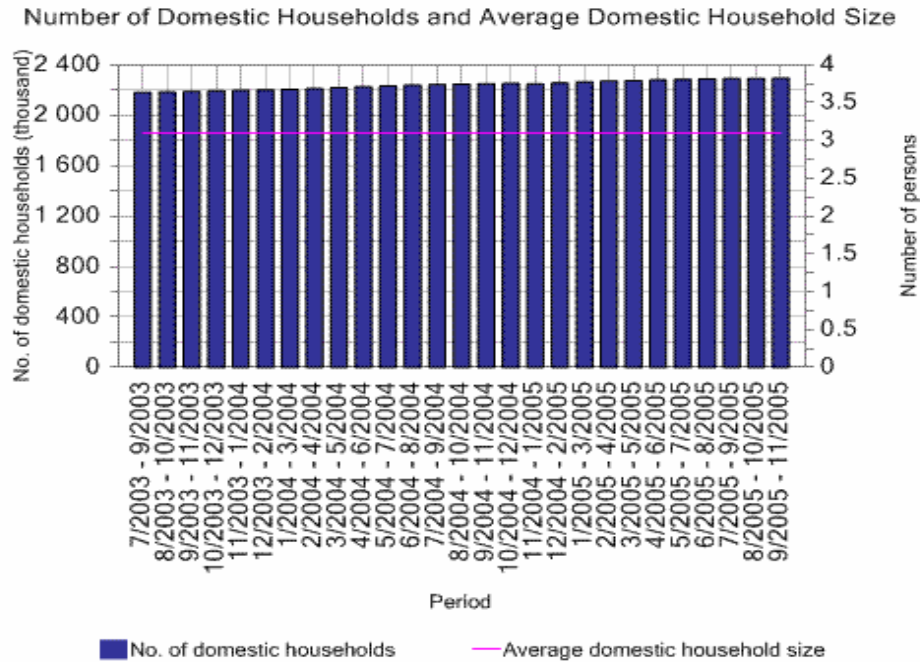
In addition, there are many historical sites around the Kai Tak area. These include Lion Rock County Park and a number of notable destinations in Sha Tin, such as Ten Thousand Buddhas Monastery. Figure 4.8 indicates what tourists prefer to do during their stay in Hong Kong.

In addition to the economy, housing has historically been a constant issue of concern in Hong Kong. As an economy increases in strength, population rises as people move in to take advantage of the opportunity to increase their personal income and standards of living. This leads to the issue concerning residential houses in Hong Kong.

### ***4.3.3 The Demand for Residential Housing***

Stakeholders disagree as to whether a need for more residential housing still exists in Hong Kong. In 1997, after the Kai Tak Airport was decommissioned, the government predicted a population figure of 10 million people by 2007. However, currently the population growth rate is actually decreasing and the overall population is only approximately 6.5 million. The growth rate from 2001-2005 is 0.7%. (Economist, 2005) Following this miscalculation, the government reduced this figure to 9.5 million people for planning purposes. The government has continued to include residential towers in its proposals to support this figure, even though citizens and other stakeholders outspokenly believe this number to be grossly over calculated.

Living in a high density city like Hong Kong is extremely stressful. (Lo, 2003) Urban crowding through packing such a large number of residents in a tower is not healthy, along with the usual problems inherent to any big city: smog, odor, clutter, and clatter. According to experts, the issue that needs to be addressed is not whether more housing is needed, but to create a more pleasant environment for residents. The citizens of Hong Kong demand a more pleasant living environment, one where they may enjoy at leisure. In the past, the rapid rise in population resulted in the speedy creation of residential towers with little regard to planning for aesthetics and comfort. In the typical high density residential tower, the average size of an apartment is 11.7 square meters. (HK Housing Authority) The average number of people living in one household has risen to about 3.7 people as well, as can be seen in Figure 4.9.



**Figure 4.9 HK Census Bureau Domestic Household Statistics (HK Census Bureau, 2006)**

Even when apartment dwellers decide to go outdoors to get away from their cramped living conditions it is still difficult for anyone to relax because the parks are full of people. While there are a number of large parks for the people of Hong Kong to enjoy, most are over capacity for people to relax. The group visited Hong Kong Park one afternoon, and found the park to be packed with people. The young played in the water fountains, as their grandparents watched them from a bench afar. While the environment was lively and pleasant, the park was crowded to the point where one was not able to leisurely stroll without getting shoved by people.

Residential housing can be built anywhere in Hong Kong; it does not necessarily need to be in front of the harbor. While creating housing near the harbor may allow for a pleasant view by its residents, harbor front property could be better utilized for creating facilities which need to be along the water, such as a cruise terminal. An abundance of

land is available in the New Territories. Just over the Dragon Back Mountains in the New Territories are about ten thousand hectares of land. This vast amount of land available in the New Territories could be developed, so there is no justification for the government to reclaim land to provide housing.

The Swire Plan for Kai Tak proposes the development of housing in a manner in which residents may enjoy the harbor's water. The plan proposes "tearing up parts of the old runway to create coves and islands" (Coleman, 2004), thereby increasing the amount of land surrounded by water. The Swire Plan, implements the idea of chopping the landing approach into sections, contradicts the people's desires to maintain Kai Tak's heritage. The people of Hong Kong are attached to the airport, and wish to preserve the heritage of the Approach by keeping the landing strip as it remains. The government agrees to preserve and pay tribute to the history of the Kai Tak Airport (Suen, 2005). The Swire Plan violates this agreement, as it requires chopping the land strip up into islands, violating the interests of the people in wanting the approach to remain as it is.

Another fault with the Swire Plan is how it will address the current environmental conditions of the water. The Swire Plan is not feasible unless the environmental issue of the water is eliminated. The site currently has a serious odor problem which needs to be addressed, especially if residential housing is to be created in this area.

#### ***4.3.4 The Need for a New Sports Facility***

The government hopes developing a new sports facility will help maintain the economy and increase the number of stable jobs. While there are sports facilities and similar recreational areas in existence in Hong Kong, the government is interested in creating a world class sports complex. Figure 4.10 shows the government's proposed



multi-purpose sports complex with recreational areas for indoor and outdoor sports. (HK Planning Review, 2005) However, experts are questioning how the people of Hong Kong will benefit from the creation of an additional sports facility.



**Figure 4.10 Kai Tak Planning Department's Sporting Complex Plan (HK Planning Department, 2005)**

There are a number of sports facilities in Hong Kong, most of which are not used to their maximum capacity. A direct observation by the group to Hong Kong Stadium on a Saturday afternoon supports this common belief. The event was an international soccer mini-tournament, and it was observed that there were many South Korean, Croatian, and Denmark fans cheering for their home teams. As Figure 4.12 illustrates, the stadium was not anywhere near the capacity it could hold. It was also noted that when the local Hong Kong team was playing, there were even fewer people in the audience.

Venue	Seating Capacity	Main Features
Main Stadium	45,000	Retract roof, multifunctional
2 <sup>nd</sup> Stadium	5,000	track, field
Sports Arena	4,000	swimming pool, ball courts

**Figure 4.11 Kai Tak Planning Department’s Sporting Complex Plan Data**

Sports facilities exist throughout Hong Kong but they are not being utilized by the people. The Hong Kong Coliseum, built for sports events, is used for singing concerts more than anything else.



**Figure 4.12 Hong Kong Stadium January 29, 2006 (South Korea vs. Croatia)**

In converse, some believe that the development of an up to date sports facility may help boost Hong Kong as a must-stop-site for tourists. Most major cities have a major stadium and major team. Some experts believe that the placement of the sports

facility is of no great concern. People will travel wherever is necessary to reach a sports stadium for an event, as it is the event and not the location that will draw visitors.

However, the location of a sports facility is important when considering its proximity to residential housing zones. The Hong Kong Stadium has been plagued with complaints about noise levels, especially from pop concerts, ever since it was built. The stadium was built next to multiple residential towers, leading to suggestion such as enforcing audiences “to wear gloves to mute the noise of their applause during pop concerts.” (Yung, 2005)

#### ***4.3.5 The Kai Tak Approach Channel- Environmental Concerns***

The government proposes reclaiming the Kai Tak Approach Channel to eliminate the environmental hazards in the water. Waste from up North is released into the waters of the Kai Tak Approach Channel. This leads to a number of environmental issues as the waste turns into mud deposits in the harbor, namely poor water quality and a serious odor problem.

The government believes the only way to solve the environmental problem in the Approach Channel is through harbor reclamation. However, the toxic mud in the Approach Channel can be dug up and removed, even though the government claims this is impossible, citing the project for removal of mud to be too extraordinary of an expense. Toxic mud on Lantau Island, at the site where Disneyland currently resides, was dug up and removed by the government. This indicates that the removal of toxic mud in the Kai Tak Approach Channel is indeed possible, as it has been done before in the past.

Reclaiming the harbor is not a feasible solution, because the smell will remain. The only reasonable solution is to kill the smell at its source- the mud. If the Approach Channel is indeed reclaimed, the odor and water pollution problem still remains.

The Hong Kong Royal Yacht Club has proposed a solution to the environmental issues of the Kai Tak Approach Channel. The Club proposes the creation of a natural water filtration using high tide to draw water in and then maintaining the new water in the approach until low tide. At low tide the water would be drained out the other end of the channel through a cut in under the Kai Tak runway. A team of scuba divers have also produced evidence that nature is taking its course as coral growth and the revival of aquatic life as returned to the approach's sea bed.

There is no doubt that the Kai Tak approach channel is an environmental nightmare. A sensible, environmentally friendly solution is the route the government should sway towards in order to have no further reclamation. If the Kai Tak approach is not treated it will greatly diminish the value of Kai Tak and the governments chance to develop the land into a desirable sector.

At 328 hectares, the Kai Tak site is not only a large piece of land available for development, but one of the last located on the waterfront. The group's conclusion on whether there is a need for the sports facility, cruise terminal, housing, and how to solve the environmental issues of the Kai Tak approach, as proposed by the government, are based on how the facilities affect and interact with each other throughout all of Hong Kong and its harbor front.

## **5. CONCLUSION**

Through extensive archival research and various interviews, our group was able to collect a vast amount of information regarding the development of the Kai Tak district. What we have learned has enabled us to develop initial views on the various options for development of the Kai Tak district.

### ***5.1 Why Does Hong Kong Need New Facilities***

Hong Kong is a continuously expanding city with limited area to develop upon. Hong Kong is trying to continuously improve itself so it can keep pace with other major cities. By developing new industries, new facilities, and improving their citizens' quality of life, Hong Kong can enhance itself. Hong Kong currently has a large number of venues and facilities, but some are not world-class, including a larger cruise terminal and a sports facility. Hong Kong also lacks large public parks, and most of its residents live in very small apartments.

### ***5.2 Why Kai Tak Is Where These Facilities Should Be Developed***

The Kai Tak site is an area with the ability to enhance Hong Kong environmentally, socially, as well as economically. The site currently provides the largest amount of developable land in Hong Kong. It also provides the largest developable waterfront area in Hong Kong. The substantial size of the Kai Tak site, gives it the unique capability to harbor many different types of development in one location. Naturally, there are many competition visions and options, and finding the right mix for Hong Kong is vital to the city.

### ***5.3 Group Overall Perspective***

Kai Tak's future lies in the idea of mixed land use. The challenge is getting the mix right and this cannot be done without reference to having regard to developments elsewhere in the city, including other parts of the Victoria Harbor waterfront. Arguably, the Kai Tak site is large enough to house all the facilities that are being currently debated – sports facility, cruise terminal, open park areas and some housing. The question that is beyond this study in regard to the sports facility and cruise terminal is how they should be structured for commercial viability, and we can make no comment on this important aspect. However, it would seem sensible that if Hong Kong wants to be in the cruise terminal business to boost tourism, then the Kai Tak runway provides a good site for developing a large terminal as it would not require further reclamation.

With Hong Kong's premiere location at the center of ten countries and Victoria Harbor's natural beauty, Hong Kong is likely to be an excellent choice for cruise clientele. If Hong Kong opts for this, then the issues of where to site what type of housing and the density of housing needs to take into account of what facilities and back-up areas are needed to operate an efficient cruise terminal. A sports facility is a less complicated endeavor than a cruise terminal. So, it would seem to us the key question for Hong Kong to consider is whether it wants to develop a large cruise business, how to do that and where to site it. If it is to be sited at Kai Tak, then other types of development should be designed to provide an optimal plan that can fit in open park areas as well as housing in the appropriate places. This would include not putting large and tall buildings, whether residential or commercial, near the waterfront so as to maintain a good aesthetics and to ensure waterfront areas are used for activities that enhance the quality of life. .

### ***5.3.1 Sports Facility***

More specifically on a new sports facility, Hong Kong's four main sports stadiums are not able to host main sports showcases. We note that to date, Hong Kong is not regarded as a sports-minded community and there are relatively few sports events of the top international stature being held there. We are not in a position to discuss what it would take for Hong Kong to build itself into a sports centre, where a new multi-purpose complex could be filled regularly. However, we can say that if Hong Kong wishes to develop such a facility, the planners must create a substantial buffer between the stadium and residential housing to avoid noise and traffic congestion affecting residents, and transportation plans need to be well-thought through, including the provision of rail services.

As we said above, prior to the creation of a sports facility, a push for a sports policy in Hong Kong must be implemented. Currently, there are no premiere leagues or players in Hong Kong that are necessary to draw fans and revenue to the complex. The complex can not be created just to house an occasional event, such as the East Asian Games; it needs to be created for weekly usage at the city level.

### ***5.3.2 Water Quality and Recreation***

Cleaning the polluted water surrounding the Kai Tak site, especially the Kai Tak Approach Channel, is essential for Hong Kong. Having examined the numerous options we concur with the environmentally-friendly idea of using the tides to lock in fresh water during high tide and flushing out at low tide through an area under the Kai Tak strip. Once this area is cleaned, it can be used for water sports such as rowing and kayaking. The other parts of Kowloon Bay can be used for marinas, piers or water recreation areas

although how they are to be sited will depend on water-recreation activities would not interfere with the cruise terminal's operation. A large metro park would also greatly enhance the area. Along with the main park, a network of smaller parks and waterfront promenade should also be created throughout the Kai Tak site.

#### ***5.4 Summary of Conclusion***

Our perspective is that the harbor is first for the people's enjoyment. The harbor needs to be brought to the people and the people brought to the harbor. Through the proper development of said facilities the people of Hong Kong will be able to enjoy a living harbor for years to come. Furthermore, the harbor front needs to be used for harbor essentials, such as a cruise terminal and waterfront promenade, instead of facilities that can survive at other locations. The proper installation of road and railways will also be essential to the prosperity and development of Kai Tak. If the area is not easily accessible it will fail in its desirability and therefore productiveness. Kai Tak is a substantial area which needs to be properly developed to take Hong Kong to the next level of world class cities.



## **Appendix A - Sponsor Mission**

Civic Exchange is a non-profit organization based in Hong Kong, created in 2000 by Christine Loh and Lisa Hopkinson. As a legislative councilor, Loh was frustrated by the lack of “her ability to affect change in what is a largely powerless body” (Clifford, 2003). When her term was near completion, Loh decided to not run for reelection. Instead, Loh established Civic Exchange to serve as a tool for the people of Hong Kong to share ideas regarding development in Hong Kong.

The main missions of Civic Exchange are to:

- (1) Promote civic education amongst members of the community and for such purpose to conduct research and publicize the results so as to provide objective and balanced information to the public concerning economic, social and environmental issues; and
- (2) Undertake research on development of economic, social and political policies and practices to help shape the breadth and depth of public policy debate and so to provide well-founded and reasoned argument on the issues identified above.

(Civic Exchange, 1)

Civic Exchange’s main motive is not to gain financial returns but to support social needs. Civic Exchange is able to advocate social needs through “long cultivated connections with public sector officials, politicians, business leaders, NGOs, educators and decision-makers in other fields.” (Civic Exchange, 1) Funding for Civic Exchange is obtained through private donors.

Civic Exchange provides policymakers with the needs and alternative ideas of the Hong Kong public, as well as promoting the discussion of topics and ideas amongst the two groups. Ideas are also generated by looking at worldwide examples of how other countries tackle an issue, and are adapted to suit Hong Kong’s local needs.

## Appendix B - IQP Description

The IQP is one of three projects required from all Worcester Polytechnic Institute undergraduates, as a part of their academic background in order to obtain a bachelor's degree. The acronym IQP stands for Interactive Qualifying Project. The purpose of an IQP is to demonstrate a student's ability to understand and integrate their educational background, may it be in engineering or hard sciences, with social science issues. Within the IQP, the student will study and make an analysis of how technology affects a social environment.

A limitless amount of social issues may be addressed by an IQP; topics are categorized under specific divisions. These divisions include<sup>1</sup>:

- Division 41 Technology and Environment
- Division 42 Energy and Resources
- Division 43 Healthcare and Technology
- Division 44 Urban and Environmental Planning
- Division 45 Science And Technology: Policy And Management
- Division 46 Social Studies Of Science and Technology
- Division 47 Safety Analysis And Liability
- Division 48 Humanistic Studies Of Technology
- Division 49 Economic Growth, Stability And Development
- Division 50 Social And Human Services
- Division 51 Education In A Technological Society
- Division 52 Law And Technology
- Division 53 Historic And Artistic Preservation Technology

The *Victoria Harbor Reclamation & Planning in Kowloon* project qualifies as an IQP. The project was proposed by the Hong Kong non-profit

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<sup>1</sup> *The Interactive Qualifying Project*. (Mar 2, 2005). WPI 2005-2006 Undergraduate Catalog. Retrieved on Nov 30, 2005 from <http://www.wpi.edu/Pubs/Catalogs/Ugrad/Current/iqp.html>

organization, Civic Exchange, with the intent of having WPI students evaluate the land reclamation process which has occurred thus far. From there, the students will make an analysis of social, economic, and environmental effects land reclamation has had thus far on the social setting within the district of Kowloon. Students are also expected to assess current trends and predict any effects which may result in the future, and make recommendations on how to tackle these issues. The project is categorized under Division 44, Urban and Environmental Planning.

## Appendix C- Experts Interviewed During Project

<b>Expert</b>	<b>Background</b>	<b>Area of Expertise</b>
Santa Raymond	Architect	Designer
Paul Zimmerman	Consultant, Designing HK Harbor Dist.	Urban Planning
Stephen Brown	Economist	Economist
Winston Chu	Town Planner and Lawyer	Town Planning
Dennis Li	Lawyer, Friends of the Harbor	Urban Planning
Ian Brownlee	Private-Sector Planner	Urban Planning
John Bowden	Chairman, Save Our Shoreline	Harborfront Planning
Kelvin Chan	HK Planning Department Developer	Urban Planning

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