

Supplemental Writing for

Promoting Social Connections Through

Waterfronts

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Sponsor Description



Designing Hong Kong (DHK) was founded in 2009 by Paul Zimmerman, Markus Shaw, Peter Wong, and Christine Loh.²⁶ The group formed a non-profit organization with the fundamental mission of promoting sustainability and quality of life through urban design. The company focuses on raising awareness around development to improve the city through planning and governance. DHK frequently collaborates with local organizations and community groups to develop comprehensive design strategies.

Based in central Hong Kong, DHK is a smaller non-profit organization with around 10 employees who primarily work on the development of some of their numerous projects with collaborating groups.²⁷ As a non-profit organization, the company does not profit from its works but does raise annual funds of around one million US dollars to fund its endeavors.

The group's founder and CEO, Paul Zimmerman has been active in the many different Hong Kong sustainability organizations on top of DHK such as the Society for Protection of the Harbour, Coalition on Sustainable Tourism, Heritage Watch, Save The Street Market, Conservancy Association, ProCommons, Business Environment Council, Harbour Business Forum, Clear the Air, and others.²⁶ He held a major role in improving the waterfront of Victoria Harbour, which awarded him an Honorary Membership of the American Institute of Architects. Along with many of his other accomplishments, Paul Zimmerman was elected as the District councilor representing the Pokfulam Constituency in 2010. Paul Zimmerman received his citizenship as a Chinese National in 2012.

DHK has been focused on many different campaigns to keep Hong Kong sustainable. They are designing and encouraging the implementation of new beverage packaging and food containers to help reduce waste. They are advocating for reducing and reversing the loss of country parks, wetlands, areas reserved for agriculture, and green belts to push forward and encourage conservation in Hong Kong. Additionally, DHK is tasked with master planning, land

supply, urban renewal and overdevelopment, harbourfront, and infrastructure to help sustain urban development.²⁶ Lastly, DHK is working on ways to improve walkability, harbourfront, and public space to better Hong Kong as a liveable city.

DHK has involved itself in many projects over the years, some of which have been Drink without Waste, Water Taxi, Watersport, Star Ferry Bus Terminus, and Biking Infrastructure.²⁶ Their most notable projects are: Commute in TY, Drink without Waste, and Coastal Trails. One particularly relevant project of DHK to our own research is the Coastal Trails, where the goal of the project is to connect promenades and trails by reinstating lost trails and connecting the existing routes to provide an alternate hiking trail that is more accessible to the elderly, children and the disabled. The projected outcome of this effort is to improve their enjoyment of the city and overall public health. Another relevant project that DHK has worked on was their efforts in Hong Kong Public Space. This project had the intention of bringing awareness to the sidewalks in need of repair and an overwhelming number of concrete barriers, metal railings, temporary signs, and canopies once you look past the tall skyscrapers and massive shopping districts. These aspects clutter the urban jungle and are even seeping their way into the rural country park areas. This project aims to raise awareness for less clutter and improved infrastructure to bring out the inner urban beauty of the city.

DHK is affiliated with the Central Harbourfront Concern Group, an establishment of civil society organizations related to the public harbor space in Hong Kong.²⁶ The primary purpose of this group is to keep the waterfronts open to the public and treat them as “Open Spaces”. In addition to this, they also aim to hold the promise that the PLA Pier will be opened to the public when there is no need for a military presence. The concern group closely aligns with DHK’s message of promoting community-oriented infrastructure and development.



The University of Hong Kong (HKU) was founded in 1910 by Sir Frederik Lugard, the then governor of Hong Kong.²⁷ Part of HKU’s mission is “to engage in innovative, high-impact and leading-edge research within and across disciplines.”

The Department of Urban Planning and Design was established in the Faculty of Architecture following the reorganization of the Centre of Urban Planning and Environmental Management on 1 July 2008 to continue the teaching of urban planning and related areas in housing management and transport.²⁸ Alain Chiaradia, the deputy head of the department of urban planning and design, was our liaison from HKU DUPAD to help follow HKU's mission. Our project aimed to add onto the summer 2022 study done by Yuan Yang adding to the leading edge research on these waterfront areas.

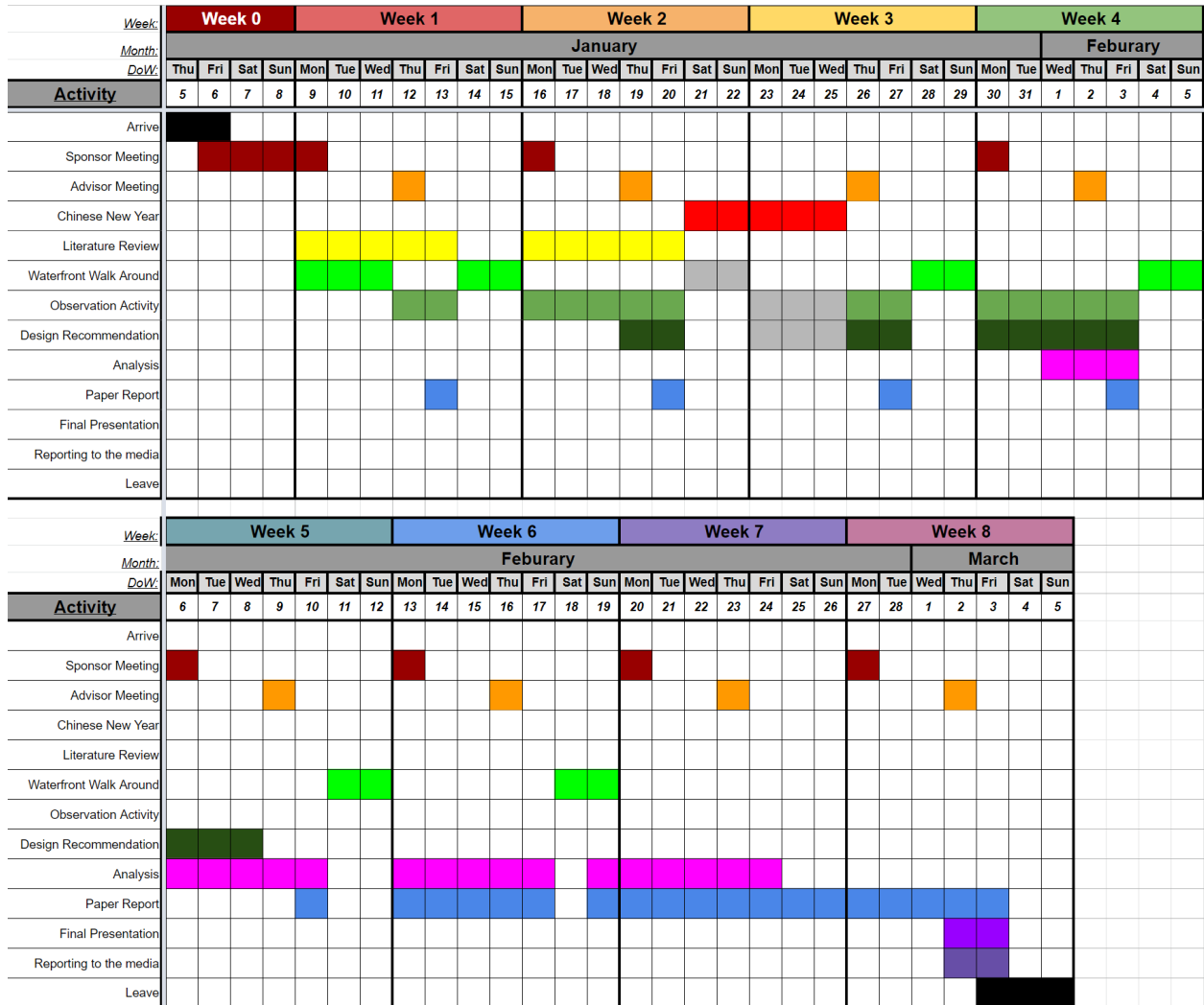


Alain Chiaradia of HKU (left) and Paul Zimmerman of DHK (right)

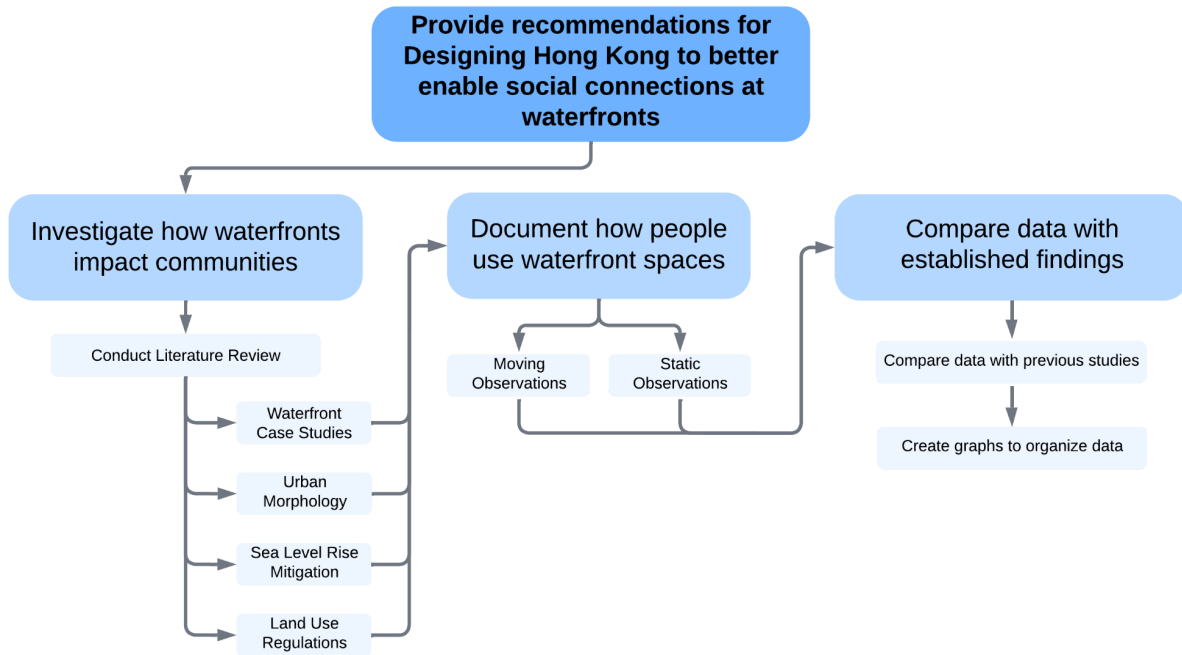
Our project focused on understanding the uses and connections that waterfronts can bring to a community and how the space was best utilized. After completing our study, we provided recommendations for the improvement and suggested new additions to Hong Kong's existing waterfront infrastructure. As described, this project closely aligned with DHK's mission to promote "sustainability, quality of life, and good design as core values in planning, development, and governance." As an organization whose primary concern is that of Hong Kong's urban planning and infrastructure, we focused specifically on waterfront promenades that easily falls within the scope of their work. As discussed previously, DHK has had a long history of projects centered around Victoria Harbour and subsequently has significant experience in the development of the surrounding area. Our study of urban waterfront morphology was most similar to DHK's work around waterfront trail infrastructure and accessibility.

Gantt Chart and Methodology Flow Chart

Gantt Chart



Methods Flow Chart



Literature Review Research Questions

Our project focuses on how people are using the waterfront currently. In order to gather a proper understanding of this, we will be studying urban morphology, sustainability, and demographic/land use data. All data will be recorded without any personal identifiers to ensure our research is ethically compliant. This data will be online through government census databases and peer-reviewed research journals. Digital records and notes will be contained in a shared Google Drive folder which is encrypted and rather safe from those trying to access data maliciously. To help guide our investigation, the following questions were developed:

- What principles of urban design draw people to a space and keep them there?
- What do successful waterfronts around Hong Kong look like? How are they used?
- Are there specific fundamental design features common amongst successful waterfronts around the world?
- How can waterfronts be built sustainably? How do they allow for the integration of climate mitigation solutions?

What are the land use/zoning regulations around Hong Kong's waterfronts? What are the demographics of populations surrounding studied waterfronts?

Methodology

People Moving Count

Our project focuses on how people are using the waterfront currently. In order to gather a proper understanding of this, we will be observing the styles people use to traverse the waterfront. All data will be recorded without any personal identifiers to ensure our research is ethically compliant. This data will be collected in person, with all members participating in the data collection. Paper records will be kept on-site, and later transcribed digitally to be included in the report. Digital copies will be contained in a shared Google Drive folder which is encrypted and rather safe from those trying to access data maliciously. The categories of travel are outlined in the sheet below, which is where the data will be presented. The moving observations were conducted using the following strategy:

- Stand at a point specified on the map (make note of the date, time, and weather)
- Focus on a particular object opposite the standing location and imagine a line between the standing location and the object
- For 10 minutes, use a tally counter to track all people moving across the imaginary line
 - Make particular note of the method of line crossing using the table
- Total the results from that point and repeat the above steps at the next marked point
- All 4 points of each waterfront location should be tallied once (for 10min) during each of the following intervals:
 - 8:30 - 9:30am
 - 10:30 - 11:30am
 - 12:30-1:30pm
 - 3:00-4:00pm
 - 5:30-6:30pm
 - 9:00-10:00pm

People Moving Count

10 MINUTES

CATEGORY	COUNT—TALLY EVERYONE	TOTAL
WALKING		TOTAL
RUNNING/ JOGGING		TOTAL
SUPPORTED (e.g., wheelchair)		TOTAL
CARRIED (e.g., stroller)		TOTAL
ROLLING (e.g., skateboard)		TOTAL
PEOPLE ON BICYCLES		TOTAL

NAME

DATE

WEATHER

LOCATION

TIME

ADD MAP HERE

INSTRUCTIONS: Count people moving across the indicated line for 10 minutes. Adjust the location of your line as necessary to maintain a clear sightline from end to end.

Stationary Activity Mapping

Our project focuses on how people are using the waterfront currently. In order to gather a proper understanding of this, we will be observing what activities the people at the waterfront will be participating in. All data will be recorded without any personal identifiers to ensure our research is ethically compliant. This data will be collected in person, with all members participating in the data collection. Paper records will be kept on-site, and later transcribed digitally to be included in the report. Digital copies will be contained in a shared Google Drive folder which is encrypted and rather safe from those trying to access data maliciously. The categories of activities are outlined in the sheet below, which is where the data will be presented.

The static observations were conducted using the following strategy:

- Stand or walk through a designated path at a specified location on the map (make note of the date, time, and weather)
- Make note of everyone spending time in the area and the way in which they are spending time using the guidelines and map markers on the following page
 - Make particular note of how many people are doing a given activity
 - Do not make note of people that are simply passing through a space
 - Time should not be a factor, simply describe a snapshot of the space in time
- Take pictures to plot large group activity following data collection and record on a map
- Walk through or stand in the same observational space during multiple periods in the day

MAP

NAME

DATE

WEATHER

LOCATION

TIME

ADD MAP HERE

POSTURE	TALLY <small>choose one per person</small>	ACTIVITIES <small>choose as many as apply</small>				
		WAITING TRANSPORT	CONSUMING FOOD/BEV.	COMMERCIAL ACTIVITY	CULTURAL ACTIVITY	RECREATION PLAY/EXERCISE
STANDING ●						
SITTING PUBLIC □						
SITTING PRIVATE △						
SITTING COMMERCIAL ○						
SITTING INFORMAL ⊠						
LYING DOWN —						
MULTIPLE/MOVEMENT ×						

POSTURES

- Standing
- Public sitting
- △ Private sitting
- Commercial sitting
- ⊠ Informal sitting
- Lying down
- × Multiple movement

ACTIVITIES

- Waiting for transportation
- Consuming food and beverage
- Commercial activity
- Conversing
- Cultural activity
- Recreation and play/exercise

a.

Observation Plan and Task Breakdown

Our project focuses on how people are using the waterfront currently. In order to gather a proper understanding of this, we will be observing the styles people use to traverse the waterfront. All data will be recorded without any personal identifiers to ensure our research is ethically compliant. This data will be collected in person, with all members participating in the data collection. Paper records will be kept on-site, and later transcribed digitally to be included in the report. Digital copies will be contained in a shared Google Drive folder which is encrypted and rather safe from those trying to access data maliciously. Given that the observation period for each waterfront ranges over the entirety of the day, we developed three different observation strategies to complete the observation period in a reasonable amount of time.

- 4-person Observation
 - All 4 team members will be at the same waterfront
 - Each member will take one point for observation
 - At the beginning of each time interval, the 10 minute moving observation tally will begin
 - Following the moving observation, each member will conduct their static observation around their point
- 2-person Observation
 - A pair of team members will be at the same waterfront
 - Each member will take one half of the waterfront
 - For Sheung Wan, Quarry Bay, Kwun Tong, Ma On Shan, and Tai Po Waterfront Park this is split into Points 1 and 2 and Points 3 and 4
 - Lam Tsuen River and Sha Tin Park are split along the river, Points 1 and 3 and Points 2 and 4
 - At the beginning of each time interval, the 10 minute moving observation tally will begin
 - Following the moving observation, move to your other point and begin a new observation session
 - After both observation periods, conduct a static observation of the waterfront area containing your points

- 1-person Observation
 - Each member will be at different waterfronts, and cover all 4 points at each waterfront
 - At the beginning of each time interval, the 10 minute moving observation tally will begin
 - It is recommended to start at either Point 1 or Point 4 to minimize distance between points
 - Following the moving observation, move to the next unobserved point and begin a new observation session
 - All 4 points should be measured in each hour segment, 40 minutes of observation and about 20 minutes of moving between points
 - After all 4 points are observed, use the time between the observation periods to conduct a static survey of the whole promenade

It is important to record the weather conditions and not to take observations on any days when it is raining, as the data will be heavily skewed.

Waterfront Observation Notes

Sheung Wan (SW)

Sheung Wan is a promenade that exists on the Northwest side of Hong Kong Island looking at Victoria Harbour. Point 1 is by the four piers, each pier with its own decorations and lights, bringing a unique character to each. Point 2 is by the under-construction Fung Mat Road Promenade, and currently only exists as a walkway. There are no extra features outside of the giant wall fencing off the construction zone. Point 3 is in front of the Sun Yat Sen Memorial Park, providing lots of open space. Point 4 is near the Shun Tak Centre, and a pet zone is nearby as well. Bikes are banned throughout the whole waterfront. The promenade overall is very segmented, feels more like 3 different promenades than just 1. Further emphasized by the construction, there are often small walking spaces and choke points between the areas of each waterfront.

During our weekend observations at Sheung Wan, there was a fire boat event that gathered over 1000 people to take photos and check it out. The moving and stationary counts for Sheung Wan on this day are almost certainly an outlier statistic and much higher than one would normally expect on a day of similar conditions.

The moving counts for Sheung Wan in the winter study were 2848 and 995 people for weekends and workdays respectively. In summer, these counts were 2458 and 1902 people for weekend and workday respectively. Sheung Wan's weekend data show a higher count than any counts taken during summer and was our second-highest count overall, but again this data seems unrealistic. Sheung Wan's workday count was the lowest of any count between both studies. By nature of the attractions on the piers and the memorial park, not to mention the fire boat event, the general demographic along the waterfront was families. You would tend to get more stand-alone older demographics for things like fishing or using exercise equipment.

The Point 1 counts for weekend/workday are 442 and 219. Point 2 counts for weekend/workday are 510 and 184. Point 3 counts for weekend/workday are 1247 and 354. Point 4 counts for weekend/workday are 649 and 238. Point 3 has the highest counts, and the same was true in Yang's study. The construction at Point 2 has made it less popular than it was in the summer study. Naturally, the weekend data peaks at 10:30am, the first observation period during the fire boat event. On the workday, the peak activity was at the 9 pm observation, similar to the

summer study. However, the 5:30 pm block had the second most counts in summer, where it was beaten by the 8:30am observation during the winter. The percentage of all people counted in Sheung Wan that was stationary was 55% on the weekend and 23% on the workday. 55% is the highest percentage across all the waterfronts, again due to people waiting in line to get on the fire boat. The 23% statistic ranks 5th highest among all stationary percentages. The area around Point 2 would rarely get stationary counts outside the occasional fisher as there is literally nothing else to do. The small food vendor at the very end of the promenade would account for the occasional person consuming food and beverage, but this was a rare sight at the other portions of the promenade, even with Point 4 being near a mall.

Sheung Wan is quite close to many MTR stops on the East Rail Line. HKU and Say Ying Pun are a little over 400 meters away each, and the Sheung Wan station is a little bit over 200 meters away. Sheung Wan would be most benefited by the inclusion of circular tables to allow for more group seating and create a great space to eat from the nearby vendors. Electric outlets would also be a useful addition, allowing people to charge their devices. The issues with Point 2 will be resolved naturally once the construction is finished.

Quarry Bay (QB)

Located on the eastern side of Hong Kong Island and maintained by the Leisure and Cultural Services Department, the QB Promenade, Point 1 has a dog park, and both Points 1 and 2 have modern seating areas, and a wide promenade allowing the space for many runners and walkers. Near Point 3, QB houses a fire boat museum, vantage outlook structure, and an open area that allows for lots of tai chi and activities facing the waterfront. Point 4 was by the far end of the park area with lots of benches and covered by trees and metal awnings. Lots of shrubbery and lights line up the park side of QB featuring walking paths and various workout zones used by the public.

QB showed a winter total of 1451 and 1324 people per hour for weekends and workdays respectively, which was less than Yang's summer totals of 2681 and 1957 people per hour for weekends and workdays respectively. From dawn till dusk lots of older individuals 65 and up can be seen walking the waterfront and socializing with friends and strangers alike, matching the larger elderly population of locals in the area when seen from the rest of Hong Kong island. However, younger pet owners could be seen walking by Point 1 in the dog park or couples or families could be seen taking a mid to late afternoon and evening stroll. The occasional runner was seen primarily between Points 3 and 4, after the Point 2 and 3 bottleneck region, in the early morning and mid to late evenings compiling of a younger 18-35 crowd. There was little active movement in Point 1 due to the dog park compared to the rest of the points. As QB bans the use of cycles the sparse use of rolling movement was seen to be almost exclusively kids on scooters. The most popular time of visitation during the winter was seen to be pretty much between late morning and early afternoon split by lunch, whereas during the summer the evenings after 5:30 pm were more common. This could be due to the distribution of heat throughout the day, where midday in the winter is ideal when in the cover of dark and shade, while the night is better during the summer. Around 29% and 21% of the waterfront on weekends and workdays, respectively, consisted of people staying and using the waterfront, other than just moving through it. Of the people staying 18% of them were seen consuming food or beverage on the weekend and only 1% were during the workday. Most of the time people staying would be on their phones, talking to their friends or reading a newspaper on benches lining the waterfront. Fishermen of all ages could be regularly seen stopping along the promenade in between Points 3 and 4 to practice their craft and relax, enjoying the nice view of Victoria Harbour or just listening to music through a

small speaker. QB served as a nice cultural area that hosted both tai chi and sword dancing alike, accounting for around 73% on the weekend and 93% during the workday stationary moving activities.

Even though QB has several benches that face the harbor and a large capacity for people, there lacks traditional congregation zones that help encourage socialization and collaboration. As such locals have been seen to bring their own seating to play games or talk side by side in groups on a bench where some are left to stand in order to join in. To make it to QB from the MTR station you have to cross a main road and even then there are limited entry points to the park. The promenade itself is almost split in two by a TownGas QB pigging station and has only 4 entrances to the park along it. This limits and restricts the use of the whole promenade. Lastly, there is limited access to nearby food and little room for natural congregation, restricting incentives to say and primarily making QB a nicer through path than sociable zone.

Kwun Tong (KT)

Located on the Eastern side of the peninsula, the Kwun Tong Promenade overlooks the former Kai Tak airport, as well as a yacht harbor. What the waterfront lacks in view, makes up for in seating as there are plenty of sheltered benches and bleachers with lots of space. Around Points 1 and 4 there are artistic structures that represent how the waterfront used to be a major industrial port with corresponding plaques that reference the history. Going from Points 1 to 2, there is lots of green space to walk around in and a workout area for the elderly. From Points 2 to 3, there are two large structures with solar panels on the roofs that were being used for cultural events, such as the new year, as well as lots of grassy areas. Finally, between Points 3 and 4 is a water fountain that lights up at night and is coordinated with music played by speakers. There is also a small playground and another space with exercise machines for the elderly.

The whole promenade is pet friendly, but no bikes or skateboards. However, there was a skate park in close proximity, just under the highway. There are also several food places located just behind the waterfront, right under the highway. Even though it was convenient for people to bring food and eat at the Kwun Tong waterfront, there was still a minimal amount who actually did, most likely due to the lack of tables. The KT waterfront is on the smaller side, for its size it has a lot of green space. The unfortunate aspect of this space is most of the grass is either dry or dying. There was also a distinct lack of a view as it was blocked by a yacht harbour and the old airport

KT retains a total count of 8982 and 8862 on the winter weekends and workdays. Comparing this to Yang's study, where the totals were 16278 and 15732 during the summer months. During the mornings of the winter study is where a majority of the runners were seen. It was also noted that usually, it was a younger demographic in the mornings and nights as well. Point 3 proved to be the most popular. This could possibly be due to the easy entry point and the close proximity to food and the water fountain. Point 4 proved to be the least popular. To enter the waterfront from that area is more of a walk compared to others, and not much to see at the end. KT proved to be one of the more popular waterfronts for people to stay at during the weekend, showing a peak of 326 individuals. Plenty of Foreign Domestic Workers (FDW) spent most of their day at the waterfront, laying out blankets and sitting on the grass. This waterfront was also the most popular during the weeknights reaching a total of 170 people. This could be due to the light up water fountain being a romantic date spot. When looking at the demographics

around the waterfront, KT had the third lowest residential population at just over 16,000 but the highest in job distribution at 17,000.

Our recommendations for this waterfront are as follows. The first being to install more tables and group seating at the waterfront. This is to enable more people to eat at the waterfront and allow more group activity as it proves to be a very popular place to gather. Our second recommendation is to have more landscaping of the area. Being one of the few waterfronts that has a grass area, it is essential that it's well taken care of in order to accentuate the attractiveness of greenery in such an urban environment. Otherwise, the populace would not be inclined to use it. Our final recommendation is the addition of more utilities such as public electricity outlets for charging and more reliable wifi connection throughout the entirety of the waterfront. An open area located in such a heavy business district would attract workers if the facilities around them would enable the completion of their jobs in an open environment.

Tai Po Waterfront Park (TPW)

Located in the new Territories by the Tai Po Industrial District, the Tai Po Waterfront Park (TPW) has one of the longer promenades out of the 7 waterfronts that were studied, ranking to be the 2nd longest. This waterfront contains both walking and biking paths, with nearby pavilions and quite the substantial park towards the entrance. This park contained many large gardens and attractions. Where the park ended there emerged a large superstructure called the Spiral Lookout Tower where visitors can climb to have a birds eye view of the entire waterfront. Later at night the spiral would glow with multi-colored lights. The promenade was very separated from the commercial areas in Tai Po, with the Tai Po Mega Mall being a 30 minute walk from the waterfront. The waterfront was very well maintained with lots of usable spaces, plenty of individual and group seating, plyometrics equipment, and some sheltered seating. Although most of the seating was south facing, with any awnings meant to shelter the benches facing the north, so no shade was provided. This led individuals to walk along the bike path instead of the walkway as there was shade provided by the surrounding trees.

When looking at the movement data, we see that Points 1 and 2 by the park entrance were shown to be the more popular places for the populace to walk around. These areas tended to have easy access to the park area nearby, as well as be close to the Spiral Observation tower. When looking at the static data, some trends that can be seen are the higher than the usual amount of people eating compared to most waterfronts that were studied. This is probably due to the fact that there was group seating and tables to eat at. Other than these places, the seating along the promenade was sparsely used as it was usually covered by the sun's rays. The more popular times that the seating was used was during times of less direct sunlight later in the day or when the heat was less intense. When looking at the regional demographics from the site zoning, it can be seen that roughly two thirds of the populace around the waterfront is made up of people between the years of 25-64. With those being on the older side being the majority, there were rarely young adults that were observed during our periods.

Our site specific recommendations for this area are as follows. The first recommendation being the planting and installation of trees that are between the water and the promenade. This is to add more shade to the walkways so the populace would use them more compared to the bike paths. The increase in shade would also make the seating along the waterfront more inviting as the people who choose to sit on the benches will not be berated by the sun's rays. If the shade

provided by the trees will not reach the seating areas at some sections of the promenade, then it is recommended that the addition of overhang shelters to provide shade should be implemented. It is also recommended to add more tables within shelters to promote more group seating and eating as during the day, the tables that were usually there were full and in the blistering heat. The last recommendation for this waterfront is to concentrate on increasing the amount of static opportunities along the areas where most of the movement occurs in order to enable more people to interact and gather more.

Lam Tsuen River Promenade (LTR)

LTR is a man-made river in the east side of the new territories, and while the river itself does not have much going on, it is surrounded by attractions. It is adjacent to the Tai Po Mega Mall, where zones A-D are on the north side, and zone E being featured on the south side. The north side also features the Tai Po Middle Sitting Out Area. The south side is home to the Plover Cove Road Mini Soccer Pitch, the Po Heung Bridge Sitting Out Area, and the Kwong Fuk Bridge Garden. Point 1, near the Tai Po Middle Sitting Out Area, and 3, across the river from the Po Heung Bridge Sitting Out Area are on the north side of the river, and they are accompanied by the official bike trail. Point 2, which is near zone E of the mega mall, and Point 4, near the bridge garden, are on the southside, with no bike trail.

For winter totals, LTR had 1705 and 1476 counts for weekend and workday respectively. These counts are lower than any count done in the Summer 2022 study. The younger demographics tended to make up most of the bikers, where the older demographics were more found in the walking counts, and the young adults were more so the running counts. There was a drastic change in counts on each side of the river. Point 1 had 773 and 552 Weekend/Workday counts and Point 3 had 686 and 531 Weekend/Workday counts. Point 2 had 150 and 217 Weekend/Workday counts and Point 4 had 138 and 176 Weekend/Workday Counts. The points on the north containing an official bike path and being closer to the more commercialized spaces led to the disparity in activity.

Generally the highest counts at each point occurred at 3pm, followed by the 5:30pm counts. This is also consistent with the temperature changes, as 3pm was peak heat of the times observed. The stationary counts were quite low at LTR compared to the rest of the observations. Weekend stationary percentage was about 18% and workday stationary percentage was 16.5%. These counts rank 8th and 10th respectively. As our weekend observations were done on a Sunday, FDH were a significant portion of these counts, as they engaged in singing, eating, and just hanging out. At the end of the day, particularly during the 9pm observations, the river was quite barren. Near Point 2, there exists a model mtr display, which was a quite popular seating as it was unique and covered. By Point 4 the benches by the river were uncovered, and thus were targets of bird poop and were generally unusable. The Kwong Fuk Bridge Garden had covered seating and made it a much more common place for people to sit. On the other side of the river,

the seats looked directly into the sun most of the day, and people sitting often had to sit uncomfortably to keep the sun out of their face.

The space provided near the river is quite tight, especially with the designated biking path. Trying to add things like circular/picnic style tables or food kiosks would likely cause much inconvenience to the walkway. The biggest recommendations that are applicable here are the covered seating to provide shade and protect the seats from rain or bird droppings.

Additionally, most of the area around the river does not allow you to connect to the public wifi, and there are no public electric outlets, so these things can also be improved upon. The east side of the river is quite far from any train stations, it is 1600 meters from Tai Po Market. However, the west side is only 400 meters from Tai Wo.

Sha Tin Park (STP)

STP is a large public park area that borders the Shing Mun River and is directly adjacent to the New Town Plaza shopping mall and Sha Tin Town Square. The area is often heavily trafficked, and the north side of the river hosts a large bike path along with a rental shop. Point 1 of observations was just north of the rental shop, outside an entrance to the promenade near a bathroom. Point 2 of observations was on the south side of the river, and south of the Lek Yuen Pedestrian Bridge, this area was much more constricted than others. Point 3 was on the north side of the river once again and hosted a small plyometrics area along with a few benches. Lastly, point 4 was along the south side of the river, just to the north of the Lion Rock Tunnel Road and was rather constricted. The park area just behind, and raised slightly above the promenade, hosts a large awning with a stage and amphitheater style seating. There were also many benches along the raised park area, overlooking the promenade and river. Additionally, there was a food kiosk just south of the amphitheater with group seating and tables, a popular spot to get snacks and a drink on a hot day.

With the existence of the promenade on both sides of the river, and one side having a bike lane, there was a clear disparity between populations counted on either side. Point 1 had 805 and 434 Weekend/Workday counts and Point 3 had 602 and 142 Weekend/Workday counts. Point 2 had 444 and 327 Weekend/Workday counts and Point 4 had 351 and 206 Weekend/Workday Counts. Points 1 and 3, on the north side of the river by the large park, clearly had more people recorded, likely due to the 348 and 272 bikes recorded on the weekend between Points 1 and 3 respectively. In total, the weekend and workday saw 2202 and 1401 moving visitors, with attendance peaks in the morning, mid-day, and around sunset.

During the workday, nearly 60% of all static standing individuals were engaging in some sort of recreational activity, this often took the form of plyometrics at the provided equipment or tai chi within the park space. During the weekend, almost 25% of people sitting down were consuming food or beverage near the kiosk. However, during the workday, this was only 1.7%. We theorize that this is likely due to the hotter and more sunny workday and the hesitancy to sit in the unshaded and very hot metal group tables and chairs. Generally, all sitting counts were lower on the hotter workday, for this reason we would recommend the addition of shaded seating along the promenade length and within the park area. This would provide more comfort and accessibility during various weather circumstances.

We also observed multiple other activities occurring throughout the waterfront such as makeshift Chinese Chess games that were haphazardly organized along bike paths. Near points 3 and 4 we saw groups of people gathering for karaoke or other group activities but were rather constricted by the limited standing space and often non-existent seating room. We would recommend the addition of more group seating and specific tables for Chinese Chess or Mahjong to encourage the use of these spaces for group gathering and activities. While the demographics of the area skew slightly older than the average within the New Territories, we saw a wide range of age groups visiting the waterfront and recommendations were not specifically tailored to any one group.

Ma On Shan (MOS)

Located in the New Territories at the mouth of the Shing Mun River and maintained by the Leisure and Cultural Services Department, MOS is a well-known long promenade divided with biking, running, and walking paths through Points 1 and 2. There are two long parks perpendicular to the promenade between the beginning points. A Fourth of the promenade, including Points 3 and 4, outlines a large park filled with many gardens and attractions adjacent to a large mall complex. The promenades are well-maintained and usable spaces, however they have limited seating compared to the nearby park. The promenade is shaded by trees for the inside bike and running paths and the walking paths line a large seawall facing the water. Additionally, small group workout zones scatter the promenade and are used by all ages.

MOS showed a winter total of 2984 and 2472 people per hour for weekends and workdays respectively. While the regional demographics skew to an older population, most observed visitors were of a variety of ages. Most people at MOS were seen moving relatively equally along the long promenade Points 1-3 and some movers likely went into the park near Point 4 as it reported lower moving counts. MOS was among one of the most popular promenades by movement counts, where it reported the most numbers between 3-5pm and included a 24% rolling use which was predominantly bikes. On the other hand MOS had the least percentage of people staying at the waterfronts: 8.13 and 9.72 on weekends and workdays respectively. Of the people staying only 11% were found eating or drinking on the weekends and less than 1% were seen eating or drinking during the workday. Like seen at other waterfronts people could be seen using their phones, talking to friends or reading a newspaper on the benches facing the water. Fishermen could also be seen fishing along the promenade. Additionally, many groups would cluster the pathways and talk in groups or look out to the surrounding mountains and horizon across the water. MOS did not have many people using the workout zones and only around 8% of people who were doing stationary activities were doing so culturally.

MOS is currently used primarily as a moving waterfront and does a good job at cycling people through the promenade. The waterfront itself lacks many sociable zones, but as it outlines a park which has more social areas. At times fishermen would climb the seawall onto the bottom ledges to get closer with the water and get away from the large number of people moving through the waterfront. A way to bring people closer to the water could benefit this area.

Although the promenade is tailored to people moving along it, the waterfront can still benefit from more tables and group seating along the waterfront as it is very scattered and centralized to the park area. Most plyometric workout spaces lack more than a few workout areas, and while it is nice to have these options available it is limited to public use, as such more could be added along the promenade. The view of MOS is fantastic and the area is well used for exercise and travel, a look into if the area would want more leisure spaces could be beneficial as to see if any recommendations should be implemented in this area.

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