

For discussion on
24 November 2015

Legislative Council
Panel on Home Affairs and Panel on Development
Joint Subcommittee to Monitor the Implementation of the
West Kowloon Cultural District Project

Integration and connectivity of the West Kowloon
Cultural District with its neighbouring districts

PURPOSE

This paper updates Members on the interim recommendations of the Traffic Operation Plan (TOP) study commissioned by the West Kowloon Cultural District Authority (WKCDA) and the implementation progress of the transport infrastructure projects linking the West Kowloon Cultural District (WKCD) with its neighbouring districts.

BACKGROUND

2. At the Joint Subcommittee to Monitor the Implementation of the WKCD Project (Joint Subcommittee) meeting held on 7 July 2014, WKCDA briefed Members on the future car parking and loading/unloading arrangements, cycling provision, as well as vehicular and pedestrian accessibility plans of the WKCD.

3. At the Joint Subcommittee meeting on 12 January 2015, Members were further updated on the programme and progress of the government-funded transport infrastructure works for the WKCD project. The scope of the TOP study, which aims to develop a comprehensive operation plan to manage future pedestrian and vehicular traffic and formulate short-, medium- and long-term transport strategies for the WKCD, was also presented.

4. The TOP study commenced in November 2014 and the interim recommendations on public transport planning and operation, private car and coach parking provision as well

as marine transport options are summarised in the ensuing paragraphs. The WKCDA will further discuss the interim recommendations with the relevant government departments.

INTERIM RECOMMENDATIONS OF THE TOP STUDY

Public Transport Planning and Operation

Connectivity between WKCD and other areas

5. The WKCD is in the vicinity of four major public transport interchanges (PTI) which at present provide more than 30 bus and green mini bus (GMB) routes connecting various districts of the territory. Eight bus and one GMB routes running along Austin Road West provide direct connections between the WKCD and Central Kowloon, Tsim Sha Tsui, Tuen Mun and Sha Tin. To enhance the public transport services to cater for the future passenger demand generated from the WKCD and to strengthen the services to and from East Kowloon and New Territories East areas, re-routing of some of the existing bus and GMB services operating in the adjacent PTIs with intermediate stops at the East and West gate lay-bys is being considered, subject to the agreement of Transport Department (TD) and other stakeholders including bus operator(s) and the relevant District Council(s).

6. During major events, visitors are encouraged to use railway as the primary transport mode to access to and depart from the WKCD. Based on WKCDA's experience, provision of supplementary express feeder bus services to nearby MTR stations would be welcomed by the public. Similar arrangements may be considered when major events are held in future. To cater for the substantial demand for railway transport service during major events, higher frequency of the train services will be required to disperse crowds at Kowloon and Austin Stations. WKCDA will maintain regular dialogue with MTR Corporation Limited (MTRCL) on the event schedules and the estimated number of visitors to facilitate the former's train service deployment.

Environmental-friendly transport system with WKCD

7. In addition to the bus re-routing proposal mentioned above, the TOP consultant is also studying the feasibility of introducing environmental-friendly bus services along the underground road of the Integrated Basement to cater for the east-west passenger traffic within the WKCD. Under Environmental Protection Department's environmental initiatives, the eBus Trial Programme (the Trial) for franchised buses is targeted to commence progressively by end of 2015 for trial run on various bus routes under different conditions in Hong Kong. The Trial will last for two years and aims to assess the vehicles' operational efficiency, performance and economic viability in local conditions. If the results of the Trial are satisfactory, the Government may encourage the franchised bus companies to use electric buses in a suitable way. WKCDA and its consultant will liaise with TD and existing bus operators to assess the feasibility of introducing electric buses and other low or zero emission vehicles to serve the WKCD.

8. The use of compact electric buses is well established in European and North American countries. A typical compact electric bus is slightly longer than a normal private van. The seating and standing capacity of typical compact buses range from 8 to 30 seats depending on their internal layout and luggage carrying capacity. In recent years, the use of driverless cars is also on trial under real conditions in Singapore, Europe and North America. Examples of compact buses and driverless transport systems are shown in **Annex A**. If the safety, licensing, regulatory and technology issues are overcome, these new transport modes could be considered to fulfil the Environmentally Friendly Transport System (EFTS) options running along the waterfront promenade, along routes providing shared-use with pedestrians and possibly bicycles. This would link the Xiqu Centre in the east and the Park in the west, with intermediate stops as a supplementary service to the underground bus services mentioned in paragraph 7 above. To minimize the interference with the at-grade pedestrian activities, the EFTS under consideration would be a low-capacity and low-speed transport system. As a further refinement, such a system might also provide a point-to-point on demand service for the elderly and people with a disability

travelling within the WKCD. We will continue to monitor progress in this field.

Private Car and Coach Parking Provision

9. Based on the latest development parameters, about 2 200 to 2 900 car parking spaces will be required in the WKCD for the entire WKCD. To support the phased implementation and operation of the Park and the Artist Square Development Area (ASDA), a new underground car park (with about 200 parking spaces) located at the interfacing area between the Park and M+ will be constructed. Together with other parking provisions in the Xiqu Centre, M+ and Lyric Theatre Complex areas, a total of about 750 car parking spaces can be provided in around 2020 to meet the demand in the interim.

10. Based on the preliminary design, upon development of the central portion of the WKCD, its underground car park will accommodate around 1 000 car parking spaces. The remaining parking spaces will be provided in other phases of the WKCD west of the ASDA and south of the Xiqu Centre. Some of these parking spaces would be used by different visitors on a time-sharing basis. A well-designed car parking management system with advanced technology is therefore required to enhance the efficiency of the parking operation. Technologies under consideration by the TOP study are:

(a) Licence Plate Recognition System – a system that records and monitors the licence plates of the cars for security purpose. The use of cameras will also enable car searching function (see sub-paragraph (c) below).

(b) Long Distance Radio-frequency Identification (RFID) Technology – a longer range contactless RFID system can reduce the clearance time at the car park entrances/exits to 2-3 seconds, about one-sixth of the clearance time of the current Octopus payment.

(c) Car Park Guidance and Searching System – video detectors will be mounted above parking spaces and driveways to read the licence plates of the cars. It

enables the drivers to locate the parked cars by entering the licence plate numbers at the kiosks or using the apps on smart devices.

(e) Variable Message Signs – parking space availability displays will be erected at strategic locations within and outside the car park to advise the directions and numbers of the unoccupied parking spaces.

(f) Car Park Booking System – a pre-booking system that allows drivers to reserve parking spaces online for a time interval of a specific date. It supports pre-trip and on-trip booking and provides information on vacant parking spaces by parking zone and by vehicle type to allow flexibility on car parking.

11. Being a mega-size arts and cultural project, the WKCD will attract coaches bringing in thousands of visitors a day. As advised by the TOP consultant, upon full development of the WKCD, 22 coach parking spaces will be required. Sufficient coach parking spaces (about 40 spaces) are planned to be provided at the Integrated Basement and the Mega Performance Venue/Exhibition Centre site to address the long-term demand.

12. The lack of spaces for coach pick-up/drop-off and parking in Yau Tsim Mong (YTM) district has been a key traffic issue. Under the TOP study, the consultant surveyed the coach activities in the YTM district. The survey results revealed that the parking utilization rate was very high near Science Museum Road, Salisbury Road and Chatham Road South. Short-term coach pick-up and drop-off spaces were insufficient. On the other hand, it was also found that the utilization rate at the existing To Wah Road coach parking area with 26 parking spaces (only about 0.5 km from the WKCD and 3 km away from the Salisbury Road) was significantly underutilized, with 77% occupancy during the evening peak hours (2:00 pm to 8:00 pm), and below 50% during the rest of the day (midnight to 2:00pm and 8:00pm to midnight). The consultant had investigated the reasons for the low utilization by interviewing the coach drivers in the district. Over 70% of the surveyed drivers responded that they would not use the coach parking spaces outside the Tsim

Sha Tsui operation area as it was inconvenient for picking up passengers. Unless the visitors' behaviour change significantly in future, when the coach parking spaces in the WKCD are open for public use, these parking spaces are unlikely to be attractive to the coaches that are currently operating in the Tsim Sha Tsui area as the turnaround time between the WKCD and Tsim Sha Tsui area is about 15-25 minutes.

Marine Transport Options

13. Within Victoria Harbour, there are sightseeing cruises operated by private operators. These cruises allow visitors to enjoy the harbour and the seafront for sightseeing, entertainment and dining purposes. These water tour services are popular among tourists. WKCD will approach the existing and potential water tour operators and explore the possibility of offering an additional water tour stop at the WKCD or introducing a new water tour route departing from the WKCD.

14. During major events, traffic demand will surge. A high capacity ferry service will be one of the transport options suitable for dispersing large volumes of people. As a pilot scheme during the Freespace Fest held in November 2014, WKCD hired vessels and offered free ferry services between the WKCD site and Wan Chai/ Tsim Sha Tsui districts. A total of 96 scheduled vessel trips carried around 3 900 patronage in two days to and from the WKCD, representing about 5-9% of the attendance. At the initial operation stage, WKCD may arrange similar ferry services for large events. The patronage, pick-up points and passenger patterns will be monitored and reviewed. If the passenger demand proves to be high, and subject to the financial viability, WKCD would explore the possibility of providing more regular ferry services to connect the WKCD to other piers in the harbour.

15. There are two existing public landing steps within the boundary of the WKCD as depicted in **Annex B**. The landing steps (1) near the MTRCL's barging facilities, which are currently not accessible by the public, are being used for the disposal of excavated materials of the Guangzhou-Shenzhen-Hong Kong Express Rail Link project by sea. In the north-western edge of the WKCD are the public

landing steps (2) at the New Yau Ma Tei Typhoon Shelter. These steps are in active use providing public access for the transportation of goods and passengers.

16. WKCDA proposes to take up the management responsibility of the two existing public landing steps to facilitate water transport and water tour services to be operated by third party providers. This will be subject to the Marine Traffic Impact Assessment being undertaken by the TOP consultant, consultation with stakeholders and approval from relevant government departments. The conditions of the landing steps are proposed to be improved by providing shelter for waiting passengers and aligning with the overall design of the waterfront promenade. WKCDA will maintain free public access to the two landing steps, though priority may be given to participants when there are major events to be held within the WKCD.

PROGRESS UPDATE ON GOVERNMENT-FUNDED VEHICULAR AND PEDESTRIAN CONNECTIONS

17. Following the Finance Committee's approval of the funding application for the Public Works Programme Item 855TH – Road Improvement Works for West Kowloon Reclamation Development (Phase 1) in February 2015, the road improvement works surrounding the WKCD commenced in March 2015. It is anticipated that all the road improvement work packages will be completed in 2018 to relieve the traffic congestion outside the WKCD.

18. The proposed Artist Square Bridge is at the schematic design stage. The Bridge will serve as a pedestrian link between the MTR Kowloon Station/The Elements shopping mall and the Artist Square in the WKCD across Austin Road West with further connections to the Park and the harbourfront for visitors to enjoy the Promenade. It will enhance accessibility to the harbourfront by providing direct and barrier-free access. The Bridge will adopt a simple but elegant design involving the use of a series of equal-sized, identical rib sections, and each rib section will be slightly rotated relative to its immediate neighbours to create the visual impact. Uniformly-sized glass louvres with gaps are fixed between the rib sections to achieve a light and elegant

bridge design. The glass louvres can give visitors good views to the sides and up to the Kowloon and WKCD skylines, as well as optimize the use of natural daylight and hence reduce electricity consumption. The current design of the Bridge is shown in **Annex C**. Subject to the design progress, site investigation/gazetting procedures and Finance Committee's approval of funding application, construction of the Bridge is targeted to commence in the fourth quarter of 2016 for completion in phases starting from 2019.

19. To further enhance the pedestrian connectivity between the MTR Austin Station and the Xiqu Centre, WKCDA proposes to upgrade the existing pedestrian subway at the junction of Canton Road and Austin Road West. New stairs and lift will be added to bring people up to the ground level footpath adjoining the Xiqu Centre. Subject to the technical feasibility and works programme, the existing subway will be upgraded by providing a new connection point to the basement of the Xiqu Centre. In addition, the existing subway is proposed to be beautified to improve the arrival experience of visitors to the WKCD.

ADVICE SOUGHT

20. Members are invited to note the interim recommendations of the TOP study and the implementation progress of the transport infrastructure projects connecting the WKCD with its neighbouring districts.

West Kowloon Cultural District Authority
November 2015

Examples of Compact Buses and Driverless Transport Systems

小型巴士和無人駕駛運輸系統的例子

Annex A
附件A



Compact Buses:
小型電動巴士:

Tecnobus Gulliver (in Rome)
Tecnobus Gulliver (羅馬)



The Ecolobus (in Quebec)
The Ecolobus (魁北克省)



Driverless Transport Systems:
無人駕駛運輸系統:

Driverless Golf Buggies (in Singapore)
無人駕駛高爾夫球車 (新加坡)



Personal Rapid Transit (in Abu Dhabi)
個人快速交通 (阿布扎比)

Existing Public Landing Steps within WKCD

西九文化區內現有的公眾登岸梯級

Annex B
附件B



Existing landing steps 現有登岸梯級

Proposed marine access points for WKCD 擬議西九文化區水上交通登岸點

Schematic Design of the Artist Square Bridge

藝術廣場行人天橋大綱設計圖

Annex C

附件C

