香港城市設計學會
Hong Kong Institute of Urban Design

Environmentally-Friendly Linkage System (i.e. monorail)
Public Consultation Stage 2

Thank you for the opportunity to participate in the second round of consultation. The Hong Kong Institute of Urban Design (HKIUD) has reviewed the presentation material and concludes that the Institute's comments from the first round have not been satisfactorily been dealt with.

The HKIUD continues to support the establishment of a new Central Business District at Kowloon East and the objective to provide enhanced connectivity between the Kai Tak Development (KTD), Kowloon Bay and Kwun Tong (Kowloon East). The Institute, however, does not support the notion that the proposed EFLS is the best or most desirable solution to achieve this. The reasons are set out below.

Lack of contextual masterplan

- The project does not appear to be embedded in a strategic masterplan for the wider area, which would provide a thorough analysis of the current state of affairs, its value for desired future use and a multi-disciplinary approach to what is required to achieve that vision. Such a masterplan would reveal that, while the road network of Kwun Tong and Kowloon Bay was developed to meet the needs of these areas as industrial areas, this road network would be over-dimensioned for purposes of a CBD. The consultation material states that Kowloon East should transform into a "vibrant hub of leisure, recreation and tourism activities". The HKIUD considers that this ambition is not compatible with the large scale and car-oriented road network that is currently in place.

Central Business District should be for people to walk, not cars to drive

- The HKIUD believes that a Central Business District should, by its very nature, be pedestrian-oriented, unless it is the intention to retain a high percentage of industrial activities in the area, in which case the designation "CBD" will be misleading and should be omitted. It would an urban area like many others in Hong Kong that has a number of new Grade A office buildings but not the coherent and pedestrian-friendly environment of a Central Business District. Studies have shown that motorized traffic does not [mesh] well with vibrancy. A small number of cars can be sustained but too many cars will form an obstacle for pedestrian movements. The high volume of motorized traffic at Queen's Road Central, for example, is clearly detrimental to the much higher volumes of pedestrians trying to go about their business in the area.

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- The HKIUD observes that a road network can be altered. Roads can be closed, realigned or downgraded. It is clear to everyone including ourselves that this would be a costly and complicated project, but there are many examples in the world to prove that the benefits are real and permanent. Following the vision to transform Kowloon East into a new CBD all through traffic should be diverted to Expressway nr. 7 and the aptly called Kwun Tong Bypass.

- Currently the area is not attractive for pedestrians and without restructuring of the road network the area will continue to be a place where pedestrians, of which there will be many more in future, will not enjoy being outside.

- The consultation material states that the walking environment will be "improved" with "new and enhanced subways, footbridges and widened walkways." The HKIUD supports the widening of footpaths but vehemently opposes new subways and footbridges. Subways and footbridges improve the environment for cars, not for people. Forced level changes will deteriorate people's daily life. Outside the urban area there are logical instances where people will have to use a bridge or subway to cross a railway or expressway, but Kowloon East is intended to be one of the few central places in Hong Kong where vibrancy will be important. As such, new subways or footbridges are absolutely the wrong way forward.

Monorail causes major visual intrusion

- One of HKIUD's main objections to a monorail is the visual intrusion into the townscape, particularly when seen from below, which is how the majority of pedestrians will see the proposed permanent structures. In spite of what the consultation documents claim, the support structures and track beds themselves will be a significant presence in the sky. More importantly, these structures will form a *permanent* visual intrusion. People inside the monorail will no doubt have a nice view of Kowloon East but far more people will have to look up to it and their view will permanently be impede on. By contrast, any road-based transport mode has no support structure.
- In stark contrast to the permanent engineering structures of a monorail, the only element of road-based transport (environmentally friendly bus or a tram) that is visible is the vehicle itself as it goes by. There are no support structures whatsoever. Any wires serving a tram system are all but invisible. HKIUD strongly opposes a monorail for its significantly adverse and permanent visual impact on the townscape.

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Hong Kong tram: overhead wires virtually invisible

Barcelona tram: overhead wires virtually invisible

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Kuala Lumpur monorail, built 2003: permanent adverse impact on the townscape

Kuala Lumpur monorail: permanent civil engineering structure above the street

- The consultation documents explain that in case of emergency, the elevated monorail carriages can safely be evacuated by use of gangways between the two tracks. This middle pathway is not shown in the images of the proposed monorail from underneath, which is clearly misleading. In our view, any monorail structure will be a significant civil engineering work, 24 hours a day. Moreover, *any* overhead structure, however optimized in design, will compare negatively with the zero overhead construction of road-based transport.

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Space can be managed

- One of the main reasons stated in the consultation material that a monorail is necessary is a perceived lack of space for road-based transport. As is stated above, it is essential with any rezoning of a district that the existing infrastructure is looked at holistically and that a plan is developed to assess how the future infrastructure best meet the strategic vision. HKIUD believes that not enough attention was given to alternatives in terms of a holistic view of Kowloon East, including its road network and public space.
- The consultation material shows a number of photos that depicts the current, often congested traffic situation, stating that "adding a ground-level tram or light rail system would drastically reduce road space, block side streets and building entrances, and compromise roadside activities and safety". A fundamental question that has not been addressed is that the level of congestion would alter since, in the future, the area would no longer be an industrial area. Current traffic levels cannot be taken as a yardstick for future situation.
- Given that a new CBD will have a logical emphasis on pedestrians (after all it will no longer have an emphasis on industrial use but on pedestrian-friendly land use), the view on road surface should be to make it primarily of importance to pedestrians. A 'Grade A' office tower requires less car capacity, including parking, than an industrial building (The 87 floor 'Shard Tower' in London has just 47 parking spaces). There should be space for vehicles to service the new CBD but through traffic should be diverted, or at least discouraged. There is no reason why automobiles without business in the area should be able to drive freely through the area on, for example, Wai Yip Street, while people who work or live in the area are made to wait and breath road-side air pollution.

Monorail offers very limited transport benefit

- The illogical paperclip-shaped alignment will, in our view, ensure that people would only take relatively short trips (for example, a person wanting to go from Kowloon Bay MTR to the proposed Kai Cheung Road Station would travel 2 km by monorail, or 1 km at street level. The added distance, time and effort will deter people from actually using the monorail. This would also negatively impact the financial viability model.
- The consultation documents show that the catchment areas of the existing MTR stations would cover almost all of the future CBD district, except the western part of Kowloon bay and the former runway. Therefore there does not seem to be a compelling case to design and construct an expensive and permanently intrusive structure such as a monorail.

- The only logical reason for a monorail would be to shuttle people from the cruise terminal into Hong Kong, for example via the new Kai Tak MTR station. But, as the Institute pointed out at Stage I consultation, this would still be detrimental to the attractiveness of the street of this mixed-use area for pedestrians.

- The HKIUD requests that clear distinction is made between maximum capacity numbers and projected numbers of people who would actually be using it. Based on our assessment of the impracticality of the proposed monorail the given numbers appear too high.

Monorail has an inherent lack of inclusive design

- The HKIUD believes that inclusive design, or accessibility, is critical to any choice of public transport. Public transport must be easy to get in and out for people in wheelchairs, people with a child stroller, people with luggage or anyone else with decreased mobility. HKIUD strongly believes that a monorail is an ill-suited solution for the intended purposes because of the fact that anyone using the system must find a way to travel the vertical distance to the monorail platforms. Even if a lift is installed, it will add waiting time and effort that a road-based system simply does not have. Such a lift, of course, would only add further permanent physical presence to the streets of East Kowloon, combined with double escalators and emergency staircases.
- The consultation documents claim that the elevated nature of the monorail would provide for easy transfer to the Kwun Tong MTR line but this is not the case. Since Kowloon Bay and Kwun Tong MTR stations have island platforms, any person arriving at these stations by MTR looking for a transfer to the monorail would have to descend one level to the station concourse. From there, if the monorail is at the same height as the MTR tracks, he or she would have to go back up one level to reach the monorail platform. Thus, a passenger transferring MTR to monorail or vice versa would have to take at least two level changes, which is the same as a person taking the MTR coming from street level (both going up). There is no benefit for a monorail system in this regard.
- The MTR operates below or above street level because of the high speed it requires to be efficient. This is understandable and most stations can reasonably be accessed for people with mobility impairments, who are willing to make the effort because the reward (long distance and high speed) is high. Since the EFLS, however, only operates on a small geographic area and most trips will be short, the high speed and therefore dedicated tracks are not essential. The Institute doubts if anyone will take the trouble to reach the monorail platforms by taking long stairs or waiting for a lift, only to do the same three or four stops later. People with mobility impairments will simply choose not to do this route but find alternatives at street-level, or opt out entirely.

- In contrast to a monorail, all road-based transport can easily be made with a level entrance to the vehicle or carriage, requiring minimal spatial intervention. The HKIUD concludes that this is vastly preferable to a monorail.

Monorail is more expensive compared to road-based transport

- As mentioned at Stage I consultation, the high capital cost of the permanent structures, the high management and maintenance cost and the limited numbers of passengers would result in an unwise spending of public funds.

Tourist appeal is less for monorail than for modern road-based transport

- Monorails were popular in the period after the Second World War as a futuristic device. By now, however, most cities opt for metro, Bus Rapid Transit (BRT) or tram because of the high cost associated with monorail and for its limited practical purpose and outdated image.

- Transport for London (TfL), for example, operates hydrogen fuel cell buses that emit zero greenhouse gasses (only water vapour is emitted). This fact is advertised on the sides of the buses and visible at eye level for all to see. The same could be the case for electric buses. Similarly, trams operate quietly through the streets of dozens of cities, generating an accessible and modern image. HKIUD firmly believes that the tourist appeal of these new technologies would be much higher than an instantly outdated monorail.

Monorail: good for shuttle transport, not for urban transport

- The HKIUD concludes that monorail-type systems are only a viable option for very limited situations, for example between airport terminals, or as a shuttle to a particular destination for example a World Fair. For the practical, technical, visual and financial reasons stated above, it has no place as part of an integrated public transport system in a modern city.

The Hong Kong Institute of Urban Design
4 February 2014