#### Hong Kong Interchange 香港交匯站 Faster - Cheaper - Better 更快・更平・更好

### **Executive Summary**

- \* The Government's Plan is costly and difficult to build. The West Kowloon Terminus is poorly located. The plan is socially and environmentally unsustainable.
- \* A group of experts from different disciplines has come together and designed an alternative plan.

## **Executive Summary**

\* This plan has two components:

- Building the express railway terminus as an integrated interchange at Kam Sheung Road (i.e. the Hong Kong Interchange).
- Direct connection between the express train terminus and Central can be provided with an Extension of the Airport Express Line from Tsing Yi to Kam Sheung Road.
- \* This proposal can provide <u>faster</u>, <u>cheaper</u>, <u>and better</u> services than the Government's plan.

#### **Overview**

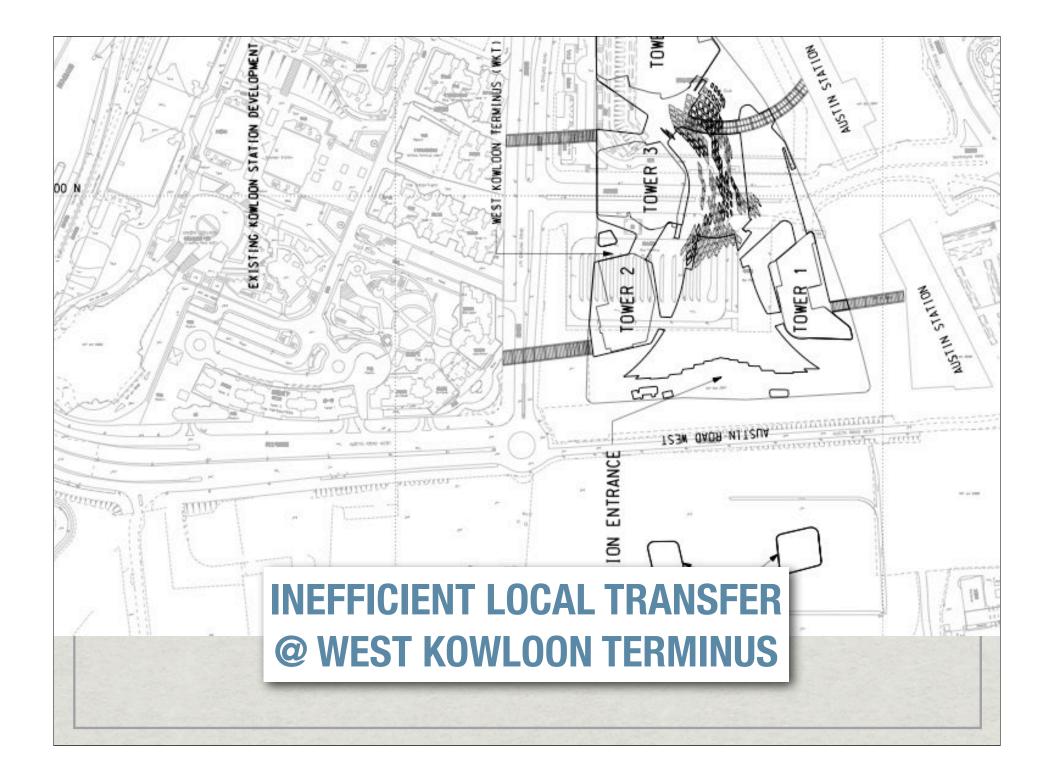
- Review of the Government's Plan
- **\*** Our Alternative
- \* Advantages: Faster, Cheaper, Better
- \* Conclusion

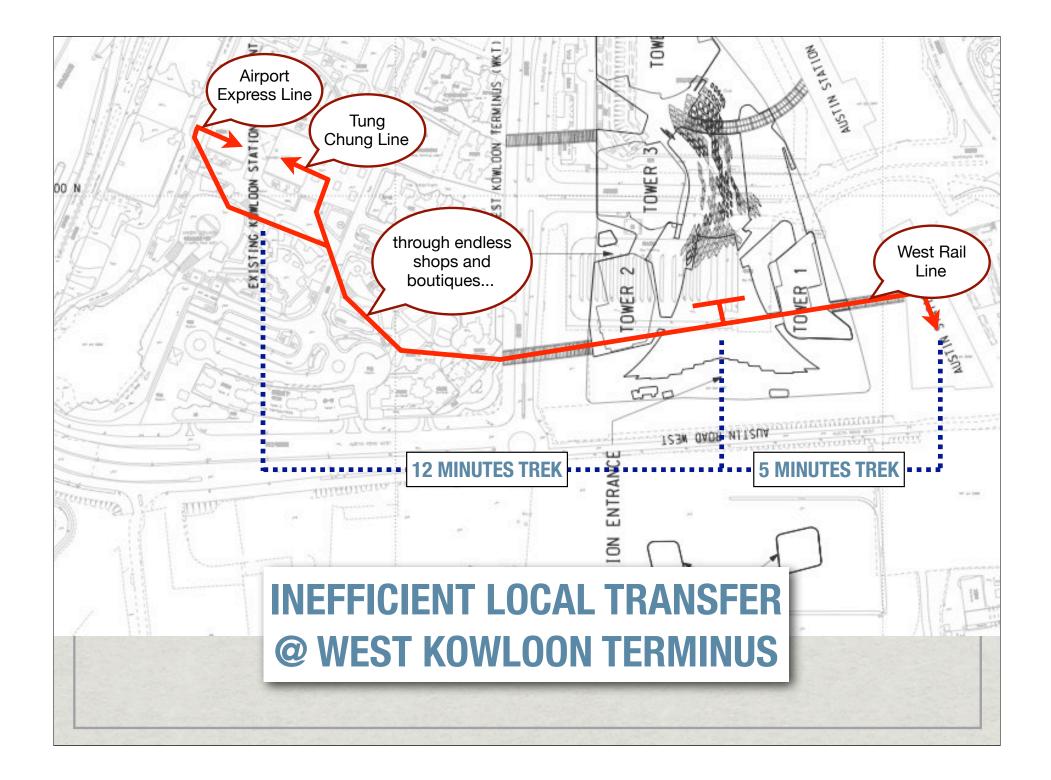
## West Kowloon Terminus

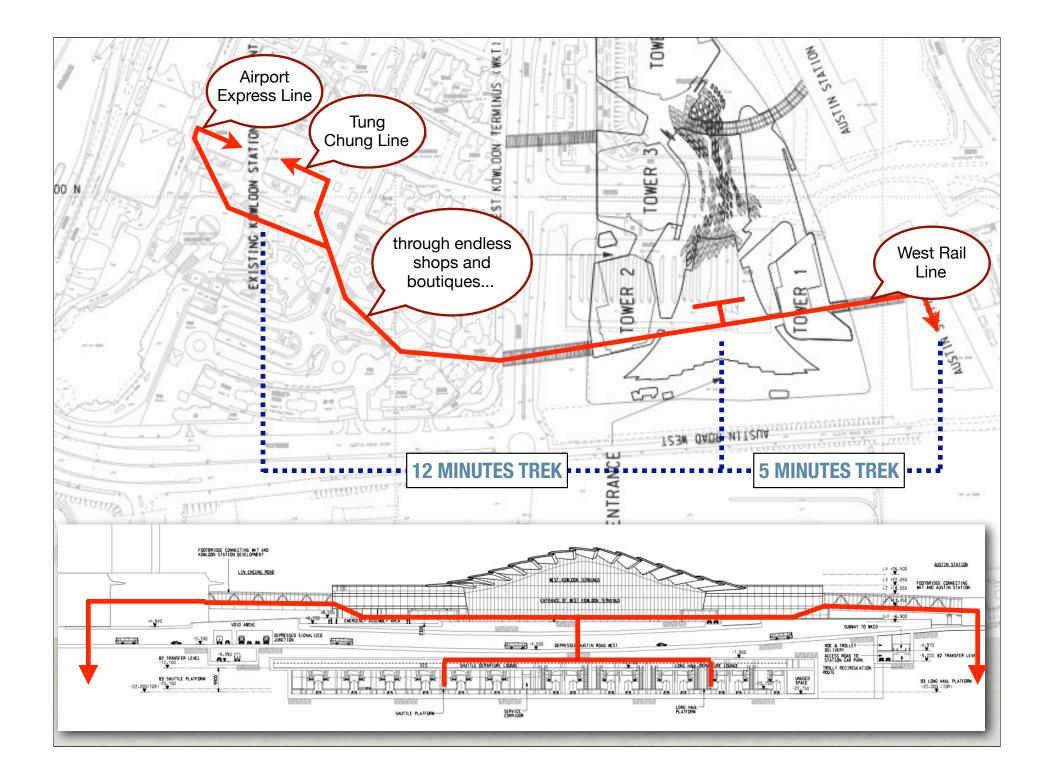
#### \* Poor Location

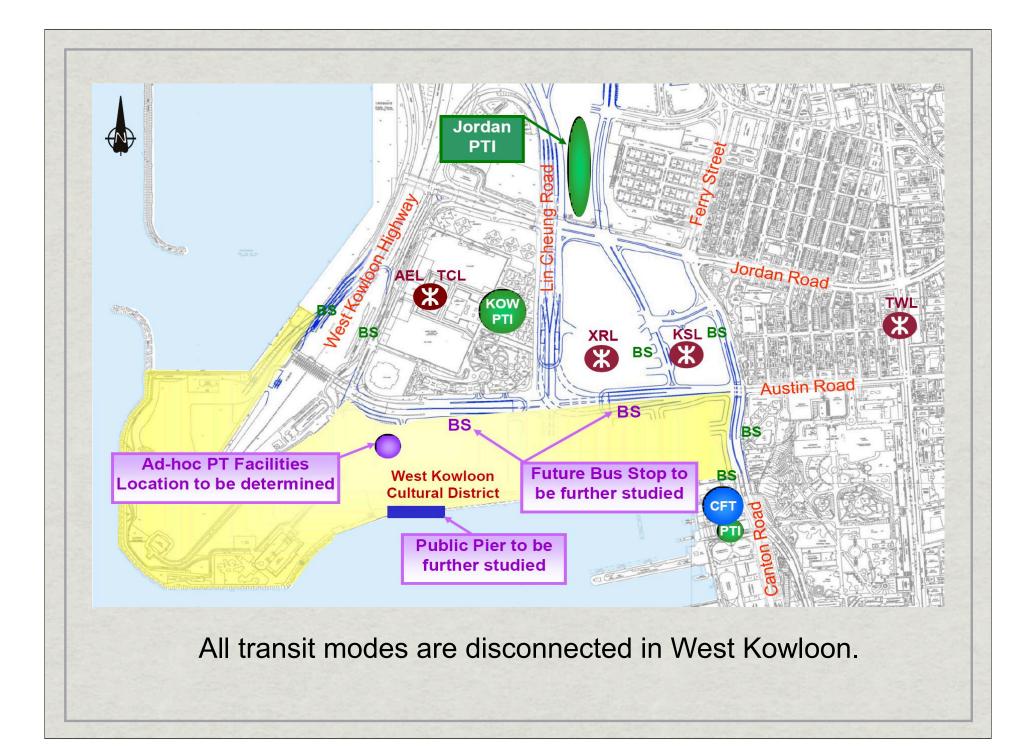
- Inconvenient for the majority of Hong Kong people.
- \* Difficult transfer XRL@WKT, Kowloon Station, and Austin Station.
- \* Traffic problems at West Kowloon.
- \* No space for expansion.
- \* Design constraints for the WKCD.

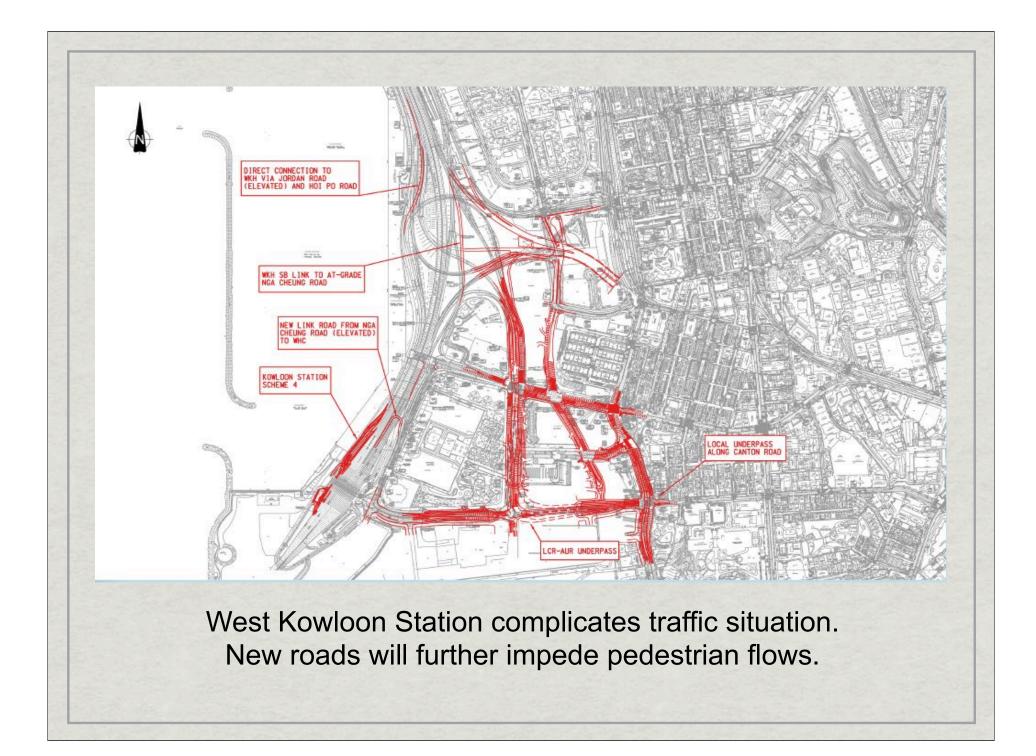
#### INCONVENIENTLY LOCATED FOR THE MAJORITY OF HONG KONG PEOPLE!

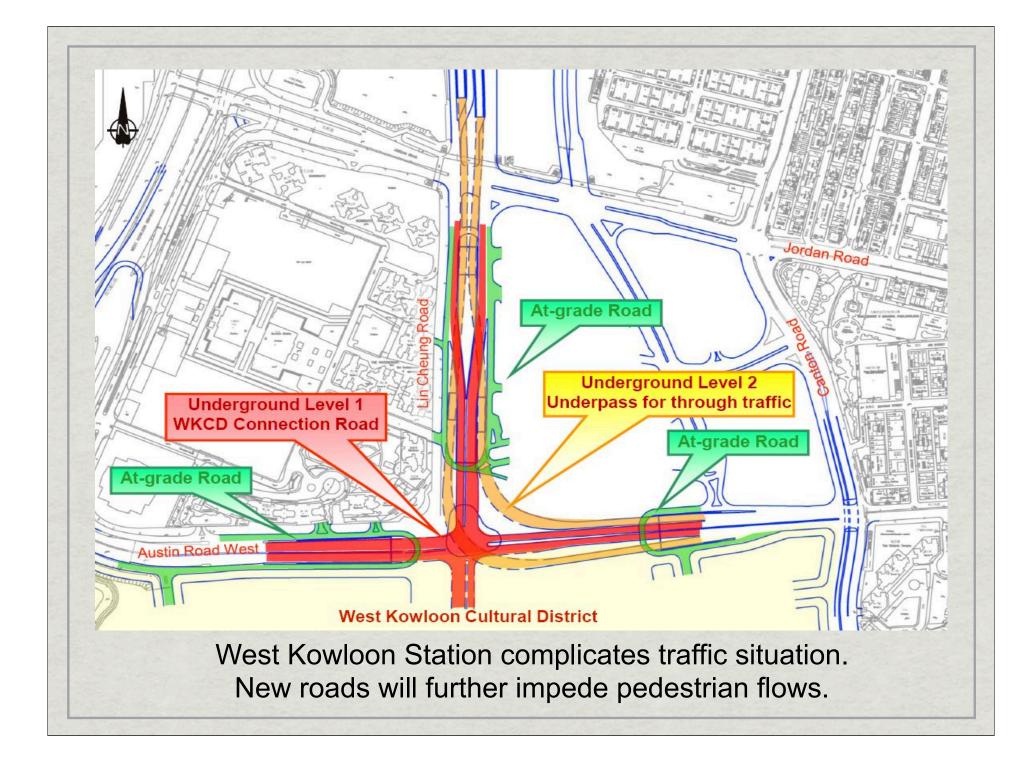


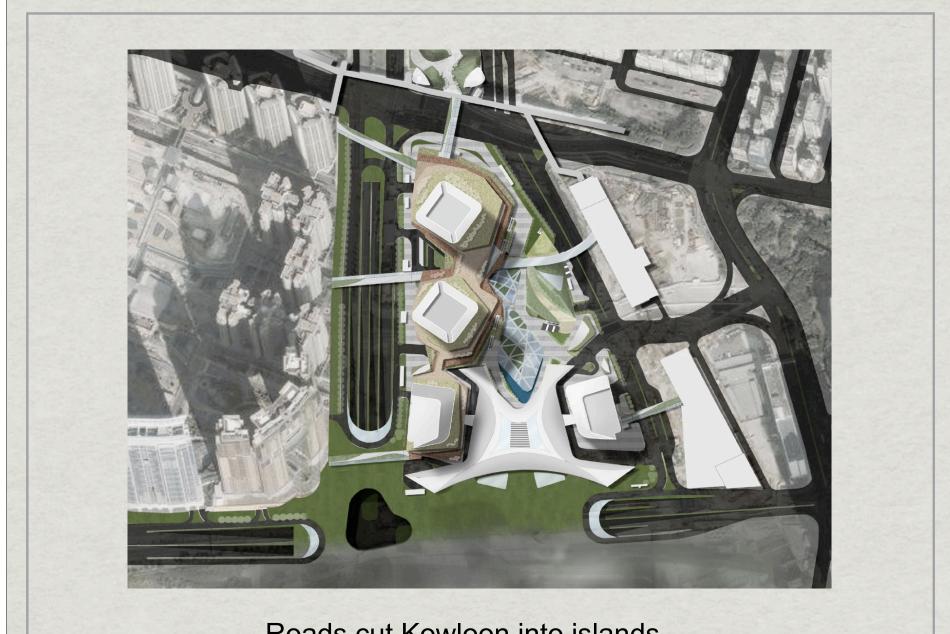






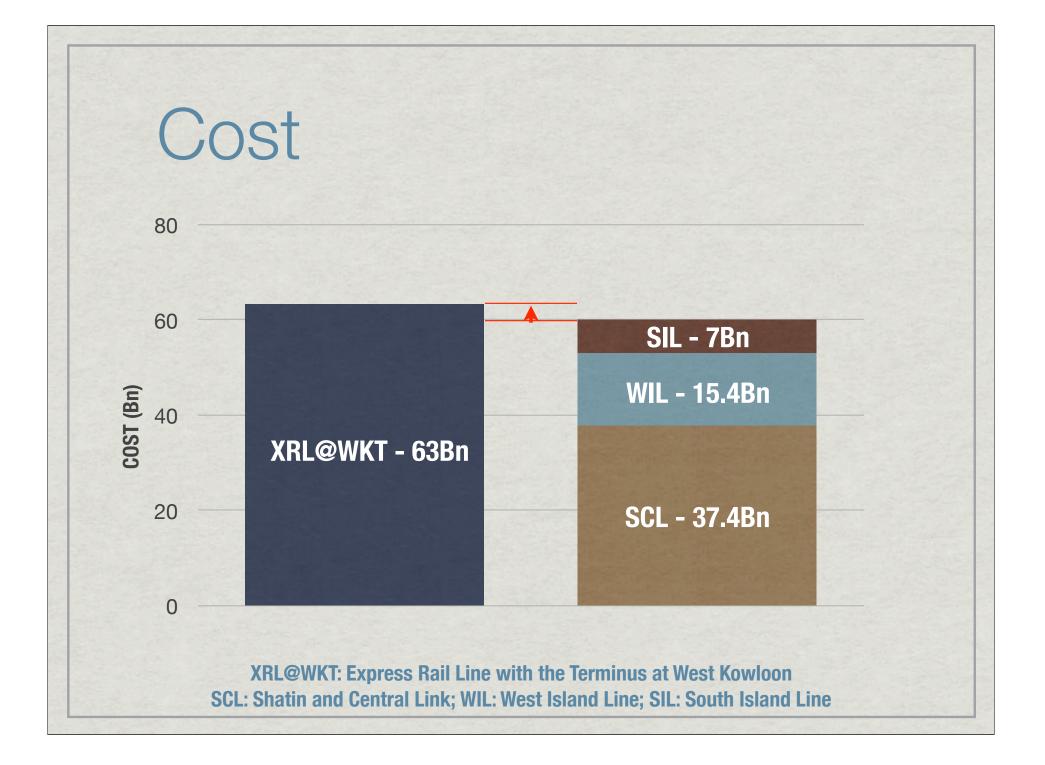






Roads cut Kowloon into islands.





#### **High-spend railway** How the costs compare (US\$m/km) HK section of US\$ express rail link Channel Tunnel, 84 Britain/France Engineers say the price tag of the express rall link's Hong Kong section will be inflated by the **HSL-Zuid high-speed** 80.4 construction cost of the state-of-the-art terminus line, Netherlands In West Kowloon (artist's impression pictured) TGV 60.3 South Korea Taiwan 44.7 high-speed rail Mokpo high-speed 34.3 railway, South Korea Nuremberg-Munich 30.8 high-speed line, Germany **Beijing-Shanghai** 24.5 high-speed line **Digging deep** Total volume of Two IFC, Hong Kong's tallest building cubic metres Total amount of soil to be excavated for express rail terminus 1. Om cubic metres SCHP CRIMEC

#### Express rail link to be world's most costly

SCMP

## Sustainability

#### \* Socially Unsustainable

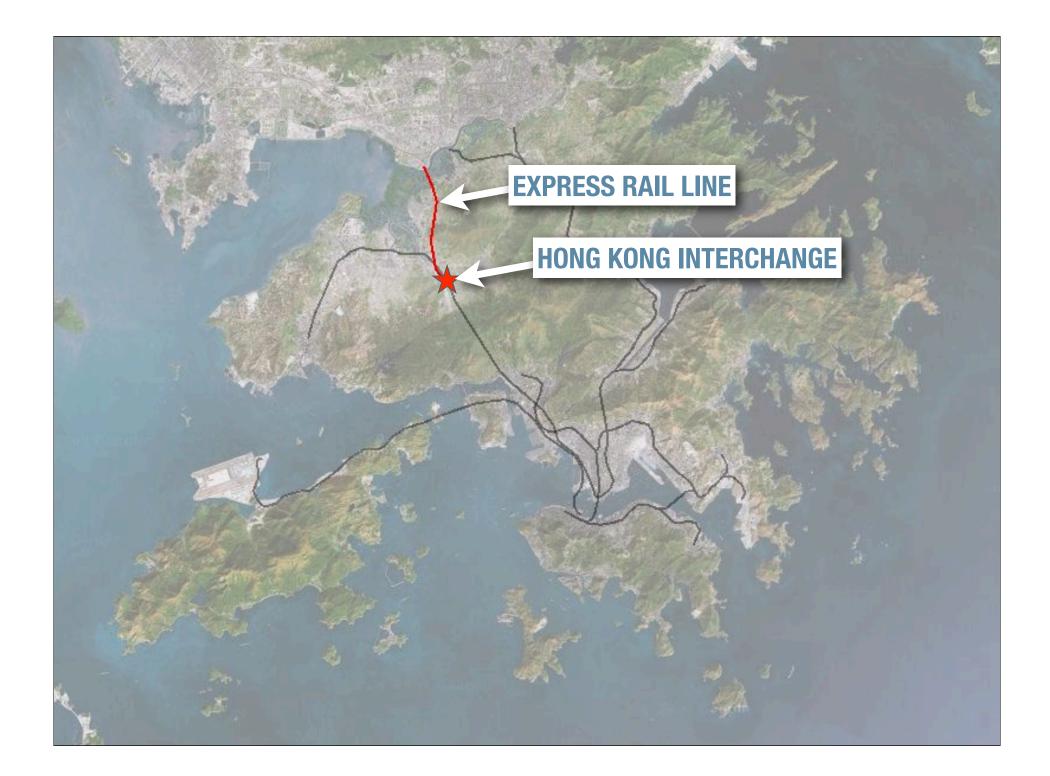
- Most Hong Kong people will not be directly benefited.
- \* Resumption of residential land in Choi Yuen Tsuen.

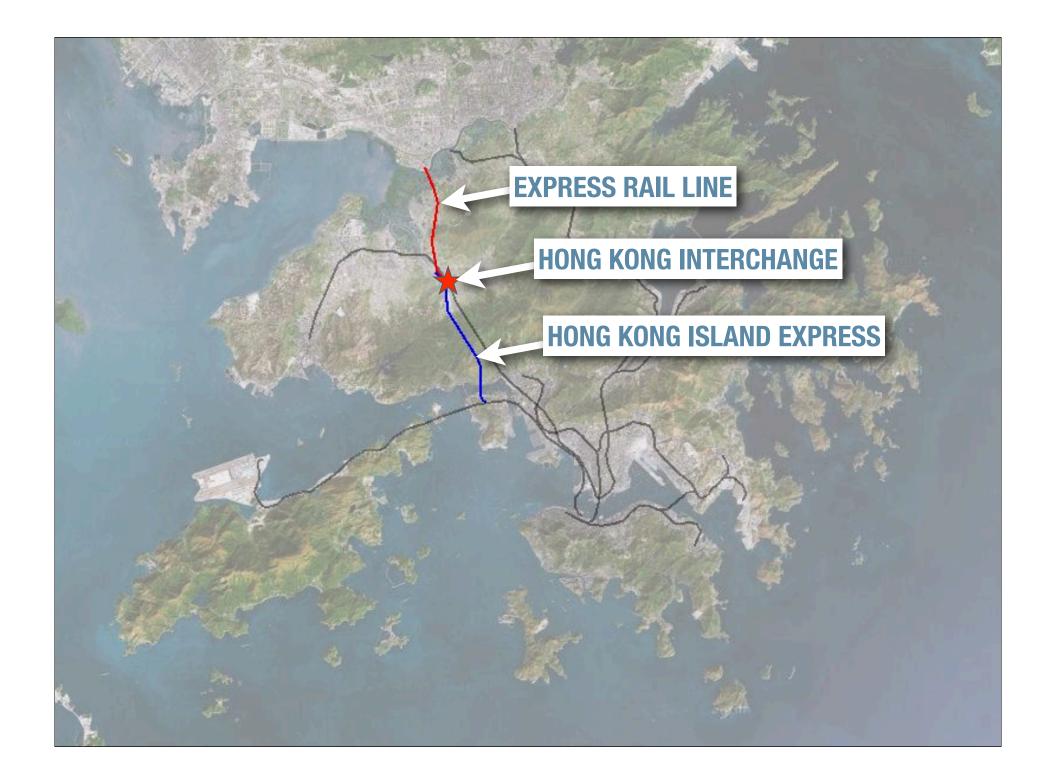
## Sustainability

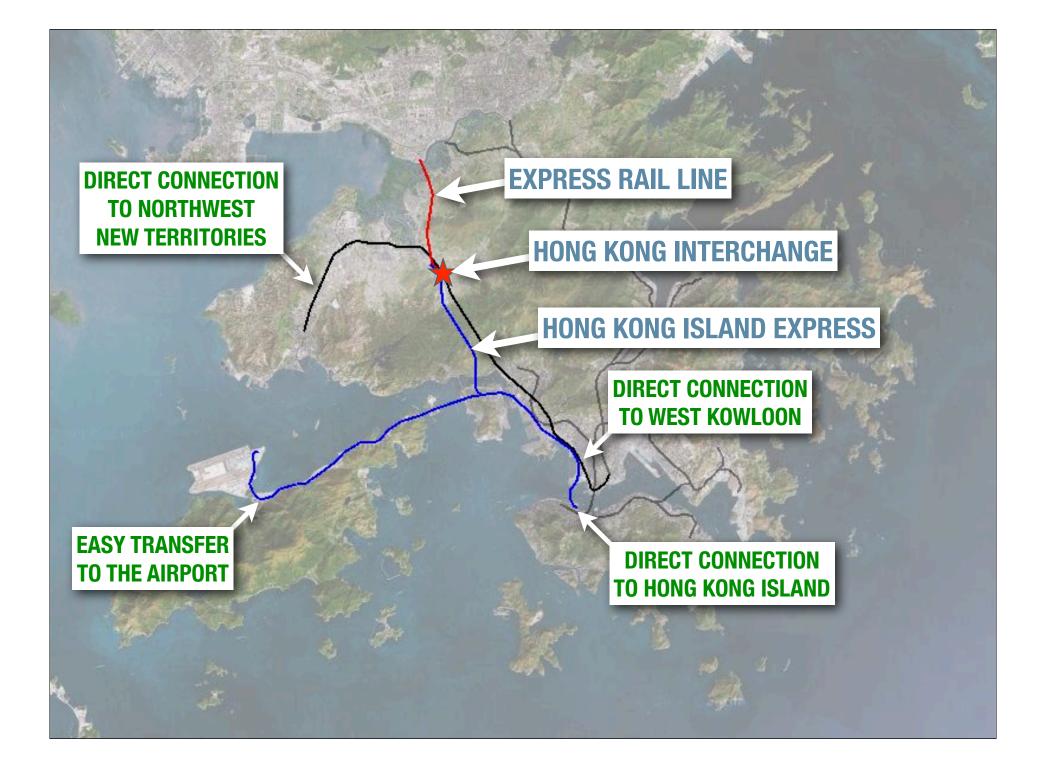
Environmentally Unsustainable
Worsen traffic problems at West Kowloon.
Another major excavation at West Kowloon.
Huge amount of construction waste.
Very high operational cost
Very high total carbon footprint

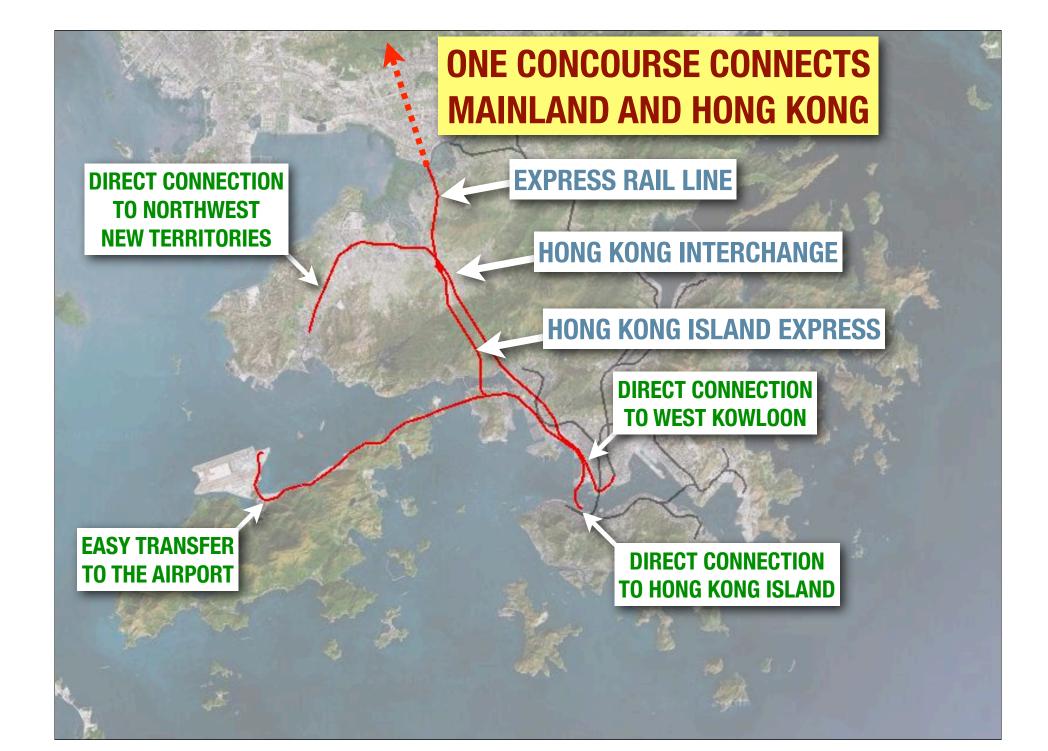
# Hong Kong Interchange

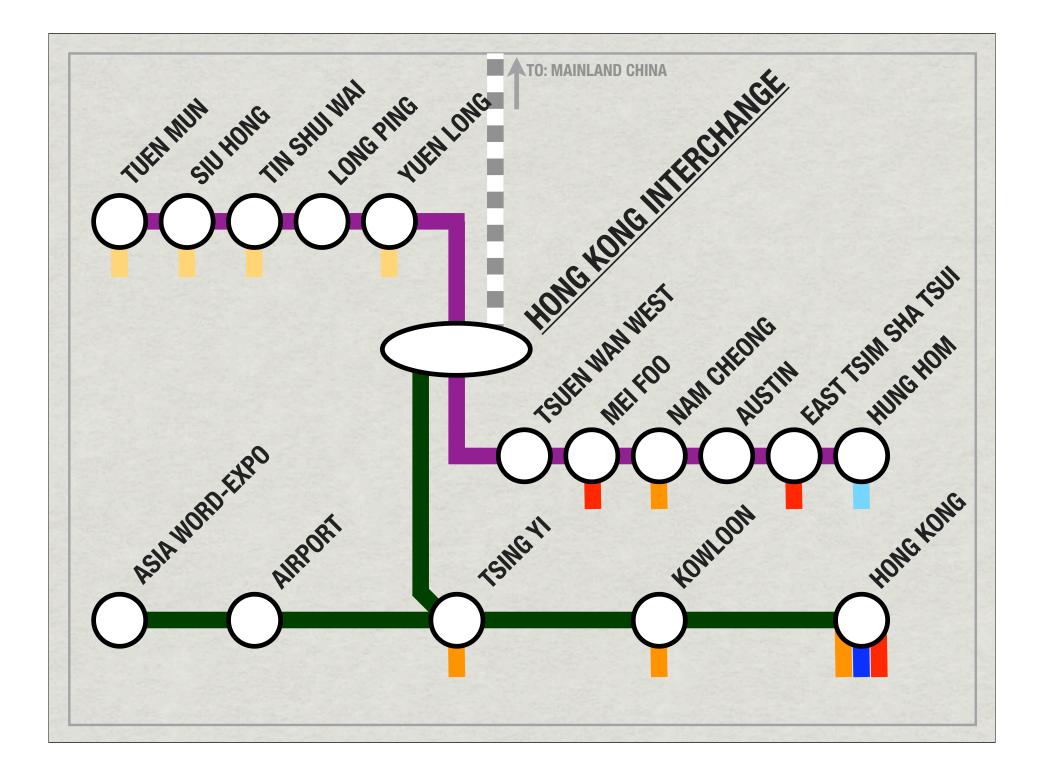










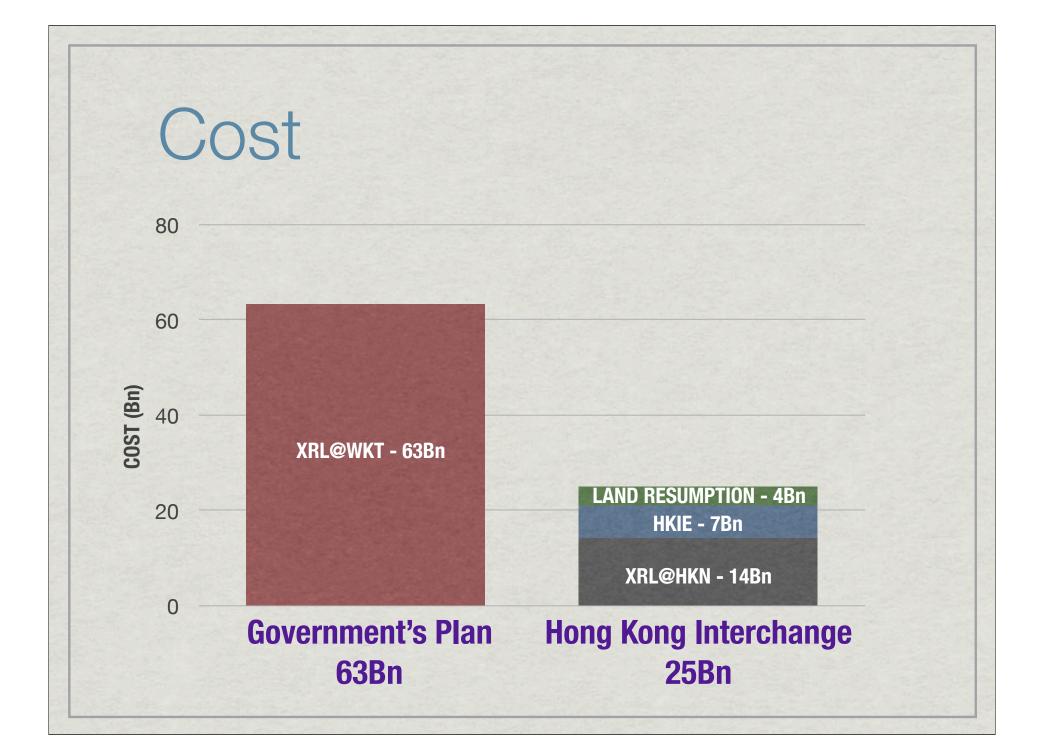


## **Advantages**

#### **\*** Cheaper

- \* Lower construction cost
- \* Lower operational cost
- \* Cheaper fares
- **\*** Faster
  - \* Easier local transfer
  - Shorter <u>Total Travel Time</u> for the majority of Hong Kong people
- **Better** 
  - \* Lower risk of construction delay
  - Increase patronage
  - \* Lower social and environmental impacts





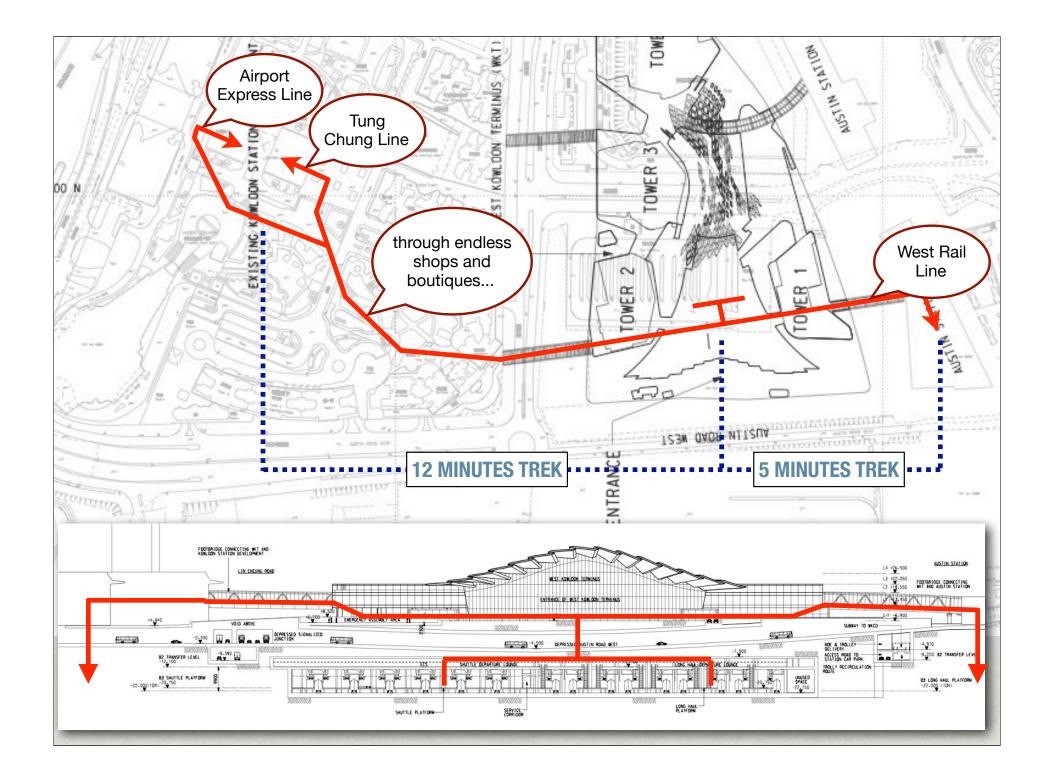
### Cost

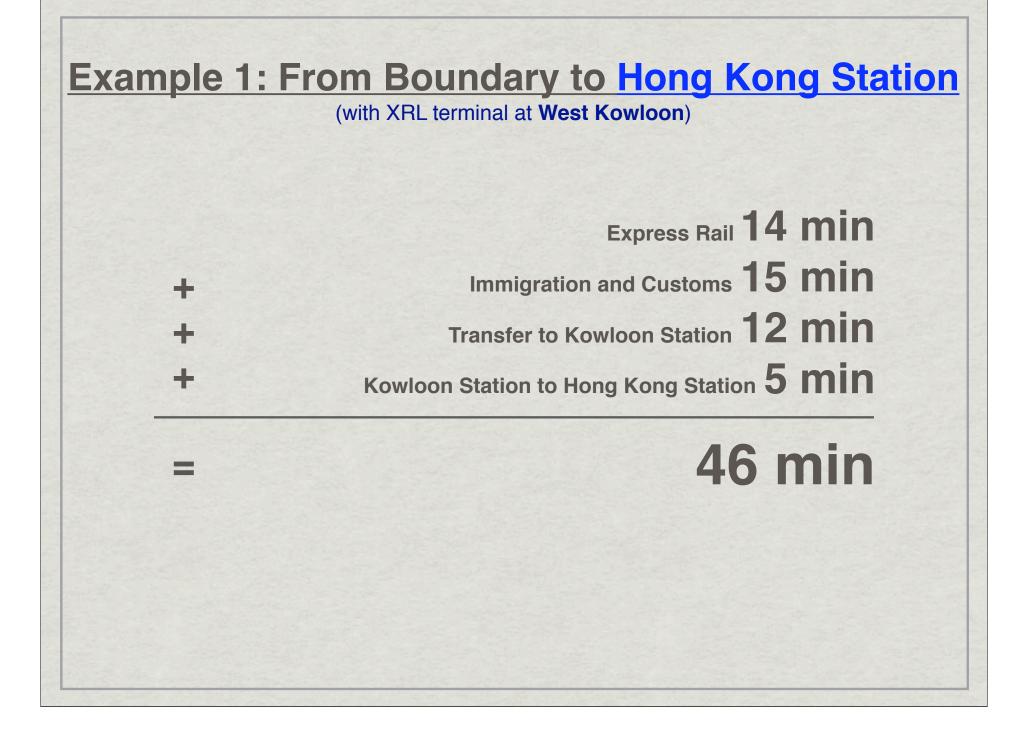
Cheaper Operational Cost
Shorter travel distance
Lower maintenance cost
More integrated design
Stabling closer to the terminus
Less energy consumption
More efficient use of existing infrastructure
Cheaper Fares

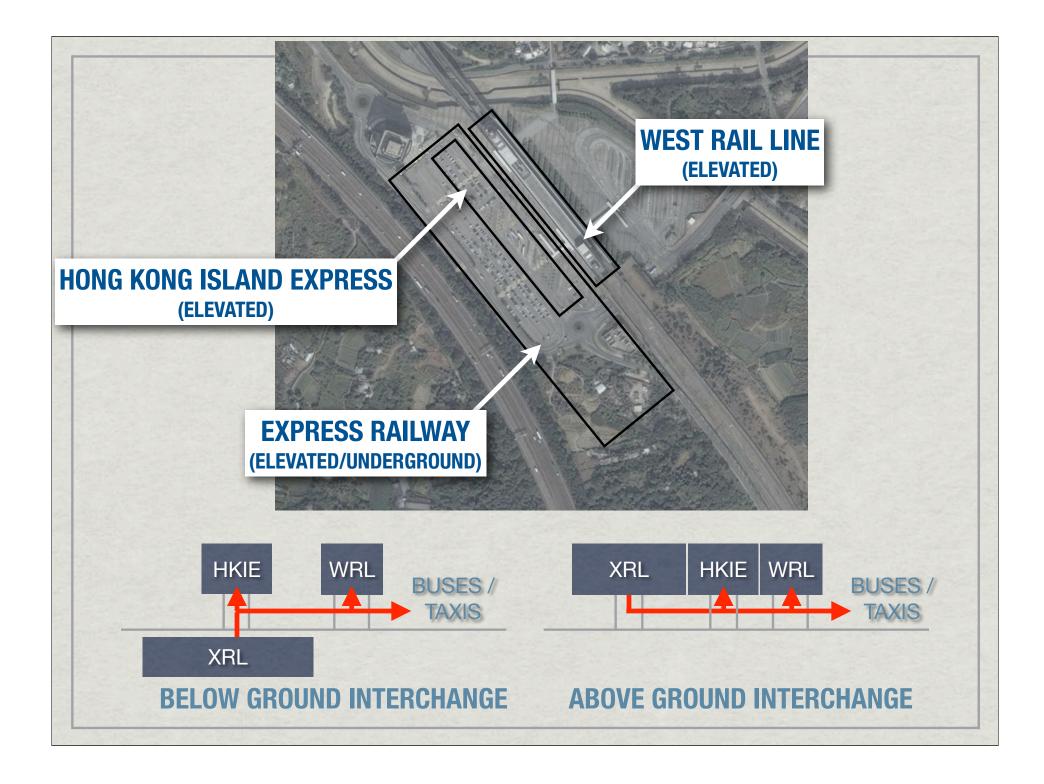


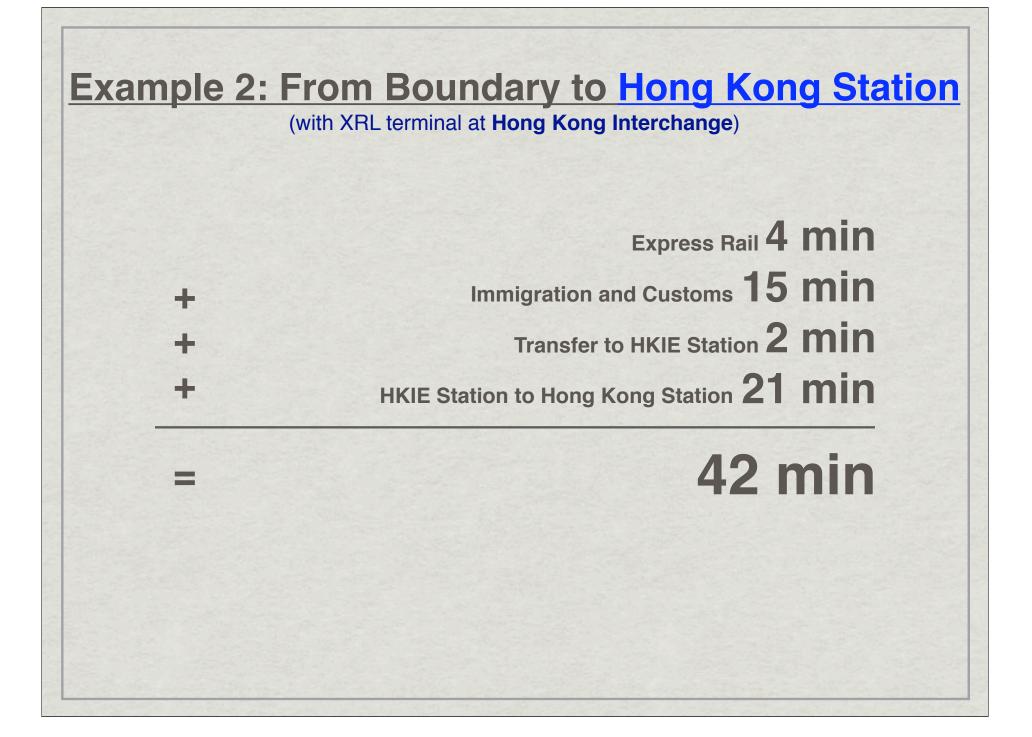
#### Express Rail Travel Time + Immigration and Customs Clearance + Transfer to Local Transportation + Local Travel Time

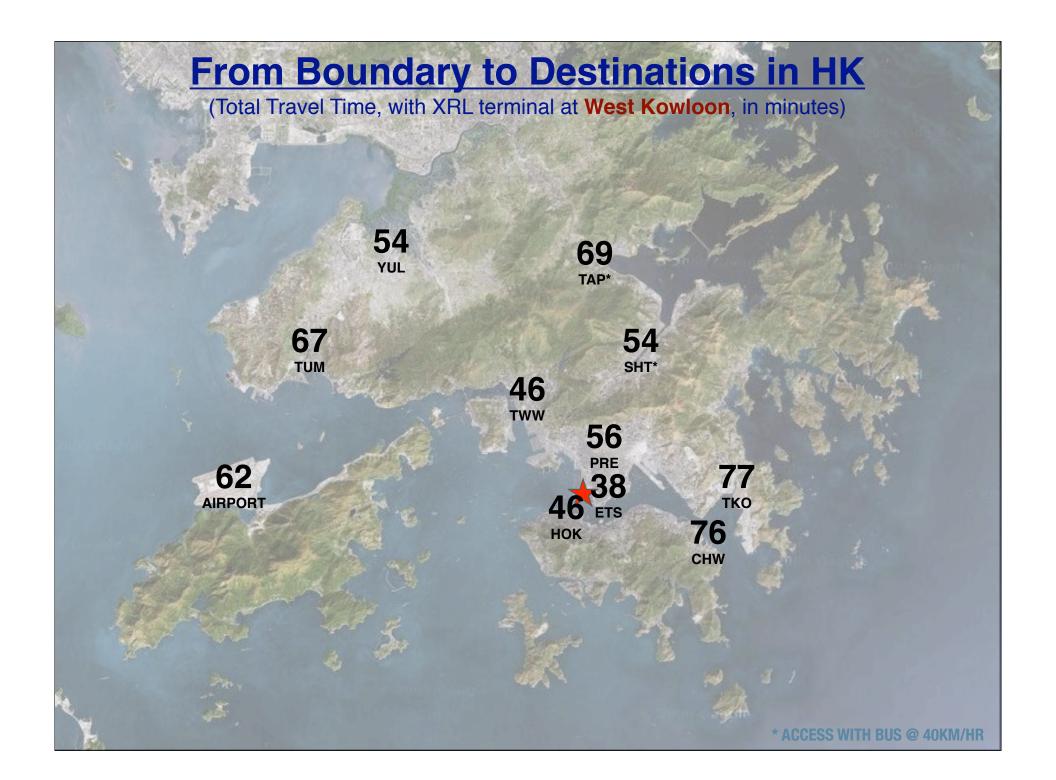
#### **Total Travel Time**

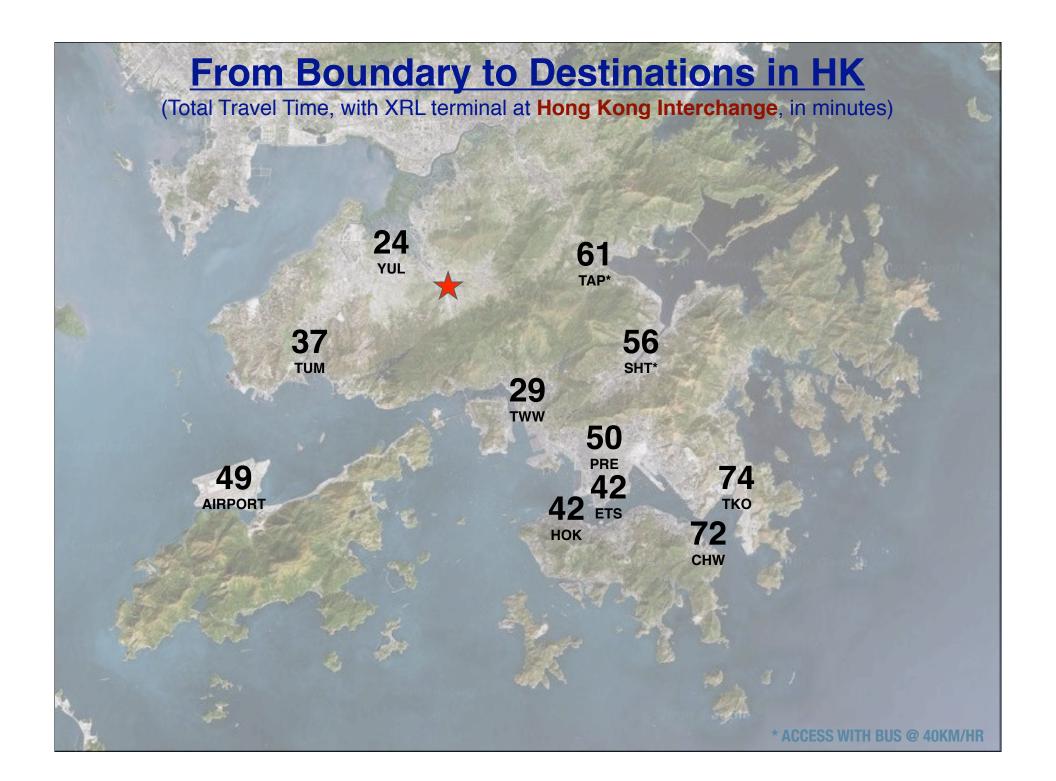


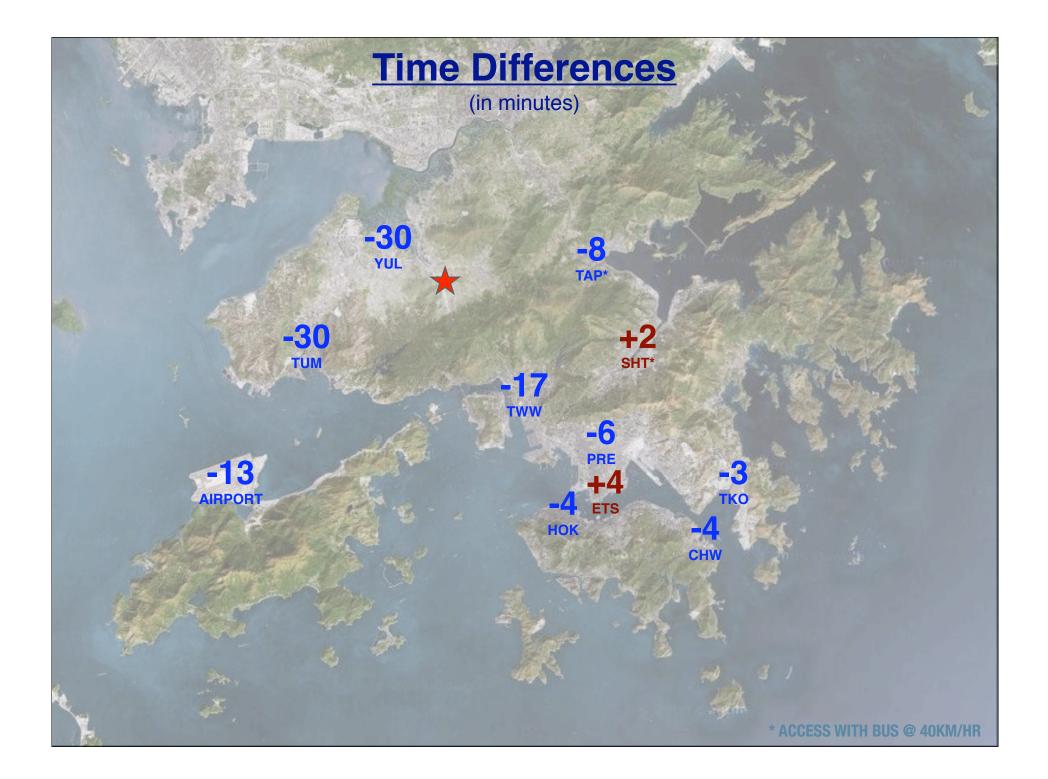














### **Construction Time**

**XRL with Terminus at West Kowloon** 

Construction by 2015 <u>High Risk</u> of Failing to meet the date

#### **XRL with Terminus at Hong Kong Interchange**

XRL Tunnels and Terminus 6 Years adequate with <u>Low Risk</u>

Hong Kong Island Express 6 Years adequate with <u>Low Risk</u>

Completion by 2015 if there is a Will to Succeed

# **Construction Time**

### Work in Parallel

Northern Component: XRL Tunnels and Terminus Southern Component: Hong Kong Island Express

Design, EIA and Gazette	1.5 Yr
Civil Construction	3 Yr
Systems / Architectural	1 Yr
Contingency	0.5 Yr
Total	6Yr

## Sustainability

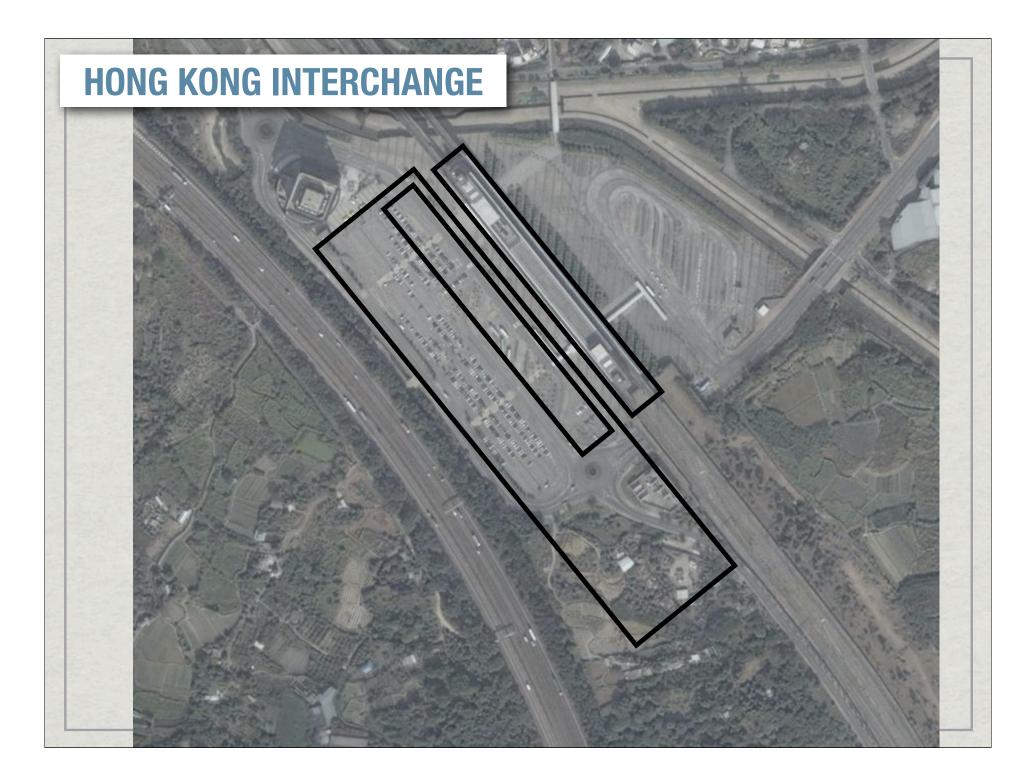
### **\* Social Impact**

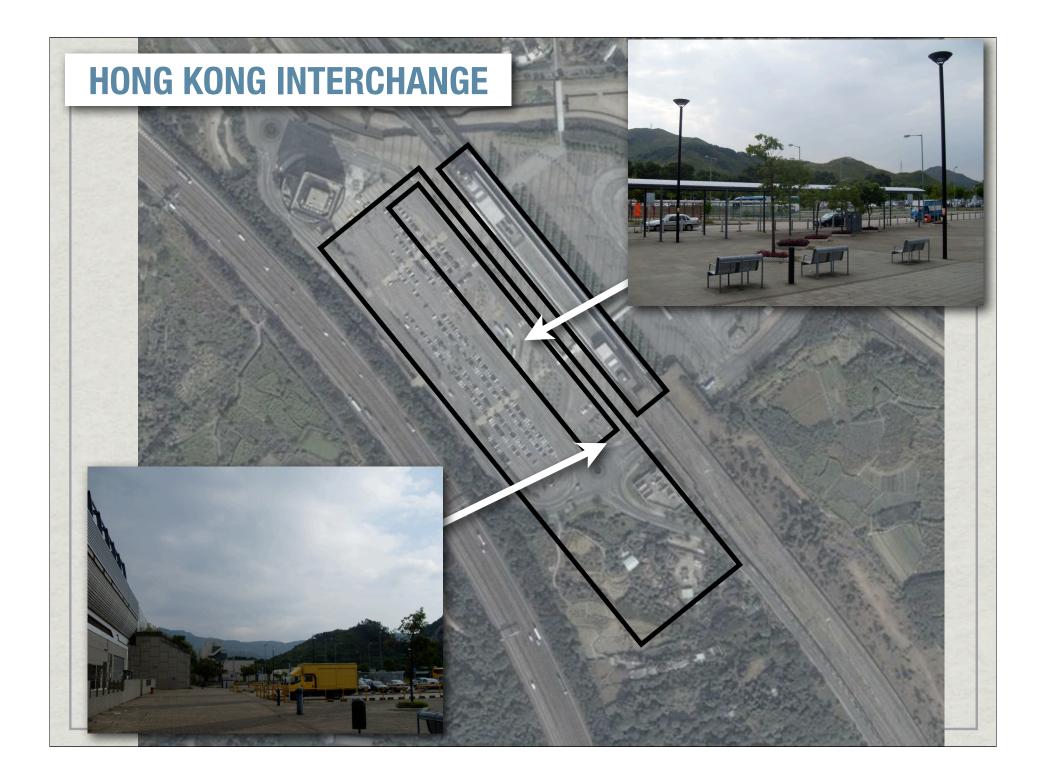
- \* Fairer: shorter total travel time for the majority of Hong Kong people - easy access from Yuen Long, Tuen Mun, Tsuen Wan and the Airport.
- \* Choi Yuen Tsuen saved.
- Minimal land resumption in Kam Tin and Pak Heung.

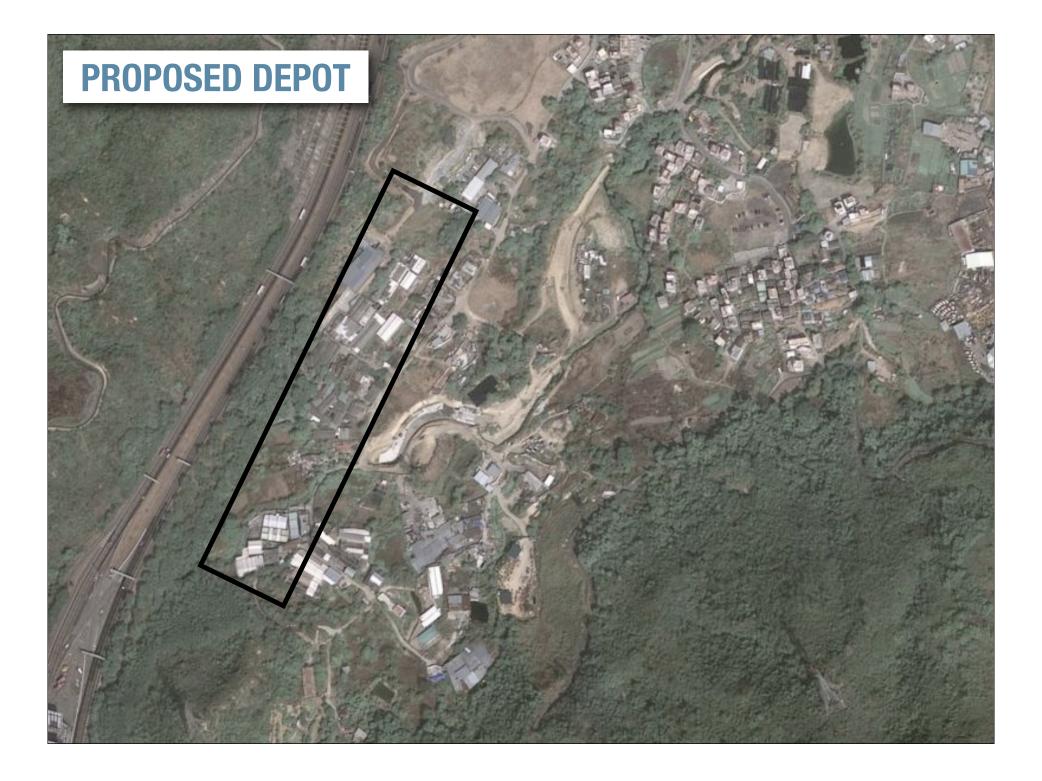


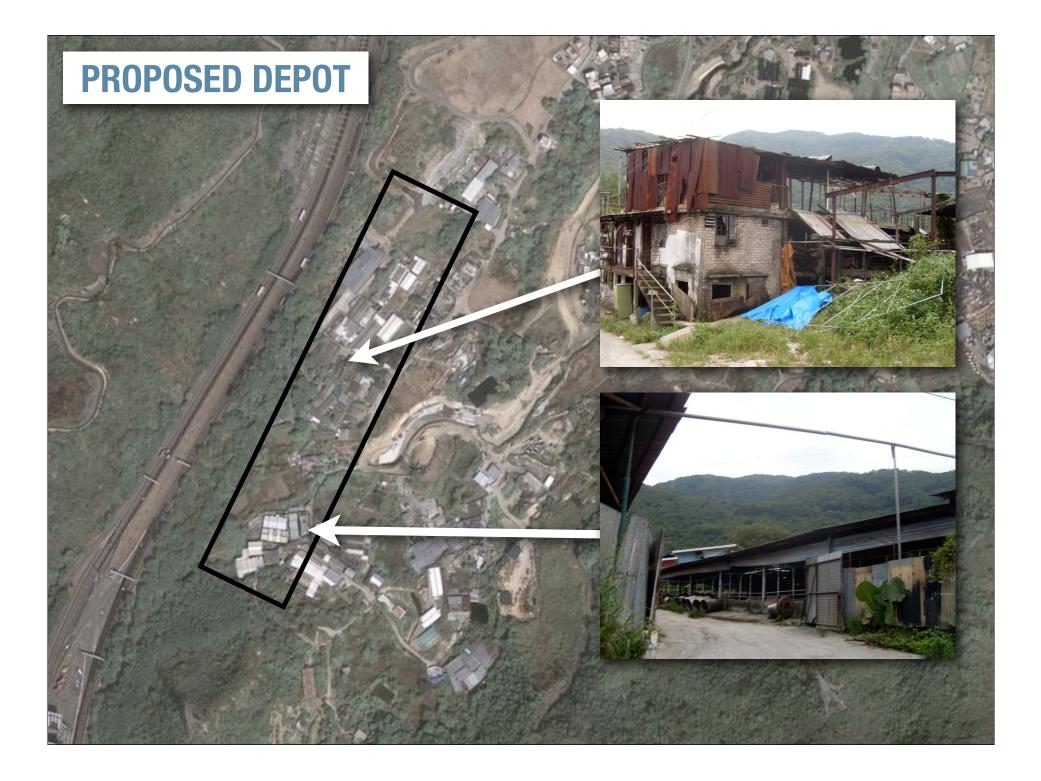
### **ESTIMATED LAND RESUMPTION**

- \* Hong Kong North Station
  - \* A car park
  - \* An electric substation
  - \* A few houses to the South
- \* Proposed Depot
  - \* Pig farms
  - Recycling storage
  - \* Abandoned houses









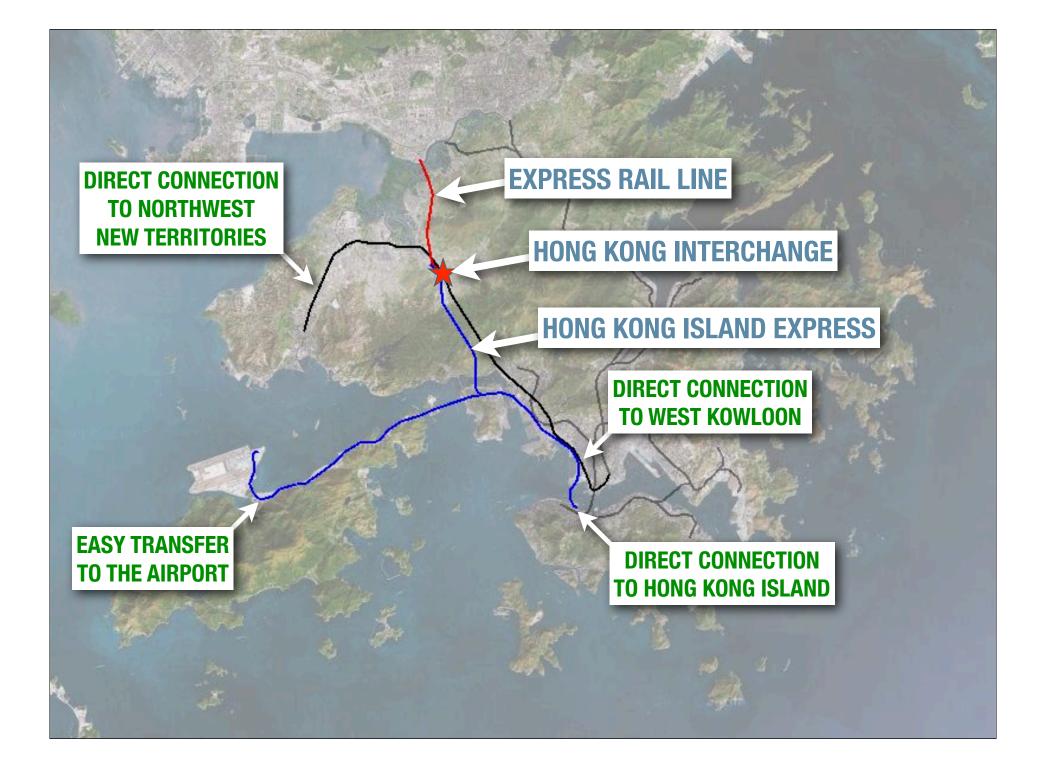
## Sustainability

### **\* Environmental Impact**

- Simpler construction
  - \* No need to dig up Jordan Road again.
  - \* No need for Emergency Rescue Station.
  - \* Less construction waste.
  - \* Much more efficient use of space.
- \* More passengers will use rail for local transfer.
- \* Lesser traffic congestion at West Kowloon.

### Other Advantages

- In-town check-in for long haul trains possible: using the current AEL model.
- \* Terminus construction can be staged to meet demand.
- \* Land sale at West Kowloon can proceed at anytime.
- \* Easier design and construction for the WKCD.





#### **OUR PROPOSED DEPOT SITE**

GOVERNMENT PROPOSED DEPOT SITE (CHOI YUEN TSUEN)

# Conclusion

# **Hong Kong North Station**

#### **Faster**

- # Easier local transfer
- Shorter <u>Total Travel Time</u> for the majority of Hong Kong people
- \* Lower risk of construction delay

#### \* Cheaper

- \* Lower construction cost
- \* Lower operational cost
- \* Cheaper fares

#### **Better**

- Increase patronage
- \* Lower social and environmental impacts

### **Expert Panel**

\* Dr Hung Wing-tat 熊永達
\* Ir Albert Lai Kwong-tak 黎廣德
\* Dr Leung Kai-chi 梁啟智
\* Mr Stanley Ng 吳永輝
\* Ms Pong Yuen-ying 龐婉儀
\* Ir Ronald Taylor 泰萊
\* Mr Paul Zimmerman 司馬文