



Rail Private Participation BOT, PPP & Franchising The Hong Kong Case

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Demand for Sustainable Urban Transit!!



Private Sector Investment in Rail

- Today involves a multiplicity of projects
- Assuring Investor returns starts from the initial concept , through the build and operational phase and into renewals.
- In Hong Kong and China the preferred model
- Looks for the state to provide the tunnel, track and foundation works, while the private partner provides station and infrastructure

Over the years, new lines and extensions were



West Rail (2003)



Lok Ma Chau Spur Line (2007)



Ma On Shan Line (2004)



Disney Resort Line (2005)



TKO Extension (2009)



Kowloon Southern Link (2009)



Tseung Kwan O Line (2002)

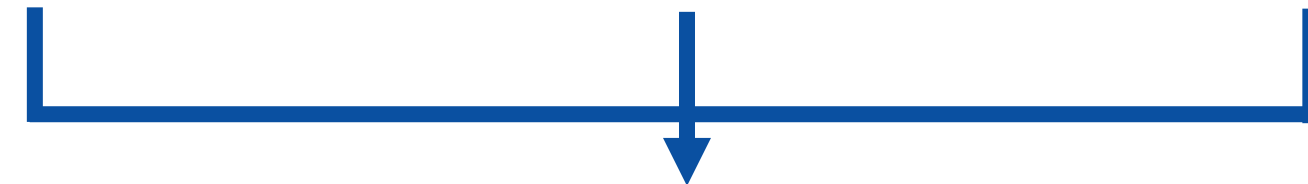
Alliances Between Govt, Railway Operators and Private Sectors



- Formulation of Transport Policy
- Town Planning
- Allocation of Public Resources
- Regulator of Projects

- Experience, Knowledge and Expertise
- System and Procedures
- Infrastructure and Equipment

- Funding
- Efficient Project Delivery
- Latest Technology and Innovation



How to promote alliances between the parties?

Getting Private Sector Involved – Viable Financial Models

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Challenges to the Government

Financial

1. How to **attract funds** to finance needed investment and operations
2. **Generate sufficient revenues** to recover operating and capital costs;
3. Limit spending on **other public services**
4. Increase Govt Financial Burden



Technical

4. **Skill and knowledge** on railway planning, design, construction, project delivery...
5. Employment of a lot of **Staff** to manage the project



Benefit of getting Private Sectors involved

1. Delivery *efficiency* in terms of saved time and resources
2. Introduce *commercial elements*
3. Improved *risk management*
4. Independent and multiple *verification of project feasibility*
5. Introduction of technological and delivery *innovation*
6. Reduced *public sector staffing need*
7. Reduction of political pressures on *fares*
8. Best *Assets* Management and Condition...

A viable financial model to attract the involvement of private sector?



Hong Kong Network Expansion at a Glance – Project Funding Model

Network Extensions		Estimated Route Length	Project Funding Model
West Island Line		3 km	“Funding Gap” filled by “Cash Grant”
South Island Line (East)		7 km	“Funding Gap” filled by “Rail plus Property”
Kwun Tong Line Extension		2.6 km	
Express Rail Link		26 km	Service Concession
Shatin to Central Link	- Tai Wai to Hung Hom	11 km	
	- Hung Hom to Hong Kong Island	6 km	



Government



Legislative Council



Capital Grant – West Island Line



OWNED



West Island Line



FUNDING WITH
CEILING



Government



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PROJECT MANAGEMENT

PLANNING

DESIGN

CONSTRUCTION

OPERATION



APPROVAL

Rail plus Property Model – South Island Line (East) & Kwun Tong Line Extension



Government
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PROJECT
MANAGEMENT



Kwun Tong Line
Extension

OWNED



South Island Line
(East)

PLANNING

DESIGN

CONSTRUCTION

OPERATION

PROPERTY
DEVELOPMENT

MTR to Pay:-

- Full market premium of the sites
- Development cost of the property developments
- Construction and operating cost of the railway

MTR to bear the risks in:-

- Financing the railway and property development
- Operating the railway
- Market fluctuations in railway and property development

MTR to Gain:-

- Growth in land value due to the investment on railway development provides funding assistance to the railway project

Railway + Property Model – Key Benefits

Government

1. No direct subsidy to rail
2. Significant land premium
3. Higher value for its MTR shares

Developer

1. properly planned sites with necessary enabling works
2. Less risky and uncertainty for the investment



Synergy of Rail + Property

Finance construction &
improve ridership

Improve accessibility & land
value



Community

1. People- Oriented
2. Quality Living Environment
3. Modern & Efficient City Living
4. Reasonable fare
5. Meet the housing demand

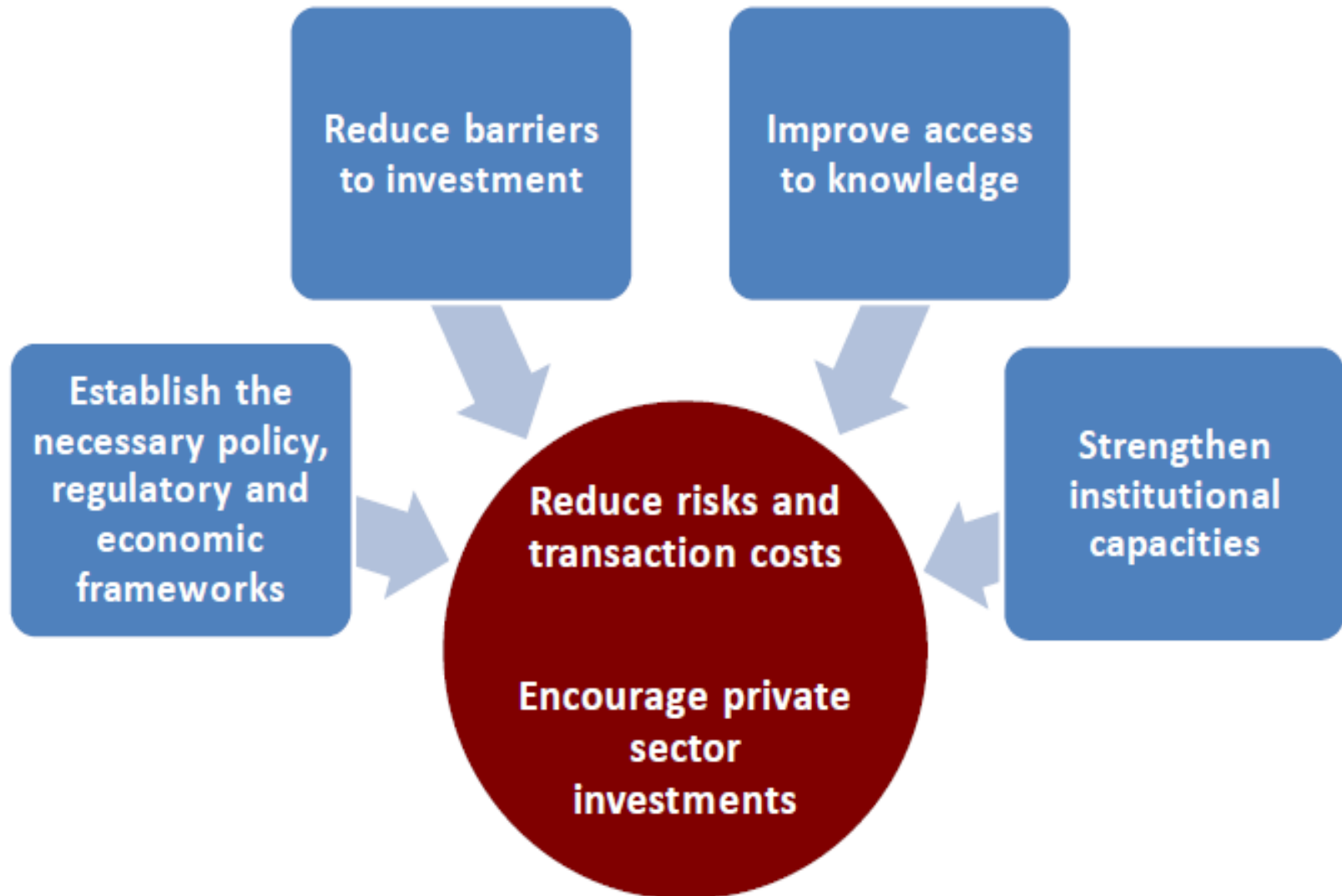


Railway Operator

1. Synergy effect that drives up both patronage and property value
2. Reasonable return to shareholders

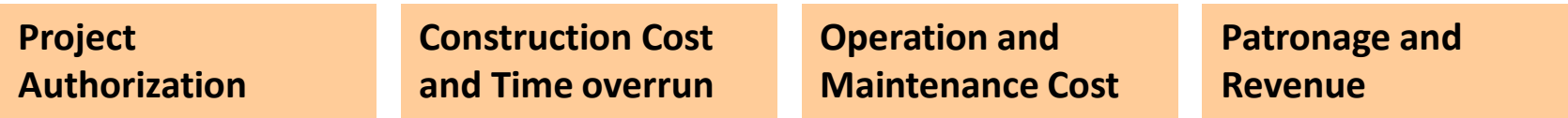


Create and Enabling Environment to Encourage Investment



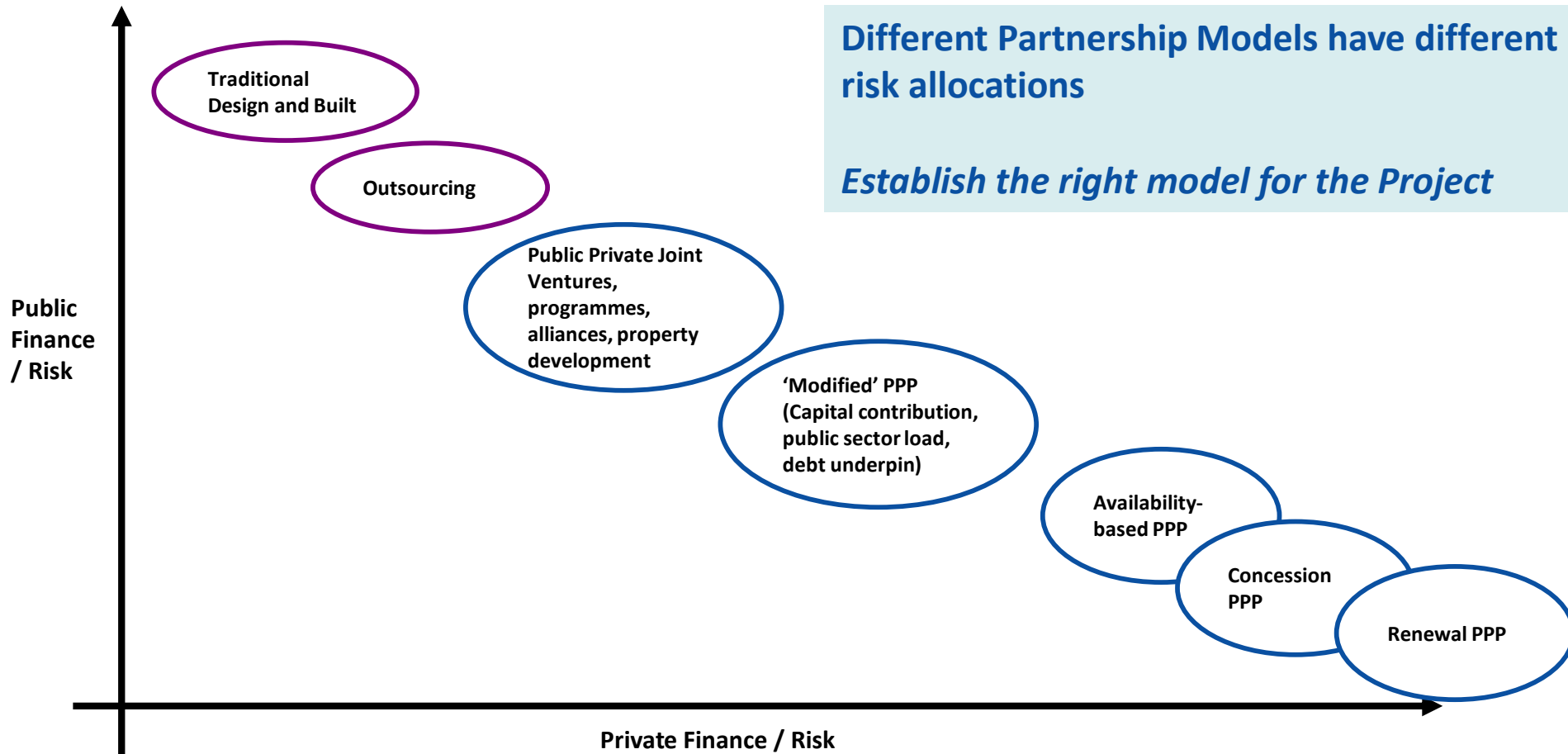
Proper Allocation of Risks

Various Risks Throughout Project Lift-cycle:



Different Partnership Models have different risk allocations

Establish the right model for the Project



Key to Successful Alliances



“Good” Partner

- Good knowledge of the local context
- Willing to risk a sustainable amount of capital at early in the project
- Financial strength to overcome expected and unexpected problems



“Good” Project Rational

- The Project makes strategic and economic sense
- With political support
- With support of local financial institutions

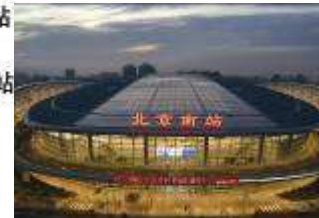


“Good” Returns

- Projects provides financial returns to the private sections
- A riskier undertaking is expected to yield a higher return

Beijing Line 4

28km, 24 stations



PPP Model for Beijing Line 4

- Capital Cost of BJL4: RMB 15.3 billion
 - 70% (RMB 10.7 billion) as Part A (mainly civil works)
 - funded by Beijing Government
 - 30% (RMB 4.6 billion) as Part B (mainly E&M works)
 - funded by Joint Venture Company (JV)
 - equity of RMB 1.4 billion & debt of RMB 3.2 billion
- JV responsible for the investment, construction of Part B & operation of BJL4
- Concession period: 30 years
(since opening on 28 Sep 2009)
- Fare Protection



Daxing Line Concession

(Beijing Line 4 Extension)

22km, 11 stations



- Concession Agreement signed on 30 Dec 2009
- Concession Period: 10 years
- Opening for Service: late 2010

North West Rail Link Sydney, Australia Funding Model

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Sydney – North West Rail Link

Three major contracts are planned:

- Tunnelling
- Surface construction works
- Rail systems, stations, trains and operations

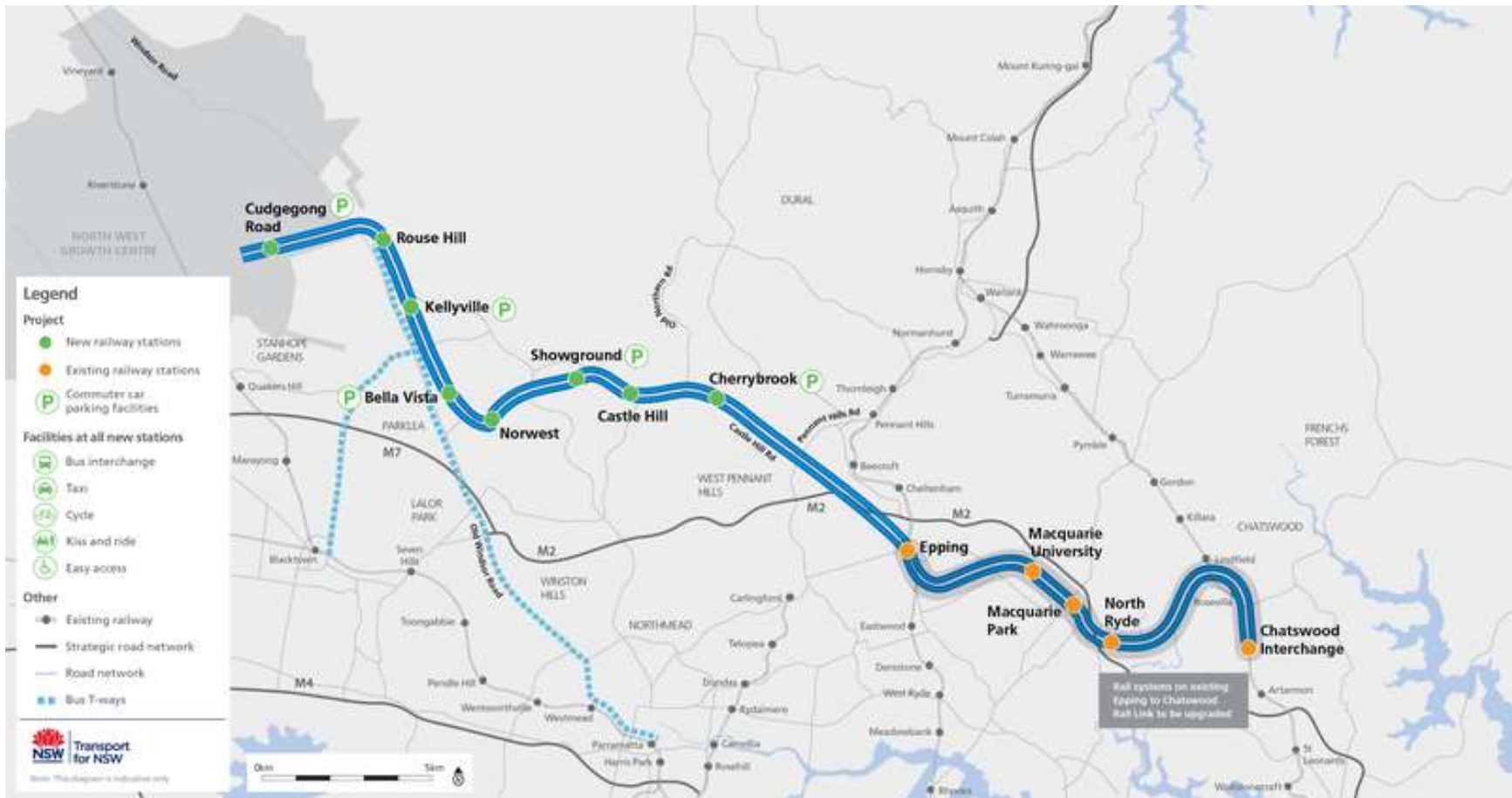
Key Points:

- *Line to be operated by the private sector*, with timetables and fares set by the Government
- Early construction work on the North West Rail Link is due to start in 2012
- Government is investing \$3.3 billion into the North West Rail Link over the next four years
- High-capacity *single-deck trains* will operate on the North West Rail Link
- NWRL will be part of a larger overhaul, including new second harbour crossing, new CBD stations, new lines in the CBD linking the North West to the city, conversion of the SW lines



North West Rail Link (Sydney, Australia)

(23km new trackworks, 8 new stations plus an upgrade of 13km existing session)



PPP Model for North West Rail Link

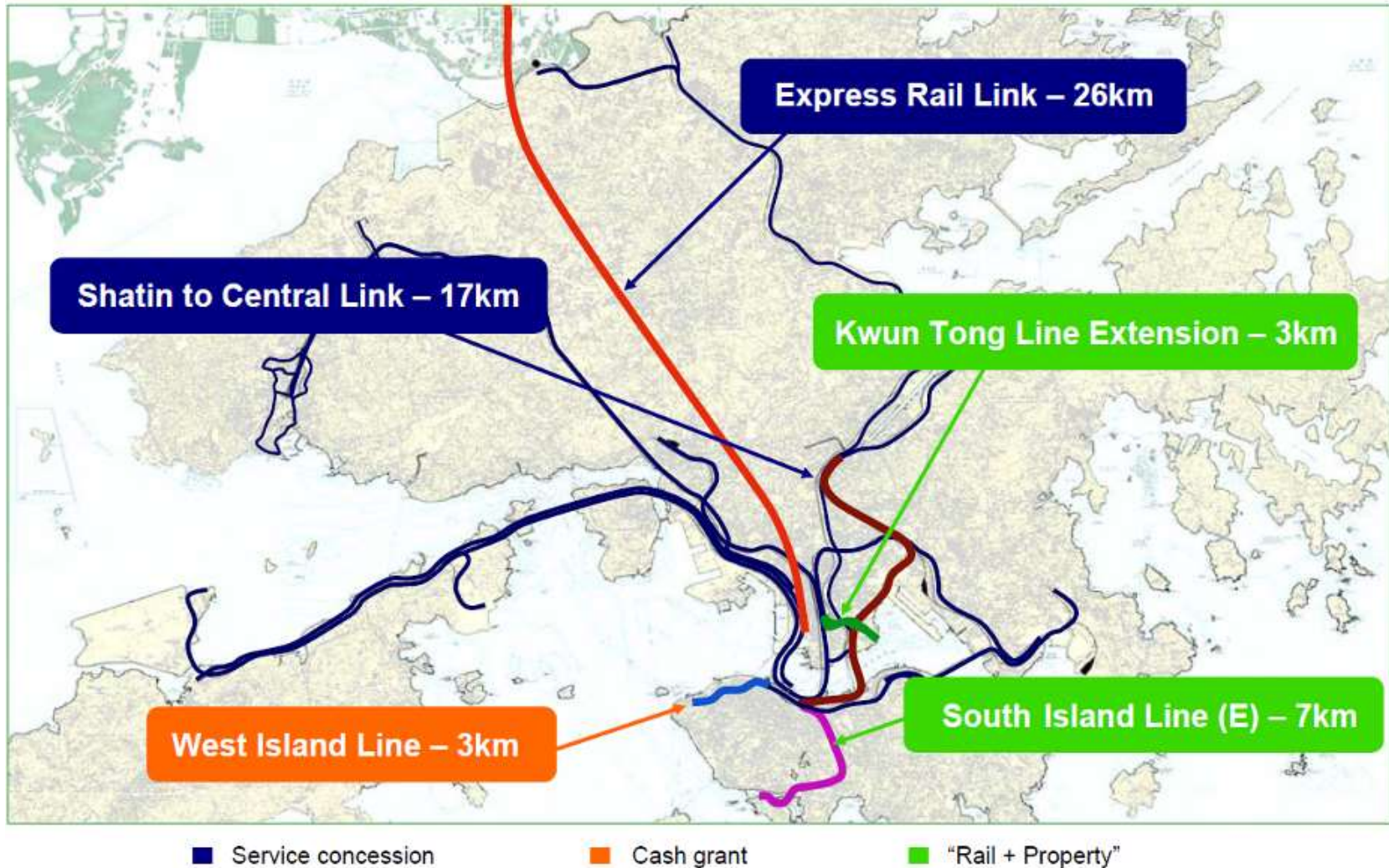
- AUD 8.3 billion project
- AUD 3.3 billion contribution by New South Wales Government
- 3 major contracts:
 - Tunneling
 - Surface construction works
 - Rail systems, trains and operations
- Open by the end of 2019
- Concession for 15 years

Funding Model for New Railway Projects in Hong Kong

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New Railway Projects in Hong Kong



MTR Ownership Model

Government Capital Contribution Model

Rail plus Property Model

West Island Line

- Construction progressing as planned
- Target to commence service in 2014

South Island Line (East)

- Project Agreement signed in May 2011
- Development right for a site at Wong Chuk Hang was granted
- Construction in progress
- Target to commence service in 2015

Kwun Tong Line Extension

- Project Agreement signed in May 2011
- Development right for a site at Ho Man Tin was granted
- Construction in progress
- Target to commence service in 2015



Service Concession Model

Project Cost 100% Funded by The Government.
Details of the O&M Concession to be agreed.

Guangzhou - Shenzhen - Hong Kong Express Rail Link (HK section)

- Entrustment Agreement signed with Government in Jan 2010
- Construction progressing as planned
- Target to commence service in 2015



Shatin to Central Link

- Entrustment Agreement signed with Government in May 2011 for advance works in Admiralty and Ho Man Tin
- Detailed design of the Tai Wai to Hung Hom section was substantially completed

