

CONTROLLING OFFICER'S REPLY

TLB016

(Question Serial No. 2404)

Head: (60) Highways Department

Subhead (No. & title): (-) Not Specified

Programme: (3) Railway Development

Controlling Officer: Director of Highways (YAU Kwok-ting)

Director of Bureau: Secretary for Transport and Logistics

Question:

Regarding the latest development of implementing the railway projects under the Railway Development Strategy 2014 and the Hong Kong Major Transport Infrastructure Development Blueprint, will the Government advise this Committee on the following:

1. What are the respective (i) anticipated/actual commencement dates; (ii) target completion dates; (iii) estimated expenditures; (iv) approved project estimates; (v) total length of the railway; (vi) cost per kilometre; (vii) estimated Economic Internal Rate of Return; (viii) years of postponement (if applicable); (ix) overspending/additional budget (if applicable); and (x) study or consultancy expenses (if applicable) of the railway projects?

Railway Projects	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)
Tung Chung Line Extension										
Tuen Mun South Extension										
Northern Link Phase 1 Kwu Tung Station										
Northern Link Main Line (Phase 2)										
Northern Link Spur Line										
Northern Link Eastern Extension										
Hung Shui Kiu Station										
South Island Line (West)										
East Kowloon Smart and Green Mass Transit System										
Kai Tak Smart and Green Mass Transit System										
Hung Shui Kiu/Ha Tsuen Smart and Green Mass Transit System (Phase 1)										

Hung Shui Kiu/Ha Tsuen Smart and Green Mass Transit System in (Remaining Phase)										
Hong Kong – Shenzhen Western Rail Link (Hung Shui Kiu – Qianhai)										
Automated people mover system from Tsim Bei Tsui to Pak Nai										
Central Rail Link										
Lo Wu South Station of East Rail Line										
Kau Yi Chau Artificial Islands Green Mass Transit System										
Central Rail Link										
Tseung Kwan O Line Southern Extension										
Science Park/Pak Shek Kok Station										
Oyster Bay Station										
Hong Kong Island West-Hung Shui Kiu Rail Link										
Northeast New Territories Line										

2. What are the manpower, establishments and expenditures involved in the implementation and monitoring of the aforesaid railway projects? How can the Government ensure that the works are implemented and completed on time, and that there are sufficient manpower and resources to implement various railway projects?
3. Did the Government develop a set of performance indicators in respect of safety, quality, project duration and cost control for new railway projects and railways in operation? If yes, what are the details? If not, what are the reasons?

Asked by: Hon CHAN Siu-hung (LegCo internal reference no.: 20)

Reply:

1. The detailed information on the railway projects mentioned in Question 1 is listed in **Annex 1**.
2. The establishments involved in the implementation and monitoring of railway projects by the Highways Department (HyD) (as at 1 March 2024) are as follows:

Rank	No. of permanent posts	No. of time-limited posts
Directorate	7	4*
Professional Grade	87	39
Technical Grade	31	-
General Grade	32	3

* Supernumerary directorate posts

The salary expenditure of the aforesaid posts in 2024-25 (in terms of notional annual mid-point salary value) is approximately \$200 million.

For those railway projects not currently implemented by the HyD, we do not have the breakdown figures of staff members and salaries involved because the subject staff members also undertake other responsibilities.

Based on the latest planning information and the progress of all the major transport infrastructure projects being constructed and planned, the Government will holistically review the delivery programme of the transport infrastructure projects under planning with a view to implementing the various projects progressively to meet the transport and logistic demands arising from the long-term developments. The Government, taking into account the planning and implementation work of the various railway projects, will review the manpower requirements of relevant departments as necessary and redeploy resources through established mechanisms. The Government would also monitor the performance of the MTR Corporation Limited (MTRCL) during the project implementation and remind MTRCL to deploy adequate manpower resources to implement the projects while ensuring safety and quality.

3. When implementing new railway projects, the Government will implement enhanced monitoring and control strategies in the projects, including (a) enhanced project supervision and communication platforms; (b) strengthened monitoring and checking levels; (c) incorporate the new “project safety review” process; (d) establish the proactive reporting and early warning mechanism; (e) oversee the project delivery performance monitoring of MTRCL; and (f) building-up collaborative culture, to ensure the new railway projects can fulfil requirements on the quality construction and on-time completion. The HyD has formulated a set of performance indicators to review the performance of the MTRCL regularly on various aspects of safety, quality, environmental protection, project duration, design management and review as well as communication with stakeholders.

Moreover, the Electrical and Mechanical Services Department (EMSD) is responsible for the regulation of the safety of railway operations and adopts the “risk-based” method with reference to past records to more strictly monitor, vet, inspect and check, and assess those areas (such as the components and equipment of individual railway system) that pose a higher risk to the safe operation of the railway. Inspecting and checking the railway facilities and systems is one of the performance indicators for regulating the safe operation of the railway.

Detailed Information of the Railway Projects

Railway Projects	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
	Anticipated commencement date	Anticipated completion date	Estimated construction cost	Approved project estimate	Increased railway length	Cost per kilometre (Note 1)	Estimated Economic Internal Rate of Return	Years of postponement (if applicable)	Overspending/ additional budget (if applicable)
Projects implemented by the HyD									
Tung Chung Line Extension	Commenced in 2023	2029	\$19.5 billion (in December 2020 prices)	See Note 2	About 2.5 km	N.A.	3.9%	N.A.	N.A.
Tuen Mun South Extension	Commenced in 2023	2030	\$15.8 billion (in July 2023 prices)	See Note 2	About 2.4 km	N.A.	0.6%	N.A.	N.A.
Northern Link Phase 1 Kwu Tung Station	Commenced in 2023	2027	\$5.9 billion (in July 2023 prices)	See Note 2	N.A.	N.A.	6.5 %	N.A.	N.A.
Northern Link Main Line	Works anticipated to commence in 2025	2034	See Note 3	See Note 2	About 10.7 km	N.A.	Under estimation	N.A.	N.A.
Northern Link Spur Line	The proposed Northern Link (NOL) Spur Line is about 5.8 km long and will provide a direct railway connection to the new Huanggang Port in Shenzhen. The governments of Hong Kong and Shenzhen are implementing the project jointly through the “Task Force for Hong Kong-Shenzhen Co-operation on Cross-Boundary Railway Infrastructure” (Task Force). The two governments are now proactively taking forward the relevant planning work of the NOL Spur Line with the target of								

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	commencing the detailed planning and design of the project within 2024. The project cost and implementation programme of the project will be confirmed during the design stage.								
Northern Link Eastern Extension	This project comprises the construction of railway of about 9.5 km in length to connect Kwu Tung Station (under construction) to Ping Che. It is anticipated that the initial commissioning target will be in 2039 and beyond. The details of the project are yet to be confirmed because the project is still in the initial planning stage.								
Hung Shui Kiu Station	Major works anticipated to commence in 2024	2030	See Note 3	See Note 2	N.A.	N.A.	Under estimation	N.A.	N.A.
South Island Line (SIL) (West)	The Government is proactively exploring suitable alternative transit systems which could meet the transport demand along the alignment as well as improve the technical feasibility and overall cost effectiveness of the project. We target to firm up a suitable technical solution within this year. When studying different technical schemes, we will also evaluate the implementation programme and construction cost. As such, we need to firm up the technical solution before providing any information on this aspect.								
East Kowloon Smart and Green Mass Transit System	The preliminary alignment is about 7 km in total. The Government plans to seek funding approval from the Public Works Subcommittee and Finance Committee of the Legislative Council in the first half of this year to engage consultants to carry out the investigation and design work. The work will commence in the middle of this year upon obtaining the funding approval. The Government also plans to invite suppliers and operators of the relevant systems to submit expressions of interest within the second half of this year with a view to finalising the specific requirements and design of the system and its infrastructural facilities. At the same time, we are working hard to expedite the original work schedule and strive to tender the construction works of the project in 2026 for the award of the works contract in 2027. The preliminary construction cost and implementation timetable of the project will be confirmed at the investigation and design stage.								
Hong Kong – Shenzhen Western Rail	The proposed HSWRL is about 18 km in length, with a length of about 8 km for the Hong Kong section. The first stage study which the Governments of Hong Kong and Shenzhen took forward through the Task Force was completed in end 2022								

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Link (Hung Shui Kiu – Qianhai) (HSWRL)	and the second stage study is anticipated for completion in mid-2024. The detailed planning of this project is subject to further discussion with Shenzhen.								
Central Rail Link	This project comprises the construction of railway of about 17 km in length to connect Kam Tin to Kowloon Tong. It is anticipated that the initial commissioning target will be in 2039 and beyond. The details of the project are yet to be confirmed because the project is still in the initial planning stage.								
Lo Wu South Station of East Rail Line	The Government is conducting the planning and engineering study for the New Territories North New Town and Man Kam To covering the Lo Wu South area. The Government will formulate relevant transport infrastructures subject to the planning of the proposed land use and its transport needs in order to cope with future development needs. The project information is subject to further study and is hence not available at this stage.								
Tseung Kwan O Line Southern Extension	The project comprises the construction of railway of about 4 km in length to connect the Lohas Park Station to Area 137. It is anticipated that the initial commissioning target will be between 2034 and 2038. The details of the project are yet to be confirmed because the project is still in the initial planning stage.								
Science Park/Pak Shek Kok Station	The Government has been working with the MTR Corporation Limited (MTRCL) to take forward the study on building a new East Rail Line Science Park/Pak Shek Kok station, with a view to unleashing the development potential of the areas and improving accessibility. The planning of the new station is underway.								
Oyster Bay Station	Commenced in 2023	2030	\$3.8 billion (in June 2022 prices)	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Northeast New	The project comprises the construction of railway which is about 8.5 km in length to connect Fanling Station to Heung Yuen Wai through Ping Che. The initial commissioning target is in 2039 or beyond. The details of the project are yet to be confirmed because the project is still in the initial planning stage.								

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Territories Line									
Projects implemented by other departments									
Kai Tak Smart and Green Mass Transit System	The total length of the preliminary alignment is about 3.5 km in length. The Government would carry out the investigation of this project as a Category D item. The Government has already invited tenders for the engagement of consultants to carry out the investigation of the Kai Tak system for the commencement of investigation in the middle of this year. The Government plans to invite relevant suppliers and operators to submit expressions of interest within the second half of this year. The Government also strives to invite tenders for the construction works of the project in 2026 for the award of the works contract in the first half of 2027. The preliminary project cost and the implementation timetable of the project will be ascertained in the investigation and design stages.								
Hung Shui Kiu/Ha Tsuen Smart and Green Mass Transit System New Development Area	The total length of the preliminary alignment is about 16 km in length. The Government would conduct the investigation and design of the phase 1 road works (about 4.5 km in length) under a Category D item. The Government is currently carrying out the procedures for the engagement of engineering consultants so as to commence the relevant investigation and design in the middle of this year. The preliminary project costs and the implementation timetables of the phase 1 road works will be confirmed at the investigation and design stages. The Government plans to invite relevant suppliers and operators to submit expressions of interest for the system in Hung Shui Kiu/Ha Tsuen within the second half of this year.								
Kau Yi Chau Artificial Islands (KYCAI) Green Mass Transit System	In order to cope with the planned development and traffic demands of the KYCAI, the Government initially proposes to link up the three proposed artificial islands through the Green Mass Transit System. The Government will review and determine the mode and alignment of the Green Mass Transit System based on the planning of KYCAI in a later stage.								

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Hong Kong Island West-Hung Shui Kiu Rail Link	<p>The Government strives to commence the statutory process of environmental impact assessment and gradually commence the detailed design for the reclamation of KYCAI within this year. The "Committee on the Financing of Major Development Projects" led by the Financial Secretary will continue to explore specific financial arrangements for overall major land supply and transport infrastructure projects. Based on the progress of the studies and assessments, the Government will formulate the implementation strategies for the KYCAI for preparing a budget and pragmatic project implementation programme for project investment and allocating manpower and material resources, striving to commence the reclamation project within the current term of government. Although the reclamation works of the KYCAI are slightly deferred, the Government will continue to allocate resources to carry out the studies on the KYCAI project, including the study on the Hong Kong Island West-Hung Shui Kiu Rail Link and other strategic transport infrastructures and the engineering feasibility study of the KYCAI Green Mass Transit System. The approved project estimate for Item 5768CL "Studies related to artificial islands in the Central Waters" is \$550.4 million. The studies mainly comprise the planning and engineering study on the KYCAI, and the engineering feasibility study of the Hong Kong Island West-Hung Shui Kiu Rail Link and the KYCAI Green Mass Transit System. There are no separate cost breakdown for the engineering feasibility study of the aforesaid railway and the Green Mass Transit System.</p>								
Green Transport Corridor from Tsim Nei Tsui to Pak Nai (subject to study)	<p>The Government is currently exploring the feasibility of connecting Tsim Bei Tsui to Pak Nai by green transport corridor. The details of the information are subject to further study.</p>								

The studies that will be carried out by consultants under the Programme of Railway Development in 2024 and their estimates are as follows:

Studies carried out by consultants	Approved project estimate / approved amount of commitment (\$ million)
1. Strategic Study on Railways beyond 2030	64.90
2. Consultancy study on Checking Design for Tung Chung Line Extension Project	9.84
3. Consultancy study on Independent Checking of the Financial Arrangement of Tuen Mun South Extension Project - Investigation	4.16
4. Stage 2 Study of Hong Kong - Shenzhen Western Rail Link (Hung Shui Kiu - Qianhai)	9.90
5. Consultancy study on Independent Checking of the Financial Arrangement of Kwu Tung Station on East Rail Line - Investigation	4.40
6. Consultancy study on Independent Checking of the Financial Arrangement of Hung Shui Kiu Station Project - Investigation	4.79
7. Consultancy study on Independent Checking of the Financial Arrangement of Northern Link Main Line Project - Investigation	9.93
8. Consultancy Services for Risk Assessment in relation to Project Supervision, Monitoring and Checking for Tuen Mun South Extension, Northern Link Phase 1 Kwu Tung Station and Hung Shui Kiu Station Projects - Investigation	11.68

Studies carried out by consultants	Approved project estimate / approved amount of commitment (\$ million)
9. Consultancy Services for Risk Assessment in relation to Project Supervision, Monitoring and Checking for Tung Chung Line Extension, Oyster Bay Station and Airport Railway Extended Overrun Tunnel Projects - Investigation	11.86
10. Smart and Green Mass Transit System in East Kowloon - Investigation and Design	190.90 (Subject to tender and funding application. Anticipate to seek funding approval from the Public Works Subcommittee and the Finance Committee of the Legislative Council in the first half of this year.)

Note 1: The works involved in various projects are not the same. Apart from the constructions works of railway facilities, some projects may also involve the constructions works other than those of railway facilities, such as reprovisioning of affected facilities, improvement works and enabling works etc. Therefore, it is not suitable to make a comparison by cost per kilometre.

Note 2: The Tung Chung Line Extension, Tuen Mun South Extension and Northern Link Phase 1 Kwu Tung Station are implemented by the MTRCL through the "Rail-plus-Property" model. No approved project estimate of the Government is involved. The detailed planning and design of the Northern Link Main Line and Hung Shui Kiu Station are underway. The Government would seek the most suitable financing scheme for the projects on a case-by-case basis.

Note 3: The Government and its independent consultants are currently accessing the detailed planning and design of the MTRCL to update the costs and estimated Economic Internal Rate of Return of the Northern Link Main Line and Hung Shui Kiu Station.

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