

CONTROLLING OFFICER'S REPLY

TLB024

(Question Serial No. 3167)

Head: (60) Highways Department

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

Programme: (4) Technical Services

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

Director of Bureau: Secretary for Transport and Logistics

Question:

Regarding the “Smart Lighting Management System”, will the Government advise this Committee on the following:

1. What were the annual expenditures on the installation of the “Smart Lighting Management System” used by the Government from 2022-23 to date? What is the relevant estimated expenditure for this year?
2. What were the operating expenses for the “Smart Lighting Management System” in each of past 3 years? What are the relevant operating expenses for this year?
3. Please provide a breakdown by the 18 District Council of the numbers of road lights installed with the “Smart Lighting Management System” in various districts since its introduction. What are the estimated numbers of road lights planned for installation in various districts for this and next years?
4. What is the average repair time for road lights currently installed with the “Smart Lighting Management System” upon failure? How has the repair time changed compared to the period prior to the installation of the system?
5. How has the frequency of nighttime patrols for the public lighting network changed for the road lights currently installed with the “Smart Lighting Management System”, as compared to the period prior to the implementation of the system?
6. What was the manpower establishment responsible for the management and repair of road lights in each of the past 3 years?

Asked by: Hon CHAN Kapui, Judy (LegCo internal reference no.: 38)

Reply:

1. The annual expenditures incurred by the Highways Department (HyD) for the installation of the “Smart Lighting Management System” from 2022-23 to date are as follows:

	2022-2023 Actual (\$ million)	2023-2024 Actual (\$ million)	2024-2025 Actual (\$ million)	2025-2026* Actual (\$ million)	2026-2027 Estimate (\$ million)
Installation expenditures	11.54	6.30	17.79	20.21	47.07 ^{Note 1}

*As at 12 March 2026

Note 1: The “Smart Lighting Management System” in Kowloon and New Territories are undergoing installation and testing stages. It is anticipated that a larger portion of the relevant expenditures will be settled upon completion of installation works in 2026-27.

2. The operational expenses incurred by the HyD for the “Smart Lighting Management System” in each of the past 3 years and this year are as follows:

	2023-2024 Actual (\$ million)	2024-2025 Actual (\$ million)	2025-2026* Actual (\$ million)	2026-2027 Estimate (\$ million)
Operational expenses	3.36	4.48	6.13	12.14 ^{Note 2}

*As at 12 March 2026

Note 2: The “Smart Lighting Management System” in Kowloon and New Territories are expected to gradually commence service in 2026-27. Therefore, there will be an increase in operational expenses.

3. The numbers of road lights installed with the “Smart Lighting Management System” in various districts since its introduction and the estimated numbers of road lights that are planned for installation of the said system in various districts in this year and next year are as follows:

District	Already installed Actual No.*	2026-2027 Estimated No.	2027-2028 Estimated No.
Kwai Tsing	1 600	4 500	-
Tsuen Wan	-	5 100	-
Tuen Mun	7 700	800	-
Yuen Long	500	19 600	-
North District	12 900	500	550
Tai Po	10 400	1 600	-
Sha Tin	11 000	2 000	-
Sai Kung	8 800	1 600	-
Kowloon City	4800	1 000	-
Wong Tai Sin	2 200	600	-
Sham Shui Po	3 500	1 000	-
Kwun Tong	4 900	1 000	-
Yau Tsim Mong	4 400	1 200	-
Central and Western District	5 200	-	-
Eastern District	4 000	-	-
Wan Chai	4 000	-	-
Southern District	4 400	-	-
Islands District	4 400	9 000	-

*As at 12 March 2026

- In the past, the public lighting network lacked an automatic fault feedback mechanism. The HyD relied solely on manual inspections or public reports to identify malfunctions in the lighting equipment. Upon receiving public reports of streetlight malfunction, the HyD's contractors generally complete rectification for urgent faults involving simple repairs (such as adjustment and replacement of lamps) within 3 hours, while other urgent cases are resolved within 12 hours.

The road lights with the “Smart Lighting Management System” can monitor the conditions of public lighting network by measuring the operating parameters of each lighting equipment in real time. Upon detecting abnormal operating parameters, the system delivers the fault alerts to maintenance personnel for fault investigations and repairs. Overall speaking, the “Smart Lighting Management System” can identify about 90% of road light’s faults reported by the public, and repairs of about 30% of faults are completed by contractors before receiving reports from the public.

5. The “Smart Lighting Management System” in Kowloon and New Territories are still undergoing installation stage, while the system in Hong Kong Island is being continuously fine-tuned to optimise the system and improve its stability. When the “Smart Lighting Management System” commences full service, it is anticipated that the number of nighttime patrols for the public lighting network can be reduced by about 50%.
6. The manpower establishment of the HyD responsible for the management and maintenance of road lights in each of the past 3 years are as follows:

	2023-2024	2024-2025	2025-2026
Staff establishment	116	116	114

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