

## LCQ22: Tree management work

Following is a question by the Hon Tony Tse and a written reply by the Secretary for Development, Mr Michael Wong, in the Legislative Council today (July 21):

Question:

The Government currently adopts an "integrated approach" for tree management, under which the departments responsible for the government facilities or land concerned are also tasked with inspecting and taking care of those trees at the places under their purview. In October 2019, the Greening, Landscape and Tree Management Section of the Development Bureau (DEVB) established a dedicated Inspection Squad, tasked with randomly checking and auditing the tree inspection reports completed annually by the tree management departments, as well as proactively inspecting every year the trees located in areas with high pedestrian and vehicular traffic flows (heavy traffic areas), and taking follow-up actions on problematic trees. However, tree failure incidents still happen every now and then. For example, during the heavy rainstorms on the 1st and 28th of last month, a number of trees located beside pavements or carriageways collapsed, crushing and damaging a number of vehicles and causing traffic jams. Regarding tree management work, will the Government inform this Council:

(1) of the current number of trees maintained by the Government and located in heavy traffic areas and, set out, by tree management departments, a breakdown of such figure and the manpower involved;

(2) of the following details of the tree inspection work undertaken by each tree management department (i) in each of the past three years and (ii) since January this year: the respective numbers of (a) inspections conducted, (b) trees inspected, (c) problematic trees identified, and (d) trees with risks of failure removed;

(3) of the respective numbers of tree failure incidents which occurred (i) in each of the past three years and (ii) since January this year in which (a) casualties, (b) serious traffic jams and (c) damages to vehicles/facilities were caused; whether it has assessed if the inspection work undertaken by the tree management departments has been satisfactory and sufficient, and whether such departments will step up inspection work;

(4) whether, in light of the recent tree failure incidents, it has reviewed if the work performance of the Inspection Squad has been satisfactory, and whether it will consider increasing the manpower for conducting inspections and the frequency of inspections;

(5) of the number of cases of inadequacies in tree management work identified during random checking and auditing of tree inspection reports and tree inspections, as well as what recommendations on improvement measures were made to the relevant departments, by the Inspection Squad since last year;

and

(6) whether it will review the current guidelines for planting trees in heavy traffic areas such as places beside pavements and carriageways (e.g. guidelines on species selection and the distance needed between a tree and a pavement/carriageway), so as to reduce the risks of tree failure; whether, in respect of those existing trees which are not in compliance with the relevant guidelines and may cause serious losses to lives and properties in case of tree failure, the Government will consider removing or carrying out strengthening works for such trees?

Reply:

President,

The Government is committed to the proper management of tree assets to ensure healthy tree growth and with safeguarding public safety as the prime objective. In respect of the six-part question raised by the Hon Tony Tse, the consolidated reply, upon consultation with relevant departments, is as follows:

(1) Trees on government land and within government facilities are managed by respective tree management departments through in-house teams or outsourced contracts or both. A total of approximately one million trees are located at high pedestrian flow and high traffic flow areas. The number of these trees maintained by the nine core tree management departments and their number of tree management personnel are as follows:

Core tree management department	Number of trees at locations of high pedestrian and high traffic flow (Note 1) (as at December 31, 2020)	Number of tree management personnel (Note 2) (as at December 31, 2020)
Agriculture, Fisheries and Conservation Department	32 500 (Note 3)	87 (87)
Architectural Services Department	105 700	5 (4)
Civil Engineering and Development Department	9 000	11 (11)
Drainage Services Department	4 200	7 (5)
Highways Department	308 700	53 (51)
Housing Department	89 100	63 (55)
Lands Department	N/A (Note 4)	41 (7)
Leisure and Cultural Services Department	390 000	263 (263)

Water Supplies Department	4 700	16 (2)
Total	943 900	546 (485)

(2) In the past three years, the number of tree inspections, number of trees inspected and number of trees with risks of failure removed after assessment by tree management departments according to the "Guidelines for Tree Risk Assessment and Management Arrangement" (the Guidelines) promulgated by the Development Bureau (DEVB) are set out below:

	2018-19 (Note 5)	2019-20 (Note 5)	2020-21 (Note 5)
Number of tree inspections	47 088	47 961	41 153
Number of trees inspected (Note 1)	1 015 800	971 800	943 900
Number of trees with risks of tree failure removed (Note 1)	10 900	7 800	5 600

(3) The number of tree failure reports and various incidents caused by tree failure in the past three years and as at June of this year are set out below:

	2018	2019	2020	2021 (as at June)
Number of individual tree failures (Note 6)	276	244	358	114
Number of incidents caused by tree failure (Note 7)				
Casualties (Note 8)	20	23	16	4
Traffic obstruction	71	35	109	17
Damage to vehicles, properties or other facilities	87	81	137	49

Like other living organisms, trees will go through stages of a life cycle, including growth, age, sickness and death. Numerous physiological and environmental factors may integrate together to give considerable variables that affect tree health and stability. Nevertheless, proper tree maintenance and systematic tree risk assessment are effective means to reduce the risk of tree failure and safeguard public safety. In the past three years, the number of fallen trees accounted for an average of about 0.03 per cent (three ten-thousandths) of the total number of trees in locations of high pedestrian and vehicular traffic flow in Hong Kong. We will continue to work closely with departments to reduce the risk of tree failure.

(4) and (5) In 2020, the dedicated Inspection Squad under the Greening,

Landscape and Tree Management Section of the DEVB randomly checked and audited five per cent of the tree inspection reports completed by the tree management departments (involving 2 614 reports) in a systematic approach. The inspection mechanism has operated smoothly at large and has found that, following the requirements of the Guidelines, departments conducted tree risk assessment and implemented appropriate risk mitigation measures in a professional manner before the onset of the wet season, achieving the expected outcomes of enhanced tree management and protecting public safety. Nonetheless, missing information in individual reports were occasionally detected by the DEVB. Apart from requiring relevant departments to take follow-up actions, we also enhanced the Tree Management Common Platform for use by departments to facilitate their completion and submission of tree risk assessment reports through the cloud technology and the geographical information technology, with a view to improving the efficiency and quality of work. We will review the tree risk assessment, workload and manpower arrangement of the Inspection Squad as and when appropriate.

Besides, to strengthen departments' tree inspection work, the Inspection Squad of the DEVB has proactively inspected trees in 126 spots of high pedestrian and vehicular traffic flow covering 18 districts in 2020 in extra, and instructed departments to take follow-up actions on about 200 problematic trees, representing about five per cent of all the inspected trees. In case a problematic tree is found, the Inspection Squad would immediately request the relevant tree management department to take follow-up actions, such as pruning, controlling pests and diseases, and removing withered branches or even the whole tree.

(6) Planting trees and vegetation along roadside can enhance the visual environment, act as buffer between a carriageway and a footpath, and also help to filter and block exhaust emissions from vehicles. Planting trees adjacent to a footpath not only provides natural shade for pedestrians, it also regulates the roadside microclimate more effectively. Roadside tree planting has also been adopted in other cities, such as Tokyo, Singapore and Shenzhen, as their standard road greening practices.

On the selection of tree species, the "Street Tree Selection Guide" promulgated by the DEVB introduces 80 tree species which have the qualities to adapt to urban street environment, such as tolerant to heat, drought, wind, pollution, waterlogging, etc. for reference by departments in their selection of tree species. Under the principle of "right tree, right place" advocated by the DEVB, departments will holistically consider site conditions, space constraints and other factors including the microclimate of the planting site (such as strong winds, sun/shade conditions, etc.), as well as the characteristics, height, size, form and maintenance requirement of trees during the selection process.

Note 1: Rounded to the nearest 100.

Note 2: Depending on departments' operational needs, some personnel are not only responsible for tree management, but also undertake other duties such as landscape design and project supervision. The figures in brackets represent the number of tree management personnel with professional qualifications in

arboriculture (including Certified Arborist, Certified Arborist Municipal Specialist and Tree Risk Assessment Qualification of the International Society of Arboriculture; Professional Tree Inspection by Lantra Awards; Technician of the Arboriculture Association, etc.).

Note 3: The Agriculture, Fisheries and Conservation Department manages all the trees in country parks. The figures include only the number of trees in frequently used areas and facilities.

Note 4: The Lands Department is responsible for the non-routine maintenance of trees on unallocated and unleased government land that are not maintained by any designated government departments. Due to their large number, trees on such land cannot be counted. The Lands Department will follow up referrals and complaints when they arise.

Note 5: Departments are required to follow the Guidelines to conduct tree inspection before the onset of wet season each year, and to conduct tree risk assessment and complete risk mitigation measures. Tree inspection includes tree group inspection and individual tree risk assessment.

Note 6: Excluding the number of tree failures after the issuance of Tropical Cyclone Warning Signal No. 8 or above.

Note 7: An individual tree failure may result in more than one incidents.

Note 8: There was one fatal tree failure incident in 2018. Other figures are tree failure incidents resulting in injuries.