LEGISLATIVE COUNCIL PANEL ON TRANSPORT

Progress Report of Speed Limit Review 2002

PURPOSE

This paper sets out the progress of the speed limit review exercise conducted in 2002 for Members' information.

BACKGROUND

- 2. At the meeting of the Legislative Council (LegCo) Panel on Transport held on 27 October 2000, Members noted that the review on the speed limits of trunk roads and primary distributors was conducted regularly. In response to Members' request, the Administration undertook to provide Members with a progress report on the review on an annual basis.
- An information paper (LC paper No. CB (1)1110/01-02(01)) on the progress of the speed limit review 2001 was issued for the meeting of the LegCo Panel on Transport on 22 February 2002. Members were informed that the speed limit of five road sections had been relaxed from 50 km/h to 70 km/h in late 2000 and the first half of 2001 and the speed limits of the following four road sections were planned to be raised to 70 km/h or 80 km/h
 - (a) Tai Po Tai Wo Road (between On Cheung Road and Yuen Shin Road) to be relaxed from 50 km/h to 70 km/h;
 - (b) Elevated section of Route 7 (between Central District and Shek Tong Tsui) to be relaxed from 70 km/h to 80 km/h;
 - (c) Western Harbour Tunnel to be relaxed from 70 km/h to 80 km/h; and
 - (d) Western Harbour Crossing northbound (between toll plaza and West Kowloon Highway) to be relaxed from 70 km/h to 80 km/h.
- 4. The speed limits of road sections in (a) and (b) were subsequently relaxed in February 2002 and August 2002 respectively. Preparation for legislative amendments for the proposed revision of the speed limits of road sections (c) and (d) is underway. It is expected that the proposed amendment will be completed in mid 2003.

REVIEW OF SPEED LIMIT

5. In 2002, the Administration has examined a total of 32 road sections of trunk roads, primary distributors, roundabouts and toll plazas as detailed in **Annex A**. The list includes 6 road sections with a speed limit of 50 km/h and 26 road sections with a speed limit of 70 km/h.

Review Criteria

- 6. In reviewing the speed limit of any road sections, ensuring the safety of the road users is the primary concern. Relaxation would only be recommended if road safety would not be impaired. In carrying out the review exercise, the Administration would take into consideration the following factors -
 - (a) the accident history of the road section, i.e. the personal injury accident rate of the road section concerned as compared with the figure for the whole territory;
 - (b) the geometry and environment of the road section, including its gradient and sightline, the number of signalised road junctions, and the extent of pedestrian activities;
 - (c) the number of changes in speed limit on a stretch of road with a view to keeping it to a minimum; and
 - (d) the speed under which the majority of drivers of light vehicles travel during off-peak periods, i.e. the 85th percentile vehicle speed.

Speed Limit Review Working Group

7. The Administration has set up a Working Group on Speed Limit Review (the Working Group) to deliberate the findings of the review exercises. In addition to representatives from Transport Department, the Working Group comprises representatives from the Police, the Hong Kong Automobile Association and the Institute of Advanced Motorists Hong Kong to benefit from their expert views. Three meetings were held in 2002 and recommendations of the Working Group are set out in the ensuing paragraphs.

Review Findings

(a) Relaxation of speed limit

8. The Working Group recommended that the speed limits of the following road sections be relaxed -

- (a) northbound carriageway of Princess Margaret Road Link between Princess Margaret Road and Hung Hom Bypass from 50km/h to 70km/h; and
- (b) North Lantau Highway (Airport Bound) near Tung Chung from 70km/h to 80km/h.
- 9. The northbound carriageway of Princess Margaret Road Link between Princess Margaret Road and Hung Hom Bypass has good sightlines and no at-grade pedestrian crossings. Since its opening in August 1999, there have been no personal injury accidents. The road conditions are considered suitable for vehicles travelling at 70km/h. With the endorsement of the Working Group, the speed limit of the road section has been raised from 50km/h to 70 km/h in January 2003.
- 10. Taking into account the relatively low traffic accident statistics and the road configuration, the Working Group also endorsed the relaxation of speed limit from 70 km/h to 80 km/h for the section of North Lantau Highway (Airport Bound) within the Airport area. The Administration is liaising with the Airport Authority on implementation of the relaxation.

(b) Downward adjustment of speed limit

- 11. The Working Group recommended the lowering of the speed limit from 70km/h to 50km/h at the following 2 road sections for road safety reasons -
 - (a) Tai Po Road near Woodcrest Hill; and
 - (b) Tai Po Road near Yung Yi Road.

The new speed limits came into operation in May and October 2002 respectively.

12. The Working Group noted that the traffic accident records at both road sections were not satisfactory. Besides, the road section of Tai Po Road near Woodcrest Hill has a long down gradient with an at-grade pedestrian crossing and a junction with Keng Hau Road located on a road bend which causes sightline constraint. The lowering of the speed limit of Tai Po Road near Yung Yi Road was suggested by the Tai Po District Council. The Working Group noted that the road section has a pedestrian at-grade crossing heavily used by students of the school located at Yung Yi Road and hence supported the adjustment proposal.

(c) Introduction of speed limit transition zone

- 13. Along North Lantau Highway Eastbound, the speed limit previously changed abruptly from 110km/h to 50km/h on the approach to the toll plaza area. We have received suggestions from the public to introduce a speed transition zone to avoid a drastic reduction in speed limit.
- 14. The Working Group considered that while sufficient signs and markings had been provided to warn motorists to reduce their speeds near the toll plaza, there were merits in introducing a 800m transition zone of speed limit of 80km/h to assist motorists to gradually reduce their speeds. The transition zone came into operation in December 2002.

(d) Standardisation of speed limits at toll plazas

- 15. At present, the speed limits at the toll plazas of road tunnels and bridges are set at a speed limit of either 50 km/h or 70 km/h. The speed limit of a toll plaza mainly follows that of the concerned road tunnel /bridge or the connecting approach road.
- 16. To enhance road safety and to address concerns over possible confusion arising from the existing different limits, the Working Group recommended that the speed limits at all toll plazas be standardised at 50km/h. A speed limit of 50km/h is proposed as physical conditions require motorists to slow down and/or stop at the approach to the toll booths. Even for autotoll booths, the approach lanes are too narrow for a high vehicle speed. Preparation for the relevant signing and marking modification works is underway and we aim to implement the 50 km/h speed limit at all toll plazas by mid 2003. Publicity would be arranged to inform road users of the arrangement.

(e) Standardisation of speed limits at roundabouts

- 17. The Working Group also discussed and considered whether the speed limits on the approaches to roundabouts should be standardised at 50km/h for a certain distance in advance of the roundabout for safety reasons.
- 18. A survey was carried out to identify the number of roundabouts with a speed limit exceeding 50km/h in May 2002. It was found that only three were now operating with a speed limit of 70km/h in the territory (**Annex B**).

As roundabout control requires all motorists to slow down and give way to other vehicles already on the roundabout, it would not be appropriate for traffic to approach the roundabout at a high vehicle speed of 70km/h. The Working Group therefore recommended that the speed limits on the approaches to roundabouts be standardised at 50km/h for a distance of at least 150m from the junction. The speed limit of the roundabout at Castle Peak Road/Tsing Fat Street has been lowered from 70km/h to 50km/h in July 2002. The Administration plans to lower the speed limit of the remaining two roundabouts to 50km/h by April 2003.

(f) Speed limits to be retained

- 20. The Working Group recommended that the speed limits of the remaining 13 road sections be retained taking into account their accident records, road environment, prevailing vehicle speeds, and potential danger to pedestrians and other road users arising from relaxation of the speed limit.
- 21. Details of the results of the speed limit review are at **Annex C**.

SPEED LIMIT ROAD MARKINGS

- 22. Members were previously informed that the Administration had carried out a trial laying of speed limit road markings (sample drawing at **Annex D**) in addition to the existing warning signs at selected locations to alert motorists of the need to reduce speed before the change to a lower speed limit.
- After a six-month trial, it was found that most motorists would slow down when approaching the road markings. The general feedback from the public on the road markings has also been very positive. The Administration hence decided to lay the speed limit road markings at all entry points to urban areas where the speed limit is lowered to 50 km/h. All the laying works were completed in end 2002.

WAY FORWARD

24. The Administration will continue to conduct speed limit review exercise on a regular basis.

Environment, Transport and Works Bureau Government Secretariat 21 February 2003

Trunk Roads and Primary Distributors with a Speed Limit of 50km/h or 70 km/h included in the Speed Limit Review in 2002

(A) Speed limit of 50km/h

No.	Road Sections
Kow	loon
1.	Princess Margaret Road Link (from Princess Margaret Road to Hung Hom Bypass)
New Territories West	
2.	North Lantau Highway Toll Plaza (East Bound)
3.	Castle Peak Road between Butterfly Interchange and Tai Wo Interchange
4.	Tai Lam Tunnel Toll Plaza
5.	Discovery Bay Tunnel Toll Plaza
6.	Lantau Link Toll Plaza

(B) Speed Limit of 70km/h

No.	Road Sections		
Hong	Hong Kong		
7.	Aberdeen Tunnel Toll Plaza		
Kowl	oon		
8.	Cross Habour Tunnel Toll Plaza		
9.	Eastern Habour Tunnel Toll Plaza		
10.	Western Habour Tunnel Toll Plaza		
11.	Tseung Kwan O Tunnel Toll Plaza		
12.	Prince Edward Road East (from King Tai Street to Kwun Tong Road)		
13.	Kwun Tong Road (from Prince Edward Road East to Ngau Tau Kok Road and Kai Cheung Road Flyover)		
14.	East Kowloon Corridor (from Chatham Road North near Fat Kwong Street to Airport Tunnel Portal)		
15.	Hong Chong Road (from Princess Margaret Road to Cross Habour Tunnel Toll Plaza)		
16.	Airport Tunnel Road (from East Kowloon Corridor to Kai Fuk Road)		
17.	Kai Fuk Road (from Kai Cheung Road to Kwun Tong Road)		
18.	Wai Yip Street (from Wai Yip Street Flyover to slip road leading to Kai Cheung Road Flyover)		
19.	New Clear Water Bay Road (from Anderson Road to elevated road adjacent to Shun Lee Tsuen Temporary Housing Area)		

Annex A (page 2 of 2)

New Clear Water Bay Road (from Clear Water Bay Road to ground level under
New Clear Water Bay Road Flyover)
Tseung Kwan O Road between Wai Fat Road and Tseung Kwan O Tunnel Plaza
Lei Yue Mun Road between Wai Fat Road and Eastern Harbour Crossing Toll
Plaza
Cerritories East
Tai Po Road near Woodcrest Hill
Lion Rock Tunnel Toll Plaza
Tai Po Road near Yung Yi Road
Tate's Cairn Tunnel Toll Plaza
Shing Mun Tunnel Toll Plaza
Roundabout at Sai Sha Road/Hang Fai Street
Cerritories West
Lung Mun Road between Butterfly Beach and Lung Kwu Tan
North Lantau Highway (Airport Bound) near Tung Chung
Roundabout outside Tuen Mun River Trade Terminal
Roundabout at Castle Peak Road/Tsing Fat Street

Annex B

Roundabouts with a Speed Limit Exceeding 50 km/h

	Roundabout	Existing speed limit (km/h)
1.	Roundabout at Sai Sha Road / Hang Fai Street	70
2.	Roundabout outside Tuen Mun River Trade Terminal	70
3.	Roundabout at Castle Peak Road / Tsing Fat Street	70

Summary of the Results of the Speed Limit Review in 2002

(A) Speed limit to be relaxed

No.	Road Sections	Decision	Justifications
Kowloon			
1	Princess Margaret Road Link (from Princess Margaret Road to Hung Hom Bypass)	Relaxed from 50km/h to 70km/h on 17.1.2003	 No personal injury accident. Good sightline and road conditions suitable for vehicles travelling at 70km/h. No at-grade crossing at the road section.
Nev	v Territories West		
2	North Lantau Highway (Airport Bound) near Tung Chung	To be relaxed from 70 to 80km/h	 Low personal injury accident rate (Notes 1 & 2) of 0.098 per million veh-km. Relaxation to 80km/h will minimise substantial change of speed from 110km/h to 70km/h on North Lantau Highway. Good road conditions of dual 3-lane carriageway.

- 1. The personal injury accident rates for individual road sections quoted in this Annex were estimated on the basis of a 12-month period prior to the respective reviews.
- 2. Figures on the territory wide average of personal injury accident rate per million vehicle–kilometre in 2002 are being compiled. The following 2001 figures for various types of roads have therefore been adopted as reference points -

Expressway	0.34 per million vehicle-kilometre
Tunnel	0.18 per million vehicle-kilometre
Other Roads	1.92 per million vehicle-kilometre

(B) Speed limit to be reduced

No.	Road Sections	Decision	Justifications		
Nev	New Territories East				
3	Tai Po Road near Woodcrest Hill	Reduced from 70km/h to 50km/h on 17.5.2002	 High personal injury accident rate of 2.5 per million veh-km. Long down gradient and existence of an at-grade pedestrian crossing. Sightline constraint to right-turning traffic from Tai Po Road to Keng Hau Road. 		
4	Tai Po Road near Yung Yi Road	Reduced from 70km/h to 50km/h on 31.10.2002 (in response to District Council's request)	 Personal injury accident rate of 1.90 per million veh-km is close to the territory wide average. Existence of pedestrian crossing used by many students accessing the school at Yung Yi Road. The speed limits of roads contiguous to the north of the road section are 50 km/h. It would be logical to extend the arrangement to the road section to enhance pedestrian safety. Speed limit of 70km/h causes difficulties to vehicles exiting or entering the side accesses. 		

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Other Roads	1.92 per million vehicle-kilometre

(C) Introduction of speed limit transition zone

No.	Road Section	Decision	Justification
New	Territories West		
5	North Lantau Highway Toll Plaza (East Bound)	800m speed limit transition zone of 80km/h introduced on 16.12.2002	 Public request for introducing a transition zone between the 110 km/h and 50 km/h speed limit zones to avoid drastic reduction. The speed limit of the slip road from the Disney Site to toll plaza is also 80km/h. A 80km/h speed limit transition zone could reduce frequent changes of speed limit.

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Other Roads	1.92 per million vehicle-kilometre

(D) Speed limits at toll plazas to be standardised

No.	Toll Plaza	Decision	Justifications		
Hor	Hong Kong				
6	Aberdeen Tunnel Toll Plaza (Wanchai Bound)	To be reduced from 70km/h to 50km/h	- To enhance road safety and adopt a consistent arrangement in response to concern over possible confusion arising from different speed limits at toll plazas.		
Kov	vloon				
7.	Cross Habour Tunnel Toll Plaza	To be reduced from 70km/h to 50km/h	- ditto		
8.	Eastern Habour Tunnel Toll Plaza				
9.	Western Habour Tunnel Toll Plaza (Kowloon Bound)				
10	Tseung Kwan O Tunnel Toll Plaza				
New	Territories East				
11	Lion Rock Tunnel Toll Plaza	Reduced from 70km/h to 50km/h on 23.8.2002	- ditto		
12	Tate's Cairn Tunnel Toll Plaza	To be reduced from 70km/h to			
13	Shing Mun Tunnel Toll Plaza	50km/h			

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Other Roads	1.92 per million vehicle-kilometre

New	New Territories West					
14	Tai Lam Tunnel Toll	50km/h to be	- 50km/h is considered a			
	Plaza	retained	suitable speed limit for toll			
15	Discovery Bay Tunnel		plazas.			
	Toll Plaza					
16	Lantau Link Toll Plaza					

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(E) Speed limits at roundabouts to be standardised

No.	Road Sections	Decision	Justifications
Kov	vloon		
17	Roundabout at Sai Sha Road / Hang Fai Street	To be reduced from 70km/h to	- Not suitable for high vehicle speed of 70km/h as
18	Roundabout outside Tuen Mun River Trade Terminal	50km/h	roundabout control requires all motorists to slow down and give way to other
19	Roundabout at Castle Peak Road / Tsing Fat Street	Reduced from 70km/h to 50km/h on 5.7.2002	vehicles already on the roundabout.

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Tunnel	0.18 per million vehicle-kilometre
Other Roads	1.92 per million vehicle-kilometre

(F) Speed limits to be retained

No.	Road Section	Decision	Justification		
Kov	vloon				
20	Castle Peak Road between Butterfly Interchange and Tai Wo Interchange	50km/h to be retained	 Moderate personal injury accident rate of 0.68 per million veh-km. The 85th percentile speeds were 61-65km/h. Existence of 2 sharp bends near Chung Shan Terrace which is not suitable for a speed limit of 70km/h. 		
21	Prince Edward Road East (from King Tai Street to Kwun Tong Road)	70km/h to be retained	 Moderate personal injury accident rate of 0.83 per million veh-km. The 85th percentile speeds were 71-75km/h. There is a tight bend which is not suitable for a speed limit higher than 70km/h. 		

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Tunnel	0.18 per million vehicle-kilometre
Other Roads	1.92 per million vehicle-kilometre

22	Kwun Tong Road (from Prince Edward Road East to Ngau Tau Kok Road and Kai Cheung Road Flyover)	70km/h to be retained	 Moderate personal injury accident rate of 0.81 per million veh-km. The 85th percentile speeds were 67-75km/h. Road geometry not suitable for relaxation.
23.	East Kowloon Corridor (from Chatham Road North near Fat Kwong Street to Airport Tunnel Portal)	70km/h to be retained	 Low personal injury accident rate of 0.14 per million veh-km. The 85th percentile speeds were 79-82km/h. There are strong environmental concerns, in particular the traffic noise nuisance to residential premises in the vicinity of East Kowloon Corridor. Relaxation will worsen the situation.
24.	Hong Chong Road (from Princess Margaret Road to Cross Harbour Tunnel Toll Plaza)	70km/h to be retained	 Moderate personal injury accident rate of 0.5 per million veh-km. The speed limits of adjoining roads at both ends are 70km/h. Heavy weaving activities near toll plaza.

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25.	Airport Tunnel Road (from East Kowloon Corridor to Kai Fuk Road)	70km/h to be retained	 High personal injury accident rate of 0.31 per million veh-km. The speed limits of adjoining roads at both ends are 70km/h.
26.	Kai Fuk Road (from Kai Cheung Road to Kwun Tong Road)	70km/h to be retained	 Moderate personal injury accident rate of 0.79 per million veh-km. The 85th percentile speeds were 77-78km/h. Road geometry not suitable for a speed limit higher than 70km/h. Several works projects will be implemented at the former Kai Tak Airport and the traffic flow will increase significantly.
27.	Wai Yip Street (from Wai Yip Street Flyover to slip road leading to Kai Cheung Road Flyover)	70km/h to be retained	 Moderate personal injury accident rate of 0.58 per million veh-km. The 85th percentile speeds were 74-75km/h. The speed limit of the adjoining Kwun Tong Road is 70km/h.

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28.	New Clear Water Bay Road (from Anderson Road to elevated road adjacent to Shun Lee Tsuen Temporary Housing Area)	70km/h to be retained	-	Moderate personal injury accident rate of 1.48 per million veh-km. The 85 th percentile speeds were 70-73km/h. The residents of Shun Lee Disciplined Services Quarters have lodged complaints about traffic noise on New Clear Water Bay Road. Relaxation of speed limit may worsen the situation. Speed limit of the adjoining Clear Water Bay Road is 70km/h.
29.	New Clear Water Bay Road (from Clear Water Bay Road to ground level under New Clear Water Bay Road Flyover)	70km/h to be retained	-	Moderate personal injury accident rate of 0.64 per million veh-km. The 85 th percentile speeds were 74-77km/h. There will be a new signalised junction between New Clear Water Bay Road and access road to the development near Choi Wan Estate. Relaxation of speed limit may give rise to safety concerns.

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30.	Tseung Kwan O Road between Wai Fat Road and Tseung Kwan O Tunnel Plaza	70km/h to be retained	-	Moderate personal injury accident rate of 0.91 per million veh-km. The 85 th percentile speeds were 66-76km/h. Relaxation of speed limit will likely increase traffic noise along the road which is a matter of concern for residents nearby.
31.	Lei Yue Mun Road between Wai Fat Road and Eastern Harbour Crossing Toll Plaza	70km/h to be retained	-	Moderate personal injury accident rate of 1.37 per million veh-km. The 85 th percentile speeds were 74-77km/h. Tight road bend at the connecting point with Kwun Tong Bypass of Lei Yue Mun Road eastbound not suitable for relaxation.

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New Territories West						
32.	Lung Mun Road between	70km/h to be	-	Moderate personal injury		
	Butterfly Beach and Lung Kwu Tan	retained	_	accident rate of 0.52 per million veh-km. The 85 th percentile speeds		
				were 77-83km/h.		
			_	There are signalised junctions, bus stops and frontage accesses along the road. Relaxation may give rise to safety concerns.		

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