For Discussion
7 November 2011

Legislative Council Panel on Transport

Measures to Promote Cycling Safety

Purpose

This paper briefs Members on the measures undertaken by the Administration to promote cycling safety.

Transport Policy

2. Hong Kong is small and densely populated. To address the problems of traffic congestion and air pollution, the Administration's long standing policy is to promote the use of public transport system as the main transport mode and to encourage the public to make use of the highly efficient mass transit transport systems and other public transport services. Any measure to encourage cycling as a means for commuting must take into account the fact that Hong Kong is a small city with a dense population and concentrated development, and road safety should be the most important consideration.

3. While we have well-developed road networks and public transport system in Hong Kong, our road traffic is heavy and the roads and footpaths are highly congested, making it generally difficult and impracticable to provide spaces to develop tracks designated for cycling in the urban areas. As an example, the traffic lanes along the east-west roads in Wan Chai, including Gloucester Road, Hennessy Road and Lockhart Road, are typically only about 3.4m wide. These are just wide enough for buses and heavy vehicles which are about 2.5m wide, taking into account the large number of kerbside and traffic weaving movements. To provide a dedicated cycle lane, which should be at least 2m wide as the design standard, the traffic lanes would have to be reduced to only 1.4m wide. As 1.4m is not enough for running of motor vehicles, this will in effect result in the reduction of one traffic lane and inevitably displace other road users thus causing serious traffic congestion problems on these major trunk roads.

4. On the other hand, mixing bicycle traffic with motor vehicle traffic without providing designated cycle lanes will increase the risk of accidents. As borne out by the accident statistics outlined in paragraphs 6 – 8 below, most of the more serious cyclist casualties occurred in accidents involving collision with motor vehicle, and encouraging cycling on congested, heavily utilized urban roads will increase the risk and severity of accidents. Apart from the fact that traffic flows in the urban areas are generally higher when compared to the New Territories, traffic lanes in the urban areas are generally narrower[1] and kerbside activities are notably heavier, making it more hazardous for cyclists to cycle along the kerbside lane of the road especially when buses or heavy vehicles are passing by.

5. In view of the above safety consideration, the Administration does not encourage the public to use bicycle as a transport mode in urban areas. Compared with urban areas, new towns in the New Territories (NT) or new development areas, where traffic density is relatively low, have better conditions for using bicycle for short-distance travel. If situation permits, we will provide cycle tracks and ancillary facilities in new towns and new development areas to enable the public to cycle safely for recreational purposes and short distance travel. The Administration has also embarked on the implementation of a package of improvement measures, as detailed below, to further enhance cycling safety.

Bicycle Accident Statistics

6. In the past decade, the annual number of bicycle accidents (which includes accidents that occur in all places including carriageways, cycle tracks, open space and playgrounds) remained within the range of 1,470 to 1,920, but in the last two years or so, there has been a rising trend in both the number of bicycle accidents and cyclist casualties. In the first nine months of 2011, there were 14 fatal bicycle accidents. Yearly breakdowns on the numbers of bicycle accidents by severity and the casualty figures are set out in Annex A. We are concerned about cycling safety and are taking proactive measures to address the issue.

7. We have analysed the collision types of bicycle accident statistics over the past ten years. Comparing the number of bicycle accidents in 2010 with that in 2001, there was a notable increase in the number of bicycle accidents that only involve cyclists themselves, i.e. accidents involving

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[1] For example, according to the design standards in the Transport Planning and Design Manual, the standard width of a 4-lane single carriageway is 14.5m for a rural road, but only 13.5m for a district/local distributor in the urban area.

bicycles colliding with objects (Bicycle/Object), or no collision at all (Bicycle/None). The number increased by 66% from 765 in 2001 to 1,269 in 2010. These two types of bicycle accidents are more likely associated with the riding skill and behaviour of the cyclists, and the increase may be related to more people carrying out cycling activities. On the other hand, it is noted that the numbers of accidents involving bicycle colliding with other vehicles (Bicycle / Vehicle) are rather steady over the years (380 in 2001 as compared with 375 in 2010). This phenomenon indicates that the frequency of bicycles colliding with other vehicles on carriageways has not shown much deterioration. There is a substantial reduction in the number of accidents involving pedestrians being hit by bicycles (Bicycle / Pedestrian) over the years (from 238 in 2001 to 167 in 2010). Bicycle accident statistics categorized by collision types are presented in Annex B.

8. It is noted that about half of the bicycle accidents occurred in carriageways. Among those serious and fatal accidents, an overwhelming majority of such accidents occurred in carriageways. The average number of bicycle accidents by location and severity over the past ten years is presented in Annex C.

Measures to provide safer and better cycling network and facilities

9. We have been reviewing the design of cycle tracks and ancillary facilities and conducting inspection regularly to ensure that they are kept in good conditions. Standards and guidelines have been established with regard to the alignment, curvature, gradient, width and visibility for developing cycle tracks. Sufficient ancillary facilities including lighting, traffic signs, road markings and guard rails will also be provided along the tracks to protect the safety of cyclists and other road users. To enhance the safety of cycle tracks, Transport Department (TD) has put on trial plastic collapsible bollards on some cycle tracks in Shatin and Ma On Shan. Compared with metal speed reducing bollards, plastic bollards are more flexible and elastic, and hence are effective in reducing the degree of injury of cyclists in case they hit the bollards accidentally. The trial was successful and TD plans to extend this measure to other cycle tracks in phases. A retrofitting programme has been embarked upon to replace, by 2015, the metal speed reducing bollards at over 1,500 locations with plastic collapsible ones and to put up clear warning signs where appropriate.

10. Separately, TD has also been addressing the concern of local communities by improving cycling facilities at specific locations, particularly where cycling accidents had occurred. To further enhance this area of work, TD has engaged consultants to, inter alia, identify "sites with more cycling accidents" along cycle track in Sha Tin and Tai Po based on the accident records over the past three years, so that focused improvement measures can be taken to reduce the risk of accidents. The consultants will analyse major contributory factors regarding accident prone sections, and recommend specific and feasible improvement options. The first stage of this review is in progress and is expected to be completed by mid 2012.

11. On provision of new cycle tracks, the Civil Engineering and Development Department (CEDD) is studying and implementing the development of a cycle track network in the NT by phased interconnection of the cycle tracks in various new towns between Ma On Shan, Sheung Shui, Yuen Long, Tuen Mun and Tsuen Wan. It is expected that the network will be completed in phases from 2013 onwards. In new development areas like Kai Tak, CEDD is actively exploring within the new Kai Tak development area the extension of the district cycling track network. According to the "Urban Design Study for the New Central Harbourfront" undertaken by the Planning Department, there is a plan to build a cycle track at the Central harbourfront.

12. The consultants engaged by TD will recommend suitable measures to improve cycle tracks and interconnection of cycle track networks in existing new towns. The study will identify a suitable district to carry out a pilot scheme to test the effectiveness of the various proposed measures. District consultation on proposed measures and the pilot scheme will be carried out by around mid 2012. Depending on the results of the pilot scheme and taking into account the physical environment of individual areas and the views of local communities, TD will consider plans for taking forward the various improvement measures.

13. On ancillary facilities, there are currently a total of about 40,000 bicycle parking spaces throughout the territory. TD plans to increase cycle parking facilities at major public transport hubs (such as railway stations), and expects to provide 1,000 additional bicycle parking spaces by 2013 through retrofitting and replacing existing cycle parking spaces at major transport hubs. TD is also conducting trials at the Fanling and Sheung Shui MTR stations on new "double-deck" parking systems which are expected to increase cycle parking provision.

Education and Publicity

14. We consider that education and publicity should be the most effective means to promote cycling safety. The Road Safety Council (RSC) has included promotion of cycling safety as one of the priority issues for its 2011-12 work plan, which would include publicity campaigns by means of TV APIs, leaflets, posters and roadside banners, etc. to remind cyclists not to ride within the blind spots of motor vehicles, and motorists to respect cyclists' right for the shared use of roads. TD plans to produce an educational video featuring proper ways to ride bicycles on public roads and cycle tracks, as well as proper behavior of motorists when sharing the road with cyclists. The video should be ready in 2012 and will be shown in selected public venues such as TD Licensing Offices, and for viewing by students at schools. The video may also be uploaded onto video sharing websites as well as the website of both RSC and TD.

15. TD is also developing a "Cycling Information Centre" website to provide the public with a convenient means to access information on cycling such as locations of cycle tracks and bicycle parking spaces, as well as regulations on cycling (including the traffic rules that should be followed by cyclists, meaning of various traffic signs and road markings for cyclists, etc.).

16. With a view to reducing bicycle accidents, the Police will strengthen enforcement actions particularly on public roads, cycle tracks and popular cycling hotspots. In the past September, the Police carried out a high-profile one-week territory-wide enforcement campaign against misbehaving cyclists targetting at serious cycling offences such as reckless cycling and careless cycling at cycling accident prone sites. The Police plan to embark on a similar operation in November this year to further enhance cyclists' safety awareness.

Conclusion

17. The Administration will continue to take proactive actions and adopt a multi-pronged approach in tackling and addressing the community's concern on cycling safety. The Administration will also continue its efforts to ensure the timely completion of the various measures relating to safety and facilities for cycling.

Advice Sought

18. Members are invited to note the contents of this paper.

Transport and Housing Bureau
Transport Department
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Annex A

Table 1 – No. of Bicycle Accidents by Severity

Year	Fatal (a)	Serious (b)	Slight (c)	Total (a)+(b)+(c)
2001	4	275	1,197	1,476
2002	16	298	1,214	1,528
2003	11	249	1,410	1,670
2004	10	260	1,644	1,914
2005	8	225	1,413	1,646
2006	9	216	1,334	1,559
2007	13	212	1,347	1,572
2008	11	207	1,372	1,590
2009	10	227	1,556	1,793
2010	11	247	1,656	1,914
2011 (Jan-Sep)[@]	14	200	1,453	1,667

Table 2 – No. of Killed and Seriously Injured (KSI) Cyclist Casualties

Year	Killed (a)	Serious (b)	KSI (a)+(b)
2001	4	244	248
2002	16	265	281
2003	10	210	220
2004	10	215	225
2005	8	194	202
2006	9	184	193
2007	12	195	207
2008	10	178	188
2009	10	202	212
2010	10	229	239
2011 (Jan-Sep)[@]	14	189	203

Note: [@] Provisional figures as at 11 October 2011.

Annex B

Number of Bicycle Accidents by Accident Collision Type for 2001 – 2011

Accident Collision Type	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 (Jan-Sep)[@]
Bicycle / Bicycle	82	64	80	101	83	86	70	76	76	96	77
Bicycle / Vehicle	380	391	375	387	376	301	357	324	320	375	296
Bicycle / Pedestrian	238	227	218	256	221	191	168	164	192	167	118
Bicycle / Object	238	272	314	337	240	228	266	347	371	413	363
Bicycle / None	527	563	672	817	714	739	700	665	829	856	788
Others	11	11	11	16	12	14	11	14	5	7	25
Total	**1,476**	**1,528**	**1,670**	**1,914**	**1,646**	**1,559**	**1,572**	**1,590**	**1,793**	**1,914**	**1,667**

Note: [@] Provisional figures as at 11 October 2011.

Annex C

Average Number of Bicycle Accidents by Location and Severity in 2001 to 2010

Location	Fatal		Serious		Slight		Overall	
	No.	%	No.	%	No.	%	No.	%
Carriageway	8.4	82	142.8	59	678.8	48	830.0	50
Cycle track	0.7	7	66.0	27	530.3	37	597.0	36
Other location*	1.2	12	32.8	14	205.2	15	239.2	14
Total	10.3	100	241.6	100	1,414.3	100	1,666.2	100

Notes : * Other location refers to places such as cycle parks, playgrounds and open spaces. There may be a slight discrepancy between the sum of individual items and the total due to rounding.