

Traffic Calming : Towards an Ambitious Target to Protect Children and Vulnerable Road-users



Together we can Save millions of lives.

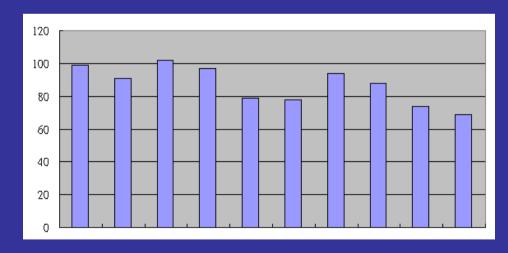
DECADE OF ACTION FOR ROAD SAFETY 2011-2020 Julian TH KWONG MPhil CEng MICE MHKIE Chairman, Community for Road Safety Road safety engineering consultant

Centre for Health Promotion 11th February 2012

Pedestrian Casualties remain a focus



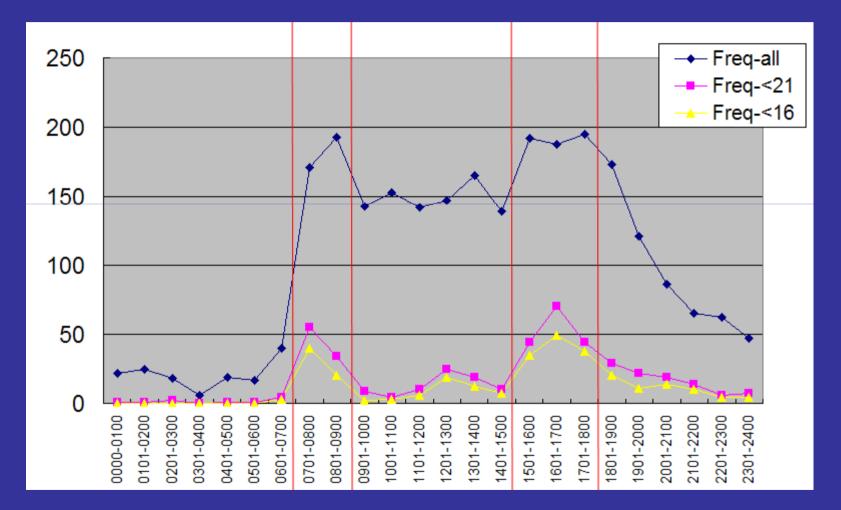
- In 2010, pedestrian fatalities and serious casualties are 69 (59%) 和 816 (38%)
- During the decade 2001 to 2010, 871 pedestrians were killed and 9,782 were seriously injured
- In 2010, urban minor streets and major streets accounted for 40% and 50% of fatalities



Trend of Pedestrian Fatalities 2001-2010 2011 figure is similar to 2010



Time Distribution of Pedestrian Casualties

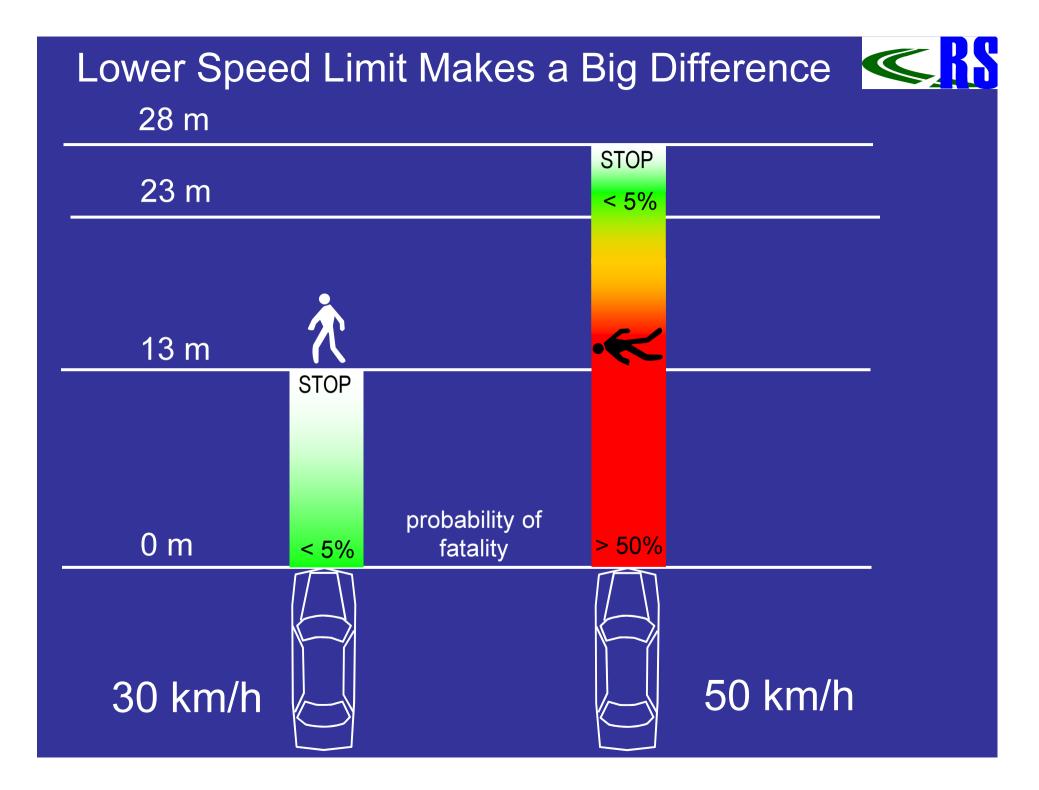




Traffic Calming in the Urban and Rural Context

- To reduce speed to a level commensurate with the activities along the road
- Facilitate walking and cycling
- Enhance the environment, aesthetic and identity of neighbourhoods







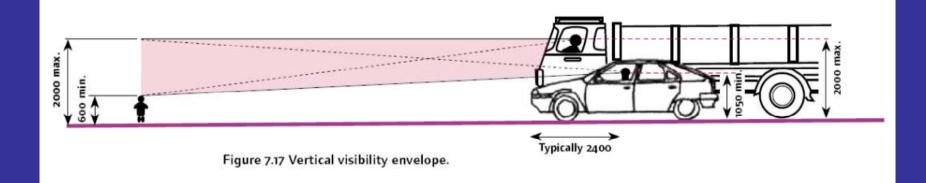
SIGHTINES





Visibility and Railings

- Average height of 6 year old child in Hong Kong: 1176mm (So et. Al, BMC Public Health. 2008; 8: 320)
- Standard height of pedestrian railing : 1000mm





Visibility at Pedestrian Crossings

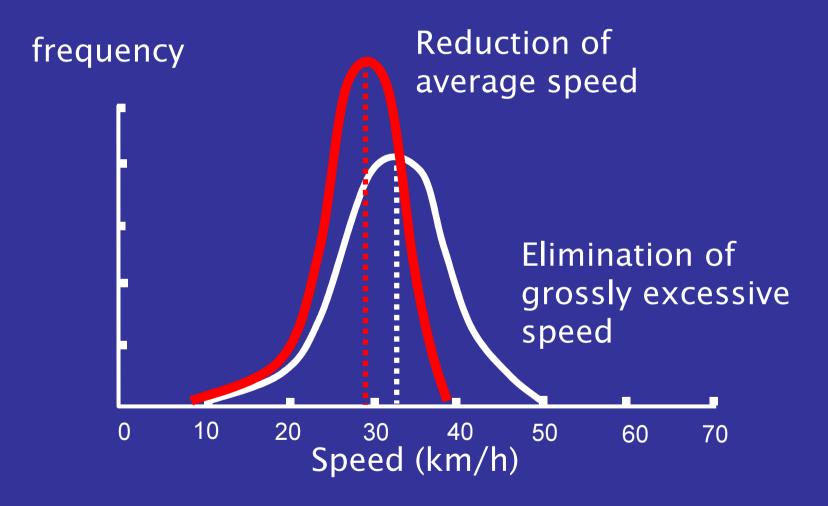
 Drivers should be able to observe the intention of pedestrians both on the crossing and over the waiting area of the footpath





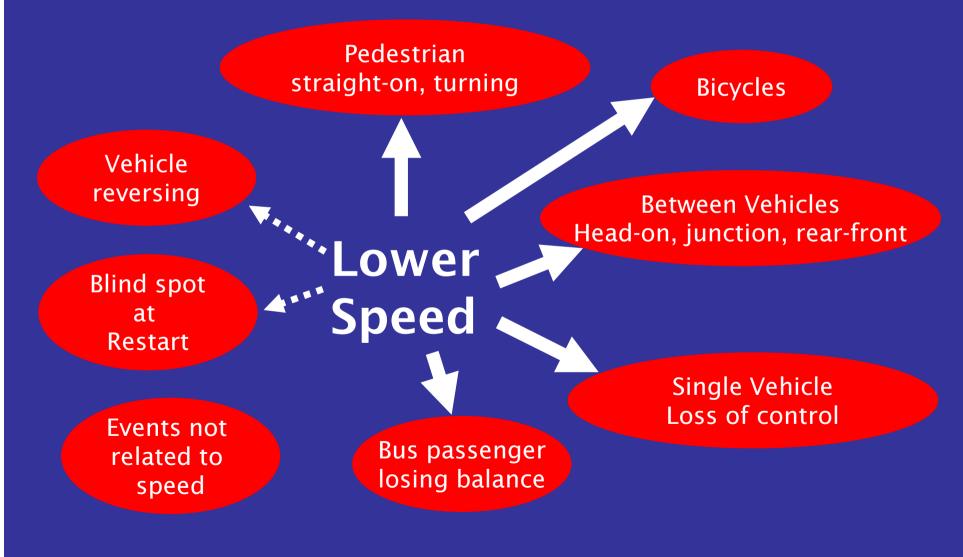


A Safer Speed Distribution is Crucial





Lower Speeds suppress a variety of collision scenarios





Lille, France



• 600 km of 30km/h streets



Oslo, Norway

• Built-up Areas 50km/h, 40km/h, 30km/h







Copenhagen, Denmark

• Built-up Areas 50km/h, 40km/h, 30km/h, 15km/h







The Netherlands

- Home of the 30km/h Zone and Woonerf (home zone)
- Leading the "Self-explaining" Road Design principle







An Ever-growing Low speed Culture

- Barcelona : 215 km 30km/h streets
- Brussels : entire old city 30km/h except main streets
- Munich :> 300 30km/h zones (85% city road length)
- London : > 400 20mph zones
- Australia : 40km/h school zones and city centres

Minor Streets in residential, Historic, Market and Industrial areas











Main Streets in urban areas

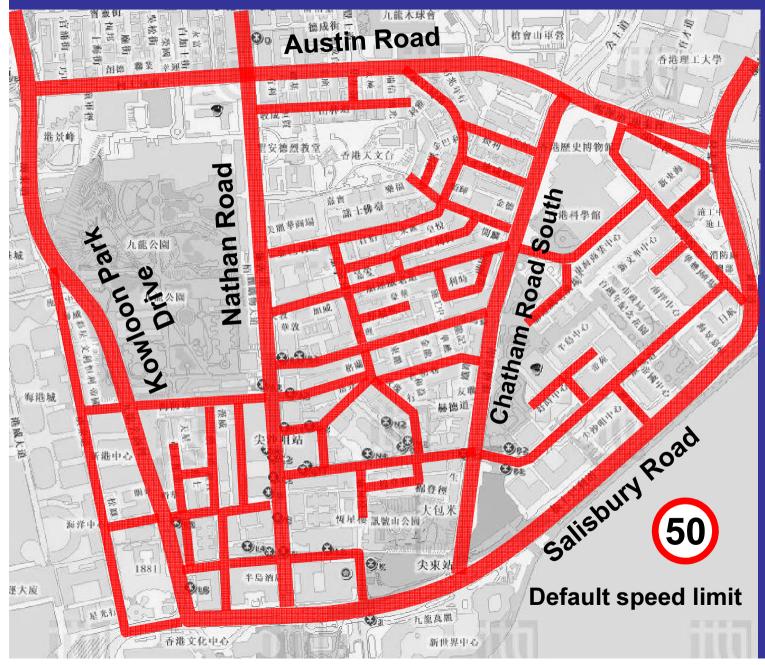


50km/h ✓ 40km/h ✓ (30km/h)



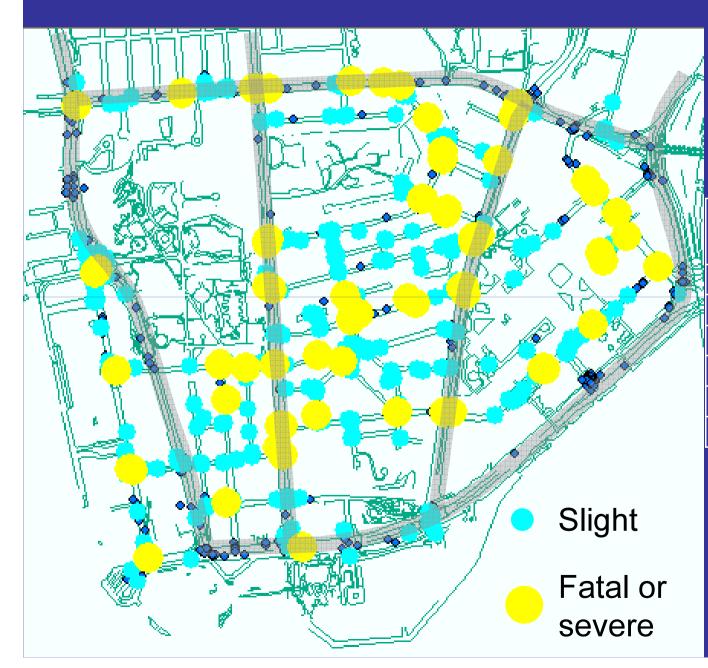


Case Study : Tsim Sha Tsui



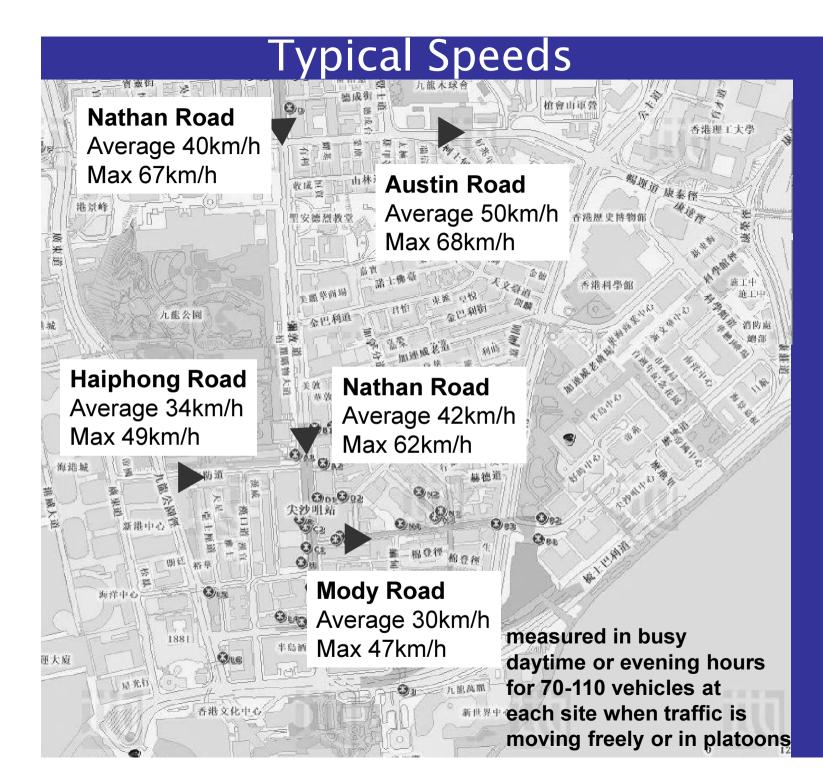
Pedestrian Collisions (2005-2009)





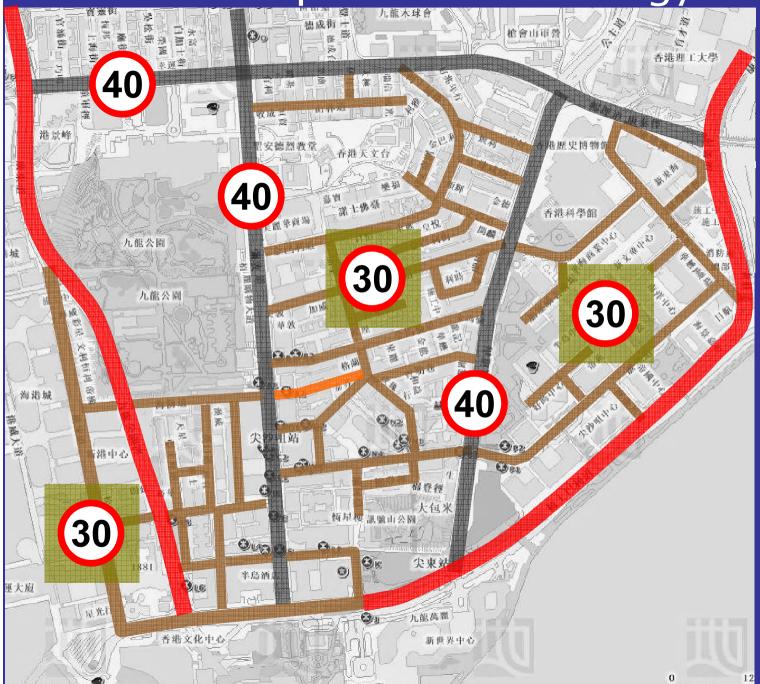
	Total crashes	Pedestrian Collisions
2005	379	160
2006	349	148
2007	327	116
2008	333	120
2009	299	104
Total	1,687	648

Raw data from Transport Department Database



Vision of Speed Limit Strategy





HIGHWAYS TRAVERSING





Similar Issues Unique Circumstances









General Principle

Major village Market town

Small villages Isolated houses

Gateway Sign 90 Enhancement of Safety level

Traffic Calming with Speed Management



Village Entrance Gateway Signs



Photo from internet source

 French system : 50km/h speed limit applies where sign is posted



Traffic Calming Design within Communities

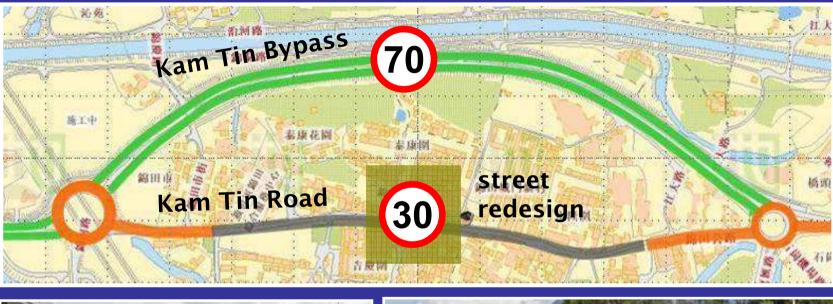




- Speed limit sign/special markings
- Street redesign/Narrowing lanes
- Trend of subtle design to weaken the perception of a highway e.g. no centreline markings



A Vision for Kam Tin Road through Kam Tin Town







Conclusion

- Area-wide traffic calming with lower speed limit will be the key of an ambitious road safety strategy in Hong Kong
- Lower speed limit on urban streets is also the key to an attractive and vibrant streetscape conducive to the economy and living quality



Acknowledgements

Transport Department

Google Street View



Second United Nation's Global Road Safety Week, 2013 "Pedestrians"