

Summary of the "Elements of Road Safety Engineering" Workshop Tashkent, 22<sup>nd</sup> – 25<sup>th</sup> April, 2019



20 participants. 4 days. 1 site visit

## I came as a foreigner, a friend and a road safety engineer

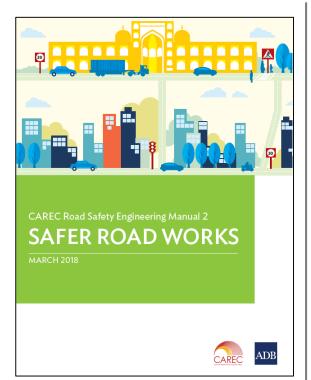
- You have made me very welcome
- You have been open to new ideas
- I have enjoyed my time in your city once again

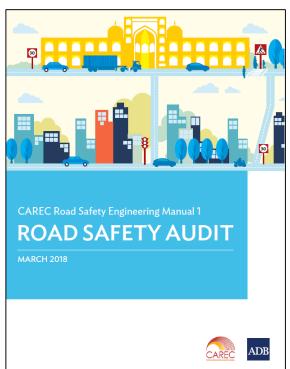
- We have covered several topics
- Uzbek roads can be made safer
- YOU can be a champion to make this happen

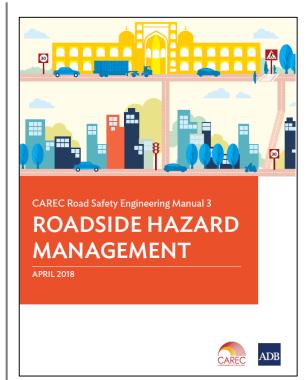


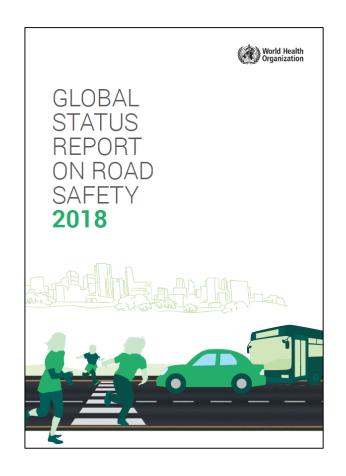


# The workshop was focused on road safety engineering









#### Deaths by road user category



- Treat road safety as a business
- Remember to serve all your customers
- Start with standards, but do not be "blinded" by them



Blackspot investigations are worthwhile. Spend \$1 – save \$4

Always - put yourselves into the shoes of your customers!

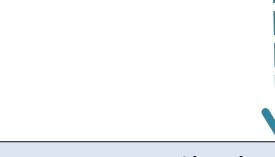


## Themes from the workshop

- Roadside hazards kill many people
- A "roadside hazard" is anything bigger than 100mm diameter and fixed
- "Clear zone" a useful guide for designers

### A 6-step strategy for Roadside Hazard Management

- 1. Keep vehicles on the road
- 2. Provide a forgiving roadside



- 2 i. remove the hazard
- 2 ii. relocate the hazard
- 2 iii. alter the hazard to reduce severity
- 2 iv. protect the people with barriers

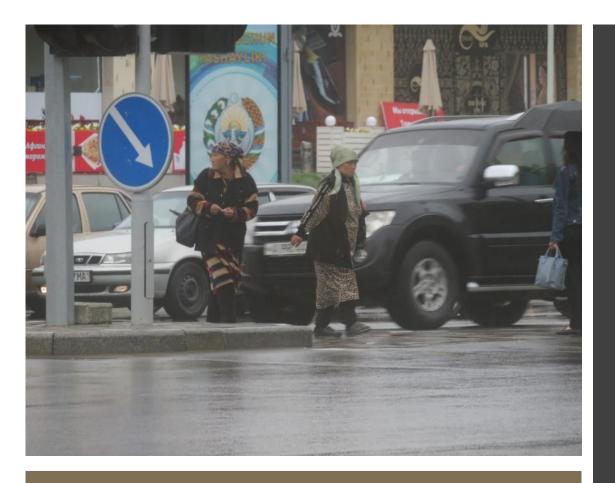
16 ≥ 50000 (adopt 13 m) 14 EXAMPLE 2 30000 If the operating speed is 100 km/h and the one way AADT is 20000 vehicles/day, the clear zone width is (adopt 11 m) (measured from the edge of the trafic lane) 12 11 m (adopt range 10000 | 30000 vehicles/day) 10000 CLEAR ZONE WIDTH (metres) (adopt 9 m) 10 5000 4000 **EXAMPLE** 3000 If the operating speed is 80 km/h and the one way AADT is 4000 vehicles/day, the 2000 clear zone width is 6.1 m 6 ≤ 1000 (vehicles/day) (approach volume) ONE WAY AADT 2 40 50 60 70 80 100 110 120 90 OPERATING SPEED (km/h)

Figure V4.1: Basic Clear Zone Widths on Straights - All Roads



Themes from the workshop

Pedestrians need your assistance.
Don't forget them!



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Themes from the workshop

### Signing Principles – 8 C's

- Conspicuous easily seen
- Clear legible, able to be read in ample time
- Concise as few words as possible
- Comprehensible understood
- Credible believed
- Consistent same placements across the network
- Compliant with standards
- **Correct** the sign must be correct





### Road Safety Audit

Prevention is better than cure



**THANKS** 

Many people have been involved in this workshop – thanks to all.

**ADB** CAREC Ministry of Transport Committee of Roads Traffic Police Design Institute Ministry of Health Shukhrat Abdullaev Interpreters (Akram and Aynur) Hotel staff Bus drivers....and others



And special thanks to all of you – you are a great group



When you return to your workplace, think about how road safety engineering may be put to best use for your customers, and how it may add value to your work. Why?



BECAUSE...... the world needs more road safety engineers

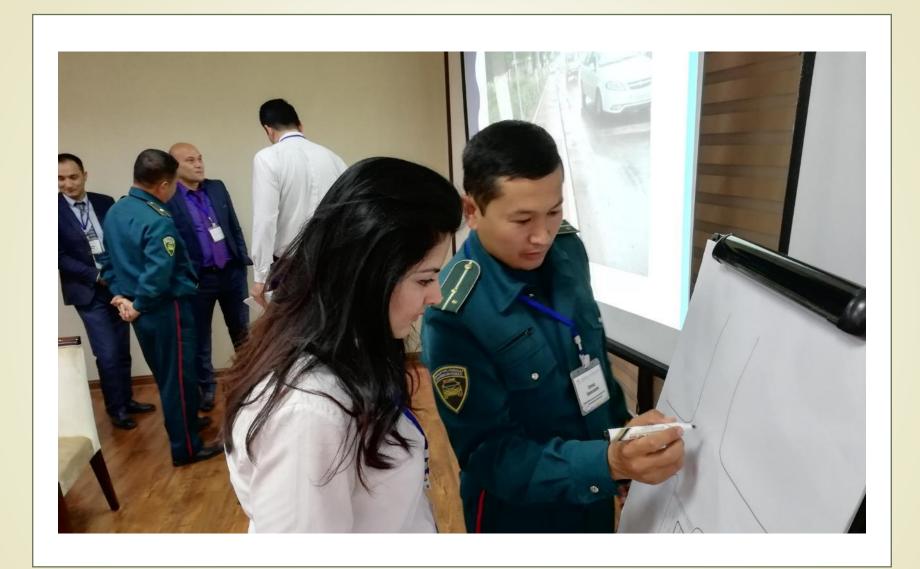


















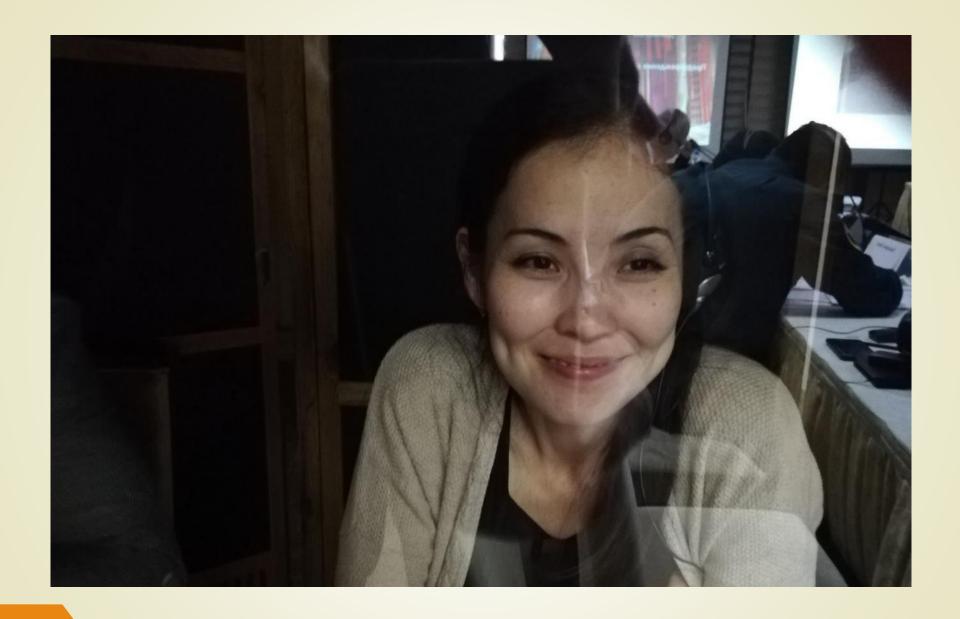


















































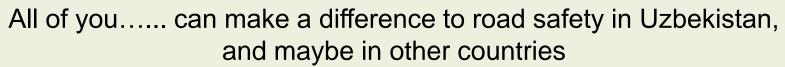


















REMEMBER..... the world needs more road safety engineers

## You can save lives on the roads of Uzbekistan





It has been a great pleasure working with you in Tashkent this week - good luck and best wishes for your future "road safety engineering" work.