



Republic of Cyprus  
Ministry of Transport  
Communications and Works

# ROAD SAFETY IN CYPRUS POTENTIAL TO ACHIEVE MORE

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28 June 2019*

# Objective of this Presentation:



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- To present the approach of the Ministry of Transport Communications and Works in reviewing the Road Safety Strategy for Cyprus and the likely changes that will be incorporated.
- The process is lead by the Minister of MTCW, advised by the Road Safety Committee – as per CY Law on Road Safety (N174/86)

Planning Partnership Zenider Transport & Urban Development SKM COLIN BUCHANAN

Υπουργείο Συγκοινωνιών και Έργων, Κυπριακή Δημοκρατία

**Παροχή υπηρεσιών για την εκπόνηση  
Στρατηγικού Σχεδίου Οδικής Ασφάλειας  
στην Κυπριακή Δημοκρατία για την  
περίοδο 2012-2020**

Νοβέμβριος 2012

Έκθεση Σταδίου 3  
ΤΕΛΙΚΗ

# Aligning Strategy Objectives



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## Cyprus Road Safety Plan 2020:

1. Improved Safety for Vulnerable Road Users
2. Legislation, Highway Code and Enforcement
3. Driver Training and Testing
4. Road Safety Education, Publicity and Enlightenment
5. Safer Roads and Mobility
6. Post Crash Response
7. Safer Vehicles
8. Organisational Structure and Operation

Which are delivered through a 52 page Detailed Action Plan.

## EU Strategic Action Plan on Road Safety – Europe on The Move - Sustainable Mobility for Europe: safe, connected and clean

1. Enhanced Road Safety Governance
2. Stronger Financial Support for Road Safety
3. Safe Roads and Roadsides
4. Safe Vehicles
5. Safe Road Use
6. Fast and Effective Emergency Response
7. Future proofing of Road Safety
8. EU's Leading Role and exporting road safety

Which will be accompanied by a Key Detailed KPI Framework.



# Taking into Consideration (1):

1. That key factors leading to serious or fatal crashes remain the same:

- speed,
- use of substances,
- human error or choice,
- infrastructure,

2. That the reduction to Road Fatalities and Serious Accidents is slowing down in Europe in general (approximately 1% per year) and Cyprus is not an exception,

# Taking into Consideration (2):

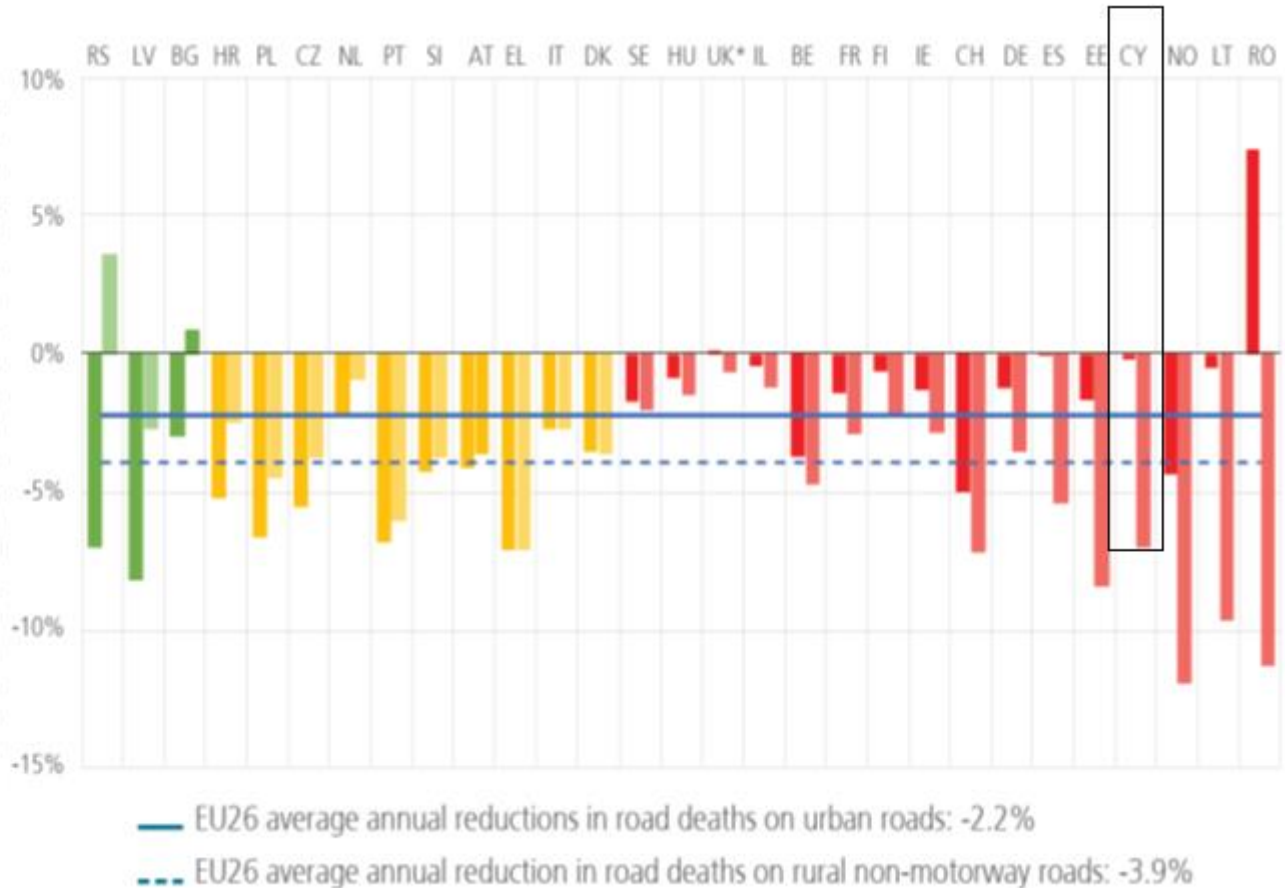
ETSC – PIN FLASH REPORT 37



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**Figure 3.** Difference between the average annual reduction in the number of reported road deaths on urban roads (first country column) and the annual reduction in the number of reported road deaths on rural non-motorway roads (second country column) over the period 2010-2017. Countries are ranked and the colour codes are applied based on the amount by which the annual average percentage reduction in deaths on urban roads exceeds the corresponding reduction on rural non-motorway roads.<sup>18</sup>

LU is excluded from the figure as the numbers of road deaths are relatively small and subject to substantial fluctuations, LU data are available in the annexes and are included in the EU26 average. SK and MT are excluded from the EU average due to insufficient data.

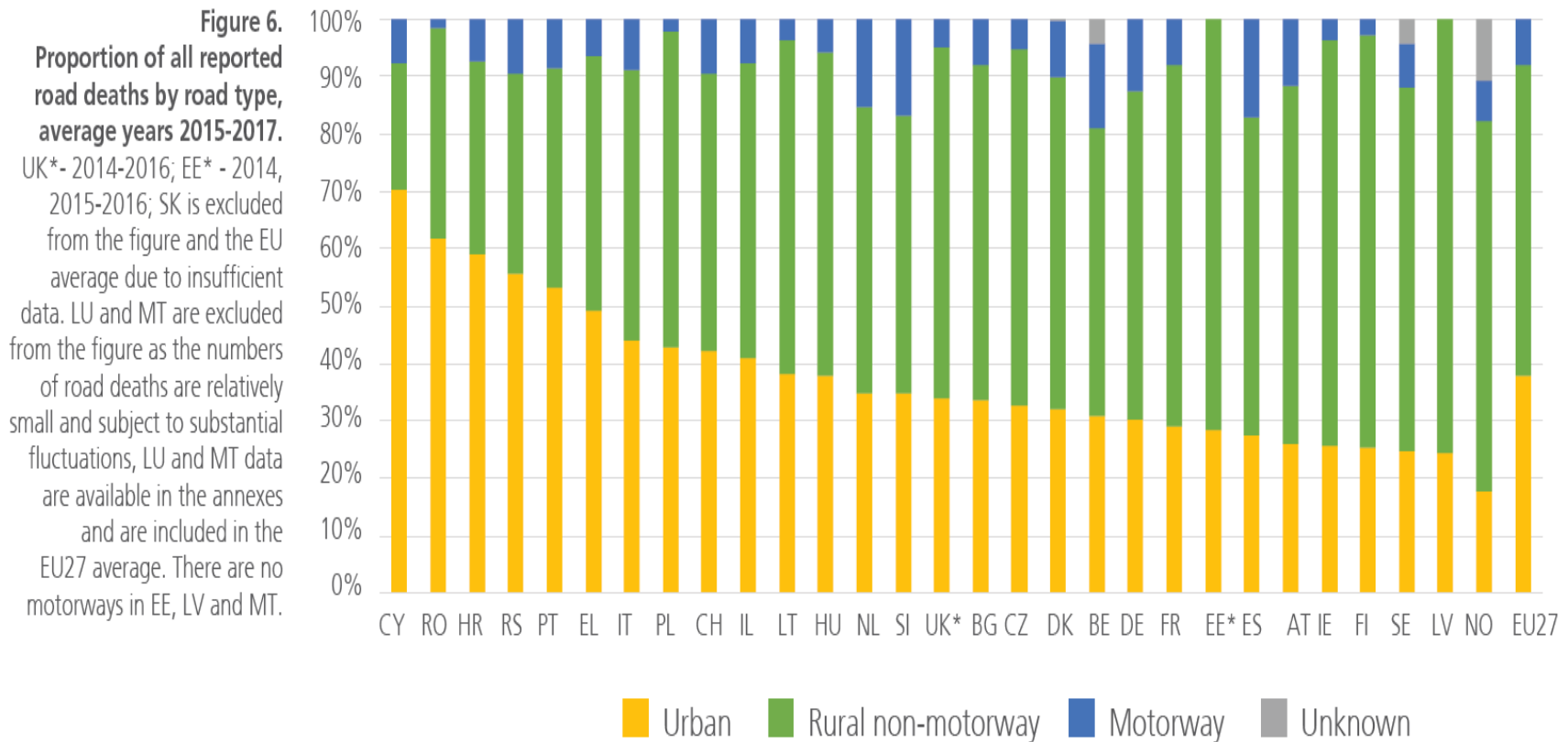


# Taking into Consideration (3):

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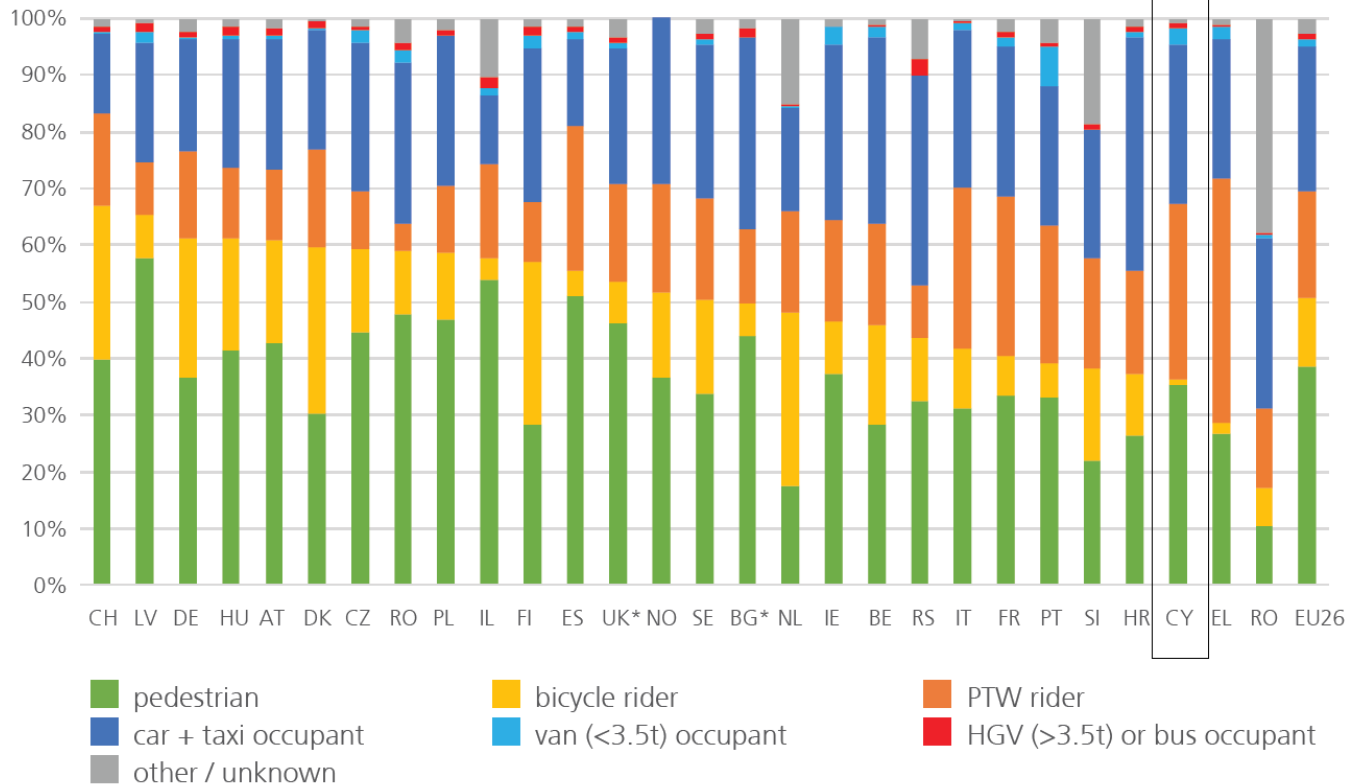
# Taking into Consideration (4):

## ETSC – PIN FLASH REPORT 37



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**Figure 8.**  
Proportion of reported road deaths on urban roads by road user group, average years 2015-2017. Countries are ranked based on the proportion of pedestrian and cyclist deaths.  
BG\* – 2015;  
UK\* - 2015-2016.  
EE, LU and MT are excluded from the figure due to relatively small numbers of road deaths. SK is excluded from the figure as the data are not available.





# THE COVER FOR THE NEW ROAD SAFETY STRATEGY 2030



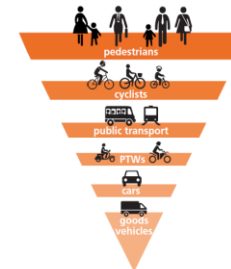
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Put further effort and resources in Urban Areas:

1. Safety by design
2. Accessibility & Mobility
3. Enforcement
4. Co-ordination of services & Training



MODAL PRIORITY  
BASED ON  
VULNERABILITY OF  
ROAD USERS  
CAN IMPROVE  
ROAD SAFETY IN  
CITIES



**SOLUTIONS  
FOR SAFER  
SPEEDS:**



SAFE AND  
CREDIBLE SPEED  
LIMITS



SELF-EXPLAINING,  
SELF-ENFORCING  
ROADS



VEHICLES THAT HELP  
DRIVERS TO COMPLY  
WITH SPEED LIMITS



STRICTER  
LAWS



ROAD USER  
EDUCATION



EFFECTIVE AND  
FREQUENT TRAFFIC  
LAW ENFORCEMENT  
ACTIVITIES

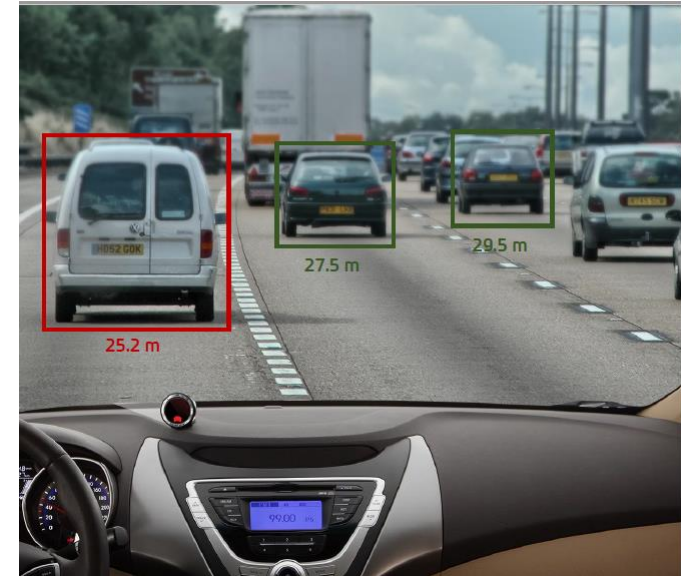


# Approach to Safety



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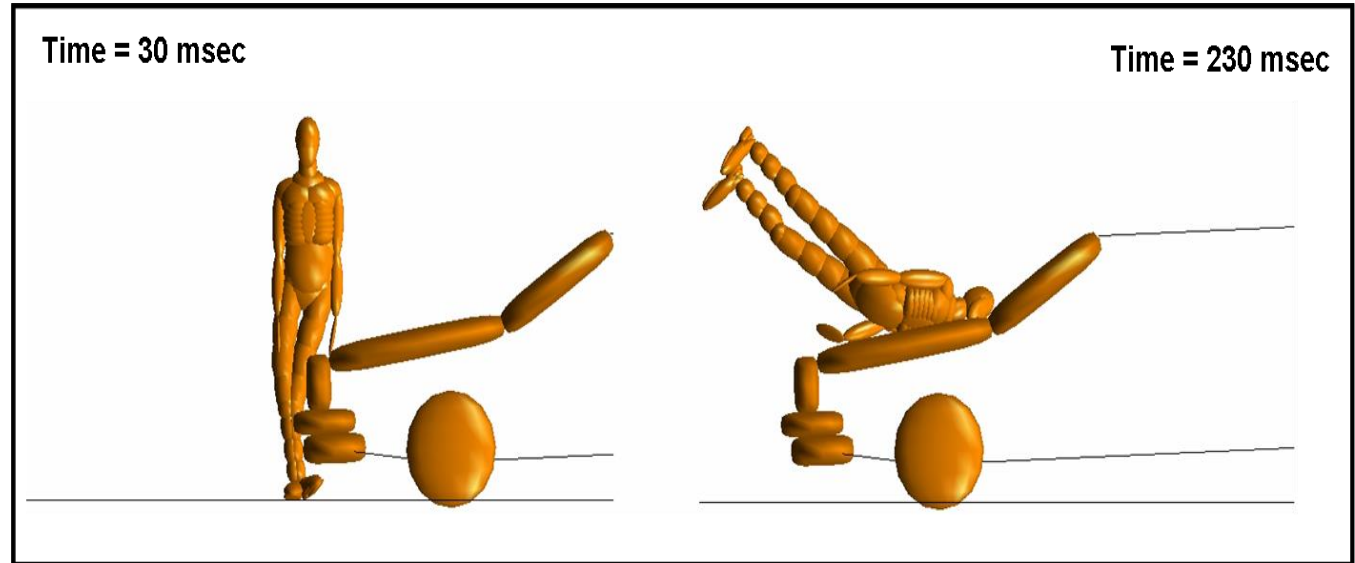
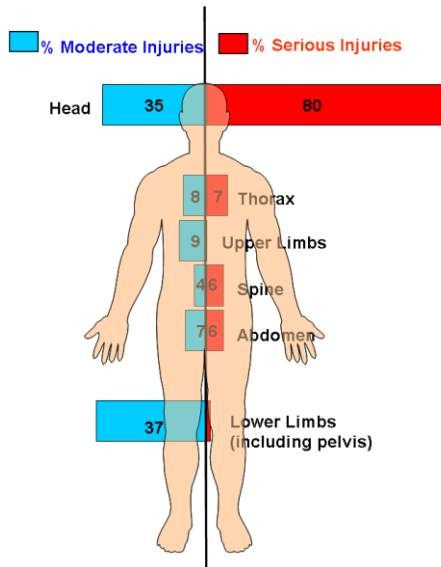
- Complex urban environment where rules are not always followed
- Those on move need to be always alert
- Lower speeds allow for accident avoidance
- Accident Avoidance Systems: 1.5 seconds early warning can prevent 90% of rear end collisions, 2.0 seconds warning can prevent almost all crashes !



# Anatomy of a pedestrian crash at 40Km/hr

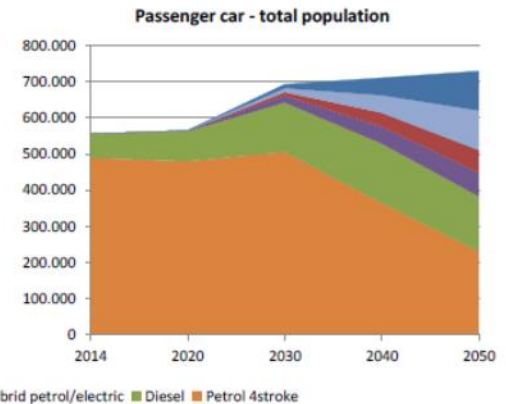
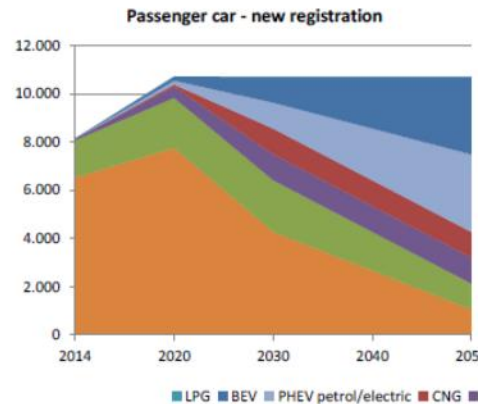


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## EU Directives regarding vehicles

- Front under run protection 2000/40/EC
- Pedestrian Protection 2003/102/EC



Source: TREMOD. Note: Additionally to the new registrations, second-hand imports and vehicles scrapping rates are taken into account in the calculation of the vehicle stock

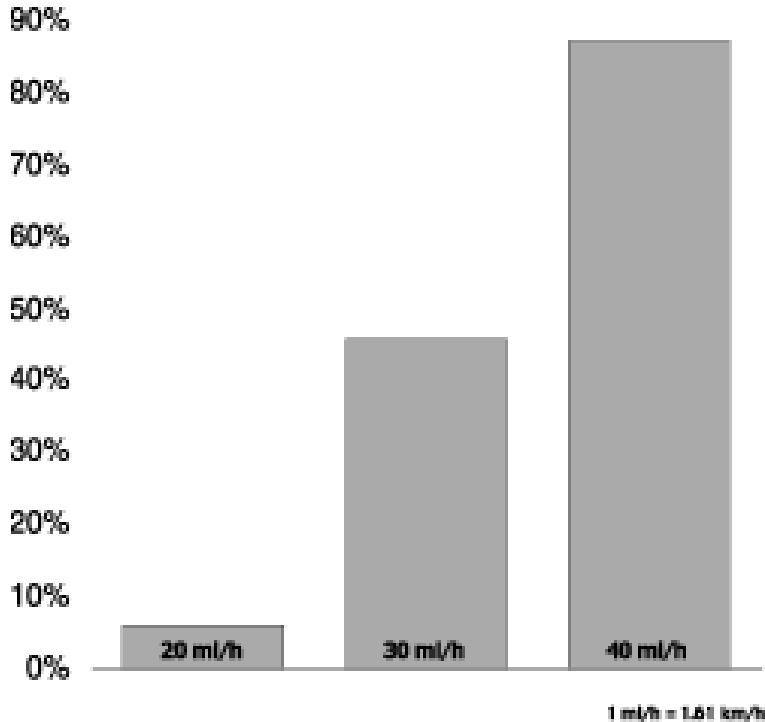


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# It is known that Speed Kills

## Fatalities Based on Speed of Vehicle

A pedestrian's chance of death if hit by a motor vehicle:



Source: U.K. Department of Transportation, *Killing Speed and Saving Lives*, London, 1987.

What are your chances of surviving a collision if you are struck by a car while walking or cycling?

Vehicle Speed	% chances of Surviving	% of vehicles exceeding that speed in built-up areas	
		Cars	Heavy Goods Vehicles
20 mph (app. 32km/h)	95	95	91
30 mph (app. 48km/h)	45	72	55
40 mph (app. 65km/h)	5	12	5

Source: Parliamentary Advisory Council on Transport Safety (1996) *Taking Action on Speeding*

Every 1 mph (1.6 Km) reduction in speed in incidents is accompanied by:

- 5% decrease in crashes
- 7% decrease in fatalities.

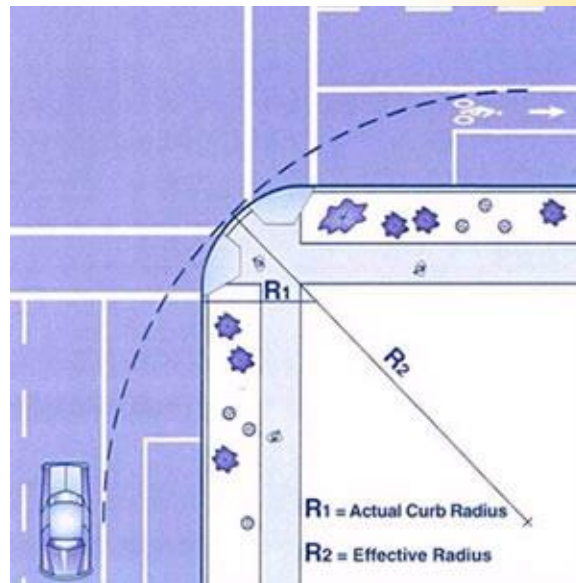
# MEASURES TO REDUCE SPEED



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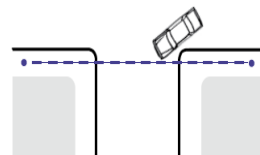
$$v^2 = 127\mu r$$

R (m)	V Km/hr
4	22
7	29
9	33
12	39
15	43
30	61

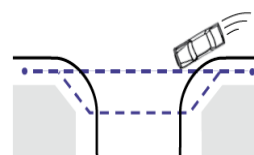


Small radius (eg. 1 metre)

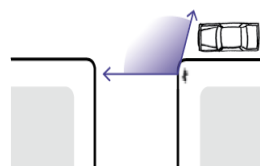
Large radius (eg. 7 metres)



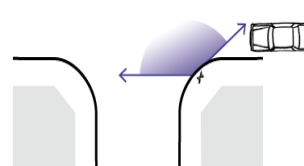
- Pedestrian desire line (---) is maintained.
- Vehicles turn slowly (10 mph – 15 mph).



- Pedestrian desire line deflected.
- Detour required to minimise crossing distance.
- Vehicles turn faster (20 mph – 30 mph).



- Pedestrian does not have to look further behind to check for turning vehicles.
- Pedestrian can easily establish priority because vehicles turn slowly.



- Pedestrian must look further behind to check for fast turning vehicles.
- Pedestrian cannot normally establish priority against fast turning vehicles.

**For speeds > 30 Km/hr  
Every 1.6 Km increase in  
speed  
= 7% increase in deaths**

Lane width (m)	Reduction in Free-Flow Speed (km/h)
3.6	0.0
3.5	1.0
3.4	2.1
3.3	3.1
3.2	5.6
3.1	8.1
3.0	10.6

Source: US Highway Capacity Manual



# IS THE ROAD CAPACITY AFFECTED?



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No – the average speed in Nicosia is approximately 25Km/hr and at peak time 15Km/hr.

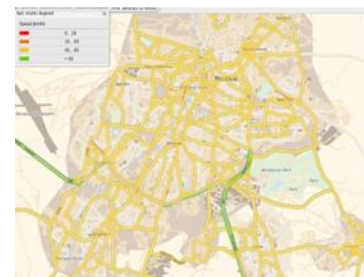
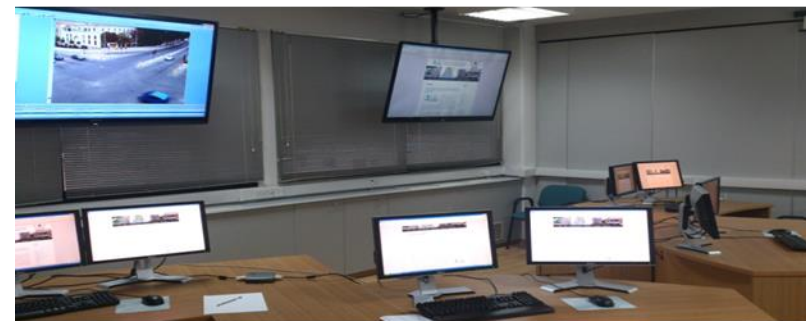
The smoothing of traffic flow increases the capacity of the road network, which largely depends on the functioning of the junctions.



1. Collect Data

2. Process Data

3. Disseminate Data



# MEASURES TO IMPROVE SAFETY



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# THE COMPLETE STREET TAKES INTO ACCOUNT THE DESIRED BEHAVIOUR



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# THE COMPLETE STRATEGY GIVES CHOICES



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# THANK YOU

## 5 TIPS FOR SAFE DRIVING



**AVOID  
DISTRACTIONS**



**WEAR YOUR  
SEAT BELT**



**DON'T SPEED**



**STAY CALM,  
BE ALERT**



**SEMI SAFETY**