

Why are Planning Visions Important?

The example of Vision Zero

Red Flag Act





The Legal Framework, crashes become illegal

Some are accident prone...



So we can always blame the victim

Some needs a psychologist

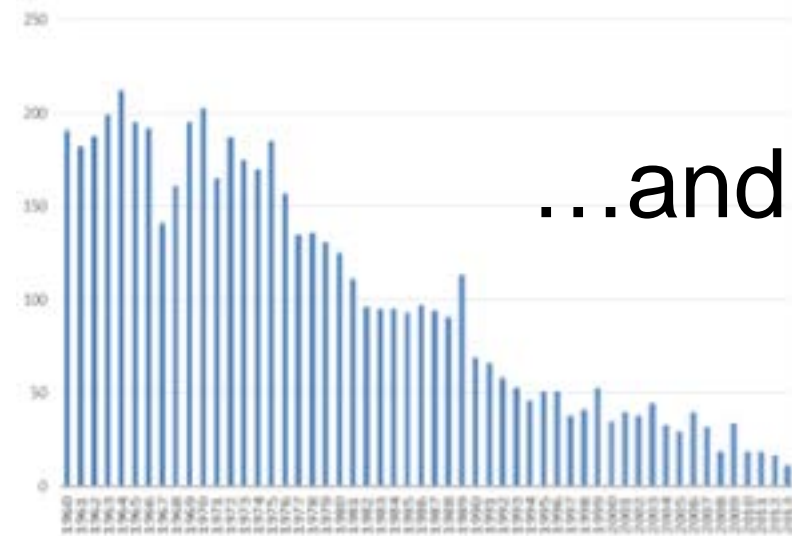




And campaigns...



...and educate the children!





and train the drivers...

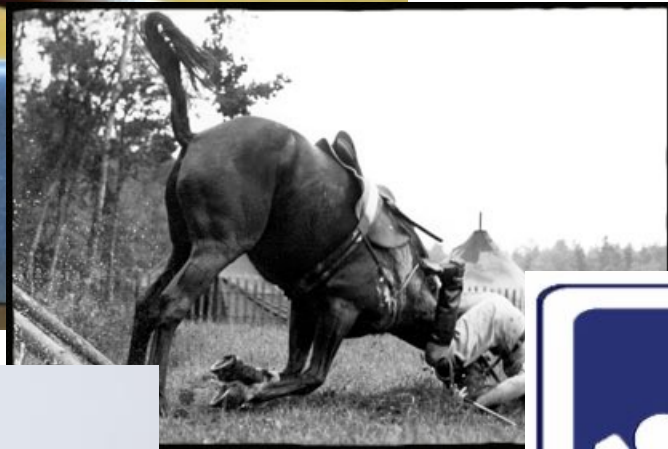
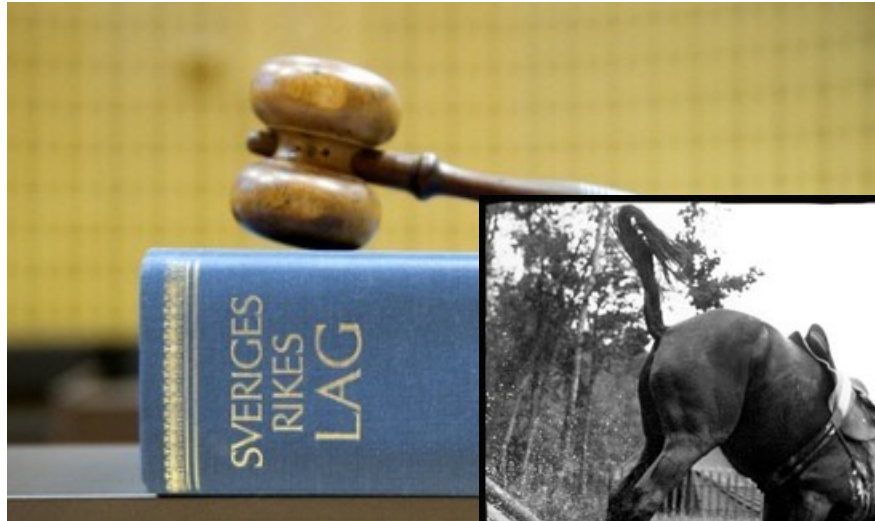
Or make them feel guilty and morally accused



or make them feel stupid



Going downstream (or simply finding the victim)



Only a little bit dead...



DON'T BE A
DICKHEAD
DON'T USE YOUR PHONE



The birth of a systematic approach - Haddon

"ENERGY DAMAGE AND THE TEN COUNTERMEASURE STRATEGIES

William Haddon Jr, Journal of Trauma 1973;13:321-31.

... The fifth strategy is to separate, in space or time, the energy being released from the susceptible structure, whether living or inanimate: the evacuation of the Bikini islanders and test personnel, the use of sidewalks and the phasing of pedestrian and vehicular traffic, the elimination of vehicles and their pathways from community areas commonly used by children and adults, the use of lightning rods, and the placing of electric power lines out of reach. This strategy, in a sense also concerned with rate-of-release modification, has as its hallmark the elimination of intersections of energy and susceptible structure – a common and important approach."

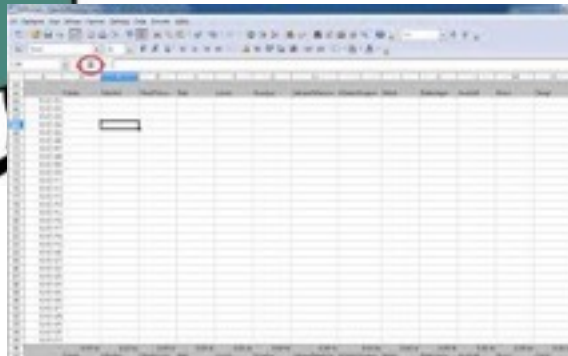
For the full text of the paper by W Haddon Jr,¹ please see:
doi:10.1097/00005373-197304000-00011

and the birth of
"countermeasures"





and the birth of calculation
and economic analysis



But still in the context of the
road user as the problem that
needs to be blamed and fixed...

...and the fatalities are simply the price for our
mobility! And therefore we need
the **optimal balance** between
mobility and safety!

Vision Zero!

The providers of the transport system
are responsible for the safety!

And the only target that is ethically
ok is 0!

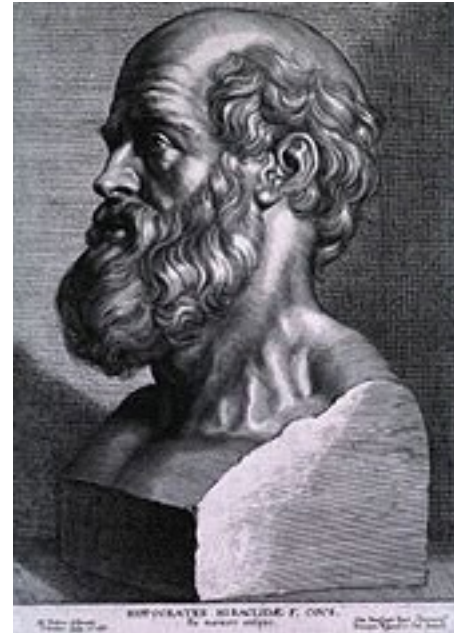
And you need to use scientific methods,
and apply them!!!

and the only way to do so is to
understand the fundamentals!



Hippokrates 400 B C

-



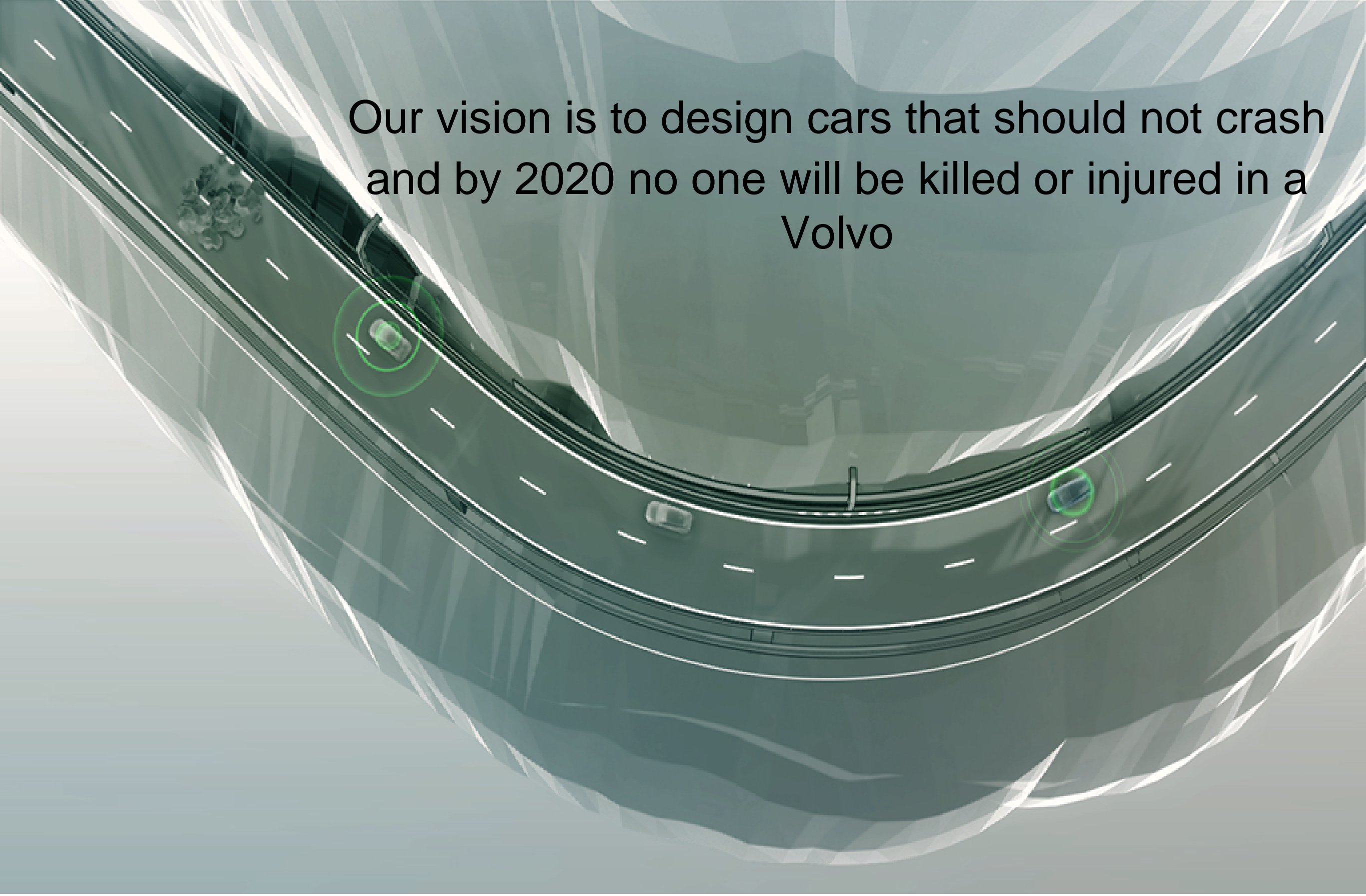
Of those who are wounded in the parts about the bone, or in the bone itself, by a fall, he who falls from a very high place upon a very hard and blunt object is in most danger of sustaining a fracture and contusion of the bone, and of having it depressed from its natural position; whereas he that falls upon more level ground, and upon a softer object, is likely to suffer less injury in the bone, or it may not be injured at all.

(9) By 2050, move close to zero fatalities in road transport. In line with this goal, the EU aims at halving road casualties by 2020. Make sure that the EU is a world leader in safety and security of transport in all modes of transport.

WHITE PAPER

**Roadmap to a Single European Transport Area –
Towards a competitive and resource
efficient transport system**

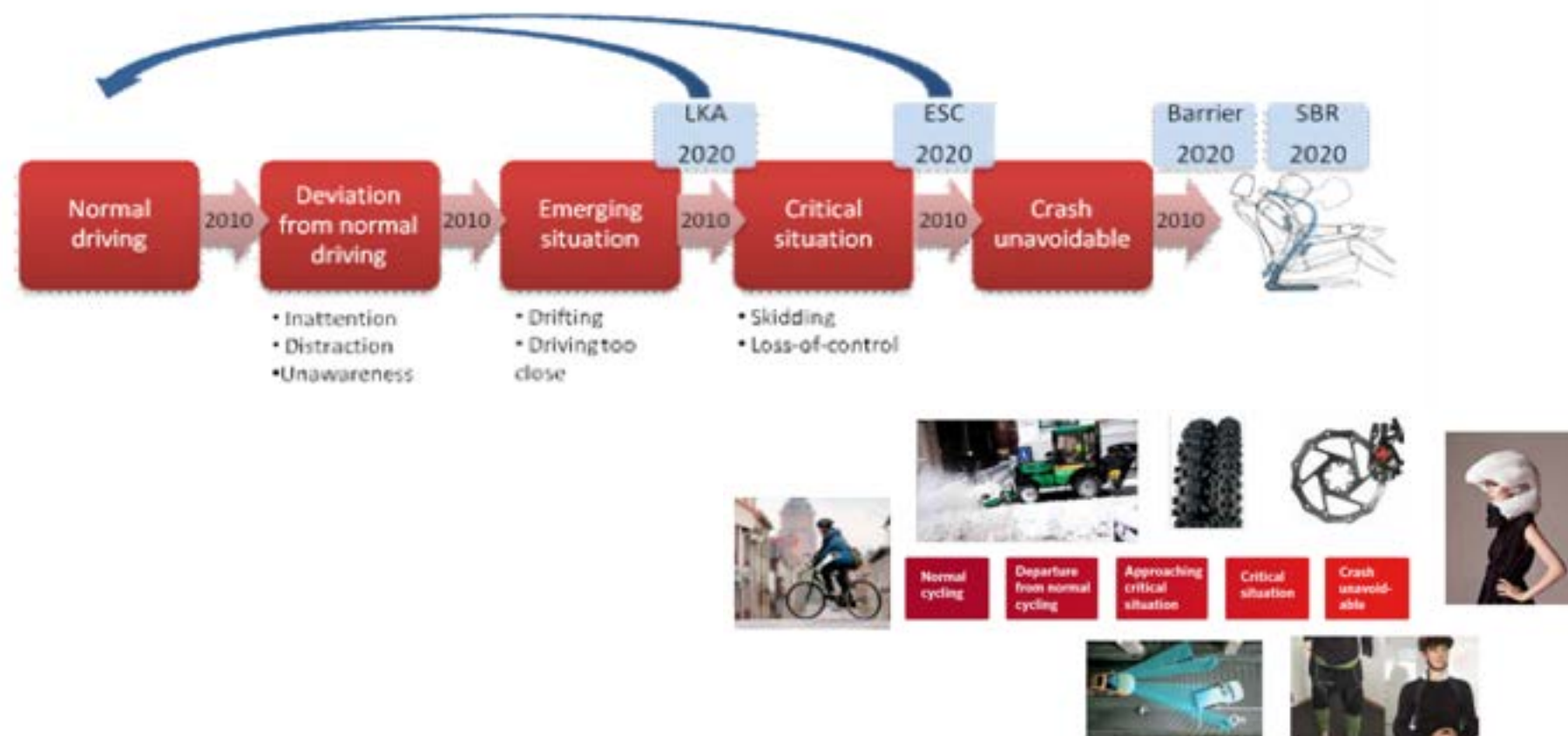
Our vision is to design cars that should not crash
and by 2020 no one will be killed or injured in a
Volvo

















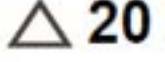
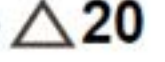




Everything is about controlling kinetic energy!




..and build chains of barriers and loops



..and define boundary conditions!!

				Passivt	Aktivt
		Head-on		+	
		Pedestrians		+	
		Side		+	
		Rear-end		+	
		Large animals		+	

Förarstödsystem/ Autonom system







UN Global Goals

By 2020, halve the number of global deaths and injuries from road traffic accidents

By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

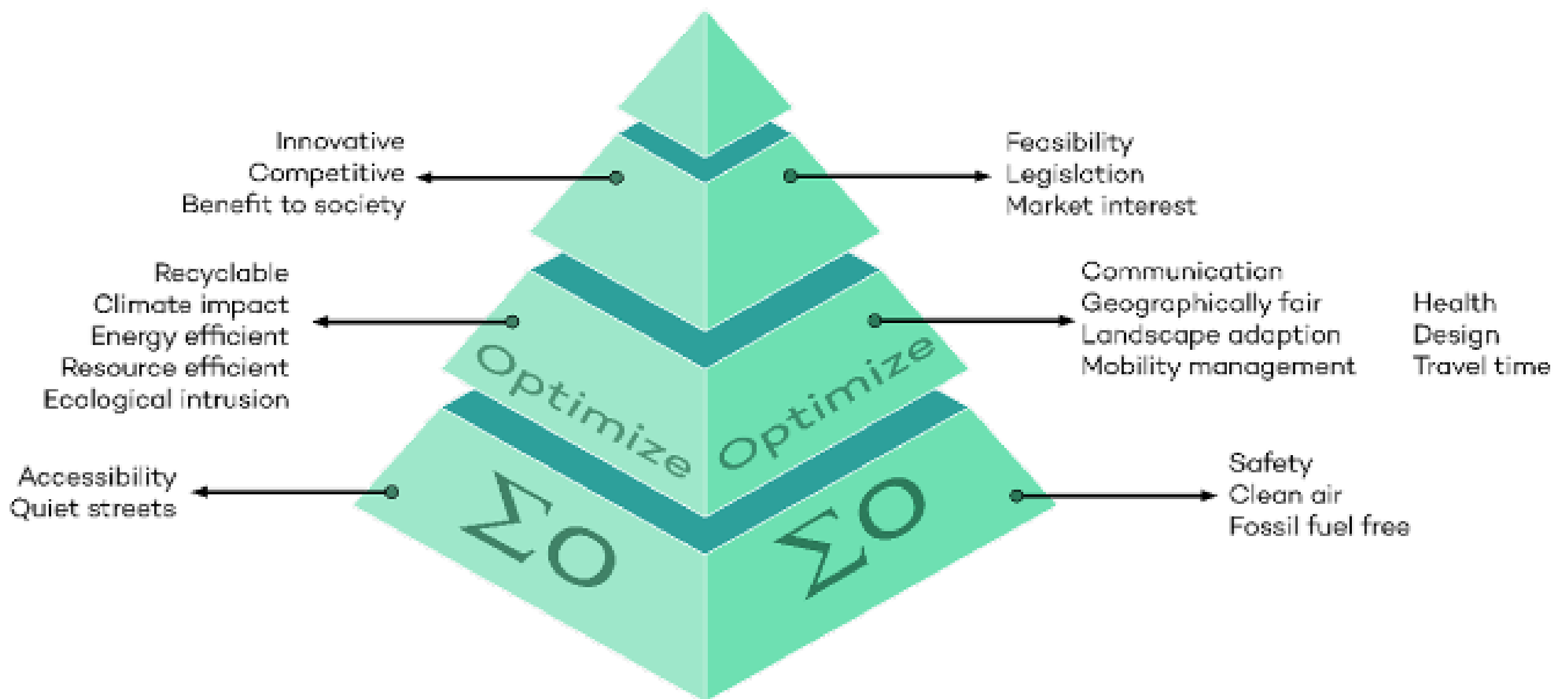
Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle

Promote public procurement practices that are sustainable, in accordance with national policies and priorities

Sustainable – not just more sustainable!



- Compact and space efficient
- Fossil free
- Silent
- Clean air
- Safe
- Mobility for all
- Affordable
- Shared economy
- ...and new technologies





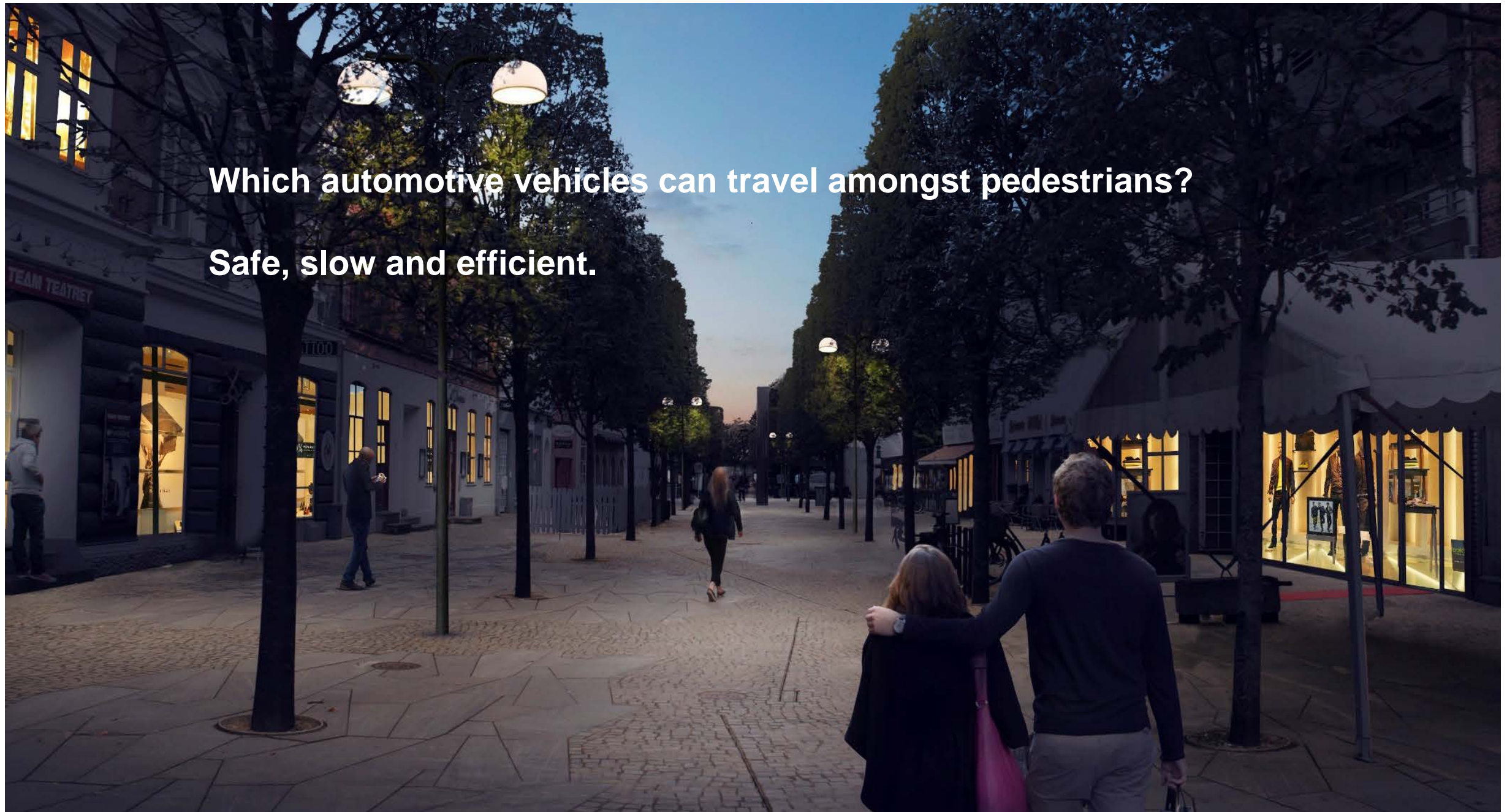
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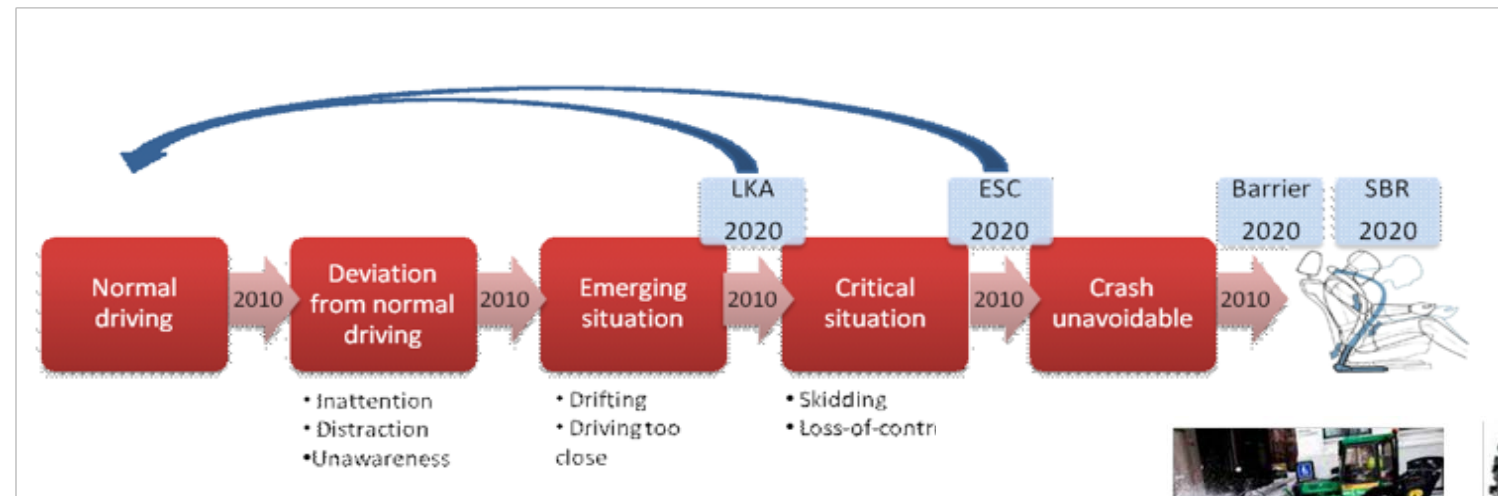


Which automotive vehicles can travel amongst pedestrians?

Safe, slow and efficient.



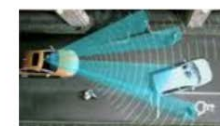
Going upstream (or simply finding the systemic prevention)



			Passivt	Aktivt
80			Head-on	60 + 20
40			Pedestrians	10 + 30
70			Side	55 + 15
△ 40			Rear-end	△ 20 + △ 20
110			Large animals	80 + 30



Normal cycling Departure from normal cycling Approaching critical situation Critical situation Crash unavoidable



What is Vision Zero?

A Vision paired with a set of principles, ethical rules and a democratic process!

A clear view on how responsibilities are shared,
and a clear view on how other values
are incorporated