agilysis Leadership in ROAD SAFETY

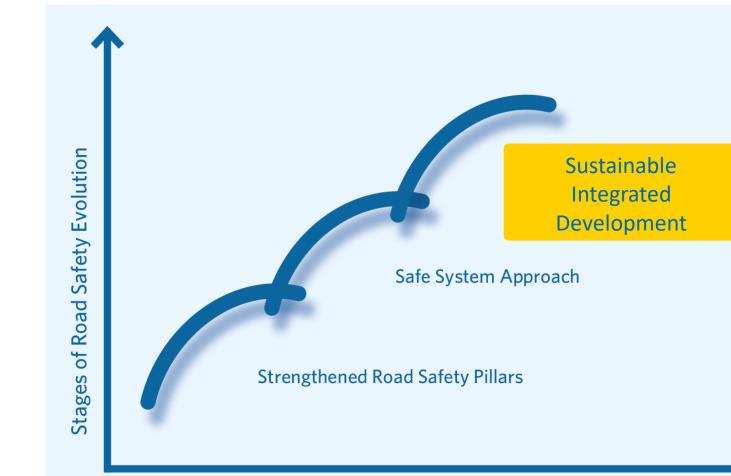
DAN CAMPSALL & TANYA FOSDICK

# **GLOBAL CONTEXT**

DAN CAMPSALL

'Global Directions in Road Safety AMA' Friday 1<sup>st</sup> May, 2.00pm.





Improved Road Safety

The Evolution of Road Safety, Saving Lives Beyond 2020: The Next Steps

#### **GLOBAL** MINISTERIAL CONFERENCE **5 ROAD SAFETY** ACHIEVING GLOBAL GOALS 2030

#### SUSTAINABLE PRACTICES AND REPORTING:

including road safety interventions across sectors as part of SDG contributions.

#### **PROCUREMENT:**

utilizing the buying power of public and private organizations across their value chains.

#### MODAL SHIFT:

100

moving from personal motor vehicles toward safer and more active forms of mobility.

#### CHILD AND YOUTH HEALTH:

encouraging active mobility by building safer roads and walkways.

#### INFRASTRUCTURE:

realizing the value of Safe System design as quickly as possible.

#### SAFE VEHICLES ACROSS THE GLOBE:

adopting a minimum set of safety standards for motor vehicles.

#### ZERO SPEEDING:

protecting road users from crash forces beyond the limits of human injury tolerance.

#### 30 KM/H:

mandating a 30 km/h speed limit in urban areas to prevent serious injuries and deaths to vulnerable road users when human errors occur.

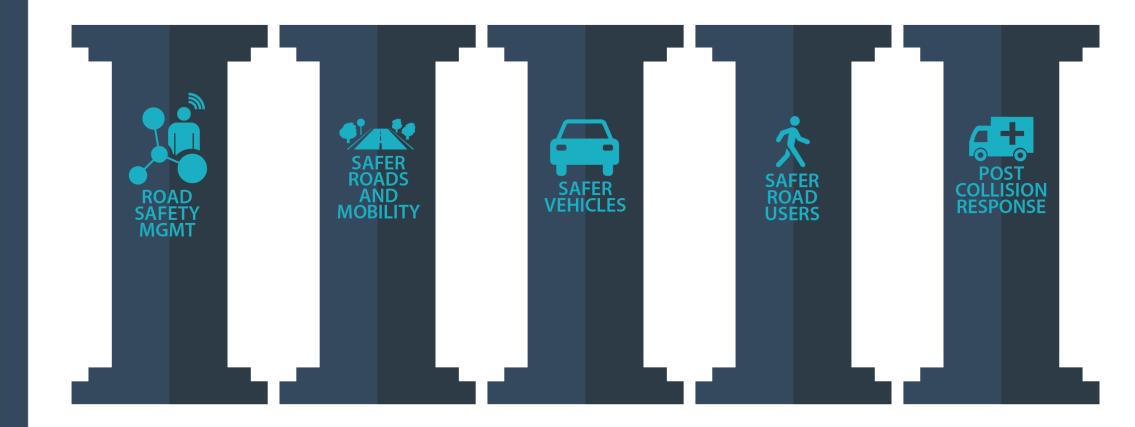
#### TECHNOLOGY:

bring the benefits of safer vehicles and infrastructure to lowand middle-income countries.



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TARGETS



Target 1: By 2020, all countries establish a comprehensive multisectoral national road safety action plan with time-bound targets.



Target 2: By 2030, all countries accede to one or more of the core road safety-related UN legal instruments.







Target 4: By 2030, more

existing roads is on roads

than 75% of travel on

that meet technical

users that take into

account road safety.

standards for all road



100% of new and used

vehicles meet high quality

the recommended priority

safety standards, such as

**UN Regulations, Global** 

**Technical Regulations**,

or equivalent.

Target 5: By 2030,



Target 6: By 2030, halve the proportion of vehicles travelling over the posted speed limit and achieve a reduction in speedrelated injuries and fatalities.



Target 7: By 2030, increase the proportion of motorcycle riders correctly using standard helmets to close to 100%.



Target 8: By 2030, increase the proportion of motor vehicle occupants using safety belts or standard child restraint systems to close to 100%.



Target 9: By 2030, halve the number of road traffic injuries and fatalities related to drivers using alcohol, and/or achieve a reduction in those related to other psychoactive substances.



Target 10: By 2030, all countries have national laws to restrict or prohibit the use of mobile phones while driving.



Target 11: By 2030, all countries to enact regulation for driving time and rest periods for professional drivers, and/or accede to international/regional regulation in this area.



Target 12: By 2030, all countries establish and achieve national targets in order to minimize the time interval between road traffic crash and the provision of first professional emergency care.

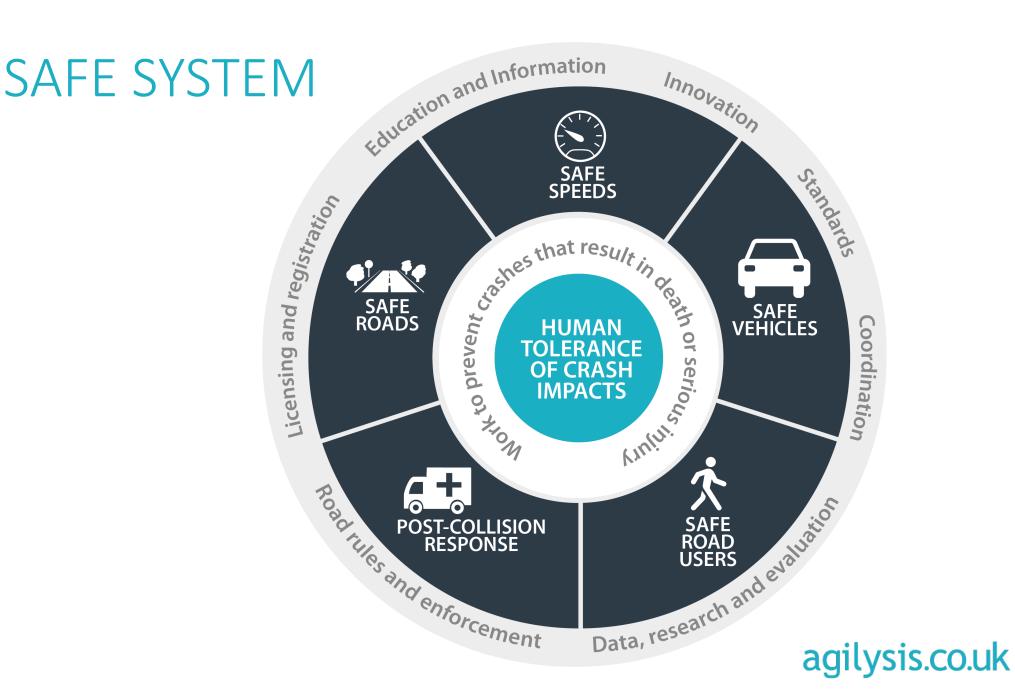
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# INTEGRATED SUSTAINABLE DEVELOPMENT



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# **UK CONTEXT**



AI & DATA ECONOMY



AGING SOCIETY



CLEAN GROWTH



FUTURE OF MOBILITY

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# CHARACTERISING THE 'NEW' LANDSCAPE

- EVIDENCE BASED
- CUSTOMER CENTRED
- FLEXIBLE DELIVERY
- LIGHT REGULATION

- COLLABORATIVE APPROACHES
- LOCAL APPLICATION
- DIGITAL WHERE APPROPRIATE
- SELF FINANCING INTERVENTIONS

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# APPLICATION

TANYA FOSDICK





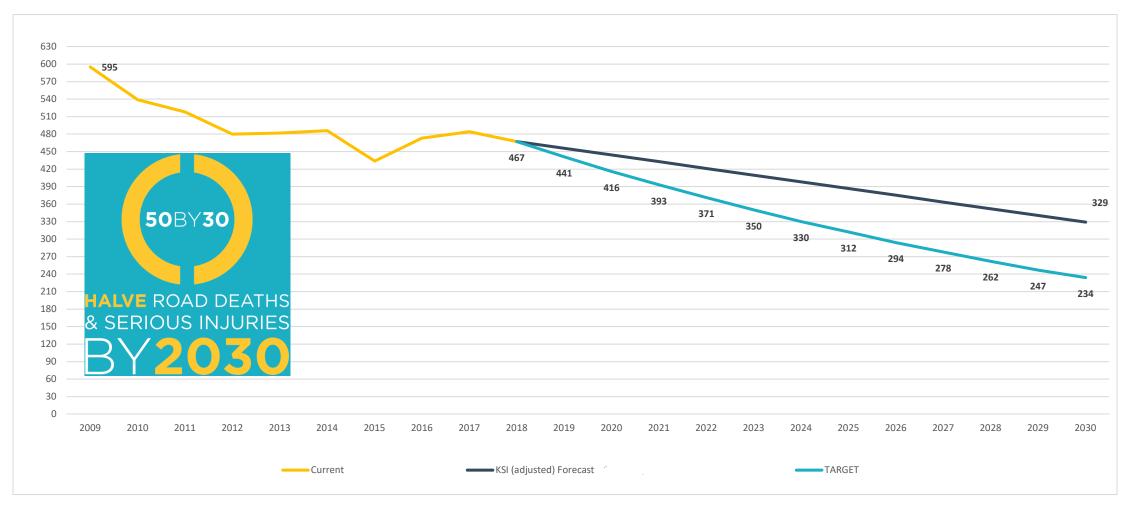
# No human being should be killed or seriously injured as the result of a road collision

### • How do we get there?

- Interim casualty targets
- Key Performance Indicators
- Adopting a Safe System approach

# CASUALTY TARGETS





# KEY PERFORMANCE INDICATORS

- Percentage of traffic complying with speed limits on national roads
- Percentage of traffic complying with speed limits on local roads
- Percentage of drivers who do not drive after consuming alcohol or drugs
- Percentage of car occupants using a seat belt / child seat
- Proportion of drivers not using an in-car phone (hand held or hands free)
- Percentage of new passenger cars with highest Euro NCAP safety rating
- Percentage of roads with appropriate iRAP safety rating
- Percentage of emergency medical services arriving at accident scene within 18 minutes.

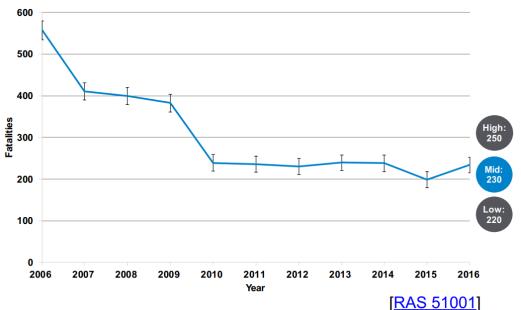




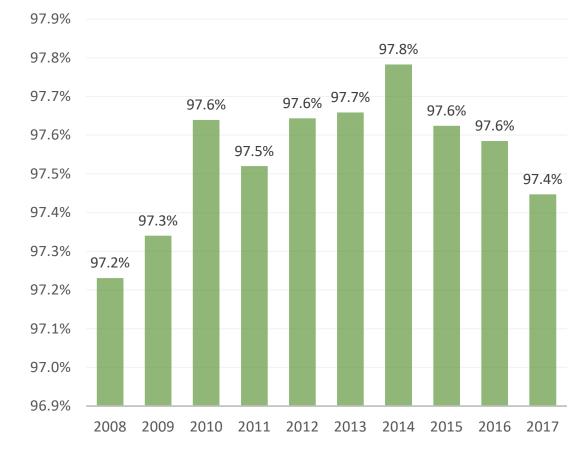
# PERCENTAGE OF DRIVERS WHO DO NOT DRIVE AFTER CONSUMING ALCOHOL OR DRUGS

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- Data sources
  - Police breath test data
  - Prosecutions
  - Surveys
  - STATS19 Collisions

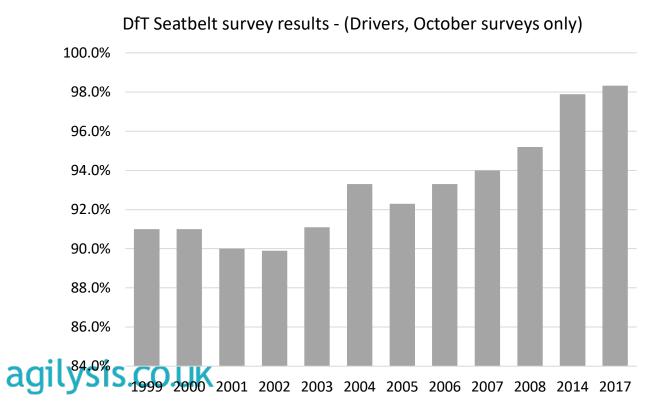


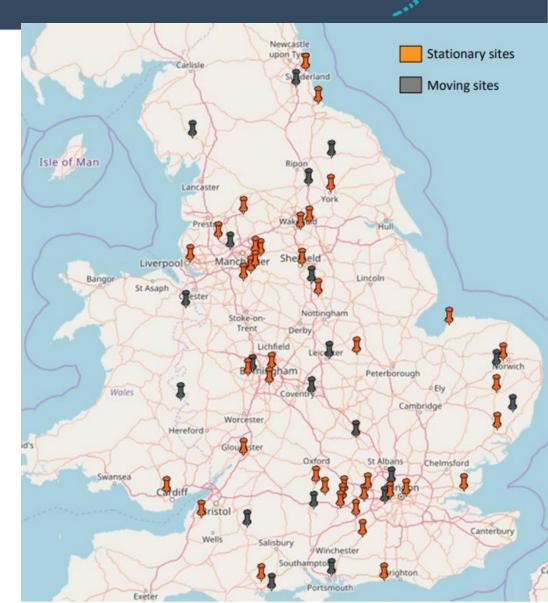
# Percentage of collision-involved drivers not impaired by alcohol



# PERCENTAGE OF CAR OCCUPANTS USING A SEAT BELT / CHILD SEAT

- Data sources
  - National surveys
  - Local surveys
  - STATS19 collision data





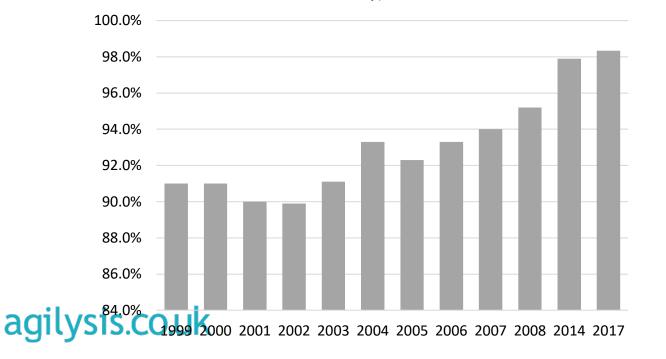
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#### PERCENTAGE OF CAR OCCUPANTS USING A SEAT BELT / CHILD SEAT

#### • Data sources

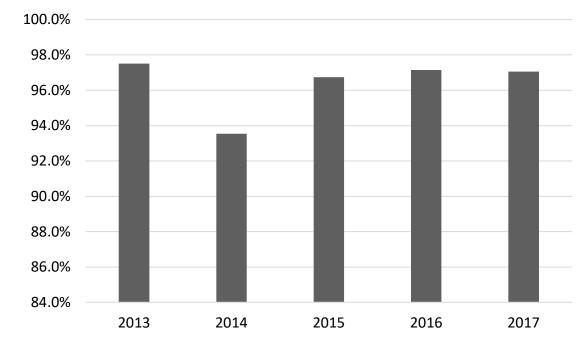
- National surveys
- Local surveys
- STATS19 collision data

DfT seatbelt survey results - (Drivers, October surveys only)



#### Percentage of <u>injured</u> car drivers wearing seatbelts when involved in an injury collision

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# PROPORTION OF DRIVERS NOT USING AN IN-CAR PHONE (HAND HELD O HANDS FREE)

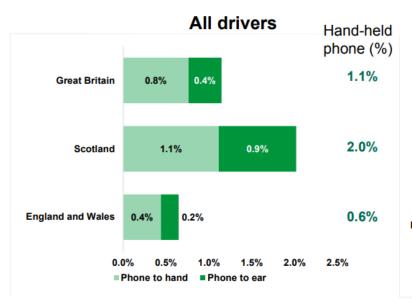
## Data sources

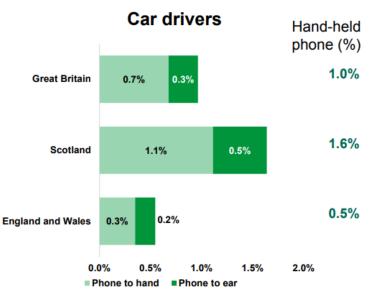
- Detection <u>rates</u> / Prosecutions
- Surveys

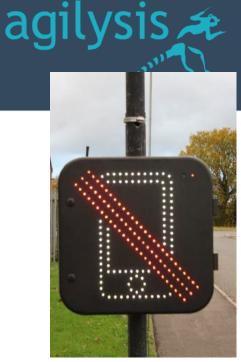
- Automated counters
- Crime Survey of England and Wales (CSEW)

STATS19 Collisions

Chart 1: Hand-held mobile phone use, 2017







PERCENTAGE OF NEW PASSENGER CARS WITH HIGHEST EURO NCAP SAFETY RATING

Make & Model 🗸	Safety Equipment	Overall rating 🔻	<mark></mark> -	<u>i</u> .	<u>k</u> -	<b>Â</b> .
Volvo XC40	Standard	****	97%	87%	71%	76%
Mercedes- Mercedes-Benz A-Class	Standard	****	96%	91%	92%	75%
Volvo S60	Standard	****	96%	84%	74%	76%
Volvo V60	Standard	****	96%	84%	74%	76%
Peugeot 508	Standard	****	96%	86%	71%	79%
Mazda 6	Standard	****	95%	91%	66%	73%
Audi Q3	Standard	****	95%	86%	76%	85%
Suzuki Jimny	Standard	<b>★★★☆☆</b>	73%	84%	52%	50%
Jeep Wrangler	Standard Standard	★☆☆☆☆	50%	69%	49%	32%
FIAT Panda	Standard	***	45%	16%	47%	7%

 20 out of 23 cars tested in 2018 achieved a 5 star rating

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#### PERCENTAGE OF NEW PASSENGER CARS WITH HIGHEST EURO NCAP SAFETY RATING



### • Data sources

- The European Transport Safety Council (ETSC) produced a report showing Finland, Norway and Ireland are the countries with the highest proportion of cars awarded the coveted 5 stars by the Euro NCAP among new cars sold in 2013 and tested over the period 2010-2013.
- On average, 52.5% of all new cars sold in the EU in 2013 were awarded 5 stars by Euro NCAP, 4.5% were awarded 4 stars, 3% were awarded 3 stars and 0.5% 2 stars. The UK was in line with the EU average: <u>http://etsc.eu/wp-</u> content/uploads/PIN-Flash-30-Final.pdf

### • Requirements

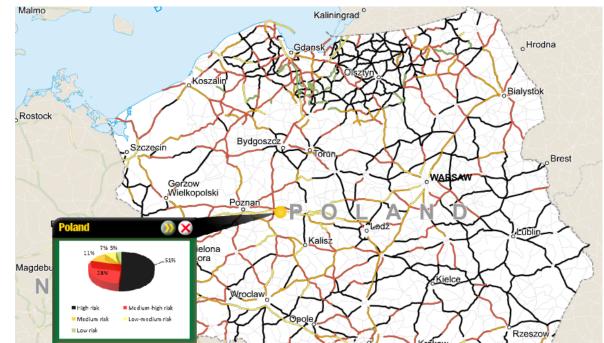
- DVLA data for VRM registered within authority areas
- Lookup table for VRM or Make / Model / Age to NCAP (if this exists...)
- How about miles driven, lots of older cars with lower safety levels may not be driven as far
- Use MoT database to create a snapshot of cars in use rather than new cars registered
- Could also then carry out local variation analysis
- Match collision data
- Match offending vehicle data
- Rating not the most reliable as it changes over time
- Focus on key features e.g. AEB

### PERCENTAGE OF ROADS WITH APPROPRIATE IRAP SAFETY RATING

### • Data sources

- iRAP agreed international protocols
- Already carried out for the Highways England network
- iRAP ratings tend to reflect operational speeds rather than speed limits
- Focus on inter-urban roads
- MRN next?
- Local roads surveys?

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SIS 2

- Data sources
  - Ambulance / NHS
  - Is it mapped effectively?
- NHS data is available for speed of response but is not linked to road safety crashes (i.e. no differentiation from other emergency types).
- For 2017, emergency calls (category 2), the average time was 20m 42s against a target of 18 minutes







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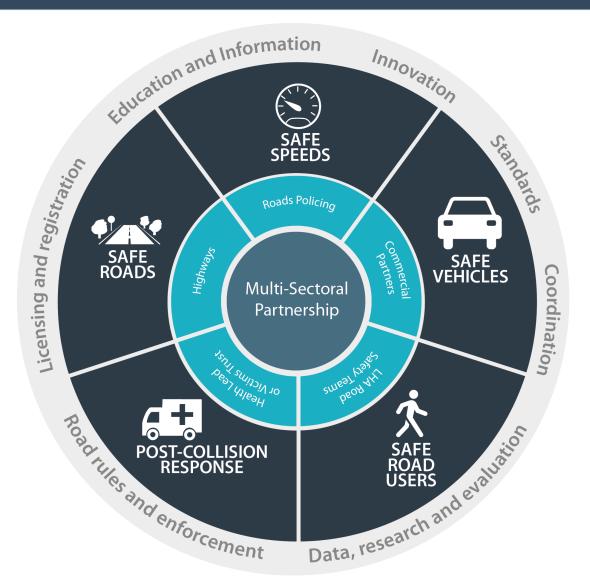


# PRINCIPLES OF THE SAFE SYSTEM

- 1. People make mistakes that can lead to road crashes
- 2. The human body has a limited physical ability to tolerate crash forces before harm occurs
- 3. A shared responsibility exists amongst those who design, build, manage and use roads and vehicle and provide post-crash care to prevent crashes resulting in serious injury or death
- 4. All parts of the system must be strengthened to multiply their effects; and if one part fails, road users are still protected.

'Principles of the Safe System' Thursday 7<sup>th</sup> May, 2.00pm.

# INTEGRATING THE SAFE SYSTEM



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- EVALUATION Thursday 23rd April
- MAST AMA Friday 24th April
- CORONAVIRUS EFFECTS Q&A Monday 27th April
- BEHAVIOUR CHANGE Wednesday 29th April
- GLOBAL DIRECTIONS Q&A Friday 1st May

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