WEBINAR WILL BEGIN AT 14:00

agilysis **ROAD SAFETY: WHAT** WORKS AND DOESN'T WORK? PART 1 RICHARD OWEN, TANYA FOSDICK, NEALE KINNEAR, MATT STATON, JESSICA TRUONG, BRIAN LAWTON

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WEBINAR SUPPORT

- Please use the chat function to discuss topics raised as we go along
- If you have a question, start your comment with QUESTION to make it clear to the presenter
- This is being recorded and will be available to review shortly
- The PDF slides are also available

INTRODUCTION TO THE WEBINAR

- How this webinar and the mini-series works
- Richard Owen CEO, Agilysis
- Tanya Fosdick Research Director, Agilysis
- Brian Lawton Research & Programme Manager, Road Safety Foundation
- Neale Kinnear Head of Transport Safety, TRL
- Jessica Truong Secretary General Towards Zero Foundation
- Matt Staton Road Safety (Vision Zero) Partnership Delivery Manager, Cambridgeshire County Council







INTRODUCTION TO THE REPORT

- A bold title!
- This guide has been prepared to help readers understand that not all road safety interventions are equally effective and that what appear to be "common-sense" approaches to selecting road safety interventions will often not be the best. Although some provide benefits, others have very limited or even negative impacts, despite being commonly—and mistakenly—recommended or accepted.
- Focus on LMIC but the evidence has been gathered from across the world
- <u>https://documents1.worldbank.org/curated/en/206691614060311799/p</u> <u>df/Guide-for-Road-Safety-Interventions-Evidence-of-What-Works-and-</u> <u>What-Does-Not-Work.pdf</u>

GUIDE FOR ROAD SAFETY NTERVENTIONS: EVIDENCE OF WHAT AND WHAT DOES NOT WORK





WHAT WORKS*

*HAS BEEN EVIDENCED TO REDUCE CRASHES

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SAFE ROADS AND ROADSIDES

INCLUDING PHYSICAL MEASURES TO REDUCE SPEED



POLL: SAFE ROADS & ROADSIDES



INTERVENTION	DESCRIPTION	POTENTIAL EFFECTIVENESS
INTEGRATED PUBLIC TRANSPORT	Provision of organised bus, light rail and heavy rail services	HIGHLY EFFECTIVE
ROADSIDE BARRIER SYSTEMS	Concrete, steel and/or wire rope barrier that constrain vehicles when leaving the roadway	HIGHLY EFFECTIVE
CENTRAL BARRIER SYSTEMS	Concrete, steel and/or wire rope barrier that constrain vehicles when leaving the roadway and cross into opposing traffic	HIGHLY EFFECTIVE
MEDIANS	Segregation of vehicles traveling in opposing directions of travel, either through constructed or painted areas of separation	HIGHLY EFFECTIVE
INFRASTRUCTURE TO SUPPORT APPROPRIATE SPEED FOR ROAD USERS	Traffic calming (including humps & chicanes), roundabouts, raised intersections, raised crossings, gateway treatments, lower speed limits, 20mph zones for pedestrians	HIGHLY EFFECTIVE
ROUNDABOUTS	Intersection control measure implemented in order to reduce speeds, angle of impact, and road user conflict points	HIGHLY EFFECTIVE
GRADE SEPARATION AT INTERSECTIONS	Provision of over or underpasses with on-ramps and off-ramps	HIGHLY EFFECTIVE
REDUCING RISK EXPOSURE AT INTERSECTIONS	Physically preventing cross-traffic turn movements at intersections, or closing low quality intersections & redirecting traffic to high quality facilities	HIGHLY EFFECTIVE



INTERVENTION	DESCRIPTION	POTENTIAL EFFECTIVENESS
PEDESTRIAN FOOTPATHS	A section clear of the roadway used by pedestrians	HIGHLY EFFECTIVE
PEDESTRIAN CROSSINGS	Crossing point giving priority for pedestrians, including signalised crossings or grade separated crossings (pedestrian underpass or footbridge, pedestrian overpass)	HIGHLY EFFECTIVE
SEPARATED BICYCLE FACILITIES	Bicycle path or lane that is physically separated from motorised traffic	EFFECTIVE
SEPARATED MOTORCYCLE FACILITIES	Motorcycle lanes that are separated from other traffic through lines or physical separation	EFFECTIVE
OTHER INTERSECTION IMPROVEMENTS	Traffic signals and provision of turning lanes	EFFECTIVE
SIGNS AND LINE MARKING	Warning, directional, and other traffic signs and line marking	EFFECTIVE
AUDIO-TACTICLE LINE MARKING	Raised or milled (cut) sections of road, placed either along the road (edge or centre) or across the road, to warn road users of hazards	EFFECTIVE
IMPROVING SURFACING ON POOR QUALITY ROADS WITHOUT ADDITIONAL INFRASTRUCTURE IMPROVEMENT	Providing a high quality road surface (that is, surfacing a dirt road) on a poor quality road (that is, with poor alignment and width)	NOT EFFECTIVE: INCREASED RISK

POLL RESULTS

What Works? Safe Roads & Roadsides

- ROADSIDE BARRIER SYSTEMS
- ROUNDABOUTS
- IMPROVING SURFACING ON POOR QUALITY ROADS
- AUDIO-TACTICLE LINE MARKING
- O PEDESTRIAN CROSSINGS







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Images: Source: Secretariat CAREC 2018. CAREC Road Safety Engineering Manual 2: Safer Road Works , World Bank, GRSF

QUESTIONS WITH BRIAN



- Which do you think offer the greatest benefit to the UK / do you have any examples
- 2. Are there other measures that may be missing / what's on the horizon?



SAFE ROAD USERS

INCLUDING SPEED ENFORCEMENT



POLL: SAFE ROAD USERS

INTERVENTION	DESCRIPTION	POTENTIAL EFFECTIVENESS
DRIVER LICENSING SYSTEMS THAT INCLUDE EXTENSIVE ON-ROAD SUPERVISED PRACTICE	Structured licensing that involves extensive supervised on-road training, & a robust examination of driver ability	EFFECTIVE
GRADUATED LICENSING SYSTEMS	Systems for novice drivers that limit the situations in which they can drive	EFFECTIVE
LICENSE THROUGH APPLICATION OR PAYMENT	Systems for licensing that do not require extensive on- road training & strict testing, but rather are obtained through application	NOT EFFECTIVE
INCREASE AGE FOR DRIVING LICENSE ELIGIBILITY	Raising the minimum age of eligibility for new drivers	EFFECTIVE
HAZARD PERCEPTION TRAINING & TESTING	Training novice drivers to better anticipate & perceive hazards as part of rigorous driver licensing regimes	EFFECTIVE
POST-LICENSE DRIVER & RIDER EDUCATION & TRAINING	Post-license skills training for drivers or riders	NOT EFFECTIVE: SOME RESULT IN INCREASED RISK
SCHOOL-BASED EDUCATION & TRAINING	Training programs or education with the school system that teach driving skills to high-school students	NOT EFFECTIVE: SOME RESULT IN INCREASED RISK

INTERVENTION	DESCRIPTION	POTENTIAL EFFECTIVENESS
PUBLIC EDUCATION & CAMPAIGNS	Comprehensive & on-going public education campaigns that are linked in content & timing with enforcement and penalty regimes	EFFECTIVE
ENFORCEMENT (INCL. SPEED CAMERAS)	Includes roadside enforcement of drink-driving, speed enforcement (roadside or through automated cameras), seat belt and helmet wearing	EFFECTIVE
PENALTIES	Fines (best if unavoidable, and not subject to corruption) and demerit points (points-based licensing systems)	EFFECTIVE
ALCOHOL INTERLOCKS	Alcohol interlocks test the breath of a driver for alcohol, & if present, prevent the vehicle from starting	EFFECTIVE
FATIGUE MONITORING	Systems designed to monitor driving fatigue through in-vehicle systems that recognise signs of fatigue & provide direct warnings & interventions to prevent continued driving	EFFECTIVE
SPEED MONITORING	Systems designed to monitor driving speed through in-vehicle systems & provide direct warnings & interventions to prevent continued speeding	EFFECTIVE
INCREASED SEAT BELT WEARING RATES	Measures to increase seat belt wearing rates	HIGHLY EFFECTIVE
INCREASED HELMET WEARING RATES	Wearing helmets while riding motorbikes or bicycles	HIGHLY

POLL RESULTS

What Works? Safe Road Users

- SPEED MONITORING SYSTEMS
- ◯ GRADUATED LICENSING SYSTEMS
- ◯ HAZARD PERCEPTION TRAINING & TESTING
- O POST-LICENSE DRIVER & RIDER EDUCATION & TRAINING
- SCHOOL-BASED EDUCATION & TRAINING









QUESTIONS WITH NEALE



- Which do you think offer the greatest benefit to the UK / do you have any examples?
- 2. Are there other measures that may be missing / what's on the horizon?



SAFE VEHICLES



POLL: SAFE VEHICLES

INTERVENTION	DESCRIPTION	POTENTIAL EFFECTIVENESS
MINIMUM SAFETY STANDARDS	Ensuring that new & used vehicles meet minimum safety standards	EFFECTIVE
SEAT BELTS	A belt or strap to securely hold a vehicle occupant in place during a collision	HIGHLY EFFECTIVE
VEHICLE MAINTENANCE	Periodic vehicle inspection and roadside maintenance checks	EFFECTIVE
DAYTIME RUNNING LIGHTS FOR CARS & TRUCKS	Automated use of headlights to help increase visibility of vehicles at all times of day and night	EFFECTIVE
DAYTIME RUNNING LIGHTS FOR TWO- OR THREE-WHEEL VEHICLES	Automated use of headlights to help increase visibility of vehicles at all times of day and night	EFFECTIVE
UNDER-RUN GUARDS ON TRUCKS	Devices fitted to the front & side of trucks to prevent vulnerable road users from being run over	EFFECTIVE
ELECTRONIC STABILITY CONTROL	Automatic application of braking to individual wheels by the vehicle to prevent loss of control	HIGHLY EFFECTIVE
ADVANCED VEHICLE TECHNOLOGIES INCLUDING FULLY OR PARTIALLY AUTOMATED VEHICLES	Emerging technologies that reduce or prevent vehicles from colliding with other vehicles or vulnerable road users, including lane keeping systems & autonomous emergency braking	HIGHLY EFFECTIVE

POLL RESULTS

What Works? Safe Vehicles

- ELECTRONIC STABILITY CONTROL
- VEHICLE MAINTENANCE (MOT)
- O MINIMUM SAFETY STANDARDS
- ◯ SEAT BELTS
- O BABY ON BOARD STICKERS







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QUESTIONS WITH JESS



- Which do you think offer the greatest benefit to the UK / do you have any examples
- 2. Are there other measures that may be missing / what's on the horizon?



POST-COLLISION RESPONSE



POLL: POST-COLLISION RESPONSE

INTERVENTION	DESCRIPTION	POTENTIAL EFFECTIVENESS
SYSTEMS TO IMPROVE EMERGENCY RESPONSE TIME, INCLUDING DEDICATED PHONE NUMBERS & LOGISTICAL SUPPORT	Systems to ensure rapid emergency response including dedicated phone numbers and logistical support	EFFECTIVE
IMPROVED EMERGENCY RESPONSE CARE	Improved equipment and skills for first responders and other emergency response units	EFFECTIVE
IMPROVED FIRST AID SKILLS FOR THE PUBLIC	Improved skills for members of the public who may provide first aid when first on the scene at a crash	EFFECTIVE
IMPROVED HOSPITAL CARE	Improved equipment and skills at trauma units within hospitals	EFFECTIVE

POLL RESULTS

Post-Crash Response

- IMPROVED FIRST AID SKILLS FOR THE PUBLIC
- SYSTEMS TO IMPROVE EMERGENCY RESPONSE TIME, INCLUDING DEDICATED PHONE NUMBERS & LOGISTICAL SUPPORT
- IMPROVED EMERGENCY RESPONSE CARE
- ◯ IMPROVED HOSPITAL CARE









QUESTIONS WITH MATT



- Which do you think offer the greatest benefit to the UK / do you have any examples?
- 2. Are there other measures that may be missing / what's on the horizon?



AUDIENCE Q&A



What Works part 2

Tuesday 9th November 2021 at 14:00-15:00

Presented by Dan Campsall and Tanya Fosdick



Second Decade of Action

Tuesday 2nd November 2021 at 14:00-15:00

Presented by Dan Campsall with guest speakers Lotte Brondum from the Global Alliance and Jonathan Passmore from Road Safety, Injury & Violence Prevention

🗭 Register now 📕 💷 Read more

Dead more

New Ways of Accessing Road Safety

Data

Tuesday 19th October 2021 at 14:00-15:00
Presented by Richard Owen
Image Register now Registe

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