

Safety Cameras - Derek Rafferty was Misled by the UK Government and TRL Reference Books [LINK](#)

**Request for the Removal from Official Records of
Life Savers Not Revenue Raisers-
[Safety Cameras in Ireland](#): A Cost Benefit Analysis
by Derek Rafferty Master of Science (M.Sc.), as**

Road crashes are because of UK Government Highway Code stopping distance mistakes

Request for removal made by;

Frank Cullinane

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12 08 2020

My Supporting evidence is outlined in the Review of Reference Books used by Rafferty

Research for the Driving ScoreCard System

Introduction

The road crash statistics outlined by Derek Rafferty in this research shows that 'Speed Detection Cameras' which are described as 'Safety Cameras' are not 'Life Savers'.

TRL has misled Rafferty and the Authors of many of the Reference Books used since 1946.

Research for the Driving ScoreCard System

Fatal Road Crash Statistics [1922 – 2020](#)

The Garda fatal and injury road crash statistics [1922 to 2020](#) outlined in the Garda web page now differ from the statistics reported to Government and published by the RSA. Gardai claim their statistics began in [1959](#) or [1961](#) and not in [1922](#),

Injury crashes were underreported, Garda car crashes increased, fatal crashes outlined in red were removed, 1 in 3 drivers received penalty points, 14 of the penalty point offences were for not wearing a Safety Belt, 40 km of the 45 km long [M50 Motorway](#) and almost every road in Ireland is now deemed to be a [Collision Prone Zone](#).

GoSafe Speed Detection Cameras run at a loss of €26m in 3 years but claim to save 24 lives each year since 2011. Irelands Government Statistics show this did not happen **in the 9 years since 2011 as follows:**

<u>Year</u>	1869	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Road Fatalities	1	51	75	64	96	130	106	106	106	184	184	202	185	199	222	201	214	227	192	204
Road crash Injuriess		583	701	725	973	1148	1148	1148	1148	2870	2870	2934	2747	2934	3388	3534	4247	5516	4989	3929
<u>Year</u>	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Road Fatalities	156	176	110	130	115	166	195	201	213	213	251	222	257	267	282	313	274	269	306	302
Road crash Injuriess	2609	1881	1455	1408	1679	2861	3294	3836	3941	4,452	4471	4208	4476	4769	5200	5027	4328	3343	3284	5753
<u>Year</u>	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Road Fatalities	332	339	335	341	356	382	416	447	462	540	576	640	592	594	586	525	583	628	614	564
Road crash Injuriess	5424	5500	4757	5205	5667	5412	6110	9718	9566	9269	9629	8955	8762	8288	7198	7798	8515	9313	8250	8509
<u>Year</u>	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Road Fatalities	572	533	535	465	410	387	462	463	460	478	445	415	431	404	437	453	472	458	413	415
Road crash Injuriess	8283	8006	7946	8210	7818	8329	8409	8437	8803	9429	9874	10k	10k	10k	13k	13k	15k	15k	14k	14k
<u>Year</u>	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Road Crash Fatalities	411	376	335	374	396	365	338	279	238	212	186	161	190	195	166	188	159	151	149	149
Or											200	179	192	196	171	190	162	146	141	151
Road Crash (M) Injuries	12k	10k	9721	8744	10k	9479	8666	10k	10k	8831	7707	8416	7388	8837	8904	N/A	N/A	N/A	N/A	N/A
Serious Injuries	1417	1150	1009	877	1021	907	860	835	640	561	472	485	492	514	417	751	857	1,037	N/A	N/A
Total Injuries	13.4K	11.1K	10.7K	9.6K	11K	10.3K	9.2K	10.8K	10.6K	9.3K	8.1K	8.9K	7.8K	9.3K	9.3K	N/A	N/A	N/A	5527	4120
Motorway Length	100	100	175	175	256	279	279	440	682	918	918	918	918	918	934	934	1000	1000	1000	1000
Penalty Points		Began			592ke	592ke	592k	597k	814k	680k	859k	962k	1m	748k	756k	N/A	N/A	N/A	N/A	N/A
Garda Car Crashes	172	350	370	460	350	233	299	486	532	577	667	639	598	613	682	602	667	625	625e	
GoSafe Cost 2017/19																				€44m
GoSafe Income																				€18m
Go Safe Loss																				€26m

Research for the Driving ScoreCard System

<u>Year</u>	1869	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Fatal Removed	1	51	75	64	96	130	106	106	106	184	184	202	185	199	222	201	214	227	192	204
Injury Removed		583	701	725	973	1148	1148	1148	1148	2870	2870	2934	2747	2934	3388	3534	4247	5516	4989	3929
<u>Year</u>	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
Fatal Removed	156	176	110	130	115	166	195	201	213	213	251	222	257	267	282	313	274	269	306	302
Injury Removed	2609	1881	1455	1408	1679	2861	3294	3836	3941	4452	4471	4208	4476	4769	5200	5027	4328	3343	3284	5753
<u>Year</u>	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Fatal	332	339	335	341	356	382	416	447	462	540	576	640	592	594	586	525	583	628	614	564
Injury	5424	5500	4757	5205	5667	5412	6110	9718	9566	9269	9629	8955	8762	8288	7198	7798	8515	9313	8250	8509
<u>Year</u>	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Fatal	572	533	535	465	410	387	462	463	460	478	445	415	431	404	437	453	472	458	413	415
Injury	8283	8006	7946	8210	7818	8329	8409	8437	8803	9429	9874	10k	10k	10k	13k	13k	15k	15k	14k	14k
<u>Year</u>	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Fatal	411	376	335	374	396	365	338	279	238	212	186	161	190	193	165	187	158	149	148	
Injury	12k	10k	9721	8744	10k	9479	8666	10k	10k	8831	7707	8416	7388	8837	8904	N/A	N/A	N/A	N/A	N/A
Motorway Length km	100	100	175	175	256	279	279	440	682	918	918	918	918	918	934	1000	1000	1000	1000	1000
Penalty Points Issued		First			592k	592k	592k	597k	814k	680k	859k	962k	1m	784k	756k	N/A	N/A	N/A	N/A	N/A
Garda Car Crashes	172	350	370	460	350	233	299	486	532	577	667	639	598	613	682	N/A	N/A	N/A	N/A	N/A
GoSafe Cost 2017 to 2019																				€44m
GoSafe Income																				€18m
GoSafe Loss																				€26m

Summary

Although now privatised TRL was owned by the UK Government when the stopping mistake was made.

- Rafferty was misled 'Safety Cameras' are not 'Life Savers'.

Driving ScoreCard System 10 to 120 km/h [Link](#)

TRLs 5 Stopping Formula Mistakes [Link](#)

About Speed Detection Cameras Worldwide

The world's first fatality occurred in Ireland in 1869 and each year the World Health Organisation WHO established in [1948](#) reports 1,300,000 road fatalities and 50,000,000 serious injuries worldwide. The WHO Reference Books and WHO Researchers Elvik, Wegman and 145 Governments use TRLs stopping formulas. **If [Speed and Red Light](#) Cameras Saved Lives road carnage would not continue worldwide [1869](#) to [2020](#).**

On [28 01 1896](#), or 124 years ago a Police Officer on a [bicycle](#) prosecuted a driver for speeding at 8 mph in a 4 mph area at a time when neither cars nor bicycles had speedometers.

On [25 09 2019](#), Police officer Matthew Alan Rushing in Dallas, Texas enters guilty plea to a single charge of writing bogus speeding tickets to earn federally funded overtime and meet a traffic ticket quota.

[12 12 2019](#), Missouri Attorney General Blasts City Over Taxation by Citation Missouri attorney general charges the city of Marshfield with operating an illegal traffic ticket quota.

[11 12 2019](#), France: Privacy Regulator Slams Speed Camera Practices Lax security and overcollection of personal information by speed cameras threaten privacy, according to government watchdog.

France, Germany, Switzerland and [Ireland](#): Speed Cameras Sabotaged

[09 12 2019](#), Speed Detection Cameras were burned or cut down across Europe. **Vigilantes in Doix-les-Fontaines, France, [torched the new turret-style speed camera](#)** that had been issuing automated citations on the D938T and the speed camera on the N165 in Theix-Noyal [was set ablaze](#).

[06 12 2019](#), Florida Cop Blows The Whistle On Ticket Quota Former Hialeah, Florida police sergeant sues city after being fired for confirming the existence of a ticket quota in court testimony. The city of Hialeah, Florida, has been boosting its revenue by forcing its police officers to issue more traffic tickets or face punishment.

[23 11 2011](#), two police officers were arrested, and four raids conducted as part of ongoing investigation into speed camera corruption scandal in Italy. The owner of a BMW X6 blew the whistle on officers Giuseppe Manca and Antonio Briganti after a speed camera accused him of driving 160 km/h in a 110km/h limit.

[31 08 2018](#), Assistant Commissioner Sheahan named 16 Gardai who failed to failed to issue the ticket Quota.

[04 03 2020](#), Mats Järleström proved conclusively that the Yellow/Amber light time designed in 1959 for straight through traffic at or above the speed limit by Maradudin, Gazis and Herman fails to allow time for traffic slowing to turn or for any other reason, is incorrect. In 2015, Järleström acknowledges [Frank Cullinane's](#) research regarding stopping distances using VBOX GPS based vehicle motion data recorder.

This is a Link to 358 pages of mainly [abuse](#) of Speed Detection Camera and Red-Light Running rules.

Research for the Driving ScoreCard System

Research of 'Road Safety Support Ltd Raising the Game'

In 2020, **Meredydd Hughes CBE QPM MA** a retired Chief Police Constable who advised Parliament and the House of Commons and worked as a Director at Sheffield Children's Hospital now launched '[Road Safety Support](#) and Raising the Game'. Hughes used 55 Reference Books with most using TRLs incorrect stopping formula introduced by Parliament on 31 07 1946.

An examination of 5 of those 55 Reference Books used by Hughes shows how for 74 years TRL has misled the UK Government, Parliament and House of Commons in Reference Books as follows:

Reference Book 2. [Avenoso, A, ETSC \(2019\)](#) 'Two passenger planes crash, killing everyone on board – This is how many people die on EU roads every week'. The Link to this Reference Book is [broken](#) but Avenoso uses TRLs incorrect Reference Books as outlined [here](#) but he failed to respond to my research discovery.

Reference Book 7: [Butcher, L. \(2013\)](#) 'Roads Speed Cameras' House of Commons Library Note SN350 accessed 08/05/2019: was Prepared for: The Department for Transport, Road Safety Division, **Adrian Gains** and **Richard Humble**, [PA](#) Consulting Group **Professor Benjamin Heydecker**, **Dr Sandy Robertson** University College London and **Tiffany Lester** [TRL Ltd](#);

who used TRLs Reference Books and Reference Books by Authors using TRLs incorrect stopping distances in Reference Books.

Reference Book 14: [Delaney, A., Ward, H. and Cameron M., \(2005\)](#) The History and Development of Speed Camera Use', MONASH University, Accident Research Agency;

Who used TRLs 74 year old incorrect [stopping](#) formula in Reference Books.

37. Delaney, A., Diamantopoulou, K. and Cameron, M. (March 2003) 'MUARC's Speed Enforcement Research: Principles Learnt and Implications for Practice' report number 200, Monash University.

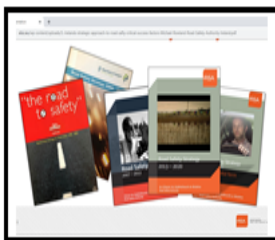
45. Newstead, S., Cameron, L., Leggett M (February 1999), 'Evaluation of the Queensland Random Road Watch Programme', Report 149, Monash University Accident Research Centre.

While I don't propose examining each of the 55 Reference Books an examination of

Referenced Books and the Reference Book 2 by Antonio Avenoso, by TRL, Professor Max Cameron Monash University and others. Cameron a Professor for 55 years at Monash University with Reference Books which are used in Ireland and worldwide, confirmed on [LinkedIn](#), with 660 million users across 200 countries that he agreed with Hughes and [Road Safety Support](#).

I outlined my research and invited Cameron and others to accept or disprove my findings by demonstration while using the Driving ScoreCard System based on VBOX measurements.

However, those who examined my Research and Profile in the following days but declined an invitation to disprove my research findings included; 26 University Professors, 9 from Monash University, 5 from Traffic Accident Commission TAC, 8 from Australian Research Board ARRB, 11 Executive Directors, 15 Research Fellows, 6 from Victoria Police and many more from training, testing departments and police forces worldwide.



On 30 09 2019, at the ETSC PIN Talk, the RSA Director of Road Safety Michael Rowland used the 4 Government Road Safety Strategies. On 20 11 2020 at 16:00 hours or 2 days after the 2020 Public Consultation Strategy Consultation closing date, the closing date was extended by 2 days which were Saturday and Sunday. The RSA Research Department claimed the [1998 – 2002](#) Strategy is a Department of Transport Document and not now available to the RSA.

Research for the Driving ScoreCard System

2. Avenoso, A, (2019) 'Two passenger planes crash, killing everyone on board – This is how many people die on EU roads every week' ETSC available at <https://etsc.eu/two-passenger-planes-crash-killing-everyone-on-board-this-is-how-manypeople-die-on-eu-roads-every-week/> accessed 08/04/2019.

7. Butcher, L. (2013) 'Roads Speed Cameras' [House of Commons Library](#) Note SN350 accessed 08/05/2019: was Prepared for: The Department for Transport, Road Safety Division, **Adrian Gains** and **Richard Humble**, **PA Consulting Group** **Professor Benjamin Heydecker**, **Dr Sandy Robertson** University College London and **Tiffany Lester** **TRL Ltd** who used TRLs Reference Books and Reference Books by Authors using TRLs Reference Books.

14. Delaney, A., Ward, H. and Cameron M., (2005) 'The History and Development of Speed Camera Use', MONASH University, Accident Research Agency.

37. Delaney, A., Diamantopoulou, K. and Cameron, M. (March 2003) 'MUARC's Speed Enforcement Research: Principles Learnt and Implications for Practice' report number 200, Monash University.

45. Newstead, S., Cameron, L., Leggett M (February 1999), 'Evaluation of the Queensland Random Road Watch Programme', Report 149, Monash University Accident Research Centre.

Department for Transport A cost recovery system for speed and red-light cameras ~ two year pilot evaluation Research paper 11 February 2003

Research for the Driving ScoreCard System

Research by Frank Cullinane of the 80 Reference Books Reviewed by Rafferty

Rafferty like many other researchers Reviewed the available Literature and assumed that the research and stopping distances formulas provided by the UK Government owned Transport Research Laboratory TRL since 1946 was correct. Reference Books used by Rafferty are as follows:

Reference Book 1: AA Ireland E-zine November 2010. Available from <http://www.theaa.ie/AA/Ezine/AA-EzineNovember-2010/Speed-Cameras.aspx>

- This Reference Book is no longer [available](#) however, according to Wikipedia: In 1923 a booklet costing one [penny](#) was published by [His Majesty's Stationery Office](#) and approved by the [Home Office](#) (and [Scottish Office](#)). Entitled *Traffic Signals to be used by the Police and Drivers of Vehicles*, this booklet arose from discussions between the Police and [The Automobile Association](#).^[3] In subsequent years, in addition to being promoted by the automobile associations, the code was publicised using posters by the National Safety First Association (which still continues this work having been renamed the [Royal Society for the Prevention of Accidents](#) RoSPA in 1936)
- **RoSPA confirmed that they have not researched the stopping distances** but use the Highway Code stopping distances and referred me to the UK Government. The RoSPA Patron [Queen Elizabeth](#) failed to respond. The UK Government referred me to the USA and will not respond further on the matter.

Reference Book 2: AA Ireland E-zine June 2011. Available from <http://www.theaa.ie/AA/Ezine/AA-Ezine-June2011/speed-cameras.aspx>

- This Reference Book is no longer [available](#).

Reference Book 3: [Austroads \(2009\) Methods for Reducing Speeds on Rural Roads](#) – Compendium of Good Practice, Sydney: Austroads Ltd.

- **Reference Book 3 has 76 Reference Books and includes;** [Queensland](#), Monash and Leeds University Research Books which use incorrect TRL and UK Government stopping formulas.

Reference Book 4: [Bacon, P, 1999. An Economic Assessment and Preliminary Cost Benefit Analysis of the Government Strategy for Road Safety 1998-2002.](#)

- **Reference Books used include;** [Finch et al \(1994\)](#), based on data from Denmark, Finland, [Germany](#), Sweden, Switzerland, UK and USA and incorrectly claims that a 1 km per hour reduction in average speed is associated with a 3 per cent reduction in accident frequency, but
- **Ireland has a maximum speed limit of 120 km/h**, Northern Ireland a speed limit of [112 km/h](#), [Germany](#) issues penalty points for exceeding a speed limit by 20 km/h, while Ireland issues penalty points at 5 km/h over the posted limit.

Reference Book 5: [Butcher, L \(2013\) Roads: safety cameras Standard Note:](#) SN350 House of Commons Library. London: HM Government.

- **The Reference book states,** “This information is provided to Members of Parliament in support of their parliamentary duties and is not intended to address the specific circumstances of any particular individual. It should not be relied upon as being up to date; the law or policies may have changed since it was last updated; and it should not be relied upon as legal or professional advice or as a substitute for it, however
- **PACTS, is the Parliamentary Advisory Council** for Transport Safety, a registered Charity, a founder member of the [European Transport Safety Council](#) ETSC, based in Brussels, which advises and informs the European Commission and Parliament while using incorrect TRL stopping formulas. [PACTS](#) is advised by Leeds [University](#) who is incorrectly advised by [TRL](#) established by the UK Government.

Reference Book 6: [Cameron M](#), Cavallo A, and Gilbert A. (1992) ‘Crash-based evaluation of safety camera program in Victoria 1990 -1991, Phase 1: General effects. Phase 2: Effects of program mechanism’, Monash University Accident Research Centre (MUARC) Victoria 3800, Vol. Report No 42, pp. 1–76.

- **Monash University** Accident Research Centre use TRL and UK Government stopping [formulas](#).

Reference Book 7: [Chen, G., Wilson, J., Meckle, W. and Cooper, P.](#) (2000) ‘Evaluation of photo radar program in British Columbia’. Accident Analysis and Prevention, 32, pp. 517-526.

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- **Stopping from 80 km/h** in [British Columbia](#) is in [65 metres](#) as compared with [52 metres](#) in Ireland and TRL is the source of both incorrect stopping formulas.

Reference Book 8: [Comptroller and Auditor General \(2013\)](#) Annual Report 2012 (Chapter 8). Dublin: Government Publications.

- **The Comptroller and Auditor General** works to improve the use of public money and resources while Speed Detection Cameras operate at a loss and have not reduced road crashes.

Reference Book 9: [Decina LE, Thomas L, and Srinivasan R \(2007\)](#) 'Automated enforcement: A compendium of worldwide evaluations of result'. Office of Research and Technology, National Highway Traffic Safety Administration (NHT to ISA) Washington DC 20590 September 2007, issue DOT HS 810 763.

- **This Reference Book has 80 Reference Books** dated since 1933 with disclaimers.

Reference Book 10: [Department of the Environment, and Local Government \(1998\)](#) The Road to Safety: Government Strategy for Road Safety 1998-2002. Dublin: Department of the Environment.

- **The Department of Environment**, and Local Government has overall responsibility for setting amber traffic light time and speed limits but were unaware of this as the [Minister for Environment](#) referred me to the Minister for Transport.

Reference Book 11: [Department of Finance \(2005\) Capital Guidelines](#) for Appraisal and Management of Capital Expenditure Projects in the Public Sector. Dublin: Department of Finance.

- **The Government** have collective responsibility for formulating overall budgetary policy while Speed Detection Cameras operate at a loss and have not reduced road crashes.

Reference Book 12: [Department of Justice \(2005\) Report of the Expert Group](#) on the use of Safety Cameras.

This Expert Group, represented by 8 members from the Department of Justice, including 4 Gardai used almost 100 Reference Books with each one using incorrect TRL and UK Government Reference Books. The first of 91 Reference Books used is '[Down with Speed: A Review of the Literature, and the Impact of Speed on New Zealanders](#)', which contains TRLs Reference Book; **Quimby A R and Watts G R (1981). Human factors and driving performance, Laboratory Report LR1004.** This Reference Book incorrectly outlines [2.20 seconds 73 metres Reaction before applying the brakes](#) at 120 km/h and is used by the [New Zealand](#) and Irish Governments. **TRLs mistake is the reason fatalities in New Zealand in 2017** at 378 were 65 higher than the 313 recorded in 1953.

TRL and the UK Government provides the Garda Commissioner and Deputy Commissioner with two different stopping formulas. The retired Assistant Garda Commissioner Eddie Rock became an RSA Board Member and the Retired Garda Inspector Michael Brosnan became the RSA Research Manager.

In 2019, TRL name 20 of their Experts and many are ex police officers: Garren [Cobb](#), Victoria [Eyers](#), Mark [Hargreaves](#), Simon [Lane](#), Alex [Livadeas](#), Paul [Beavis](#), **Simon Hall**, Mark [Hill](#) and **Richard Lambourn**, while Dean [Beaumont](#) and Paul [Jackson](#) are police advisors. Simon Hall and Phil Balderstone, both ex police officers provided the RSA with Project Report [2161 v2](#) on Shock Absorbers in 2016, while the name of the RSA Engineer requesting the TRL Report, Caroline Greene is [redacted](#), Reference 11108863/T06 07 01 2016.

In 2007 and 2012 Iain York at TRL provided Brian Farrell RSA with 2 different stopping formulas used in the Rules of the Road, including [Report RPN2213](#) for the **SRA not RSA**. This Reference Book which includes Reference Book; '[Triggs and Harris \(1982\). Reaction time of drivers to road stimuli. Human factors Report HFR-12, Monash University, Australia](#)', includes; **Reference Book by; 'Gazis, D., Herman, R. and Maradudin, A. 'The problem of the amber signal light on traffic flow'. Operations Research, 1960, used by the ITE for 60 years and now proven to be incorrect. See Reference Books 18 and 71.**

In 2019, Richard Cuerden, Director of the TRL Academy, chair of the Parliamentary Advisory Council for Transport Safety (PACTS) Vehicle Design Working Group and a trustee for the road safety charity Brake **allows 42 metres Reaction at 100 km/h, as compared with 18 metres at 96 km/h in the Highway Code. Cuerden claims the TRL designed 1946 Highway Code stopping formula is incorrect.**

Reference Book 13: [Department of Public Expenditure and Reform \(2009\)](#) The Public Spending Code.

- This Reference Book claims that the revenue generated from safety camera fines covers less than 45% of their operational costs but are life savers. **Fatal Crash Statistics show otherwise.**

Reference Book 14: [Department of Transport \(2004\) Road Safety Strategy 2004-2006](#). Dublin: Department of Transport.

- **This Reference Book has 54 Reference Books including TRL and UK Government References.** The Minister for Transport incorrectly states, '[Road Safety is everyone's responsibility](#)'. The Minister for Transport's [Essential Driver Training](#) EDT Syllabus introduced eight years ago in 2011, MUST be taught in 12 hours or in a day and a half, with recommendations that cannot be complied with, while the [2012 Review of EDT](#) containing mistakes and contradictions, prepared for Michael Dolan RSA Chief Driving Instructor is now removed from the RSA website and [Dolan has retired](#).

Reference Book 15: [Department of Transport \(2009\) Guidelines](#) on a Common Appraisal Framework for Transport Projects and Programmes. Dublin: Department of Transport.

- The purpose of this Reference Book is unclear.

Reference Book 16: [Department for Transport \(2004\)](#) The national safety camera programme: Three-year evaluation report: Department for Transport London.

- **This Reference Book Contains 54 Reference Books** including [TRL Report 421](#) and [TRL Report 58](#) with Disclaimers stating: "*This report has been produced by the Transport Research Laboratory, under/as part of a Contract placed by the Department of the Environment, Transport and the Regions. Any views expressed are not necessarily those of the Department*"

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Reference Book 17: [Department for Transport \(2005\)](#) The national safety camera programme: Four-year evaluation report. London: Department for Transport.

- **This Reference Book contains;** [1994 TRL Report 84](#) and [2000 TRL Reports 421](#) and others as well as hundreds of linked TRL Reference Books dating to [Report RRL 126 in 1967](#) and 1963, when TRL was owned by the Ministry of Transport. The reports commissioned by the Department, have Disclaimers. The findings, views and conclusions are those of the authors and not the Department for Transport.

Reference Book 18: [Department of Transportation \(2012\)](#) Traffic Safety Fact. Washington.

- **This Reference Book contains** mainly statistics, 113 years after the USAs first fatality in [1896](#). In the case [Järleström Vs the ITE](#), the short time of the yellow light is to be amended in the ITE Manual after it was incorrectly used in the [courts](#) and elsewhere for 60 years. Research by [Frank Cullinane](#) with the use of VBOX is Acknowledged by Järleström in his victory over the ITE.

Reference Book 19: [Diamantopoulou K, AND Corben B.](#) (2002) The impact of safety camera technology on speed limit compliance in multi-lane tunnels. Road South Australia. 2002. [: ISBN 1–876346–46–9 ISBN 1–876346–46–9] Safety Research, Policing and Education Conference. Adelaide.

- **This Reference Book relies heavily on TRL, RRL and Monash University Research Reference Books** from [1959](#), using incorrect TRL and UK Government stopping formulas.

Reference Book 20: [Transport Research Laboratory \(2005\)](#) How methods and levels of policing affect road casualty rates (**TRL Report 637**). [Authors: Elliott, M.A., and Broughton, J]

- **TRL637 Reference Book has 90 Reference Books** dated from 1933. Reference Book 22 has been produced by the Transport Research Laboratory; under/as part of a Contract placed by Transport for London. Any views expressed are not necessarily those of Transport for London.

Reference Book 21: [Elvik, R. \(1997\)](#) ‘Effects on Accidents of Automatic Speed Enforcement in Norway’, Transportation Research Record, 1595, pp. 14-19.

- **Elvik, like others at Research Centres worldwide** is misled by TRLs 5 stopping formulas allowing 0.67 seconds 22 metres to 2.20 seconds 73 metres at 120 km/h before applying the brakes, braking distance beyond emergency standard and for one-way roads only since [1946](#).
- **Dr Rune Elvik, is a road safety researcher** at the Institute of Transport Economics, Oslo, Norway. He has 40 years of experience conducting road safety research and served, alongside Karl Kim, as editor-in-chief of Accident Analysis and Prevention from 2005 to 2013. In many cases, Elvik partnered TRL, **Monash and others in Research funded by the European Commission**, while using TRL, RRL and ETSC Reference Books, without addressing the 5 incorrect TRL stopping distance formulas.
- **The Netherlands allow higher speed limits** and longer [stopping distances](#) than [Ireland](#), while both use different TRL and UK Government stopping formulas.
- **Elvik misled by TRL, misled Rafferty as the Netherlands recorded fatalities as follows:**

Road Fatalities in the Netherlands in the 10 years between 2010 and 2019										
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Fatalities	640	661	650	570	570	621	629	613	678	660

Reference Book 22: [Elvik R. \(2000\)](#) ‘How much do road accidents cost the national economy?’, Accident Analysis and Prevention , 32(6), pp. 849–51.

- As Reference Book 21.

Reference Book 23: [Elvik. R \(2001\)](#) Cost-Benefit Analysis of Police Enforcement. The “Escape” Project Mach 2001.

- As Reference Book 21.

Reference Book 24: [Elvik, R. \(2009\)](#) ‘[The power model](#) of the relationship between speed and road safety: update and new analyses’, TOI Report 1034: Institute of Transport Economics, Oslo, Norway.

- As Reference Book 21.

Reference Book 25: [Elvik, R, Christensen P,](#) and Amundsen A (2004) ‘Speed and road accidents: an evaluation of the power model’, TOI Report 740/2004, Institute of Economics, Oslo, Norway.

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- **This Reference Book incorrectly** claims that a 10 percent reduction in the mean speed of traffic will result in a **37.8%** reduction of the number of fatalities.

Reference Book 26: [European Commission \(2008\)](#), Regional Policy, Guide to Cost -Benefit Analysis of Investment Projects. Brussels: European Commission.

- **The Reference Book** could not be [displayed](#), however the [2018 European Commission](#), Cost Benefit Analysis, European Commission, Directorate General for Transport is co-funded by the European union and contains 50 year old Reference Books. These Reference Books included are **by Elvik R.TRL, ETSC, EU Projects** and others and the Cost Benefit Analysis states:
- **The 2018 edition of Traffic Safety Synthesis** on Cost Benefit Analysis updates the previous versions produced within the EU co-funded research projects **SafetyNet (2008)** and DaCoTA (2012). This Cost Benefit Analysis was originally written in 2008 and then **updated in 2012 by Rune Elvik**, TØI and in 2016 by Victoria Gitelman, Technion Israel Institute of Technology. **See Reference Book 66.**

The Disclaimer states: This report has been produced by the National Technical University of Athens (NTUA), the Austrian Road Safety Board (KFV) and the European Union Road Federation (ERF) **under a contract with the European Commission**. Whilst every effort has been made to ensure that the matter presented in this report is relevant, accurate and up to date, **the Partners cannot accept any liability for any error or omission**, or reliance on part or all of the content in another context. Any information and **views set out in this report are those of the author(s) and do not necessarily reflect the official opinion of the Commission.**

- **The Commission does not guarantee the accuracy of the data included in this study.** Neither the Commission nor any person acting on the Commission's behalf may be held responsible for the use that may be made of the information contained therein. **Please refer to this Report as follows:** [European Commission](#), Cost Benefit Analysis, European Commission, Directorate General for Transport, February 2018."

Reference Book 27: [European Commission](#), 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions Towards a European road safety area: policy orientations on road safety 2011-2020: The European Road Safety Action Programme 2011-2020, 2010. (See MEMO/10/343)

- The purpose of including this Reference Book is unclear.

Reference Book 28: [European Commission \(2010\)](#) Towards a European road safety area: policy orientations on road safety 2011-2020. Com (2010) 389 final. European Commission, Brussels.

- **This Reference Book** claims the cost of crashes in 2009 was approximately 130 billion Euro, but the 2020 targets are not going to be achieved for fatal and injury crashes.
- **Ireland won the European road safety prize** for its "exemplary progress" in reducing road deaths in [2010](#), but this was done based on underreported Garda statistics published by the RSA. Ireland won the ETSC Award again in [2019](#) for not killing as many people on the roads as in previous years.

Reference Book 29: [European Transport Safety Council \(ETSC\) \(2014\)](#) 8th Road Safety Performance Index (PIN) Report, Brussels.

- **This is the 8th Annual Road Safety Performance Index (PIN) Report**, as TRL misleads the ETSC and [1,000 clients](#) worldwide on stopping distances and the Garda Statistics published by the RSA are underreported. **Ireland was represented by Michael Rowland and Yaw Bimpeh RSA, while Great Britain was represented by Louise Lloyd TRL and Antonio [Avenoso](#) is Executive Director of the ETSC for 19 years since 2001, failed to respond.**

Reference Book 30: [European Transport Safety Council ETSC \(1999\)](#) Police enforcement strategies to reduce traffic casualties in Europe.

- Reference Book 30 has 100 Reference Books including Reference Books by Allan Quimby TRL the co-author of [Reference Book TRRL1004](#) allowing 2.20 seconds Reaction before braking.

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Reference Book 31: [Fawcett L and Thorpe N \(2013\)](#) 'Mobile safety cameras: estimating casualty reductions and the demand for secondary healthcare', Journal of Applied Statistics 40: 11, pp. 2385-2406. [Finnish Transport Safety Agency \(2013\)](#) Finnish Annual Road Safety Review 2013, Helsinki: Finnish Transport Safety Agency.

- **Ireland and Finland** use different and incorrect TRL and UK Government stopping [formulas](#).

Reference Book 32: [Florio, M, Vignetti, S \(2013\)](#) 'The use of ex-post cost-benefit analysis to assess the long-term effects of major infrastructure projects. Centre for Industrial Studies, Milan. Working Paper N. 02/2013 [www.csilmilano](#).

- **The Report is co-funded by the [European Fund](#)** for Regional Development, while TRL and UK Government stopping distances and stopping formulas used, are incorrect.

Reference Book 33: [Flyvbjerg, B., Holm M., Skamris, K. and Buhl, S.L. \(2003\)](#) 'How common and How large are Cost Overruns in Transport Infrastructure Projects', Transport Reviews, Vol 23 (1), pp. 71-88 (2003) Flyvbjerg, Bent (2007) 'Policy and planning for large-infrastructure projects.

- **The cost of the Reference Book is €37.**

Reference Book 34: [Gains A, Heydecker B, Shrewsbury J, Robertson S. \(2004\)](#) 'The national safety camera programme -Three-year evaluation report'. Department of Transport. Road Safety Division. London UK 2004.

- **This Reference Book was commissioned by the Department**, but the findings and conclusions are those of the authors and [do not necessarily represent](#) the views of the Department for Transport. [TRL Report 58](#) has 60-year-old References from 1959 and states; **The Transport Research Laboratory TRL is no longer an Executive Agency of the Department of Transport as ownership was transferred to a subsidiary of the Transport Research Foundation on 01 04 1996.** The Report has been reproduced by permission of **the Controller of HMSO, while the views expressed in this publication are not necessarily those of the Department of Transport.**

Reference Book 35: [Garda Inspectorate \(2014\) The Fixed Charge Processing System](#) A 21st Century Strategy Report of the Garda Síochána Inspectorate. Dublin: The Garda Inspectorate.

- **The Objective of the Garda Síochána Inspectorate is:** 'To ensure that the resources available to the Gardai are used to achieve and maintain the highest standards. On [25 07 2017](#) An Garda Síochána overreported Mandatory Alcohol Tests MATs by 1,458,221 Tests. [On 11 08 2017:](#) Assistant Commissioner Michael O'Sullivan, having conducted an Examination of the overreporting of MATs, concluded: "This examination has highlighted variations in the disparity of breath test data amongst Garda Divisions, but identifying the causes of these variations has been inconclusive".
- **17 Questions were introduced in the [Driver Theory Test Book](#) based on these incorrect statistics.**

Reference Book 36: [Garda Inspectorate \(2008\)](#) Roads Policing Review and Recommendations Report of the Garda Síochána Inspectorate. Dublin.

- **This Reference Book uses many incorrect Reference Books. The [World Health Organisation WHO](#) (Established 72 years ago in 1948) Report on Road Traffic Injuries 2004 has 706 Reference Books. These include; **TRL Reports 445, 421, 511, 232, 724, 543, 106, 498, LR88, LR 546 dated from 31 07 1946 when TRL was owned by the UK Government** and designed the Highway Code Stopping Distances based on an incorrect formula introduced by Parliament. Authors of other Reference Books who use TRLs 5 incorrect stopping formulas include **Elvik, Allsop, Wegman, Carsten** and many more.**

On 07 05 2019, Rob [Wallis](#) the TRL CEO announced his resignation without responding.

Reference Book 37: [Goldenbeld, C. and van Schagen, I. \(2005\)](#) 'The effects of speed enforcement with mobile radar on speed and accidents. An evaluation study on rural roads in the Dutch province of Friesland,' Accident Analysis and prevention, 37, pp. 1135-1144.

- **There were 570 road user fatalities in the [Netherlands](#) in 2013 and 678 or 108 more in 2018.**

Reference Book 38: [Elliott, M.A., & Broughton, J. \(2005\)](#) How methods and levels of policing affect road casualty rates (**TRL Report 637**) Wokingham: Transport Research Laboratory.

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- **TRL Report 637** has **94 Reference Books** dating back to UK Government Reference Books in 1933. The Report has been produced by TRL Limited, under/as part of a contract placed by Transport for London. Any views expressed are not necessarily those of Transport for London.

Reference Book 39: [Goodbody Economic Consultants](#) in association with Atkins (2004), Cost Benefit Parameters and Application Rules for Transport Project Appraisal, 2004.

- **Cost Benefit Analysis CBA** is a **key economic appraisal technique** under the VFM Code. This document provides an introductory guide to CBA. It sets out the aims and principles of CBA and highlights the main technical issues in estimating costs and benefits. **See Reference Book 26.**

Reference Book 40: [Hauer E, and Ahlin FJ. \(1982\)](#) 'Speed enforcement and speed choice', Accident Analysis and Prevention, 14(4), pp 267–78.

- **This Report claims that;** A rational approach to practical problems of speed enforcement requires an understanding of the way enforcement affects speed choice. **The Malpractice, Collusion, Bribery and Corruption** involving Red Light and Speed Detection Cameras worldwide, over a 15 year period 2004 to 2019 and cities that have voted against having speed cameras are outlined at the [Newspaper.com](#).

Reference Book 41: [Hauer E. \(1997\)](#) Observational Before-After Studies in Road Safety. Oxford: Pergamon.

- The Reference Book costs [£53.99](#) but due to the many laws, rules and road changes taking place, before and after studies are not always accurate.

Reference Book 42: [Hauer E, Harwood DW](#), Council FM, and Griffith MS (2002) 'Estimating safety by the Empirical Bayes method', Transportation Research Record, issue 1784, pp.126–31.

- **The empirical Bayes (EB) method claims;** it addresses two problems of safety estimation: it increases the precision of estimates beyond what is possible when one is limited to the use of a 2- to 3-year accident history, and it corrects for the regression-to-mean bias, however
- Incorrect Police recording of statistics results in incorrect estimations and assumptions.

Reference Book 43: [Hess S, Polack J.\(2003\)](#) 'An analysis of the effects of speed limit enforcement cameras on accident rates. Transportation Research Record', Centre for Transport Studies, Imperial College, London UK2003: pp. 1–16.

- **The Studies are funded by the Department of Environment and the Regions DETR**
- **The UK Government established TRL, 5 stopping formulas are incorrect since 31 07 1946.**

Reference Book 44: [HM Treasury \(2011\) The Green Book](#): Appraisal and Evaluation in Central Government, London: HM Government.

- **The Treasury's Green Book** is to provide guidance but TRLs stopping formulas are incorrect.

Reference Book 45: [High Level Group on Road Safety \(2001\)](#) Third progress report, Dublin: Department of the Environment and Local Government.

- **The mission of the Department of the Environment** and Local Government is to promote sustainable development and improve the quality of life through good local government but one Progress Report should be sufficient if TRLs UK Government stopping formulas were corrected.

Reference Book 46: [Hooke A, Knox J, and Portas D. \(1996\)](#) 'Cost benefit analysis of traffic light and safety cameras'. Police Research Group. London, issue Police Research Series Paper 20: pp. 1–58.

- **Reference Book 46 Contains TRL Reports** without correcting TRLs stopping formula mistakes.
- **TRL provide** the EU, ETSC, Gardai and the PSNI with 5 different stopping formulas.
- **See Reference 18,** Research by [Frank Cullinane](#) with the use of VBOX is Acknowledged by Järnlström in his victory over the ITE, **Amber Light** Time is short at 3 seconds and must be changed.

Reference Book 47: [International Transport Forum \(2014\)](#) Road Safety Annual Report 2014, Paris: Organisation for Economic Co-operation and Development.

- **The Report states;** Deaths of pedestrians, cyclists and motorcyclists have levelled-off and some increases have been recorded since 2009/10. **Ireland was represented by** [Yaw Bimpeh](#) and [Velma Burns](#) RSA, who use TRLs 5 different stopping formulas.

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Reference Book 48: [International Traffic Safety Data](#) and Analysis Group (IRTAD) (2011) Reporting on serious road traffic casualties: combining and using different data sources to improve understanding of non-fatal road traffic crashes. Paris: Organisation for Economic Co-operation and Development OECD.

- **IRTAD is the International Traffic Safety Data and Analysis Group.** TRLs representative in this Reference Book is John Fletcher. **TRL misleads Derek Rafferty, Fred Wegman IRTAD Chair (For 9 years), Michael C. Brosnan as Garda Inspector and RSA Research Manager, Yaw Bimpeh RSA Statistician,** Anil Bhagat and Ms Pat Kilbey, UK Department for Transport with responsibility for Highway Code stopping distances, [Maria Teresa SANZ VILLEGAS](#) European Commission DG MOVE, Marc Shotten the World Bank, Graziella Jost European Transport Safety Council (ETSC), Commissioner Drew Harris, Deputy Commissioner John Twomey and many more.
- **The ETSC is an international non-governmental organisation,** formed 26 years ago in 1993 in response to the persistent and unacceptably high European road casualty toll. The contents of the review are the sole responsibility of ETSC and do not necessarily reflect the views of sponsors nor organisations to which research staff participating in the Working Party belong.
- Governments worldwide should have one Action Plan and not separate Action Plans.

Reference Book 49: [Jones AP., Sauerzapf V. and Haynes R.](#) (2008) 'The effects of mobile safety camera introduction on road traffic crashes and casualties in a rural county in England', Journal of Safety Research.

- **This Reference Book claims,** the introduction of cameras resulted in reductions in crash risk, however in 2012 there were **1,754 road fatalities in Great Britain and 1,770 in 2018.**

Reference Book 50: [Jost, G. Allsop, R. & Steriu, M. \(2013\)](#) Back on track to reach the EU 2020 Road Safety Target? 7th road safety Performance Index PIN report. ETSC PIN report 7. Brussels: European Transport Safety Council, 2013.

- **Louise Lloyd, Transport Research Laboratory (TRL), [Michael Rowland and Yaw Bimpeh](#)** were Steering Group Members. The [2020 target](#) for road fatalities and injuries will not be met as TRL mislead their 1,000 clients including Governments in 145 countries worldwide on stopping distances.
- **Professor R.E. Allsop** Professor of Transport Studies University College London in the 1967, Ministry of Transport Road Research Laboratory [RRL Report LR72](#) on the cost of a crash helmet 53 years ago confirms that; Ownership of the Transport Research Laboratory was transferred from the Department of Transport to a subsidiary of the Transport Research Foundation on 1st April 1996. The Report has 23 pages, 7 Reference Books dated from 66 years ago in 1954 with 4 of the Reference Books by TRL and 3 unpublished.
- **TRL misleads Professor Allsop** on stopping distances who misleads Rafferty.

Reference Book 51: [Kearns IB, Webster KA \(1988\)](#) 'The effect of aerial speed enforcement on traffic crashes' Traffic Authority of New South Wales, Research Note, RN 4/88 1988.

- **Stopping Distances** in [Ireland](#) and [New South Wales](#) differ by 23 metres when stopping from a speed of 120 km/h, although both use TRL stopping distance formulas, Monash and Queensland References.

Reference Book 52: [Mountain L, Hirst W, and Maher M. \(2004\)](#) 'Costing lives or saving lives? A detailed evaluation of the impact of safety cameras on safety', Traffic Engineering and Control, September 2004.

- **Reference Book 52 contains Reference Book;** Taylor, M, D Lynam, and A Baruya (2000). The effects of drivers' speed on the frequency of road accidents [TRL Report 421](#) with a Disclaimer and claims a 5% increase in injury accidents per one mile/h increase in average speed.
- TRL [421](#) includes TRL Reference Books from 1948 when TRL was owned by the UK Government and: [TRL135](#), [183](#), [184](#), [185](#), [186](#), [215](#), [281](#), [296](#), [300](#), [304](#), [317](#), [323](#), [324](#), [325](#), [326](#), [332](#), [334](#), [363](#), [425](#), [440](#). [RR315](#), [RR65](#), [CR309](#), [CR253](#), [AG34](#) and Authors, [Quimby](#), [Carsten](#), Webster, [Watts](#), [Mackie](#), [Elvik](#), [Corbett](#), [Maycock](#), [Taylor](#), [Sabey](#), [Barker](#) and many more.
- TRL Reference Books published during the period when owned by the UK Government prior to 1996 now state as follows: "Ownership of the Transport Research Laboratory was transferred from the

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Department of Transport to a subsidiary of the Transport Research Foundation on 1st April 1996. This report has been reproduced by permission of the Controller of HMSO. Extracts from the text may be reproduced, except for commercial purposes, provided the source is acknowledged.

- **Rafferty was misled by TRL on stopping formulas, Speed Detection Cameras are not ‘Life Savers’**

Reference Book 53: [Mountain L J, Hirst W, and Maher M. \(2005\)](#) ‘Are speed enforcement cameras more effective than other speed management measures? The impact of speed management schemes on 30 mph roads.’ *Accident Analysis and Prevention*, 37, pp. 742–54.

- **The [Report](#) is Unavailable at present.**

Reference Book 54: [Newstead SV, and Cameron M. \(2003\)](#) ‘Evaluation of the crash effects of the Queensland safety camera program’. Monash University Accident Research Centre, Report No. 204, pp. 1–35.

- **This Reference book states, the views expressed here are those of the authors, and not necessarily those of Monash University.** TRL is the source of [Queensland Transport stopping formulas](#).

According to Max Cameron’s [Biography](#)

Max Cameron is a Professor (Research) in the Monash University Accident Research Centre, where he has worked since 1990 (**for 29 years**). He holds B.Sc. and M.Sc. degrees in statistics and a Ph.D. for his thesis on methods of evaluation of road trauma countermeasures. He is also a Fellow of the [Royal Statistical Society](#), U.K.

Max has worked in the road safety field in Australia since 1965 (**54 years**), with extensive experience in road safety research and its management, and in road safety policy formulation and strategic planning. He has special skills in road crash data analysis and countermeasure evaluation in the behavioural, vehicle and road environment safety areas. His research interests have included rating the crashworthiness of cars, evaluations of speed enforcement, random breath testing, and mass media publicity, and the economic benefits of these road safety measures. He has provided consultancy advice to the **European [Commission DG-TREN](#)** through the **[EU Safety Ratings Advisory Committee](#)**, the **[SWOV Institute for Road Safety Research in the Netherlands](#)**, the **government of the [Republic of Ireland](#)**, the **KwaZulu-Natal provincial [government in South Africa](#)**, the **Land Transport Safety Authority in [New Zealand](#)**, and **road safety [agencies](#) throughout [Australia](#)**.

Road Fatalities in Australia in the 10 years between 2010 and 2019										
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Fatalities	1,353	1,277	1,300	1,187	1,150	1,209	1,293	1,225	1,135	1,194

- **TRL mislead their 1,000 clients including 145 Governments and Max Cameron who then misleads Derek Rafferty. One Report should be enough for all countries.**

According to Stuart Newstead's [Biography](#)

Stuart works at the Monash University Accident Research Centre as an Associate Professor. He is an Associate Director of MUARC where he leads the Centre's Injury Analysis and Data Team. He holds a Ph.D. in Applied Statistics and is Accredited by the Statistics Society of [Australia](#). He has worked at MUARC since 1993 (**For 26 years**) and developed specific expertise in a wide range of safety research areas with a numerical focus. His methodological based skills cover the areas of experimental design and sample size estimation, design and analysis of surveys, database design, management and analysis, database linkage, high level statistical analysis including the full range of modern statistical techniques, economic analysis, statistical consulting and statistical software.

Dr Newstead's areas of significant topic-based expertise include a range of safety issues with a particular focus on safety program evaluation, vehicle safety evaluation monitoring and policy setting, police enforcement programs, vulnerable and high-risk road user safety, injury data systems design and analysis and injury outcome metrics.

- **TRL mislead their 1,000 clients including Stuart Newstead who then misleads Derek Rafferty. Cameron uses TRLs incorrect stopping formulas for 54 years and Newstead for 26 years.**

Reference Book 55: [Organisation for Economic Co-operation and Development \(OECD\)](#) (2006) Speed Management Paris: OECD.

- **The European Conference of Ministers of Transport (ECMT)** is an inter-governmental organisation established by a Protocol signed in Brussels on 17 10 1953. The Report relies on TRL, Monash and Leeds University Reports which rely on TRL Reports, the views expressed here are those of the authors, not the OECD, while Stopping [information](#) outlined differs from that in the [Rules of the Road](#)

Reference Book 56: [Organisation for Economic Co-operation and Development \(OECD\)](#) (2013) Road safety annual report 2013. Paris: Organisation for Economic Co-operation and Development.

- [Garda statistics](#) provided to the Road Safety Authority are under reported and differ from the statistics provided to IRTAD and Government since 1959. TRL provides the Gardai and RSA with different stopping formulas. Irelands injury to fatality rate is 28 to 1 as compared with; UK 80 to 1, Germany 79 to 1, and France 16 to 1. Ireland won two ETSC Road Safety Awards based on Statistics.
- The List of [IRTAD Members and Observers](#) include, Fred Wegman Netherlands, Yaw Bimpeh RSA Ireland, John Fletcher TRL UK, Maria Teresa SANZ VILLEGAS DG MOVE European Commission, Marc SHOTTEN World Bank, Terry SHELTON, Umesh SHANKAR National Highway Traffic Safety Administration (NHTSA), Charles COMPTON and Carol FLANNAGAN University of Michigan, Alison SCOTT Harvard University and many more using TRLs 5 incorrect stopping distance formulas.
- **Rafferty was misled on stopping distances by TRL.**

Reference Book 57: [Perez K, Mari-Dell'Olmo M, Borrell C.](#) (2007) 'Reducing road traffic injuries: Effectiveness of safety cameras in an urban setting', *American Journal of Public Health*, 97(9), pp. 1632–7.

- **This Reference Book incorrectly [Concluded](#)**, Speed cameras reduce road crashes and is used by many Researchers in [References](#). Statistics show that Speed cameras do not reduce crashes.

Reference Book 58: [Pilkington, P.](#) (2002) '[Speed cameras under attack](#) in the United Kingdom' *Injury Prevention*:293-294 doi:10.1136/ip.9.4.293.

- **The Report [relies](#) on ETSC, Leeds University and OECD Reports, relying on TRL Reports from 1989.**

Reference Book 59: [Pilkington, P. and Kinra, S.](#) (2005) 'Effectiveness of safety cameras in preventing road traffic collisions and related casualties: systematic review'. *British Medical Journal*, BMJ online, BMJ.com, doi:10.1136/bmj.38324.646574.AE.

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- **This Reference Book [Concluded](#)**; speed cameras reduce road traffic collisions, but statistics show that in 2012 there were **1,754 road fatalities in Great Britain and 1,770 in 2018**.

Reference Book 60: [Road Safety Authority \(2005-2012\)](#) Road Collision Facts Ireland. Dublin: Government Publications.

- **The Collision Information** provided by Gardai is incorrect but published by the RSA. **162 road users** died in 2012, 21 more than in 1931, 81 years earlier. **Gardai removed [1922 to 1958](#)** statistics and claimed 162 is the lowest since records began in 1959. **Ireland won the [EU Road Safety Award in 2010](#)** based on statistics, Gardai removed 14 fatalities from statistics in 2011 and 17 in 2012 but declined under DATA Protection and Freedom of Information to disclose the reason for this.
- **The RSA** introduced [17 Questions on Drink Driving](#) based on these statistics. **During this period**, Gardai overestimated Mandatory Alcohol Checks by 1.45 million. **40 per cent of all fatal collisions** in 2012 were recorded as single vehicle only collisions. **Driver error** accounted for 86 per cent of all contributory factors identified in fatal collisions. **36.2% of fatalities** occurred on the incorrect side of the road. **24.4% of fatalities** occurred at traffic lights – as the amber is incorrectly timed at 3 seconds.
- In the case [Järilström Vs the Institute of Engineers ITE](#), the ITE having firstly fined Järilström \$500, now accept the formula for the time of the Amber/Yellow light written in 1960 by Gazis, Herman and Maradudin is incorrect and will be changed. Ireland has used books containing this incorrect Reference Book. [Frank Cullinane's research](#) with the use of VBOX is acknowledged by [Järilström](#) in his Report to ITE. The time of the Amber Light will also have to be lengthened in Ireland.

Reference Book 61: [Road Safety Authority \(2007\)](#) Road Safety Strategy 2007-2012. Dublin: Government Publications.

- **As in [International Traffic Safety Data and Analysis Group](#) (IRTAD) (2011)** Fred Wegman is misled by TRL and Monash University on stopping distances. Fred Wegman is Managing Director Institute for Road Safety Research, Netherlands and misleads the Minister for Transport, RSA and others.
- **During the 2007 to 2012 Road Safety Strategy** road fatalities decreased from 338 in 2007 to 163 in 2012, due mainly to the building of almost [1,000 kilometres of motorway](#) in Ireland.

Reference Book 62: Road Safety Authority ([2011](#)) Free Speed Survey (Urban and Rural). Dublin: Government Publications

- **In this Reference Book;** [Brian Road, Lorcan Avenue and Glasilawn Road](#) used by the RSA do not comply with speed limit Guidelines as outlined as they are short, narrow and with ramps installed.

Reference Book 63: [Road Safety Authority \(2012\) Annual Report 2011](#). Dublin: Government Publications

- **This Reference Book claims;** 162 people died in road collisions the lowest since records began in 1959, but Garda records in [1922](#) and Gardai removed 14 fatalities from statistics without explanation in 2012. See [Road Safety Authority \(2005-2012\)](#) Road Collision Facts Ireland.

On 28 02 2012, Maurice [Buckley](#), CEO of the National Standards Association of Ireland NSAI presented Noel Brett RSA CEO and Gay Byrne RSA Chair with 3 NSAI Standards Awards.

On 23 05 2012 the Garda [Commissioner](#) declined to release information on Garda statistics and in 2020 Chief Superintendent Fergus Healy again declined to release any information under FOI Legislation.

Brian [Farrell](#) RSA commissioned I York at TRL to design a new and incorrect RPN2213 stopping formula, so why did the RSA use TRL rather than NSAI standards?

Reference Book 64: [Road Safety Authority \(2013\) Road Safety Strategy 2013-2012](#). Dublin: Government Publications

- Rafferty was misled by the RSA and Gardai who were misled by TRL on stopping formulas.

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Reference Book 65: [Road Safety Authority \(2014\)](#) Provisional Review of Road Crashes 2013. Dublin: Government Publications.

- In 2013, there were **190 fatalities on Irish roads**, 28 more than recorded in 2012, so Rafferty who was Sponsored by the RSA was mistaken, Speed Detection Cameras are not 'Life Savers'.

Reference Book 66: [SafetyNet \(2009\) Speed Enforcement](#)- A Road Safety Synthesis. Brussels: SafetyNet.

- SafetyNet has **72 Reference Books** dated from 1935, with **10 by TRL and the European Commission** stating; The opinions expressed in the studies are those of the consultant and do not necessarily represent the position of the Commission. **Researchers misled by TRL include, Wegman, Carsten Elvik and others** resulting in road fatalities in Netherlands, Australia and other countries as follows;

Road Fatalities in the Netherlands and Australia in the 10 years between 2010 and 2019										
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Netherlands	640	661	650	570	570	621	629	613	678	660
Australia	1,353	1,277	1,300	1,187	1,150	1,209	1,293	1,225	1,135	1,194

Reference Book 67: [Shin K, Washington S P,](#) and van Schalkwyk I (2009) 'Evaluation of the Scottsdale Loop 101 automated speed enforcement demonstration program'. Accident Analysis and Prevention.

- **The Report incorrectly claims:** Speeding is recognized as a major contributing factor in traffic crashes, when in fact it is Speed beyond trained/tested ability and incorrect TRL stopping formulas.

Reference Book 68: [Smith, R.R., Cameron, M. and J. Bodinaar](#) (2002) '[The Use of Safety cameras in Ireland](#)', A report submitted to the High-Level Group on Road Safety, Ireland.

- **The objective of a safety camera project** was to reduce the number of speed related collisions, but this could not happen while TRL maintains 5 incorrect stopping formulas. The [High-Level Group](#) included 8 members from the Department of Justice, including 4 members of the Gardai, 2 members of the Department of Transport and a member and ex member of the National Roads Authority. [Michael Brosnan](#), the Garda Inspector and member of the High-Level Group, became the RSA Research Manager although Gardai and the RSA differed on stopping distances. Gardai were aware of my research discovery but not presenting this in [Communiques](#) or correcting TRLs mistake as follows:

TRLs Stopping Formulas Supplied to;	Speed Km/h	Reaction Time Seconds	Reaction Distance Metres	Braking Distance Metres	Total Stopping Distance Metres
RSA Rules of the Road	50	0.67	10	15	25
Garda Crash Investigators	50	2.20 + 1.53	31 + 21	15	46 + 21
RSA Rules of the Road	80	0.67	16	36	52
Garda Crash Investigators	80	2.20 + 1.53	49 + 33	36	85 + 33
RSA Rules of the Road	100	0.67	20	50	70
Garda Crash Investigators	100	2.20 + 1.53	61 + 41	50	111 + 41
RSA Rules of the Road	120	0.67	24	78	102
Garda Crash Investigators	120	2.20 + 1.53	73 + 49	78	151 + 49

- **The first of the 17 Reference Books** used by the High-Level Group is: [Down with Speed](#), A Review of the Literature and the Impact of Speed on New Zealanders which contains Reference Book: [Quimby A R and Watts G R](#) (1981), Human factors, Laboratory Report TRRL1004, Transport Research Laboratory. This Reference Book incorrectly outlines driver Reaction before braking from 120 km/h as 2.20 seconds.
- In the case [Järilström Vs the Institute of Engineers ITE](#), the ITE having firstly fined Järilström \$500, now accept the formula for the time of the Amber/Yellow light written in **1959 by Gazis, Herman and Maradudin is incorrect** and will be changed. Ireland and Monash use books containing these incorrect Reference Books. [Frank Cullinane's research](#) with the use of VBOX is acknowledged by [Järilström](#) in his Report to ITE. The time of the Amber Light will now also have to be lengthened in Ireland.

Reference Book 69: Snell, M. (2011) Cost-benefit analysis: A Practical Guide London: Thomas Telford.

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- Reference Book presently [unavailable](#).

Reference Book 70: [Stevenson, M \(2011\) 'Safety cameras: more, not fewer, saves lives'](#) Injury Prevention 2012;18:1e2. doi:10.1136/injuryprev-2011-040288. (Note: first published online in December 2011).

- **Professor [Mark Stevenson](#), Monash University Accident Research Centre** claims that; Management of speed is the success story of [road injury prevention](#), and much of this success can be attributed to the widespread roll-out of red light and speed detection cameras and that even a 10% reduction in speed across the road network equates to **30–40%** reduction in road fatalities. Fatally injuring 1.3m road users worldwide annually with 280,000,000 million injuries, is not a success story. By 2019, 43 Cities voted down [Speed and Red-Light Cameras](#). Monash University, Queensland Transport and the Rules of the Road in Ireland use 2 of the incorrect [TRL stopping formulas](#), while Garda Forensic Crash Investigators use a different TRL formula as follows:

TRLs Stopping Formulas	Speed Km/h	Reaction Time Seconds	Reaction Distance Metres	Braking Distance Metres	Total Stopping Distance Metres
Rules of the Road	100	0.67	20	50	70
Queensland Transport	100	1.50	42	85	127
Garda Crash Investigators	100	2.20	73	50	123

Reference Book 71: [Transportation Safety Council](#), Institute of Transportation Engineers ITE (2009), Before-And-After Study Technical Brief. Washington: Institute of Transportation Engineers.

- **See also Reference 18 and 46.** The Institute of Transport [Engineers](#) ITE was established in 1930 and used Reference Book; 'The Problem of the [Amber Signal Light](#) in Traffic Flow' published by Denos Gazis, Robert Herman, and Alexei Maradudin, Research Laboratories, General Motors Corporation, Warren, Michigan, first published on 27 11 1959. [Maradudin](#), the sole surviving member certified that the Amber/Yellow Light Time Formula used was designed solely for straight through traffic, at or above the speed limit and not for traffic slowing to turn. Based on [Frank Cullinane's](#) recommendations, [Järnlström](#) used VBOX as part of his evidence to prove his case. [90%](#) of all red-Light Running Tickets are issued to drivers slowing to turn safely, for the past 60 years due to this mistake.
- **The Malpractice, Collusion, Bribery and Corruption** involving Red Light and Speed Detection Cameras worldwide, over a 15 year period 2004 to 2019 is outlined at the [Newspaper.com](#). Karen Finley, former head of US operations for Redflex, was charged with nine counts of mail fraud, three counts of wire fraud, three counts of bribery and one count of conspiracy to use bribes to win and expand a lucrative red-light camera contract with Chicago. She was found guilty, fined \$2 million and was released from federal prison in 2018.
- [Redflex Traffic Systems](#) used a special spreadsheet to calculate precisely how much profit a city can expect from red light cameras on an intersection-by-intersection basis. Maryland, police captain was caught editing letters to the editor praising speed cameras to give the appearance that the public supports the program. Texas Judge Joel Patrick Baker was arrested and later convicted for arranging a deal with American Traffic Solutions (ATS) to install speed cameras during a meeting held in violation of the Texas Open Meetings Act.
- **43 Cities** have so far voted down the Speed Detection and Red-Light Cameras and it is reported that [Redflex](#) owns 16% of GoSafe Speed Cameras in Ireland.

Reference Book 72: [Maher, M \(2013\) 'Statistical Advice: Scottish Safety Camera Programme'](#), Institute for Transport Studies, University of Leeds, Transport Scotland.

- **TRL mislead their 1,000 clients including Maher M. and Leeds University on stopping**
- Drivers cannot be trained with dual controls and cars cannot be stopped in TRL distances.

Reference Book 73: [Vaa T. \(1997\) 'Increased police enforcement: Effects of speed'](#), Accident Analysis & Prevention, 29(3), pp. 373–85.

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- **Truls Vaa** Senior Research Psychologist and **Rune Elvik** Senior Research Officer have [published](#) Reference Books, using Reference Books by Monash, Leeds and other Universities and Research Centres, containing many of [TRLs](#) incorrect stopping distance formulas.

How Professor Fred Wegman who Misleads Rafferty is misled by TRL on stopping formulas

Reference Book 74: [Wegman F \(2002\) Review of Ireland’s Road Safety Strategy](#). Dublin: Department of Transport.

Reference Book 75: [Wegman, F.C.M. & Goldenbeld, Ch. \(1996\)](#) When winning counts. Traffic law enforcement and road safety targets for the year 2000. D-96-9. SWOV Institute for Road Safety Research, Leidschendam.

Reference Book 76: [Wegman F, and Goldenbeld C. \(2006\)](#). ‘Speed management: Enforcement and new technologies.’ SWOV Institute for Road Safety Research, Leidschendam, The Netherlands 2006.

The Highway Code stopping distances were designed by TRL based on an incorrect formula introduced by Parliament on 31 07 1946. In 2020, TRL has 5 incorrect formulas and mislead 1,000 clients, 145 Governments, [Wegman](#), [Cameron](#), [Newstead](#), [Dr Saskia de Craen](#) and the EC who fund contracts since 1997 as follows:

Project	Contract	Total Budget	EU Funded	Period	References
Dumas	ID:RO-95-SC.0294	€1,952,888	€1,168,823	1997 - 1999	SWOV & TRL
Samovar	ID: V2007	€0		1992 - 1994	SWOV & TRL
GADGET	ID: RO-97-SC.2235	€1,162,294	€659,766	1998 - 1999	TRL & Trinity College
ADONIS	ID:205537	€1,296,000	€1,296,000	2008-2013	Germany
PROMISING	ID: RO-97-RS.212	€548,877	€311,536	1998 - 1999	SWOV & TRL
MeBeSafe	ID: 723430	€7,136,979	€7,136,979	2017- 2020	Saskia de Craen SWOV, TRL & RSA

Saskia de [Craen](#) SWOV, Project [Manager](#) of the “[MeBeSafe project](#)” is author of “[The X Factor](#)” and uses 189 Reference Books by [Fuller](#), TRL and [Wegman](#) who incorrectly claim we are making progress, as

Road Fatalities in 6 countries misled by TRL on Stopping Formulas between 2010 and 2019 show										
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Great Britain	1,850	1,901	1,754	1,713	1,775	1,730	1,792	1,793	1,770	1,870
Netherlands	640	661	650	570	570	621	629	613	678	660
Ireland North	55	59	48	57	79	74	68	63	55	56
Australia	1,353	1,277	1,300	1,187	1,150	1,209	1,293	1,225	1,135	1,194
Sweden	266	319	285	260	270	259	270	253	324	223
Ireland	212	186	161	190	193	165	187	158	149	149

TRLs 74-year-old stopping formula mistakes for 120 km/h

Km/h	TRL 1946 - 1947 Highway Code For Parliament			TRL 1981 - 2006 Quimby A 1004 For Gardai			TRL 2007 York I. For RSA			TRL 2012 York I. RPN2213 For SRA & RSA			TRL 2017 Cuerden R. For Brake		
	R	B	TSD	R	B	TSD	R	B	TSD	R	B	TSD	R	B	TSD
120	22	86	108	73	86	159	22	85.5	107.5	24	78	102	50	86	136

Reaction, B Braking, TSD Total Stopping Distance.

- In 2019, road fatalities in Victoria increased by 26%. MUARC was invited to explain and prepare a [submission](#) and [Cameron, Newstead and others responded in 57 pages and 74 Reference Books including Reference Book, TRRL1004](#) by A.R. Quimby and G.R Watts, Human factors and driving performance, Transport and Road Research Laboratory allowing 2.20 seconds 73m at 120 km/h reaction before braking.

Reference Book 77: [Wilson C, Willis C, Hendrikz JK, Le Brocque R](#), and Bellamy N (2012) Speed cameras for the prevention of road traffic injuries and deaths (Review). New York: John Wiley & Sons Ltd.

- **Statistics show that Safety Cameras do not reduce road fatalities.**

Reference Book 78: [Zaal, D. \(1994\) ‘Traffic Law Enforcement: A review of the literature’](#). Report no. 53. Monash University, Accident Research Centre, Clayton, Victoria.

- **Zaal D. was now Reviewing the Literature in 500 Reference Books in each of his Reference Books dated from 1960, with many having RRL/TRL References produced under contract with the**

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Departments of Environment and Transport and each one having a Disclaimer, with some containing 1,500 pages and a further [1,600 Reference Books](#) each.

Reference Book 79: [Zaidel, D. \(2000\) 'Total Speeding Management \(TSM\)](#) - a different way for Controlling Speeding', paper presented at the 13th ICTCT-workshop, 5-7 October 2000, ICTCT, Corfu, Greece

- TRLs incorrect stopping formulas are used.

Book 80: [Allsop, R \(2010\) The Effectiveness of Safety cameras](#)- A review of evidence, London: RAC Foundation

- **Richard Allsop, a Professor for 43 years**, a Director of PACTS, the Parliamentary Advisory Council for Transport Safety, a Board Member of the ETSC, leads European road safety performance index programme PIN, reviewed available evidence, provides inputs to road safety policy in Australia, Hong Kong, Japan, New Zealand and Poland, was made an OBE, is a Fellow of the Royal Academy of Engineering and holds the IHT Award for professional excellence, but
- **Allsop is one of the 1,000 Clients in 145 countries misled by TRL on stopping distances, as**

Eight years of Penalty Point statistics in New Zealand shows that fatalities increased as follows:

Offences and Penalty point Statistics New Zealand where 4m drivers get 1m penalty points each year and fatalities are increasing										
Year	Red Light Running	Restraints Not Used	Drunk Driving	Drug Driving	Phone Use	Mobile Speed Detection	Static Speed Detection	Police Speed Detection	Total Speed Detections	Fatalities
2018	10,405	37,697	25,933	624	23,493	351,588	611,712	228,184	1,191,484	379
2017	11,217	40,905	25,544	540	28,901	414,431	193,142	249,791	857,364	378
2016	12,846	50,467	25,479	416	27,975	410,548	31,603	291,964	734,115	327
2015	13,094	50,110	26,139	336	21,147	486,095	53,923	287,104	827,122	319
2014	13,647	57,433	20,969	209	13,547	705,929	61,675	295,482	1,06,086	293
2013	10,492	54,894	24,540	250	13,547	584,560	30,155	261,462	876,177	253
2012	10,176	53,685	27,643	283	12,393	539,559	44,509	248,570	832,638	308
2011	11,603	58,843	30,782	220	10,304	545,879	81,730	267,371	898,980	284
Totals	93,480	351,074	207,029	2,878	137,760	4,038,589	1,108,449	2,129,928	6,323,966	2,541

Summary

On 26 03 2019, the [European Commission](#) EC Tweeted and the RSA Retweeted; “We want to move close to Zero fatalities and serious injuries on our roads by [2050](#)”. The Tweet was removed after I queried it. **After 10 years of correspondence the EC Team** of the European Transport Minister Adina Vălean replaced [72 of the European Commission EC Authors](#) with a new set of [60 Experts in References Books](#), WHY?.

On 07 05 2019, Rob [Wallis](#) the TRL CEO announced his resignation without responding.

On 03 10 2019, **CLINT D’SOUZA**, UK Department for Transport Representative responded REF No. 268471, “The Department will not enter into any further correspondence with you on this subject, Any further correspondence will be kept on file but will not be acknowledged”.

On 06 01 2020, The RSA CEO Moyagh [Murdock](#) announced her resignation without responding.

On 13 01 2020, the Team responded without a signature, “I can assure you that all our legal initiatives at EU level are preceded by thorough impact assessment”

- **Failing to correct TRLs and the UK Government mistakes is a miscarriage of Justice.**
- **Based on VBOX measurements the Driving ScoreCard System is accurate to within 2cm.**
- **I invite any rule maker worldwide to disprove my findings by demonstration while using VBOX.**

Research for the Driving ScoreCard System

Conclusion

Rafferty is mistaken as he was misled by TRL and many more. Road fatalities are because of mistakes made by TRL and the UK Government in 1946 and 1981. These mistakes are Training drivers with the aid of dual controls and using incorrect TRL stopping formulas.

I wrote the Driving ScoreCard Research 1 to 300 km/h based on [VBOX](#) measurements to prove my discovery and the **Driving ScoreCard System 10 to 120 km/h** to train drivers worldwide to maximum speed limits or each drivers speed limitation with a record available for TRL, Police, Rule Makers, Drivers, Testers or Doctors.

I invite TRL and their 1,000 clients to disprove my findings by demonstration while using the Driving ScoreCard System based on VBOX measurements.

Frank Cullinane is a Road Crash Investigator and Researcher

09 07 2020.