

Draft Road Safety Strategy to 2030 – Consultation on the Key Performance Indicators – Views Sought

The draft Road Safety Strategy to 2030 was published on 24 October 2022. The Strategy outlines 4 ambitious targets to 2030, and in line with the Outcomes Based Accountability approach, the Department, working with key stakeholders and delivery partners, developed an action plan to work together towards these targets. The draft Strategy can be viewed [here](#).

The Department has identified Key Performance Indicators (KPIs) which will monitor the impact of the change we want to achieve through our Strategy.

The proposed KPIs have been designed to monitor and measure the effectiveness of the strategy's actions and their impact on realising improvements in the identified targets and outcomes. They will keep our focus on delivering actions that will make a positive difference.

The Department welcomes the public's views on these Key Performance Indicators.

Road Safety Strategy – Current Key Performance Indicators

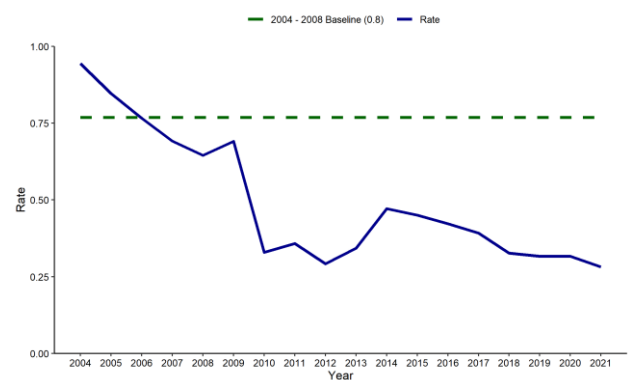
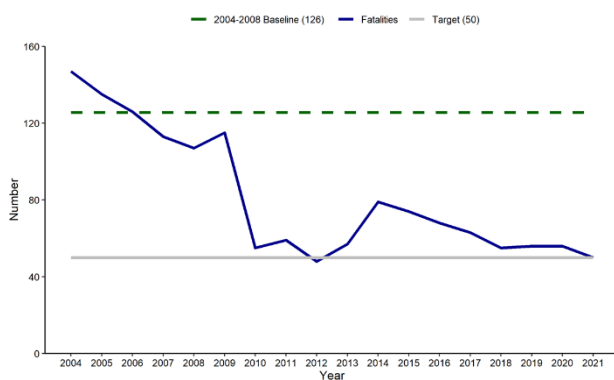
Key Performance Indicator 1: Rate of road deaths per 100 million vehicle kilometres

Data Required:

- Police Service for Northern Ireland (PSNI)
- Travel Survey for Northern Ireland (TSNI)
- Population

Target 1: reduce the number of people killed in Road collisions by 60%

KPI 1: Rate of road deaths per 100 million Vehicle kilometres



Trend Analysis:

- Chart very similar to the chart for target 1 from the Road Safety Strategy
- Driven by the number of fatalities
- Sharp decrease from 2004 to 2010, followed by modest increase to 2014. Marginal decrease year-on-year since 2014
- No comprehensive Vehicle Kilometres Travelled (VKT) calculation at present, TSNI used as a proxy

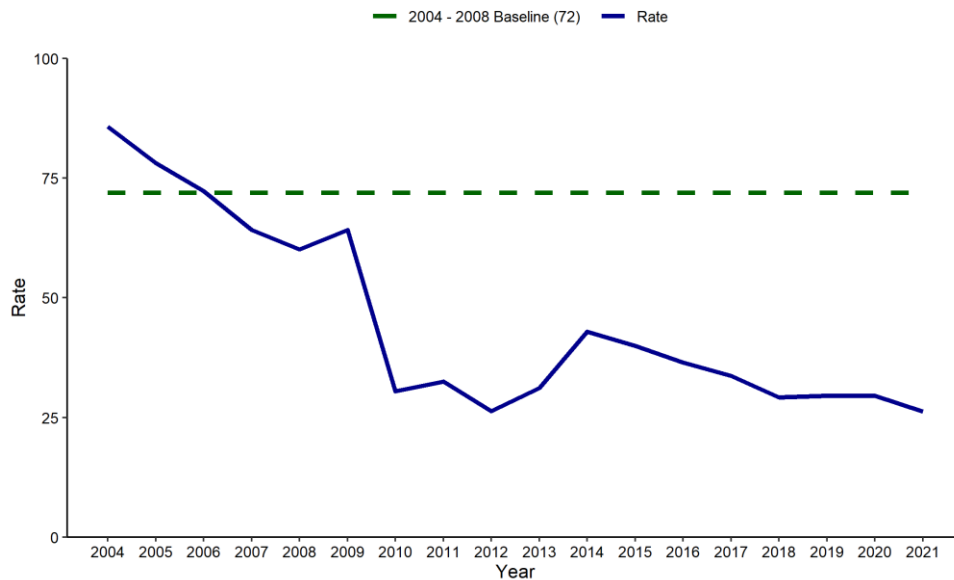
Baselines

2004-2008	0.77
2014-2018	0.41

Key Performance Indicator 2: Rate of road deaths per million population

Data Required:

- PSNI
- Population



Trend Analysis:

- Chart very similar to the chart for target 1 and KPI 1
- Driven by the number of fatalities
- Data feeds into the comparison with other countries
- Sharp decrease from 2004 to 2010, followed by modest increase to 2014. Marginal decrease year-on-year since 2014

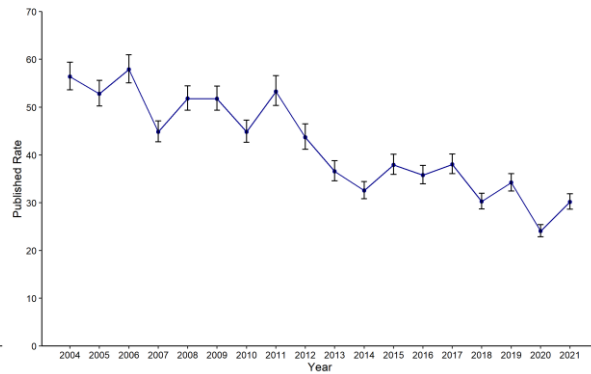
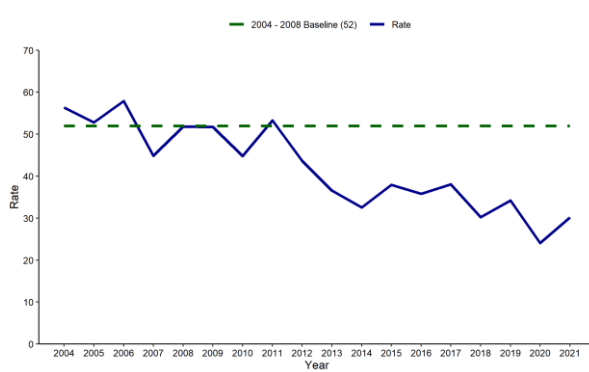
Baselines

2004-2008	71.97
2014-2018	36.43

Key Performance Indicator 3: Rate of pedestrian KSIs per 100 million kilometres walked

Data Required:

- PSNI
- TSNI
- Population



Trend Analysis:

- Confidence intervals small enough to make meaningful comparison year on year
- Can make comparison with other modes of transport (cycling, car)
- There was a period of rapidly reducing risk from 2011 to 2014, which then increased in 2015. Each year following this has seen the numbers decrease and increase alternatively

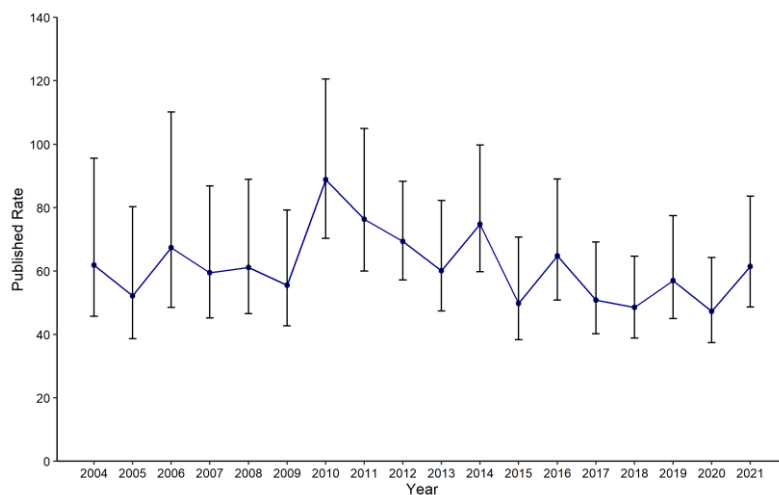
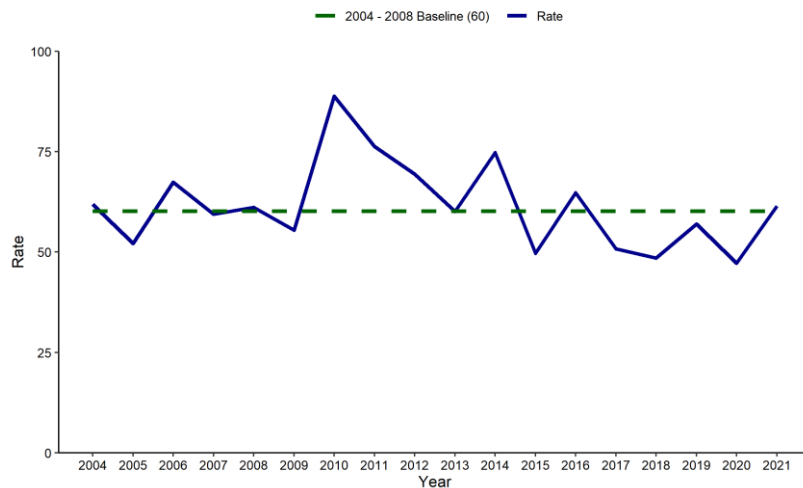
Baselines

2004-2008	51.97
2014-2018	34.43

Key Performance Indicator 4: Rate of pedal cyclist KSIs per 100 million kilometres cycled

Data Required:

- PSNI
- TSNI
- Population



Trend analysis:

- Confidence intervals quite large, prevents making meaningful comparisons year on year
- Can make comparison with other modes of transport (pedestrians, car)
- We know that cyclist KSIs have been increasing markedly since the Strategy baseline, with a 78% increase in KSIs between 2004-2008 and 2017-2021. However, the overall distance travelled by pedal cyclists over the same period has more than doubled suggesting a slightly decreased risk

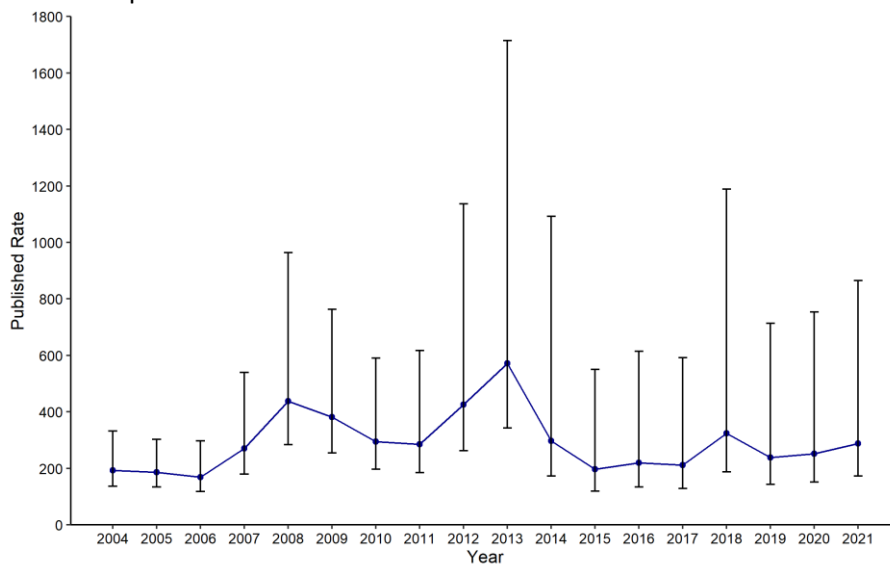
Baselines

2004-2008	60.15
2014-2018	55.30

Key Performance Indicator 5: Rate of motorcyclist KSIs per 100 million motorcycle kilometres

Data Required:

- PSNI
- TSNI
- Population



Trend Analysis:

- Confidence intervals very large, prevents making meaningful comparisons year on year
- Can make comparison with other modes of transport (cycling, car, walking)

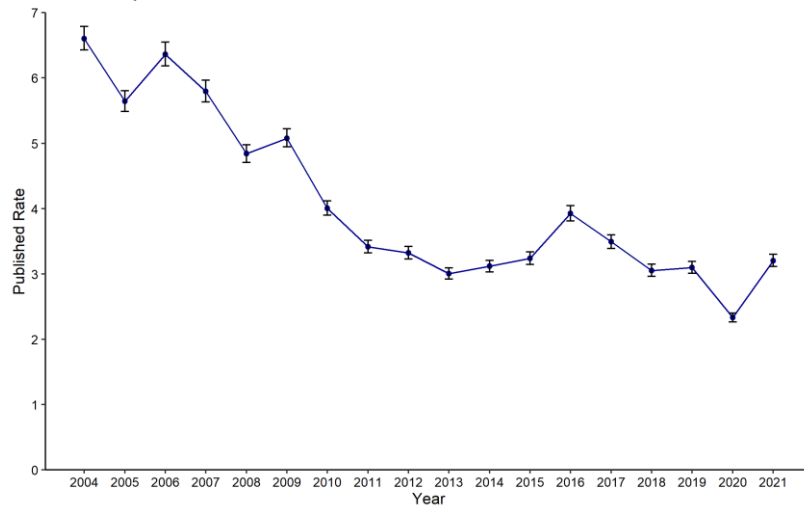
Baselines

2004-2008	257.09
2014-2018	208.35

Key Performance Indicator 6: Rate of car user KSIs per 100 million kilometres (cars and vans)

Data Required:

- PSNI
- TSNI
- Population



Trend Analysis:

- Confidence intervals small enough to make meaningful comparison year on year
- Can make comparison with other modes of transport (cycling, walking)
- The fall in the rate observed between the start (6.60) and the end of the series (3.20) represents a decrease of 51% while the rise over the year to 2021 (37%) was the largest annual increase observed

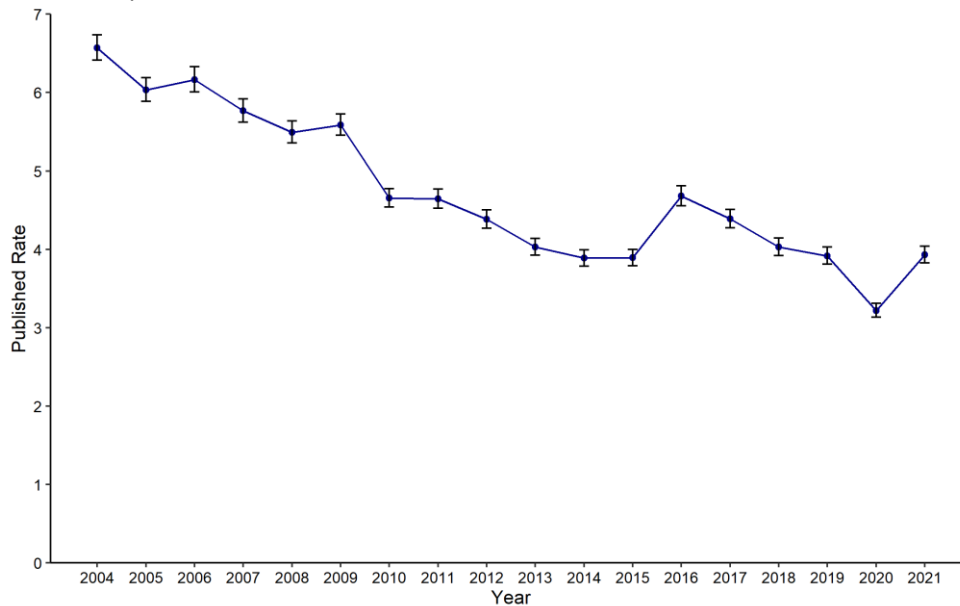
Baselines

2004-2008	5.80
2014-2018	3.34

Key Performance Indicator 7: Rate of fatal and serious collisions per 100 million vehicle kilometres

Data Required:

- PSNI
- TSNI
- Population



Trend Analysis:

- Confidence intervals small enough to make meaningful comparison year on year
- Very similar to number of KSIs
- The rate of fatal and serious collisions per 100 million vehicle kilometres travelled has generally been reducing since the baseline

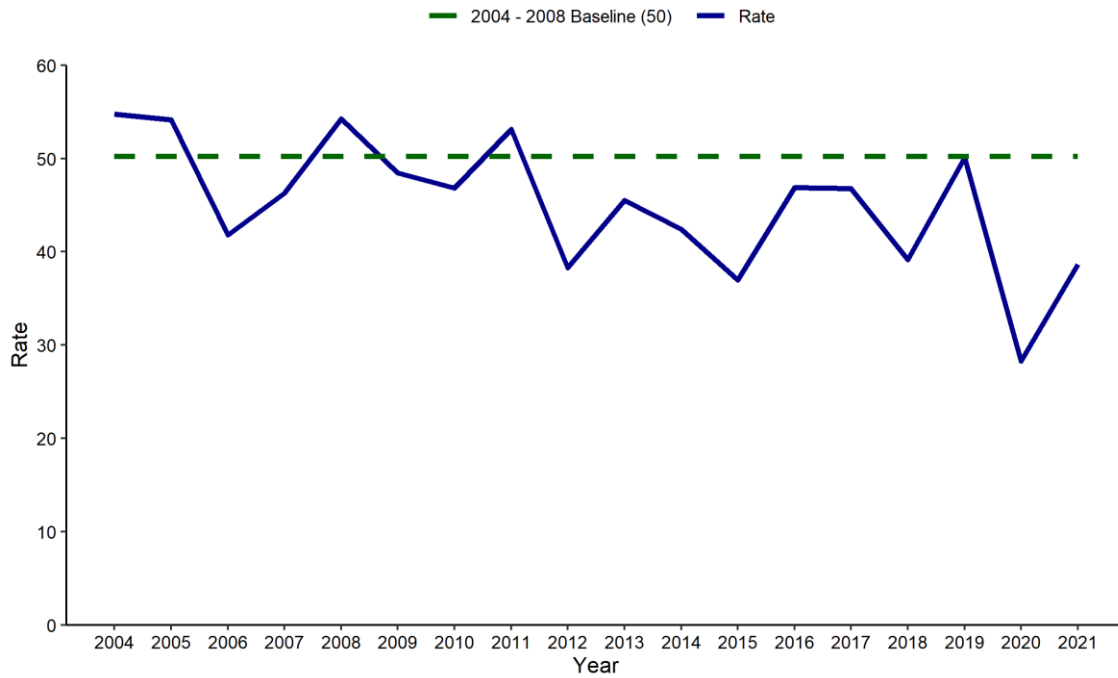
Baselines

2004-2008	5.94
2014-2018	4.17

Key Performance Indicator 8: Rate of people aged over 70 killed or seriously injured in road collisions

Data Required:

- PSNI
- Population



Trend Analysis:

- Used in other regions
- No confidence intervals
- In 2021 there were 38.7 people aged over 70 who were killed or seriously injured in road collisions, per 100,000 population aged over 70 years. The rate increased by 37% between 2020 and 2021, which is the largest annual percentage increase in the series

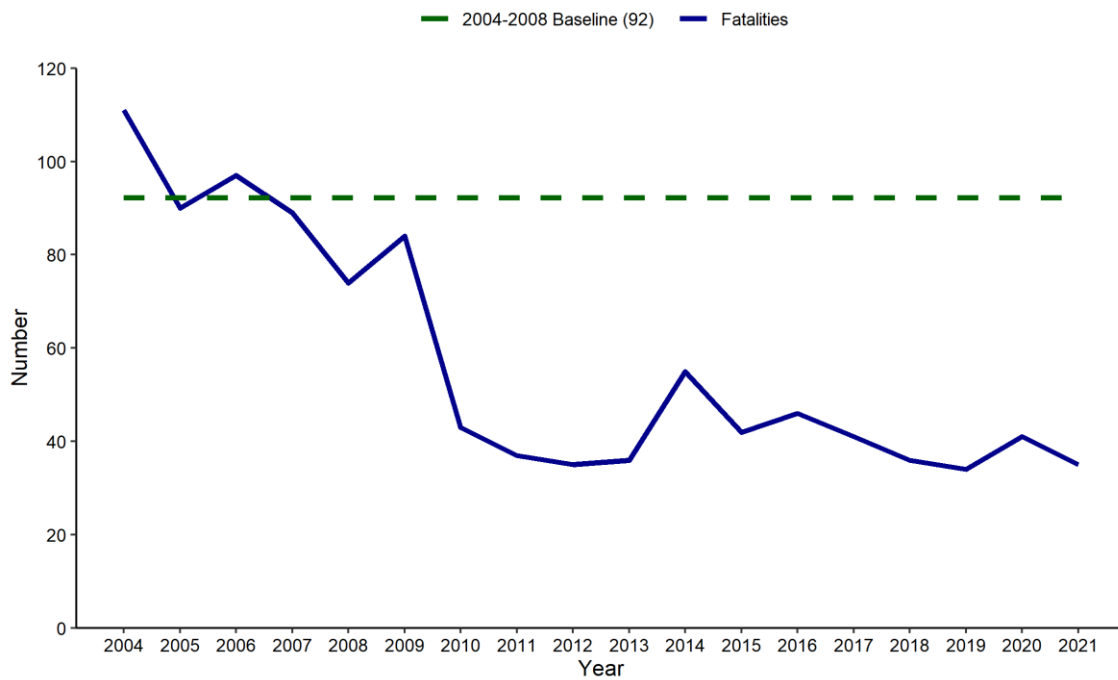
Baselines

2004-2008	50.23
2014-2018	42.46

Key Performance Indicator 9: Number of people killed in collisions on rural roads

Data Required:

- PSNI



Trend Analysis:

- Only PSNI data required
- Rural roads continue to be the roads with the majority of fatalities
- Other regions use rural roads KPI
- The numbers recorded in 2021 are down 15% on 2020 (41) and are the same as the level recorded in 2012. Fatalities on rural roads are now 62% below the baseline figure of 92

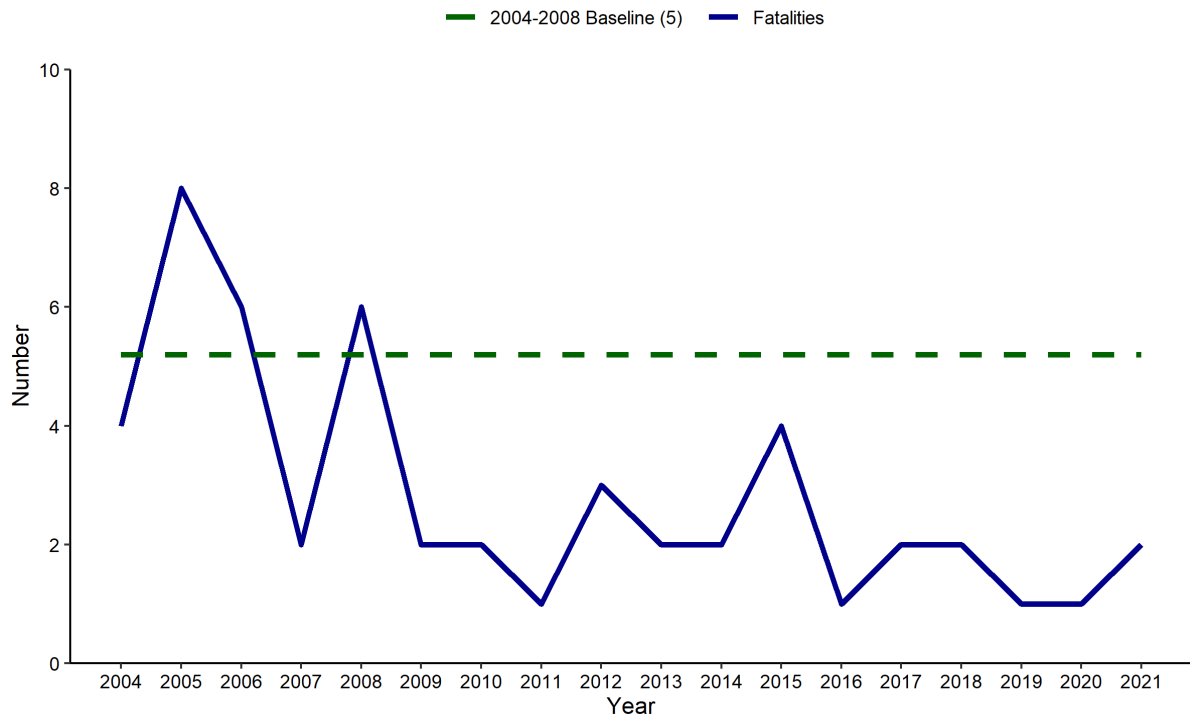
Baselines

2004-2008	92
2014-2018	44

Key Performance Indicator 10: Number of children (0-15) killed in collisions on rural roads

Data Required:

- PSNI



Trend Analysis:

- Numbers are starting to get very low, could get years with zero. Percentage changes not calculated.
- There were two children killed on rural roads in 2021 which has seen the five year average fall from 5 at the time of the baseline to two

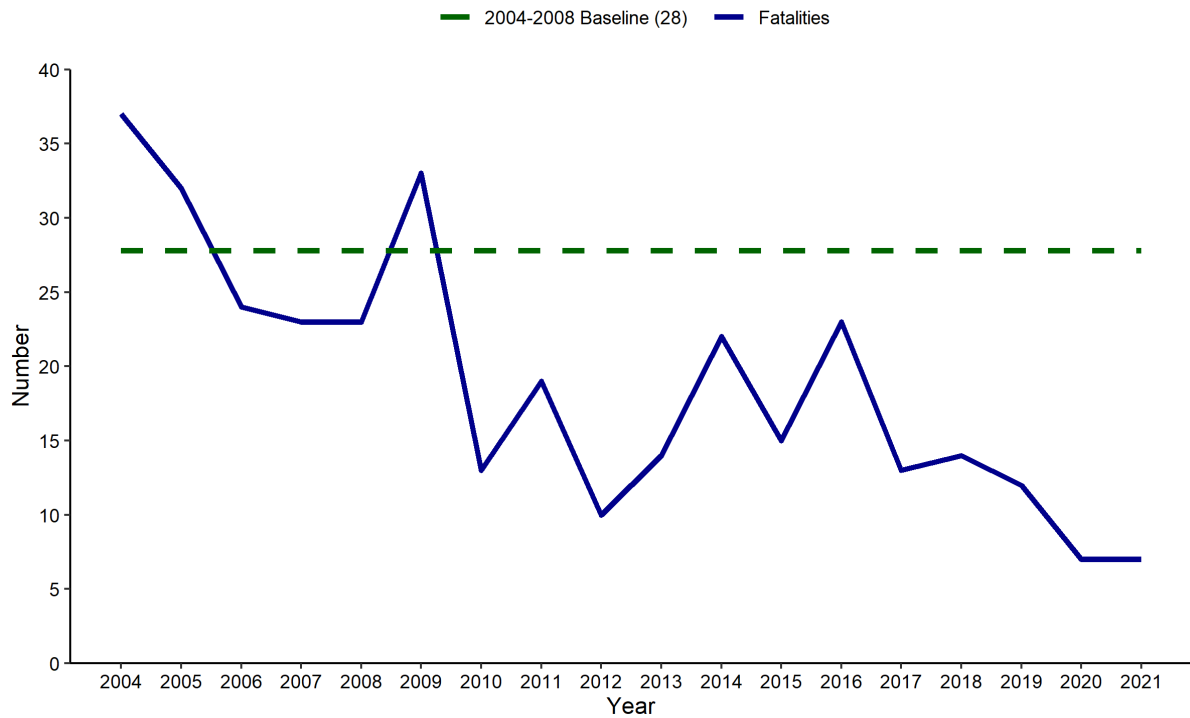
Baselines

Year	Fatalities
2004-2008	5
2014-2018	2

Key Performance Indicator 11: Number of people killed where alcohol/drugs causation factor was attributed

Data Required:

- PSNI



Trend Analysis:

- Still relevant: part of safety campaigns, numbers dropped in 2020 and 2021, but this could be a covid effect.
- In 2021, there were seven people killed in road traffic collisions where alcohol or drugs was attributed. This is same number that was recorded in 2020

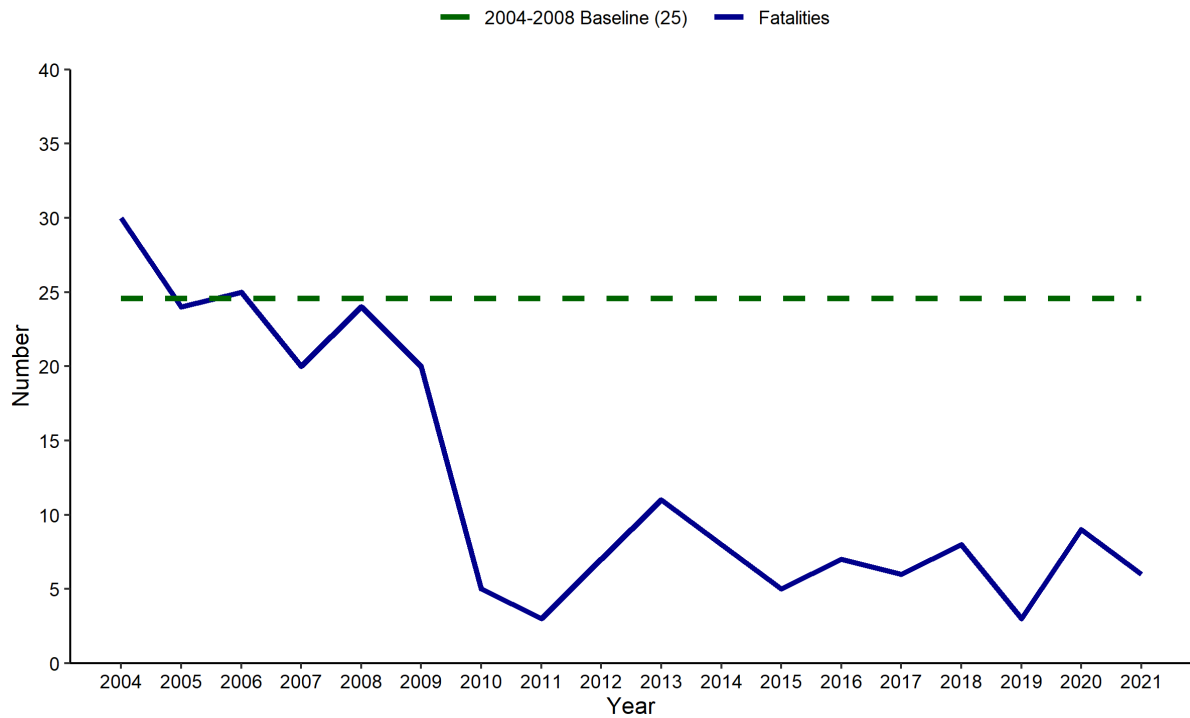
Baselines

Year	Fatalities
2004-2008	28
2014-2018	17

Key Performance Indicator 12: Number of car occupants killed who were not wearing a seatbelt

Data Required:

- PSNI



Trend Analysis:

- Still relevant: part of safety campaigns
- In 2021 there were six car occupants killed who were not wearing their seatbelt. This is a reduction of 33% (3) the number reported in 2020 (9) and represents a 76% decrease on the baseline (25)

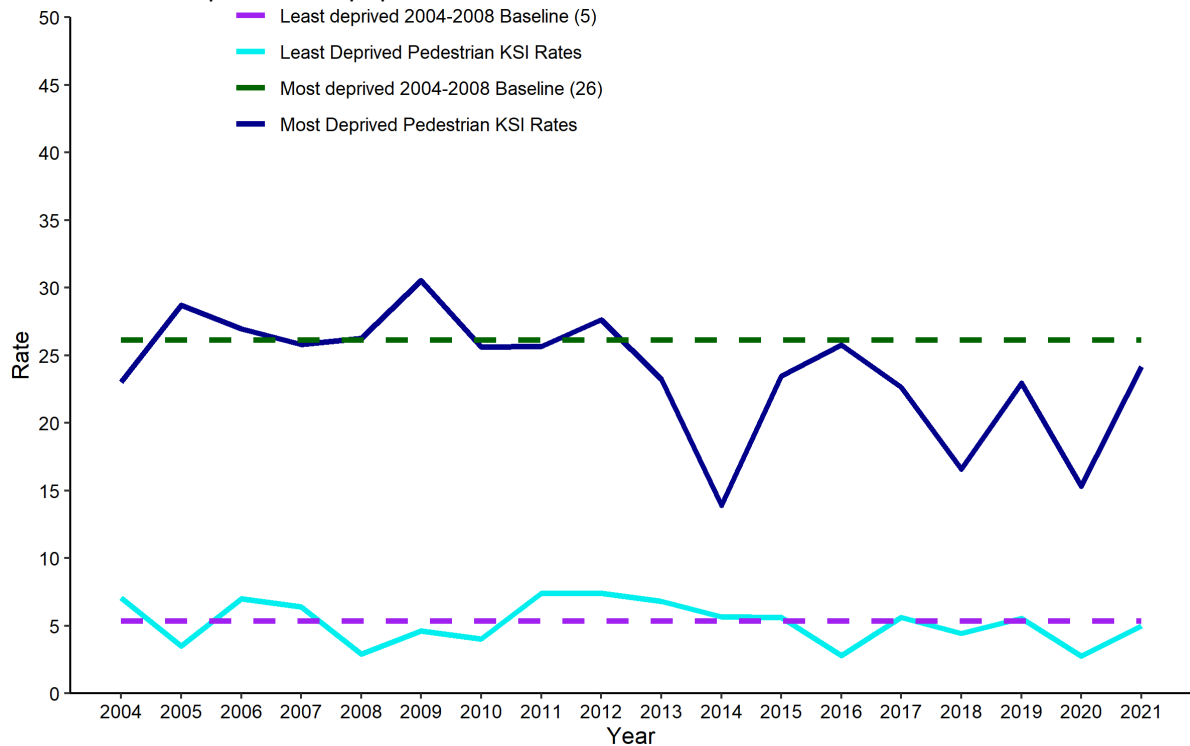
Baselines

Year	Fatalities
2004-2008	25
2014-2018	7

Key Performance Indicator 13: Rate of pedestrians killed or seriously injured (KSIs) per 100,000 population in 10 per cent most deprived areas (Collision Super Output Area)

Data Required:

- PSNI
- NISRA Deprivation & population



Trend Analysis:

- Least deprived have shown little change from baseline
- Most deprived have shown more variation, but back close to the baseline
- In 2021, the rate of pedestrians killed or seriously injured in road traffic collisions in the most deprived areas was 24.19, which is nearly five times greater than the rate of 4.98 observed in the least deprived areas

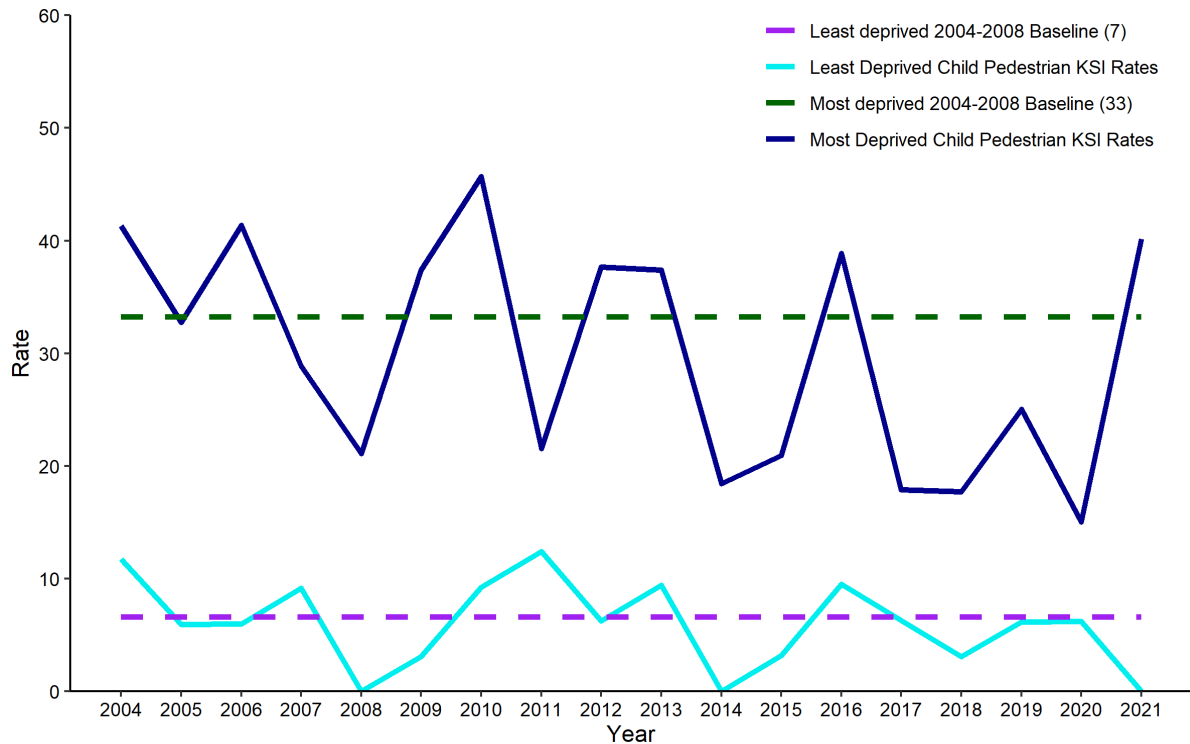
Baselines

Year	Least	Most
2004-2008	5.37	26.14
2014-2018	4.83	20.49

Key Performance Indicator 14: Rate of child pedestrians killed or seriously injured (KSIs) per 100,000 population in 10 per cent most deprived areas (Collision Super Output Area)

Data Required:

- PSNI
- NISRA Deprivation & population



Trend Analysis:

- Least deprived rates are very low and sometimes 0
- In 2021, the rate of child pedestrians killed or seriously injured in road traffic collisions in the most deprived areas was 40.16, the highest rate recorded since 2010. There were zero child pedestrians killed or seriously injured in the least deprived areas in 2021

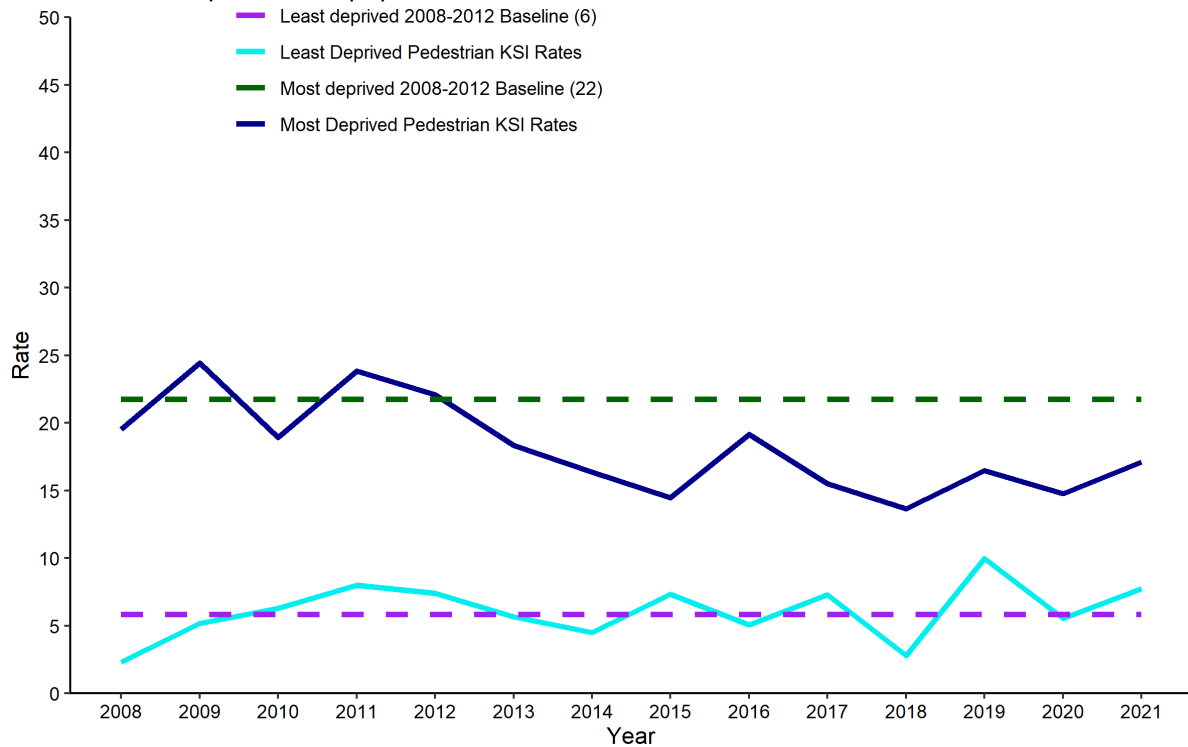
Baselines

Year	Least	Most
2004-2008	6.60	33.26
2014-2018	4.41	22.75

Key Performance Indicator 15: Rate of pedestrians killed or seriously injured (KSIs) per 100,000 population in 10 per cent most deprived areas (Casualty Address Super Output Area)

Data Required:

- PSNI
- NISRA Deprivation & population



Trend Analysis:

- Most deprived have shown a decrease from the baseline, while least deprived have shown little change
- In 2021, the rate of pedestrians killed or seriously injured in road traffic collisions that lived in the most deprived areas was 17.11, which is greater than the rate of 7.74 observed in pedestrians that lived in the least deprived areas

Relevant: Yes

Recommendation: Retain

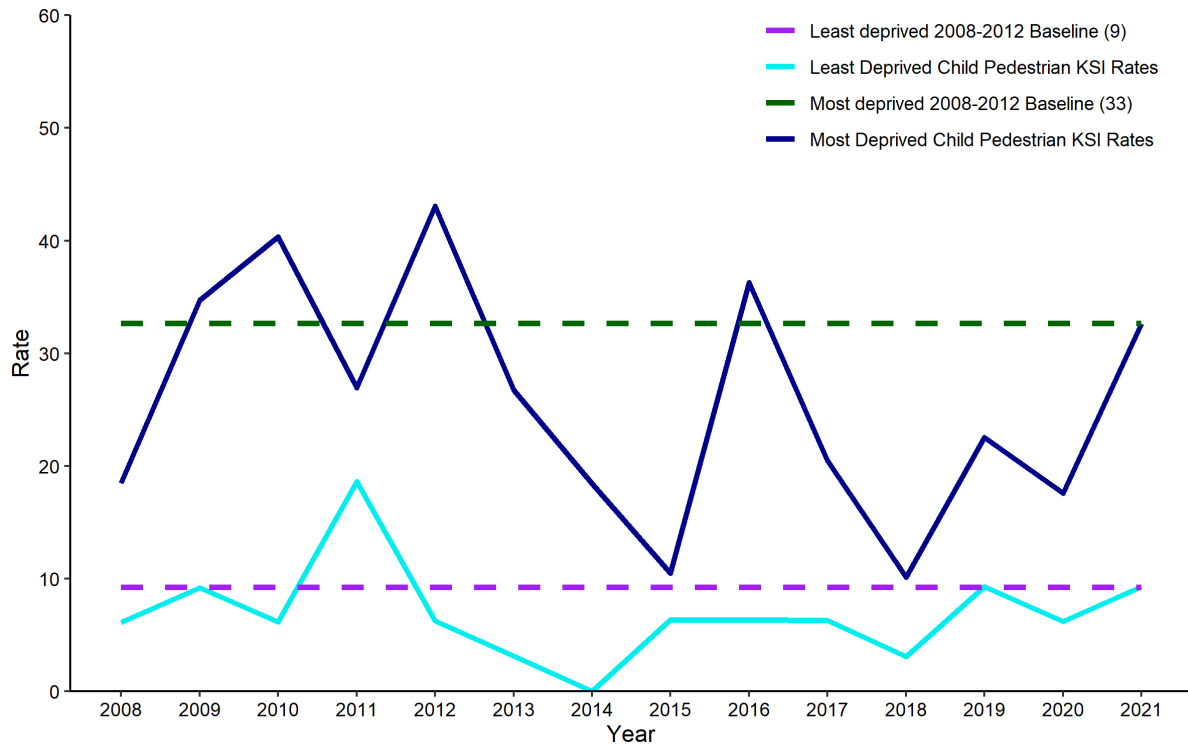
Baselines

Year	Least	Most
2008-2012	5.85	21.76
2014-2018	5.39	15.81

Key Performance Indicator 16: Rate of child pedestrians killed or seriously injured (KSIs) per 100,000 population in 10 per cent most deprived areas (Casualty Address Super Output Area)

Data Required:

- PSNI
- NISRA Deprivation & population



Trend Analysis:

- Least deprived rates are very low and sometimes 0
- In 2021, the rate of child pedestrians killed or seriously injured in road traffic collisions that lived in the most deprived areas was 32.63, which is greater than the rate of 9.28 observed in child pedestrians that lived in the least deprived areas

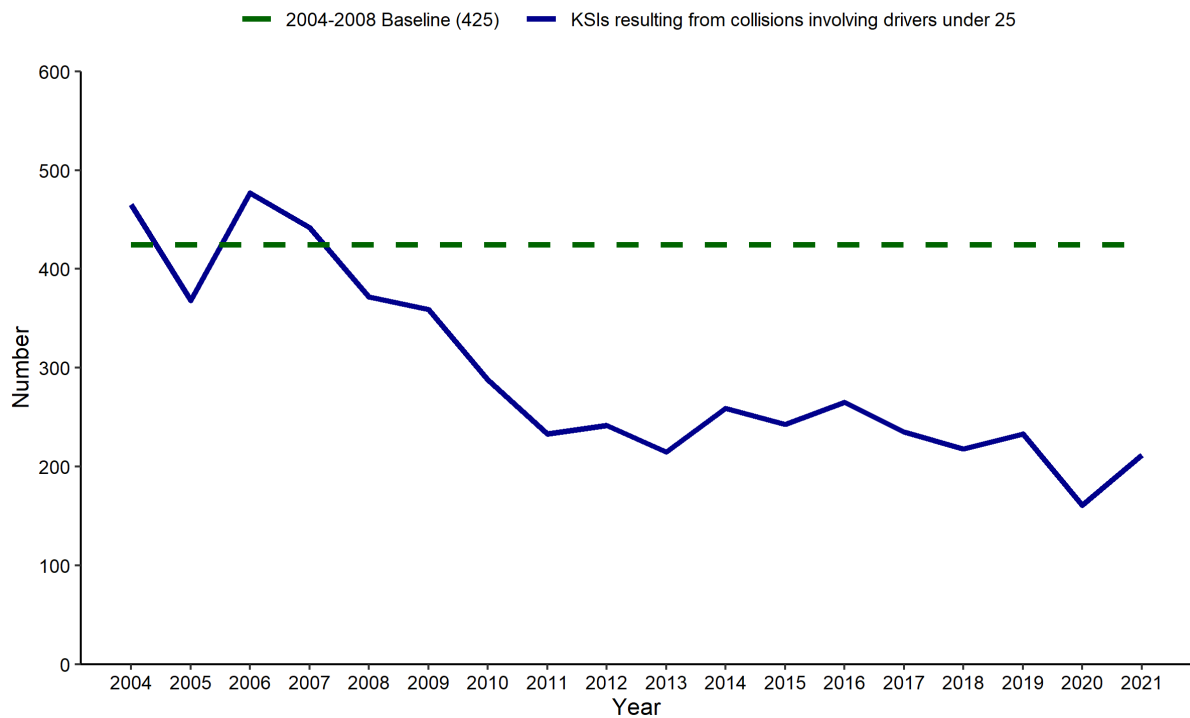
Baselines

Year	Least	Most
2008-2012	9.26	32.66
2014-2018	4.41	19.13

Key Performance Indicator 17: Number of KSIs resulting from collisions involving drivers under the age of 25

Data Required:

- PSNI



Trend Analysis:

- Only requires PSNI data and could be linked in with the Graduated Driving Licence (GDL)
- Figures are still high enough to provide annual percentage changes
- In 2021, there were 212 KSIs resulting from collisions involving drivers under the age of 25. This is a 32% increase from the number recorded in 2020 (161). The numbers in 2021 are 50% below the baseline number (425)

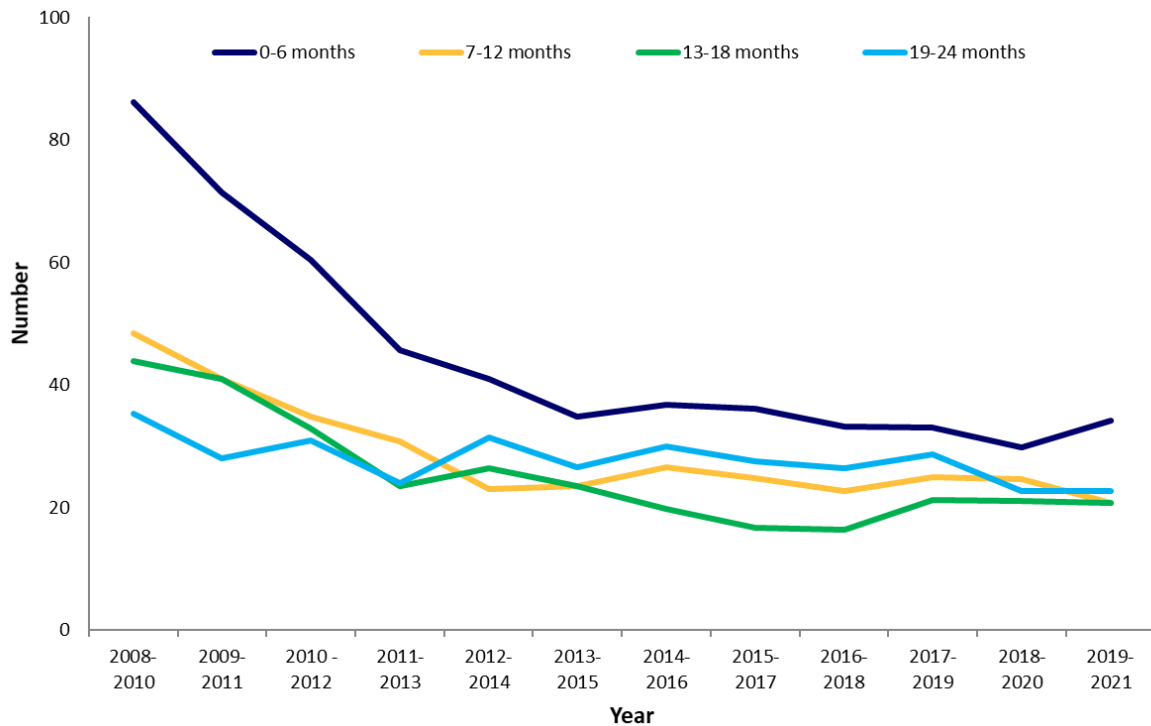
Baselines

2004-2008	425
2014-2018	244

Key Performance Indicator 18: Number of KSI casualties resulting from collisions involving a novice driver

Data Required:

- PSNI
- DVA



Trend Analysis:

- Could be tied in with GDL to see if it has an impact when introduced
- Over the three-year period 2019-2021, novice drivers (those drivers within 2 years of passing their 'Category B' driving test) were involved in road traffic collisions on Northern Ireland roads that resulted in the death or serious injury of, on average, 99 people each year. This is almost unchanged from the 98 average number of KSIs recorded during the 2018-2020 period and is 54% below the 2008-2010 baseline average of 214 KSIs per annum

Baselines

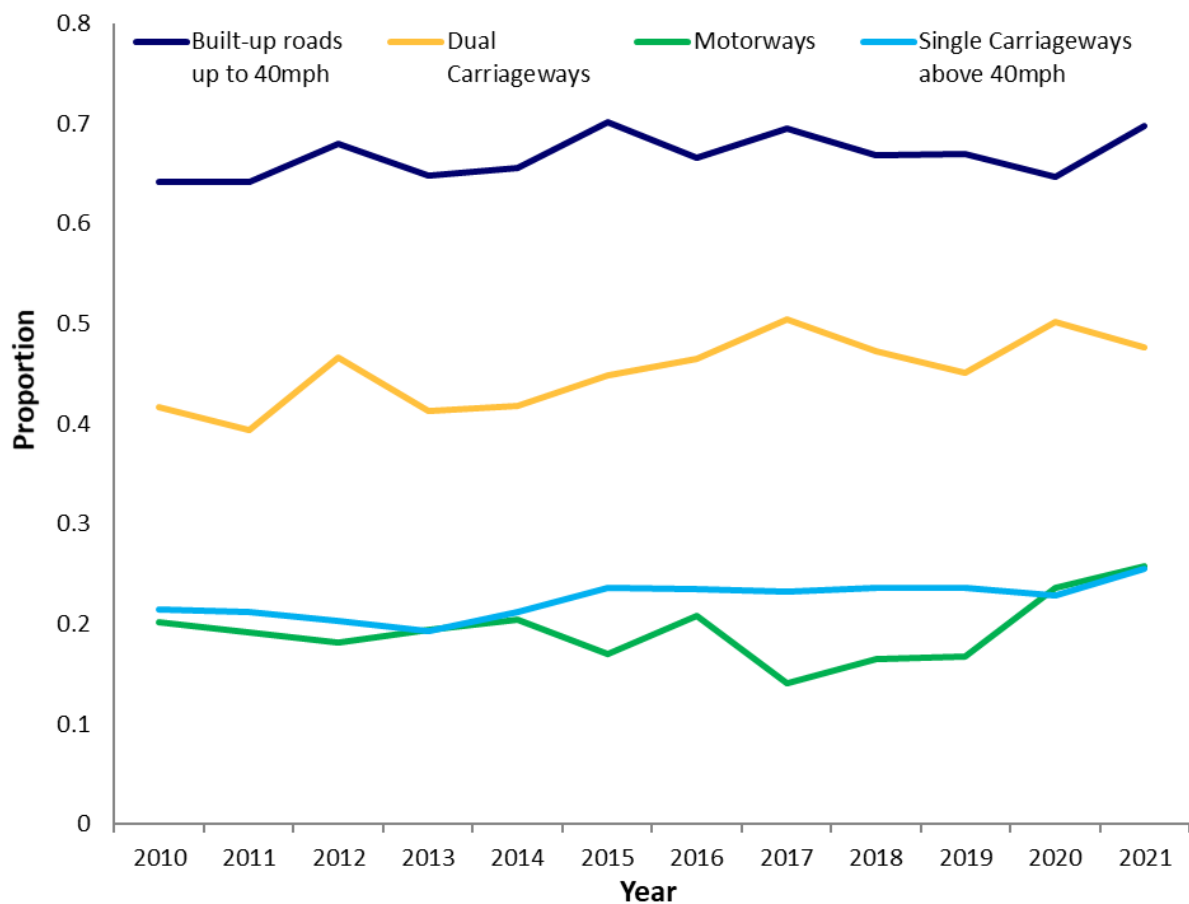
2008-2010	214
2016-2018	99

Key Performance Indicator 19: Proportion of vehicles exceeding the speed limit by road type

Data Required:

- Transport NI
- Traffic and travel report DfI

Proportion of vehicles exceeding speed limit (11pm – 7am), 2010-2021



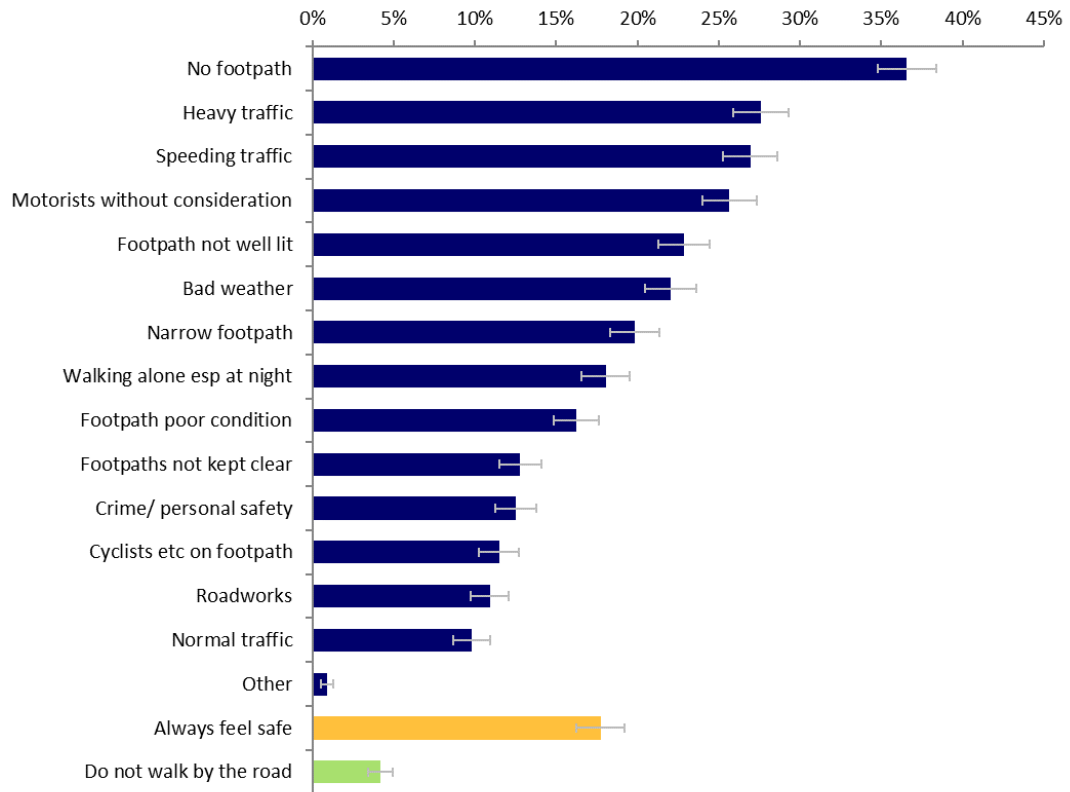
Trend Analysis:

- Does not use any PSNI data, but other regions used speeding as a KPI
- In 2021, over two thirds (70%) of vehicles exceeded the speed limits on built-up roads, while in non-built-up areas in the same year, the proportion of vehicles exceeding the speed limit was greatest on dual carriageways (48%) followed by motorways (26%) and single carriageways (25%)

Key Performance Indicator 20: Reasons why respondents feel unsafe when walking by the road

Data Required:

- TSN1



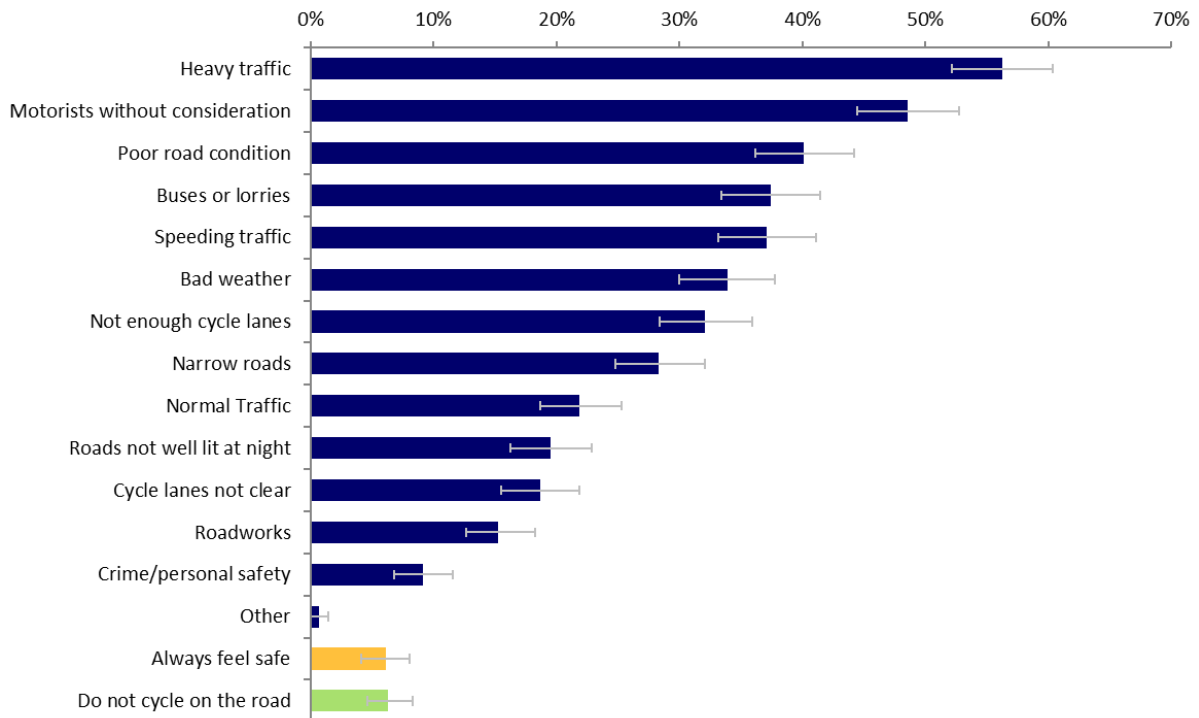
Trend Analysis:

- In 2017-2019, 18% of respondents said they always felt safe when walking by the road, while 4% said they do not walk by the road. The most common reason cited for feeling unsafe was that there was no footpath, with 37% of all respondents giving this answer

Key Performance Indicator 21: Reasons why respondents feel unsafe when cycling on the road

Data Required:

- TSNI



Trend Analysis:

- When asked about safety while cycling, 6% of respondents who had cycled in the last 12 months said they always felt safe when cycling on the road, with a further 6% stating that they do not cycle on the road
- More than half of respondents (56%) felt unsafe due to heavy traffic, while 49% felt unsafe because of motorists driving without consideration of cyclists

Possible New KPIs

Through desk-based research and analysis of other jurisdictions Road Safety KPIs a number of potential new KPIs have been identified. Where possible, existing data sources have been used to determine the current trends and make recommendations as to whether or not these indicators should be adopted.

HGV Involved in / responsible for KSIs. (Good vehicles over 3.5 tonnes)

Year	Involved	Responsible
2014	42	12
2015	27	13
2016	28	12
2017	30	15
2018	34	13
2019	32	4
2020	34	14
2021	44	13

Source: PSNI

Van Involved in / responsible for KSIs. (Good vehicles 3.5 tonnes or less)

Year	Involved	Responsible
2014	53	20
2015	75	31
2016	94	37
2017	66	29
2018	60	27
2019	85	38
2020	60	22
2021	104	38

Source: PSNI

Bus Involved in / responsible for KSIs. (17+ passengers)

Year	Involved	Responsible
2014	13	3
2015	14	3
2016	8	1
2017	9	0
2018	16	3
2019	19	4
2020	8	2
2021	15	0

Source: PSNI

Taxi Involved in / responsible for KSIs.

Year	Involved	Responsible
2014	4	1
2015	6	1
2016	10	5
2017	11	8
2018	5	1
2019	6	4
2020	2	0
2021	4	1

Source: PSNI

Graduated Driving License

The Department publishes a monitoring report on the Graduated Driving License scheme, and within this report a number of additional indicators are produced on KSIs involving young drivers. These indicators are reproduced here and are recommended for adoption in the Road Safety Strategy to 2030.

Number of KSIs resulting from collisions involving car drivers aged 17 to 23

Year	Involved	Responsible
2014	243	156
2015	214	157
2016	223	151
2017	218	146
2018	187	134
2019	210	137
2020	146	100

Source: PSNI

Number of young passenger (14-20 years old) KSIs with a young driver (17-23 years old)

Year	Involved
2014	52
2015	56
2016	48
2017	29
2018	33
2019	42
2020	28

Source: PSNI

Number of KSIs caused by L and R Plate drivers

Year	Learner Driver	Restricted Driver	Learner Motorcyclist	Restricted Motorcyclist
2014	18	23	9	2
2015	16	35	5	1
2016	7	39	6	0
2017	9	31	4	0
2018	12	29	6	0
2019	10	17	2	0
2020	8	12	10	0

Source: PSNI

KSI collisions involving car drivers aged 17 to 23 who were responsible for the collision, where the principal causation factor was, 'Excessive speed having regard to conditions'

Year	KSI collisions caused by young drivers speeding
2014	29
2015	25
2016	23
2017	26
2018	26
2019	15
2020	21

Source: PSNI

Most of the indicators previously identified focus on safer drivers / road users. The following proposed indicators focus on safer vehicles using data that is available from colleagues in DVA.

Safer Vehicles

Vehicle Test Pass Rates by Test Category - Full Tests

Year	Private Car	Motor Cycles	Light goods	Heavy Goods	Taxi
2015/16	80.5%	93.3%	74.7%	75.9%	83.2%
2016/17	81.0%	93.6%	75.8%	77.1%	84.3%
2017/18	81.0%	93.3%	76.3%	76.9%	82.1%
2018/19	81.5%	93.0%	77.8%	77.8%	79.7%
2019/20	82.0%	93.2%	78.2%	79.3%	82.3%
2020/21	83.1%	89.1%	78.1%	78.5%	83.1%
2021/22	77.1%	91.5%	73.3%	79.9%	80.8%
2022/23	82.3%	93.1%	77.7%	80.6%	83.5%

Source: DVA

DVA Enforcement Prosecutions and Penalties

Year	Files Referred to PPS	Cases	Offences	Number Of fixed penalties
2015/16	377	327	756	2,120
2016/17	354	265	644	1,601
2017/18	353	299	694	1,760
2018/19	441	337	827	1,219
2019/20	395	173	502	1,041
2020/21	211	160	487	211
2021/22	318	429	1,229	337

Source: DVA