# Sevenoaks District Road Safety Profile -Supporting Documentation

Produced for the Sevenoaks Borough - Community Safety Partnership (CSP) - with Personal Injury Crash and Casualty data up to the end of 2012

Publication: January 2014















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#### 1. Introduction

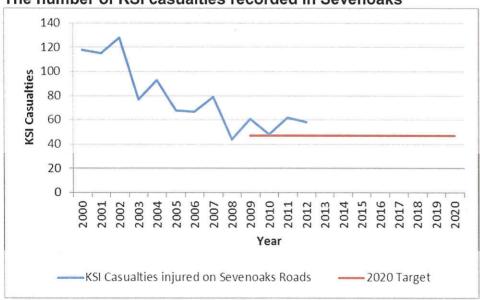
This report has been produced to illustrate casualty reduction progress to date and to highlight where further improvements could be made to benefit Road Safety in this area. The data used for this report is primarily personal injury and casualty statistics, based on Stats19 data provided by Kent Police.

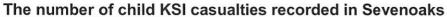
This is the third year that these Road Safety Profiles have been produced and it has been decided that this year the structure of the documents will be changed. Traditionally when looking at road safety the focus has been primarily on where the collisions have occurred, this approach has been driven by the fact that all targets set nationally and locally have always been focused on a reduction in casualties resulting from RTCs (Road Traffic Collisions) occurring in a given area. Currently the targets within Kent are to reduce the numbers of:

- (1) all those killed and seriously injured (KSI) on Kent's roads by 33%;
- (2) children killed and seriously injured on Kent's roads by 40%.

There has been a reduction in the number of KSI casualties recorded in Sevenoaks since 2000 however the figures recorded in 2012 are above the 2020 target line of 47. The number of child KSI casualties recorded in Sevenoaks has also reduced since 2000 with 1 child KSI recorded in 2012, although they are low numbers as illustrated in the charts below. It is extremely important that casualty reduction work remains a priority within the district as budget cuts being made to various organisations who contribute to road safety activity will make these figures difficult to maintain over the coming years. The current economic climate also has the potential for people to be less focused on issues such as vehicle maintenance and the number of older cars on the roads may also increase.









It should be noted that viewing the data in this way does not take into account vehicle movement and the fact that the drivers and passengers involved in a collision will not always reside in the district or area where it took place. Focusing solely on where collisions occur will help engineering and enforcement efforts but this disguises wider trends and in particular may reduce the impact of educational campaigns which look to influence the behaviour of the driver or rider. Research has shown that having perfectly engineered roads will never stop all injury collisions as 95% involve some form of human error and in 76% of injury collisions the human is solely to blame<sup>1</sup>. With this in mind, efforts to educate road users (combined with appropriate enforcement and engineering measures) will provide the most significant casualty reduction returns.

For this reason the document has been split into two distinct sections 'Engineering' and 'Education'. The Engineering section of the document will focus on where collisions have taken place while the Education section will focus on who was involved in collisions occurring in a district as well as looking at the common reasons why drivers from the district have been involved in road traffic collisions in Kent.

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<sup>1</sup> http://www.rospa.com/roadsafety/adviceandinformation/general/road-safety-projects.aspx

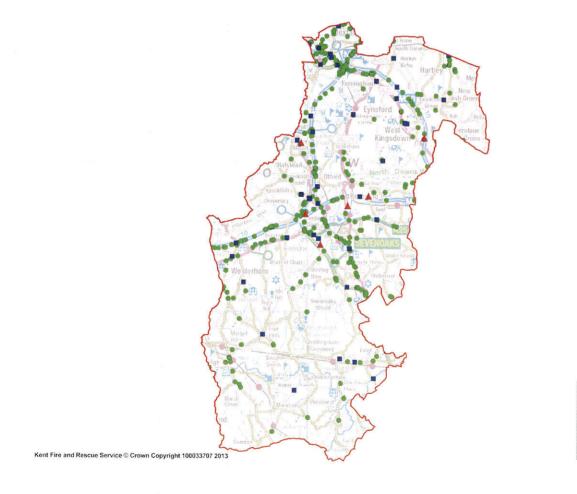
# 2. Engineering background

This section focuses on collisions which have occurred in the district of Sevenoaks. The information in this section should be primarily used to inform potential engineering measures at locations where the highway has been identified as a causation factor in a group of collisions. In this document, the 'Engineering' related sections are Cluster Sites, Route Analysis and Environmental Contributory Factors.

In the last 3 years in Kent (excluding Medway) 3.6% of collisions reported by the police cited road environment as the only contributory factors. This low percentage may indicate that engineering works may not be the sole solution to reducing collisions on the road network.

The map below shows collision locations in Sevenoaks for 2012 and highlights how collisions predominantly occurred along the strategic routes into and out of Kent.

#### Map of crash locations in Sevenoaks in 2012



Key

▲ Fatality

■ Serious inj.

◆ Slight inj.

#### 3. Cluster sites

The Cluster Site Identification process is carried out annually in August using the latest 3 years of data (all casualty severity). It is an automated process within KeyACCIDENT<sup>2</sup> and searches for clusters of collisions within a specified area. The initial criterion is set at 6 collisions in urban areas and 4 in rural areas within a 50 meter diameter.

For the recent 3 years data (01.07.2010 to 30.06.2013) Sevenoaks recorded 7 cluster sites shown on the map and listed below.



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<sup>&</sup>lt;sup>2</sup> KeyACCIDENT is the UKs leading collision analysis system which Kent County Council uses to process and investigate collision data to detect possible patterns in information.

#### List of cluster site locations in Sevenoaks; casualties of all severity

No.	Road Class	Location	Grid Reference	Urban/ Rural	Final Diameter	Total	
11	A25	Westerham Road j/w A21 Sevenoaks By-Pass, Sevenoaks	550208 / 155650	Urban	180m	13	
90	B2173	Bartholomew Way j/w B258 Swanley Lane, Swanley	551572 / 168630	Urban	122m	6	
100	F2766	London Road j/w Hockenden Lane, Swanley	550228 / 169572	Urban	122m	6	
114	A25	Main Road j/w Chevening Road, Sundridge	548481 / 155375	Urban	122m	6	
123	B269	Four Elms Road at j/w Pootings Road Edenbridge	546695 / 148380	Urban	122m	6	
134	A20	London Road j/w Teardrop Recycling Centre, Swanley	552994 / 167523	Rural	112m	5	
142	A20	Gorse Hill j/w A225 Eynsford Road, Farningham	555030 / 166754	Rural	112m	5	

### 4. Route analysis

Routes in Sevenoaks ranked by the total number of collisions 2010 to 2012 (A and B

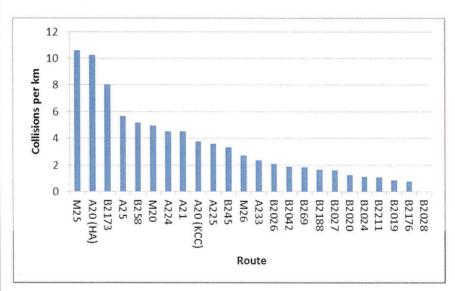
roads only)

	Road Class	M25	A25	A225	M20	A224	A20	A20	82173	A21	B2026	B258	M26	B2027	B2042	A233	B269	B2188	82211	B2024	B2176	B2019	B245	B2020	B2028
HA or KCC		HA	KCC	KCC	НА	KCC I	KCC	НА	KCC	НА	KCC	KCC	НА	KCC	KCC	KCC	KCC	KCC	KCC	KCC	KCC	KCC	KCC	KCC	ксс
	Total number of collisions	224	95	73	54	49	45	43	41	36	33	31	24	22	19	9	9	8	4	3	3	2	2	1	0
	Fatal collisions	1	1	3	3	1	0	2	0	0	2	0	2	0	1	0	0	0	0	0	0	0	0	0	0
Collision	Serious collisions	16	11	7	3	7	6	5	4	5	5	4	3	5	4	2	1	0	1	2	0	0	0	0	0
frequencies	Total number of casualties	343	131	87	70	65	71	61	52	52	39	50	38	37	27	12	11	13	6	3	3	3	4	1	0
	Fatally injured casualties	1	1	3	3	1	0	2	0	0	2	0	2	0	1	0	0	0	0	0	0	0	0	0	0
	Seriously injured casualties	18	11	9	5	7	6	5	4	5	5	7	4	5	5	2	2	0	1	2	0	0	0	0	0

The table shows which routes recorded the highest number of personal injury collisions of all severity in the 3 year period from 2010 to 2012 with statistics for A and B class roads only.

#### Routes in Sevenoaks ranked by collisions per kilometre of road

Road Class	HA or KCC	Total number of collisions	Route Length (km)	Collisions per km
M25	НА	224	21.1	10.62
A20 (HA)	HA	43	4.2	10.24
B2173	KCC	41	5.1	8.04
A25	KCC	95	16.8	5.65
B258	KCC	31	6	5.17
M20	HA	54	10.9	4.95
A224	KCC	49	10.8	4.54
A21	HA	36	8	4.50
A20 (KCC)	KCC	45	12	3.75
A225	KCC	73	20.4	3.58
B245	KCC	2	0.6	3.33
M26	HA	24	8.8	2.73
A233	KCC	9	3.8	2.37
B2026	KCC	33	15.8	2.09
B2042	KCC	19	10.2	1.86
B269	KCC	9	4.9	1.84
B2188	KCC	8	4.9	1.63
B2027	KCC	22	13.7	1.61
B2020	KCC	1	0.8	1.25
B2024	KCC	3	2.7	1.11
B2211	КСС	4	3.7	1.08
B2019	ксс	2	2.3	0.87
B2176	КСС	3	3.9	0.77
B2028	KCC	0	1.6	0.00



The M25 recorded the highest number of total collisions in Sevenoaks (224) and the highest number of collisions per kilometre rate - 10.62 (this route comes under responsibility of the Highways Agency).

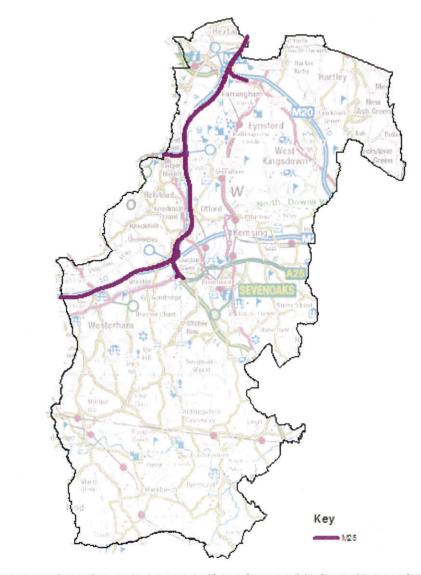
The KCC route with the highest number of total collisions in Sevenoaks was the A25 (95). It should be noted that this route also recorded the highest number of KSI Collisions (12).

50% of all fatal collisions and 35% of all serious collisions on A and B roads in Sevenoaks occur on roads under the responsibility of the Highways Agency. 36% of all collisions on A and B roads in Sevenoaks occur on the M25, M20 and the M26 only.

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Map of routes with the highest total collisions and highest collisions per km rate in Sevenoaks



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# 5. Contributory factors (Environment)

This section outlines environmental contributory factors recorded in collisions in Kent between 2010 and 2012. Those factors that are related specifically to human error are looked at in Section 10. Contributory factors were established as part of the Stats19 data form in 2005 and provide an insight into the circumstances of the crash. They note the key actions or failures of the driver, road environment or casualty that led to or caused the collision. A maximum of 6 contributory factors can be attributed to each crash by the recording police officer. Please note that "the contributory factors are largely subjective reflecting the opinion of the reporting police officer and are not necessarily the result of extensive investigation" (Transport Statistics: Road Safety (DfT 2006).

It is also important to note that only collisions where the police attended the scene and reported at least one contributory factor have been included in this analysis. Personal injury collisions which were self-reported or reported 'over the counter' at a police station have been excluded.

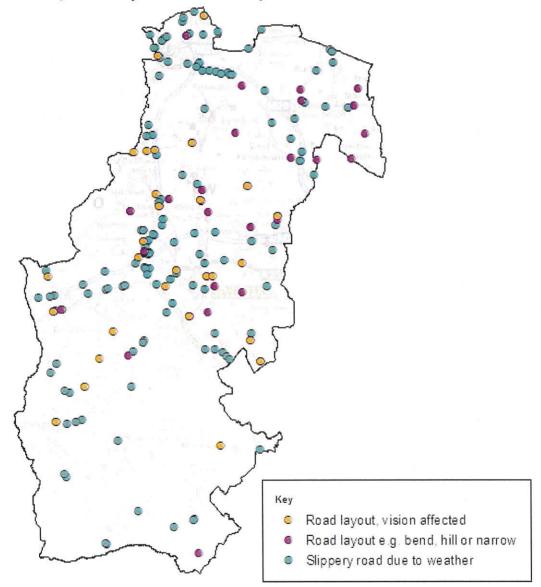
The table below illustrates a comparison of contributory factors between Sevenoaks and the Kent (excluding Medway) districts' average. The location of collisions with factors coded as either 'Road environment' and/or 'vision affected by' have been analysed in this section as they indicate that factors other than road user behaviour may have played a part in the collision. However it should be noted that whilst these factors can be attributed to the road environment, human behaviour may also have an impact on the collision. For example a collision involving a "slippery road" could also have "inappropriate speed" as a factor, indicating that human behaviour added to the cause of the collision.

Road environment contributory factors in Sevenoaks ranked difference to the Kent (excluding Medway) average, 2010 to 2012

Engineering - Road Environment		Seve	noak	S	SARATORIS	trict xc M				Diffe	renc	e
Contributory Factor Information	Ft.	Ser.	SI.	Tot.	Ft.	Ser.	SI.	Tot.	Ft.	Ser.	SI.	Tot.
103 Slippery road due to weather (Road Environment Contrib)	2	17	125	144	1	11	97	109	1	6	28	35
703 Road layout (Driver/Rider - Vision Affected)	0	5	25	30	0	3	16	19	0	2	9	11
108 Road layout e.g. bend, hill or narrow (Road Environment Contrib)	0	5	35	40	0	4	26	31	0	1	9	9
102 Deposit on road e.g. oil, mud, chippings (Road Environment Contrib)	1	4	19	24	0	2	15	16	1	2	4	8
109 Animal or object in carriageway (Road Environment Contrib)	1	4	14	19	0	1	10	12	1	3	4	7
710 Vehicle blind spot (Driver/Rider - Vision Affected)	0	0	23	23	0	1	16	17	0	-1	7	6
705 Dazzling headlights (Driver/Rider - Vision Affected)	0	0	6	6	0	0	3	3	0	0	3	3
104 Inadequate/Masked signs or road markings (Road Environment Contrib)	0	0	9	9	0	1	6	7	0	-1	3	2
106 Traffic calming (Road Environment Contrib)	0	1	2	3	0	0	2	2	0	1	0	1
704 Buildings, road signs, street furniture (Driver/Rider - Vision Affected)	0	0	5	5	0	1	3	4	0	-1	2	1
107 Temporary road (Road Environment Contrib)	0	0	2	2	0	0	2	2	0	0	0	0
702 Vegetation (Driver/Rider - Vision Affected)	0	0	5	5	0	0	4	5	0	0	1	0
709 Visor or windscreen dirty, scratched or frosted etc. (Driver/Rider - Vision Affected)	0	0	1	1	0	0	1	1	0	0	0	0
105 Defective traffic signals (Road Environment Contrib)	0	0	1	1	0	0	2	2	0	0	-1	-1
708 Spray from other vehicles (Driver/Rider - Vision Affected)	0	0	2	2	0	1	2	3	0	-1	0	-1
101 Poor or defective road surface (Road Environment Contrib)	0	3	5	8	0	1	8	10	0	2	-3	-2
707 Rain, sleet, snow or fog (Driver/Rider - Vision Affected)	0	2	10	12	0	2	17	19	0	0	-7	-7
701 Stationary or parked vehicle(s) (Driver/Rider - Vision Affected)	0	2	11	13	0	3	22	25	0	-1	-11	-12
706 Dazzling sun (Driver/Rider - Vision Affected)	0	0	8	8	0	2	21	23	0	-2	-13	

The table above illustrates that Sevenoaks records a similar proportion of contributory factors as the District average with the exception of 'slippery road due to weather' (35) which recorded the largest difference to the average. The map below illustrates where these collisions have occurred along with both "road layout" factors.

Collisions in Sevenoaks which recorded contributory factor "slippery road due to weather", "road layout" or "road layout vision affected" 2010 to 2012



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### 6. Education background

This section of the report will focus on where drivers involved in collisions in Kent and Medway reside as opposed to where the collisions occur. Within the data captured by Kent Police, the home postcode of all casualties and all vehicle drivers are included. It is using this postcode data that the district and even ward, from which drivers involved in collisions live. The focus can then target the characteristics and behaviour of drivers from Sevenoaks district that are involved in crashes anywhere in Kent as opposed to simply those drivers crashing in Sevenoaks who may live elsewhere. This has the potential for interventions to be focused on the safety of residents from the district.

There are a number of caveats when using this postcode data. The first is that although details of collisions occurring in Kent and Medway are captured, the same level of detail is not currently available for collisions outside of Kent. This means that if there are a high proportion of drivers from Sevenoaks who are involved in collisions outside of Kent then they will not be captured in this dataset. The second caveat is that the postcode field is not always captured by Kent Police and some of the data entered is not valid. The table below shows the proportion of postcodes that were matched in Kent and Medway over the last 5 years, the proportion that were valid postcodes but from out of the county and then finally the proportion that were not valid UK postcodes; this data is for all drivers involved in collisions in Kent.

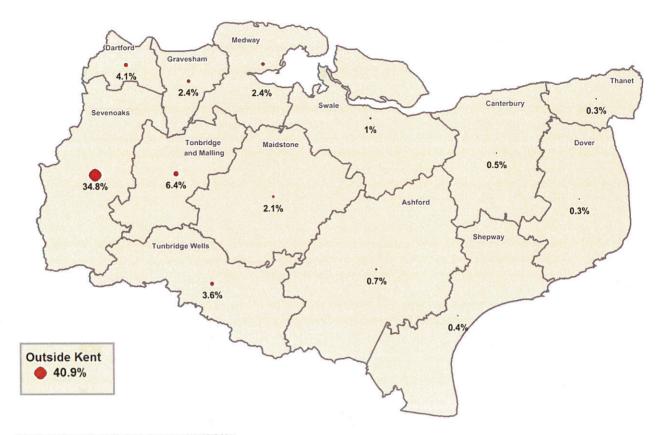
	2008	2009	2010	2011	2012	Total
Postcode matched	63.02%	67.38%	66.43%	68.62%	68.41%	66.72%
Out of county	13.84%	15.62%	15.67%	15.05%	15.74%	15.16%
Total valid	76.85%	83.00%	82.10%	83.67%	84.16%	81.88%
Not valid	23.15%	17.00%	17.90%	16.33%	15.84%	18.12%

The total number of valid UK postcodes over the 5 year period of 2008-2012 is 81.88%, although there is variation across the years with the quality of the data improving from 76.85% in 2008 to 84.16% in 2012. This is very encouraging as the upward trend suggests that the data accuracy will continue to improve in the future.

It should be noted that although the data does have these two limitations it is still a robust dataset and this is one of the first times this data has been analysed in this way. An assumption has had to be made however, that where there are gaps in the data it will not be vastly different from the distribution of the rest of the data.

Traditionally, casualty reduction measures have been focussed on where collisions occur in Kent and it is often this data that underpins engineering activity and can also influence local education and enforcement campaigns in the area even if many of those crashing in the district might have travelled from much further afield. For example, the map below shows the proportion of drivers involved in collisions in Sevenoaks against where they live (using only valid postcodes that have been recorded by Kent Police).

#### Collisions occurring in Sevenoaks by home district of drivers (2008 - 2012)



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Only 34.8% of drivers involved in collisions in Sevenoaks are actually residents of the Sevenoaks district. This means that any education activity focussing on the residents of Sevenoaks would at the very best target just under 35% of the people who are involved in the collisions within Sevenoaks.

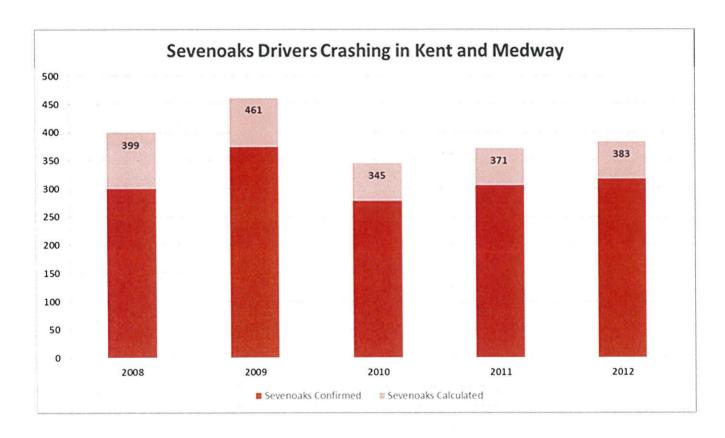
To potentially reduce collisions in Sevenoaks district it would therefore be beneficial to target, or help target, drivers from other districts and areas as well, particularly as 40.9% of drivers were from outside Kent.

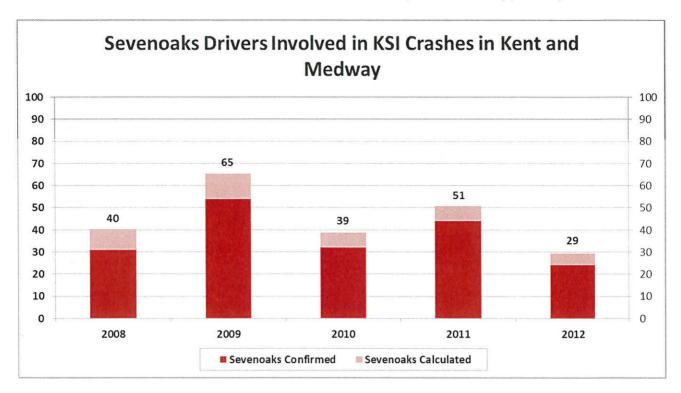
### 7. Drivers who live in Sevenoaks

This section will review the home postcodes of drivers who live in Sevenoaks over a 5 year period to see the total number of drivers from Sevenoaks who have been involved in personal injury collisions in Kent.

As there are a number of invalid postcodes which have been recorded in the Stats 19 data, an assumption has been made that these will allocated with the same proportions as the valid postcodes. So for example if 5% of the valid postcodes come from Sevenoaks then the assumption, to allow for year on year comparisons, is that 5% of the invalid postcodes will also have come from Sevenoaks.

The charts below show the total figure for the number that it is estimated to have come from Sevenoaks and this is split down into confirmed and calculated, where the confirmed are taken from valid postcodes and the calculated is the number of invalid postcodes that it is estimated to have come from Sevenoaks.

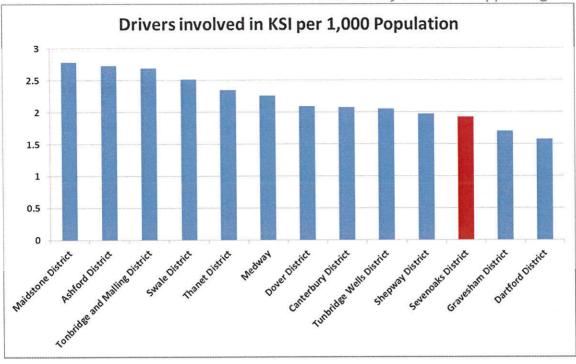




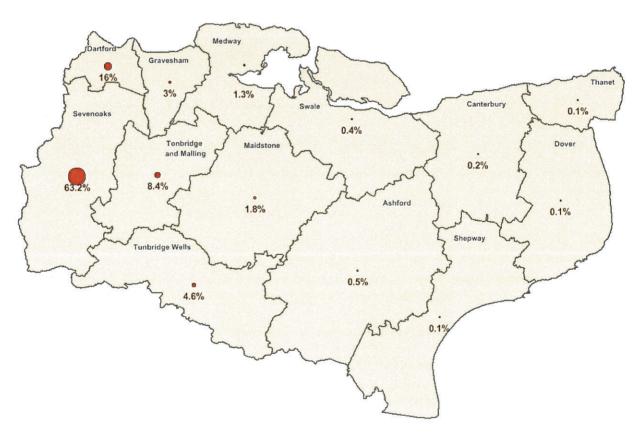
The remainder of this document will focus on the 5 year period (2008 to 2012) in one block as this will provide a more statistically significant data set and minimise the impact of invalid postcode data. For district comparisons it is possible to look at all collisions that have been recorded in Kent and to link this to the home postcode field. The collision figures can then be standardised by showing these figures against population levels.

The chart below shows the drivers from each district involved in KSI collisions against the population of the district, which highlights that Sevenoaks has one of the lower numbers of drivers involved in KSI collisions per population in Kent.

It should be noted that data for crashes recorded outside of Kent is not included in this analysis so this may affect the ranking for districts where residents are more likely to travel outside of the Kent and Medway boundary.



The proportion of Sevenoaks residents who were involved in collisions (all severity) in Kent only (2008 - 2012)



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The map above shows where drivers whose postcodes fall within Sevenoaks district only have been involved in a collision. Of those residents who have been involved in a collision in Sevenoaks Profile Page 16 of 39

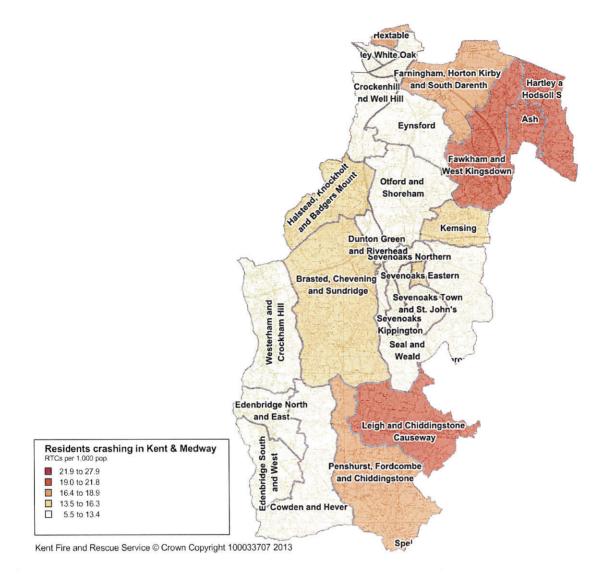
Kent, the majority (63.2%) occur in Sevenoaks itself, with Dartford (16%) and Tonbridge (8.4%) recording the next highest proportions.

The postcode data set within Stats 19 can also be interpreted to show where residents from Sevenoaks live within the District, who have been involved in a collision in Kent. The maps below show the output areas in Sevenoaks by the number of drivers involved in personal injury collisions in Kent per 1,000 residents. The darker shading highlights a higher number of collisions compared with the resident population, which indicates that drivers/riders from these areas are more likely to be involved in a collision in Kent.

No areas in Sevenoaks recorded the highest rate of between 21.9 and 27.9 RTCs per 1,000 population but the wards below fell into the next highest category (19.0–21.8 RTC per 1,000 population):

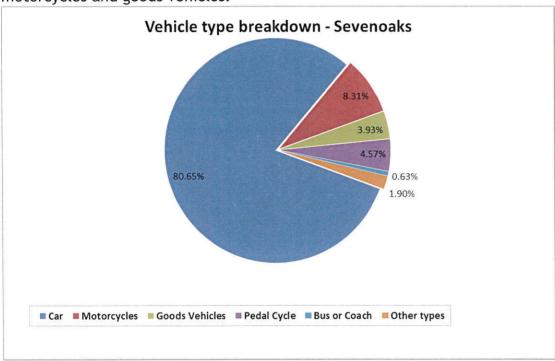
- Hartley and Hodsoll Street
- Ash
- Leigh and Chiddingstone Causeway
- Fawkham and West Kingsdown

#### All Kent and Medway collisions involving Sevenoaks drivers, by home ward 2008-2012

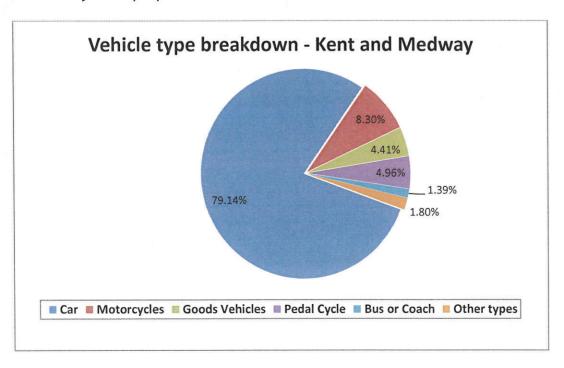


### 8. Vehicle types

The pie chart below shows the vehicle types driven by Sevenoaks residents involved in a personal injury collision in Kent and Medway. The dominant vehicle is cars followed by motorcycles and goods vehicles.

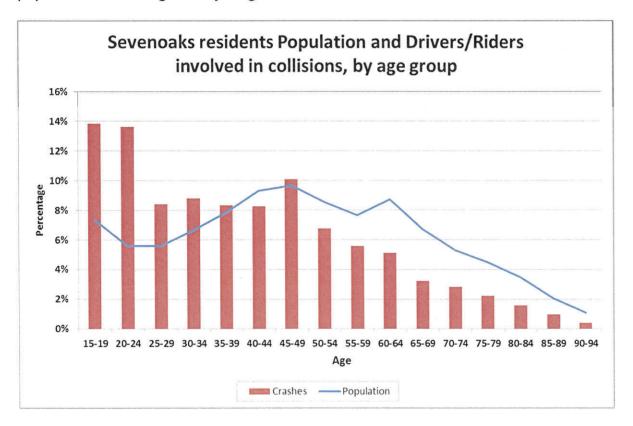


The proportion of residents from Sevenoaks crashing while driving cars is slightly higher than the county wide proportions.



### 9. Age of driver

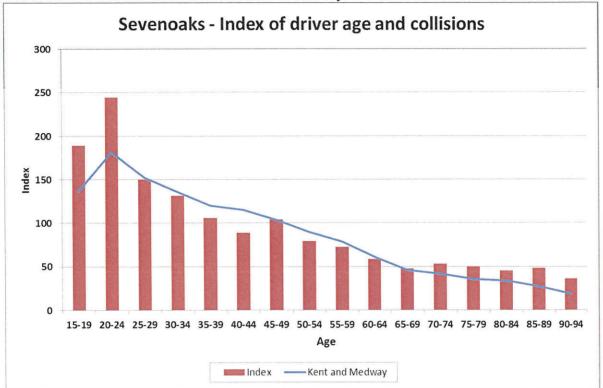
The chart below shows the proportion of drivers from Sevenoaks by ages who are involved in personal injury collisions in Kent. The lowest age group included is 15-19 as this is the lowest age group that should legally be able to drive, with moped riders being legal from 16 and although there are a small number of collisions involving drivers younger than 16 there are not enough to make any statistical difference. The line on the chart uses the 2011 census data to illustrate the proportion of the Sevenoaks population falling into each age category, again those below 15 have been excluded and the proportions are of the total population excluding those younger than 15.



The chart above illustrates how drivers/riders from Sevenoaks aged between 15 and 39 year of age recorded a higher proportion of crashes when compared to their respective proportion of the population in Sevenoaks. Equally those drivers/riders from Sevenoaks aged between 50 and 94 recorded a lower proportion of crashes when compared to their respective proportion of the population in Sevenoaks.

The data above can be illustrated as an index value by taking the proportion of drivers from Sevenoaks involved in collisions and comparing this figure to the proportion of the population they make up. For example, if 5% of the collisions involve drivers who are aged between 45 and 49 and also 5% of the population in that area is aged between 45 and 49 then this would equal an index score of 100. Anything below 100 means there are fewer incidents than expected (under-represented) and anything above means that there are more incidents than would be expected (Over-represented).

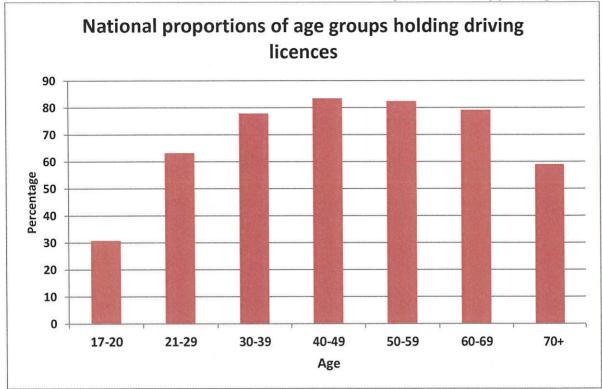
The chart below shows these indexes for Sevenoaks by each age group and also compares these to the overall totals for Kent and Medway.



An index value over 100 indicates an age group being over represented in collisions for their proportion of age group in the district. The 20-24 age category in particular, is over-represented in Sevenoaks and is also much higher than the average index for this age group across Kent and Medway. This age group returned an index score of over 200 which means that there is more than twice the expected number of drivers in this age category involved in collisions. In fact, 13.64% of drivers from Sevenoaks involved in collisions are aged 20-24 but within Sevenoaks this age group only accounts for 5.57% of the population.

Although this index data set gives a good overview of the likelihood of being involved in collisions, it should be considered alongside other factors, for example older drivers may drive less and are therefore less likely to be involved in a collision compared to their population proportion.

It is possible to obtain the number of individuals who hold driving licences by their age. The National Travel Survey collects data on driving licence ownership and the most recent publication gives information on the number of licences held by age group.

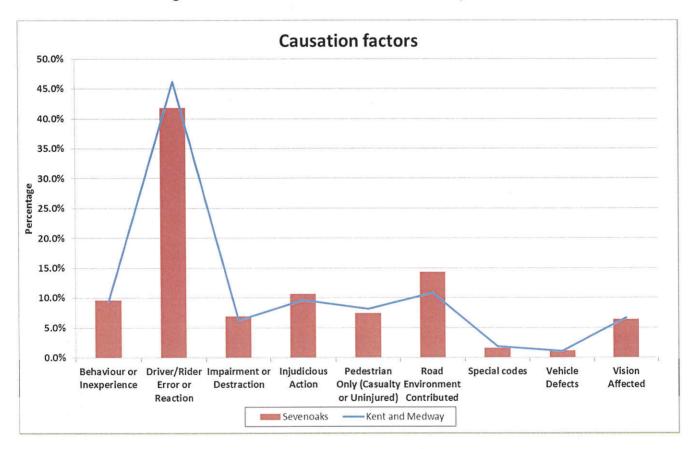


It should be noted that these figures do not provide an exact representation of the number of active drivers but they do give an indication. There is also the issue that these figures represent licence ownership nationally, which may disguise variations locally.

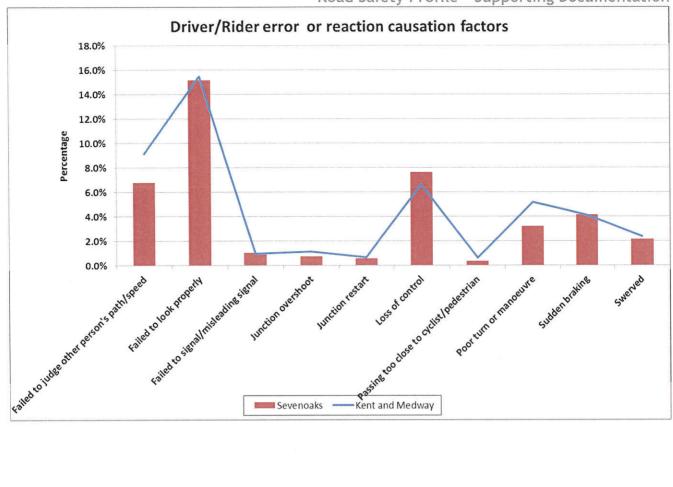
The chart above indicates that just over 30% of 17-20 year olds hold a licence and just over 60% of 21-29 year olds, yet these groups are shown by the index to be over-represented without taking this data set into account.

# 10. Contributory factors (Human)

This section will look at drivers who live within Sevenoaks to focus on the causation and behavioural factors that may have caused the collisions they were involved in. The causation factors recorded for Sevenoaks drivers are in line with the Kent and Medway categories, with the exception of road environment factors that are looked at in more detail in section 5. The category that stands out as being much higher than any other is 'Driver/Rider Error or Reaction' with it being recorded as a causation factor in nearly 45% of all collisions.



As Driver/Rider error or reaction is recorded to a greater extent than any of the other contributory factor groups, the individual factors making up this group will be investigated further. 'Failed to look properly' and 'loss of control' are the two most commonly recorded causation factors in this group and interestingly compared to the Kent and Medway figure the 'Failed to look properly' type is lower than the Kent and Medway overall while the 'loss of control' type is much higher than the Kent and Medway total proportions.



### 11. Mosaic

This section will further explore the postcode data set to gain information on the mosaic profile of drivers/riders. Experian have created a tool called 'Mosaic Public Sector', which provides an insight into the likely background of the individuals from a given postcode. Mosaic breaks down households into groups and types; for the purposes of this exercise only the Mosaic groups will be used.

The table below shows the Mosaic groups for all drivers from Sevenoaks who were involved in personal injury collisions in Kent over the period 2008 to 2012. These proportions have then been compared to the proportion of households in Sevenoaks that fall into the same groups so that an index value can be calculated, which is the proportion of drivers divided by the proportion of households. An index value of 100 means that there are as many drivers from the group as there are households falling into the group. A figure greater than 100 means that there are more drivers from the group involved in collisions than would be expected and less than 100 means there are fewer drivers involved in collisions than would expected. A figure of over 100 suggests that the group may have characteristics that are leading them to be more likely to be involved in a collision.

	Number of	Proportion of	Proportion of	Index
Mosaic Groups	Drivers	Drivers	Population	Value
A Residents of isolated rural communities	145	9.27%	7.15%	129
B Residents of small and mid-sized towns with strong local roots	191	12.20%	10.35%	118
C Wealthy people living in the most sought after neighbourhoods	156	9.97%	11.58%	86
D Successful professionals living in suburban or semi-rural homes	335	21.41%	19.18%	112
E Middle income families living in moderate suburban semis	214	13.67%	13.19%	104
F Couples with young children in comfortable modern housing	104	6.65%	8.48%	78
G Young, well-educated city dwellers	30	1.92%	2.30%	83
H Couples and young singles in small modern starter homes	30	1.92%	3.04%	63
I Lower income workers in urban terraces in often diverse areas	9	0.58%	0.58%	99
J Owner occupiers in older-style housing in ex-industrial areas	74	4.73%	4.85%	98
K Residents with sufficient incomes in right-to-buy social houses	178	11.37%	8.35%	136
L Active elderly people living in pleasant retirement locations	24	1.53%	3.90%	39
M Elderly people reliant on state support	39	2.49%	5.00%	50
N Young people renting flats in high density social housing	6	0.38%	0.56%	68
O Families in low-rise social housing with high levels of benefit need	30	1.92%	1.49%	129
Grand Total	1565	100%	100%	1393

In conjunction with looking at the index values it is also important to look at the raw proportion figures as well when evaluating how to target these mosaic groups effectively. In taking into consideration both the index value and the proportion of drivers fields it would make sense to target Groups A, B, D, E and K as between these Groups they account for 68% of all collisions involving a driver from Sevenoaks district and 58% of the population of Sevenoaks. This obviously does not mean that the targeting of other groups should not take place but that these groups represent a key audience for appropriate interventions.

The table below shows the most appropriate methods of communications for targeting these mosaic groups, that is Sevenoaks drivers involved in collisions in Kent that may be most (green) and least (red), receptive to.

	Deprivation Rank	Telephone	Interactive TV	Magazines	National Papers	Face to Face	Local Papers	Internet	SMS Text
Group A	10								
Group B	11					1.6			
Group D	14								
Group E	9								
Group K	4						100000		

### 12. Road Safety Activity

There is a significant level of road safety activity across organisations involved in the District Community Safety Partnership (CSP). The key to further reductions in road casualties is the co-ordination of current activity, the continuation of existing partnership activity and in identifying appropriate opportunities for future partnership working. The list below shows road safety activity that has been undertaken by KCC, Kent Police and KFRS. It is hoped that the individual CSPs will be able to add to this campaign list. It should be noted that many campaigns are multi-agency and this list has been categorised by the lead agency only.

Road Safety activity is typically described as delivering The 3 'E's; Education, Engineering and Enforcement. Often the most effective road safety interventions draw together at least 2 of the 3 E's'. Kent County Council, as the Highway Authority in Kent, has a statutory duty for road safety under the Road Traffic Act. Both Kent Police and Kent Fire & Rescue Services have a statutory duty to attend road traffic collisions, and contribute to collision prevention. In addition, a number of other organisations contribute to road safety through organised events and supporting activity.

#### **Enforcement**

Enforcement activity is delivered by Kent Police and focuses on driver behaviour issues associated with excessive speed, driving under impairment (e.g. alcohol, drugs, mobile phones, etc.) and anti-social driving (including Due Care). In addition to direct Police activity, the Kent & Medway Safety Camera Partnership provides speed enforcement activity on behalf of the partnership between Kent Police, Kent County Council, Medway Council and Highways Agency. A number of campaigns and operations are organised centrally each year; below is the 2013 calendar and brief campaign details.

*Operation Mermaid* (National campaign to rid the roads of dangerous and poorly driven lorries, vans and other commercial vehicles. Stop and search.)

*Operation Tourist* (Tackles transport carrying people on a commercial basis; automated number plate recognition checks registrations against police database.)

Operation Coachmen (Inspects all transport arriving at a targeted school)

**Stammtisch** (Meetings with lorry drivers, to help improve safety and reduce criminal activity)

Association of Chief Police Officers Drink and Drugs (Month long drink and drug driving summer campaign and also a winter campaign)

TISPOL Drink/Drugs (Christmas drink and drug driving operation and a summer campaign)
TISPOL Speed Campaign (European wide anti speeding campaign, roadside officers and

cameras)

TISPOL Seatbelt Action (European wide seatbelt enforcement campaign)

TISPOL Operation Bus (European wide focus on buses)

CDG Operation (Focus on the carriage of dangerous goods)

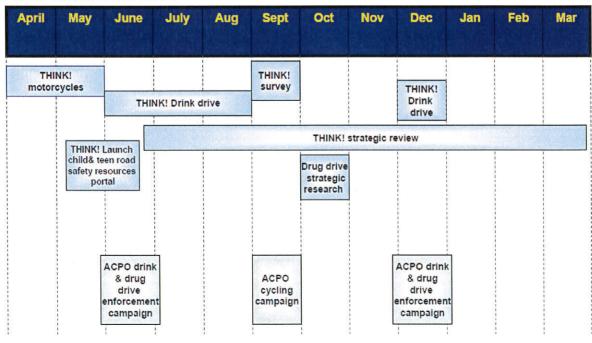
SRN PACT Days (Strategic Road Networks, Partners and Community Together)

Operation Crassus (National operation to identify stolen plant vehicles)

#### **OPERATIONS 2013**

2013	Op Mermaid (HGVs)	Op Tourist & Coachman (Buses)	ACPO Drink & Drugs	TISPOL Drink & Drugs	TISPOL Speed	TISPOL Seatbelt	TISPOL Op Bus	Rogue Trader	Other Operations
JAN	27								
FEB	13 (European)								
MAR	26	Coachman 4 - 15 March				11 - 17			
APR					15 - 21			24	Op Crassus 27 April - 12 May
MAY	21						BUS		
JUNE			1 - 30	3 - 9					CFOA National
JULY	23	Tourist 1 July - 4 Aug				A - \$2	22 - 28		Road Safety Day (Date: TBF)
AUG					19 - 25				
SEPT						9 - 15			
ОСТ	9 (European)								Op Crassus 26 Oct - 10 Nov
NOV									Road Safety Week 18 - 24
DEC	· ·		1 - 31	9 - 15					

Road safety communications activity planned by THINK! and the Association of Chief Police Officers for 2013



to 2014

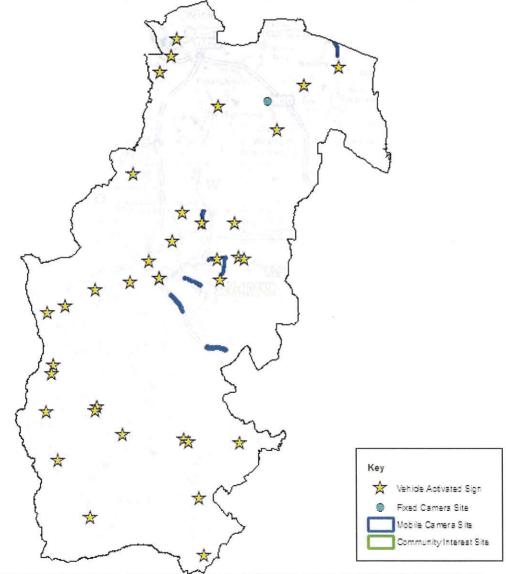
#### **Engineering**

Engineering activity is delivered by Kent County Council's Highways department and seeks to improve the Highway, to provide a safer road environment. KCC Highway Engineers contribute to casualty reduction through improvements to the road environment, typically at locations that are identified as having a high level of collisions.

#### Safety Cameras and Interactive Signs

The below map shows the current locations of safety cameras and interactive signs as of August 2013 in the district of Sevenoaks.

Map of safety cameras and interactive signs in Sevenoaks.



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#### Education

The below calendar has been put together by the Casualty Reduction (CaRe) Co-Ordination Group and lists the road safety education and enforcement activities planned across Kent and Medway in 2013/14.

The purpose of the calendar is to contribute to casualty reduction in Kent through coordinated activity.

It has been produced to illustrate the on-going coordination of the relevant service and to ensure resources are used as efficiently as possible, that the potential for duplication is reduced and opportunities for joint working are identified.

It details activity aimed at the key target audiences as identified by the CaRe Executive Group:

- young drivers
- powered two wheelers
- vulnerable road users (pedestrians and cyclists)

There is also a section for 'generic' activity which covers additional areas of road safety and may include the key target audiences above.

Also, there are a number of interventions aimed at other road user groups that are not included here as this calendar will focus on the partnership priorities for 2013 / 14 - some agencies have their own local activity beyond these CARE priorities (e.g. KCC and Medway's work on Child Car Seats).

It is proposed that if any partner or associate partner would like to carry out road safety education, training or publicity (ETP), that this document is first consulted so as to avoid duplication and use existing resources where appropriate.

	Title	Description	Expected Reach	Timescales	Delivery	Evaluation
	Country Roads	Speed campaign - 17- 34 year olds drivers and m/c	450,000	August	ксс	Bi - Annual
ty	See the Hazards	Urban speed campaign - 17-34 year olds drivers and m/c	450,000	September	КСС	undertaken by KCC in July and January to measure.
Generic Activity	Good Egg Guide	Correctly fitted car seats - parents and carers	1,000	All year	Medway KCC	All driver and motorcyclists road safety
Generic	Summer Drink Drive	Drink Drive- 17-34 year olds drivers and m/c	450,000	June	Medway Council Kent Police KCC	risk, attitudes, perceptions, campaign reach and effectiveness.
	Christmas Drink Drive	Drink Drive- 17-34 year olds drivers and m/c	450,000	December	Medway Council Kent Police KCC	As well as pre and post online surveys

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Don't let drugs take the driving seat	Anti-drug drive - 17- 34 year old drivers	450,000	May	ксс	pre and post online surveys
Switch Off	Mobile phone campaign - 17-34 year olds drivers and m/c	450,000	January	КСС	pre and post online surveys
When will it click	Seatbelt campaign - all vehicle occupants all ages	450,000	March	КСС	pre and post online surveys
Foreign Driver	Safer driving on Kent's roads to foreign drivers	1.5 million	All year	ксс	Pre and post questionnaires
Seatbelt sessions	School based visits, delivering seatbelt safety messages and practical experience on seatbelt sled - predominantly Year 5/6. Some colleges and sixth forms have previously taken part.	1800	Typically from Spring onwards as weather dependent.	Medway	Qualitative feedback for attendees
Paws (school introductions)	The Pedestrian Awards Scheme (PAWS) is a guidance and assessment programme for parents, school staff and adults leading other groups (Brownies and Cubs). Appropriate for the age of four to 14 years old.	250	All year ad hoc	Medway	Pre & Post questionnaires
Bad Weather/defensive Driving Press release	Press release to raise awareness to better driving in winter months	Medway Population	Jan	Medway	Press/web monitoring
Driving Business Safely	Raising awareness of the need and benefits - managing occupational road risk. Campaign and workshops		All year	KMSCP Kent Police Medway KCC	Feedback forms, web hits, media coverage
Streetlights mean 30	Speed campaign - TV, posters, leaflets in 2012			KMSCP	Opportunities to see / hear media

	Safety camera myth busting	PR, website, social media messages about camera operations		All year	KMSCP	Digital and traditional media coverage. Opinion surveys.
	Safety camera boards	Casualty reduction figures - boards, PR, social media		Twice a year	KMSCP	Digital and traditional media coverage. Opinion surveys.
	Seat belt diversionary scheme	Alternative to prosecution		All year	Kent Police	National Schemes evaluated nationally
	Drink drive offender rehabilitation course	Opportunity to shorten length of driving ban		All year	Kent Probation	ТВС
	Speed Awareness courses	Alternative to prosecution	35000	All year	Kent Police KCC	National Schemes evaluated nationally
	What's Driving Us	Alternative to prosecution for certain driving offences		All year	Kent Police KCC	National Schemes evaluated nationally
	Driving for Change	Alternative to prosecution for certain driving offences		All year	Kent Police KCC	National Schemes evaluated nationally
	National Driver Alertness Course	Alternative to prosecution for certain driving offences	350	All year	Kent Police KCC	National Schemes evaluated nationally
Cyclists	Bikeability	Deliver Level 1 and 2 training to children in year 6. In addition, we have piloted Level 3 training to secondary school children.	4500+	Term time	ксс	National evaluation and on-going monitoring
Pedestrians and Pedal Cyclists		Deliver Level 1 and 2 training to children in year 6. Level 3 delivered ad hoc	1700	Term time	Medway	On-going monitoring
Pedestrians	Small Steps Scheme	Practical delivery pedestrian training scheme for KS 1 and 2 expected reach 2,000	2000	Term time	КСС	National evaluation and On-going monitoring
	Smart Brothers	Theatre production to 70 primary schools expected reach 20,000	20000	Feb/March	КСС	Post activity surveys

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"Walk this way" a family guide to road safety	To be piloted in Dartford. A "tool" for Parents/Carers /Guardians to be used to assess KS1/KS2 road safety knowledge and behaviour and provide information to increase positive road safety behaviour change	10,000	May	КСС	Post surveys
JRSO Scheme	Empowering children within their primary school to highlight issues that affect them locally reached reach 22,000	22000	Term time	ксс	On-going questionnaires and qualitative feedback
Pedestrian training through 3 initiatives Clever Feet, Road Stars and PAWS	PAWS is an off the shelf initiative for parents, Road Stars is more practical delivery pedestrian training scheme for KS2 - Clever Feet covers KS1	500	Term time for Clever Feet. Road Stars and PAWS are on-going	Medway	On-going
Walking bus	volunteer training, skills tests, pilot launches, etc	100	Term time	Medway	On-going
Safety in Action	An event for year 6 pupils with educational scenarios covering issues such as seatbelts and safer road crossing.	4,000	Spring / Summer	Kent Police KFRS KCC	Each event evaluated with Qualitative and quantitative measurement
	Interactive Road Safety sessions at a one week outdoor event for Years 5&6	4000	Summer exact time TBC	Medway	Qualitative feedback for attendees
Under 5 in car safety/seatbelts/child car seat sessions	Typically informal sessions delivered via children centres.	200	All year adhoc.	Medway	Qualitative feedback for attendees
RSGB/ Global road safety week	en e	terminorum nastritum stratium desimania	April/May	Medway	ТВС

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	Walk to School Week 2013	Two week walking challenge issued to Medway Schools	All school ages children, families and school staff	21 <sup>st</sup> -25 <sup>th</sup> May 2013	Medway	Uptake compared to previous years
	Walk to School Month 2013	Golden Boot Challenge between Medway schools.	All school ages children, families and school staff	October	Medway	Uptake compared to previous years
	B-viz	Campaign targeting 5-16 year olds on the importance of wearing fluorescent and reflective clothing - including school assemblies delivered by the road safety team	22,000	Oct/Nov	KCC Medway	Quantitative and qualitative questionnaires
	Ditch the Distraction	Campaign targeting 12-16 year olds on the importance of not being distracted on/by the road	22,000	July	КСС	Quantitative and qualitative questionnaires
	Bare Bones DVD	Through CBT instructors	2000	All year	КСС	National evaluation
Motorcycles	Biker down scheme	Workshops on incident scene management, casualty care & conspicuity	400	All year	KFRS	Online
	Dynostar				Police with limited resources KCC Medway	
	Biker Down for young		***************************************		Medway	
	riders  RIDE Scheme Diversion course - moped module		20	All year	KFRS	National monitoring

	Ghost Lids	Targeting 16-19 year old riders. Website in place.	2,000	All year - focus on April to October	KCC	Bi - Annual survey undertaken by KCC in July and January to measure motorcyclists road safety risk, attitudes, perceptions, campaign reach and effectiveness.
	Kentbiker.com	21- 55	10,000	All year - focus on April to October	ксс	
	Think Bike!	Campaign aimed at drivers to raise awareness to both pedal cyclists and p2w. Main drive behind was Grain power.	Hard to quantify as along main routes for 3 months	March-May	Medway KCC KMSCP	ТВС
Cars	Licence to Kill	Theatre production to 16-18 year olds approx 6,000 per annum	5000	November	KFRS KCC Medway Kent Police KMSCP	Online surveys- qualitative and quantitative
	Young driver education	4 sessions in schools covering speed/impairment/distractions/crashes/responsibilities	1000	Term time	ксс	Pre and post questionnaires
	Pass Plus	Subsidised Pass Plus training for 17-19 year olds by £60 - publicised via events/online/driving instructors	500	All year	КСС	National evaluation
	Speak up Theatre in Education	Young driver passenger safety highlighting specific problem areas KS5 reach 6,000 -linking with Speak up publicity campaign	6000	March	КСС	Questionnaires
	The Box	Drug driving highlighting specific problem areas KS5	6000	March	ксс	Questionnaires

Mid Kent College & University Fresher's week	With the Alcohol team to tackle drink drive and other initiatives	600 engaged seen by 1500	Sept/Oct	Medway	Qualitative feedback for attendees
RUSH	School education for Y11 Aims - to educate young people on potential risks to driver and passengers, vulnerabilities of this age group, provide strategies aimed at reducing risk.		Through the year	KFRS	
Car'n'age 2Y2D	RS presentation using Brake website to give advice and education around, speed, alcohol & drugs, driver distractions, seat belts and car maintenance/costs		Through the year	KFRS	Questionnaires
YEARS (Youth engagement around road safety)	Young offenders programme in Whitstable to offer safety advice and education to high risk individuals	400	Bi-monthly	KFRS Kent Police KCC KMSCP	Qualitative feedback for attendees
Last Orders	Theatre in Education in collaboration with Public Health & Trading Standards	1000	December	Medway	Qualitative feedback for attendees
Young Driver Lessons	A series of free road safety related lessons covering: Licence info, alcohol awareness, drink drive, moped riding, passenger safety and seatbelts.	200	All year	Medway	Pre & Post questionnaires

Speak Up	A campaign aimed at 16-24 passengers being driven by young drivers.	130,000	Profile - Su	KCC	Pre and post research and evaluation undertaken by KCC to measure young driver road safety risk, attitudes, perceptions, campaign reach and effectiveness. Also, on-going measurement through biannual survey
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For further information on many of these activities visit:

www.kentroadsafety.com www.kent.gov.uk Kent Fire & Rescue Service Road Safety Kent & Medway Safety Camera Partnership Medway Council Road Safety

#### Kent Community Speed Watch

Community Speed Watch (CSW) is an educationally-centred, community-owned initiative that allows concerned citizens to make a significant contribution to road safety by helping to reduce excessive vehicle speeds on the roads in their own communities.

Speed Watch schemes are supported by Kent Police through partnership-based working with community groups, Parish Councils, Kent County Council and Medway Council.

Operating at the roadside in 30 and 40 miles per hour limits, CSW practitioners monitor the speeds of passing vehicles using portable speed indication devices. They record the speed and identifying details of vehicles travelling above nationally-specified speed thresholds. The registered keepers of vehicles observed repeatedly or excessively speeding anywhere in the county in a 12-month period are then sent warning letters and advice by Kent Police.

At 31 July 2013, the following places could be identified as believed to have, about to have or to have recently had Speed Watch activity:

Acol, Addington, Ash, Bekesbourne, Benenden, Birchington (Margate), Boughton Aluph, Boughton Malherbe, Boughton Monchelsea, Boxley, Brabourne, Bridge, Chart Sutton, Chestfield, Cliffe Woods, Cliffs End, Cobham, Coldred, Collier Street, Doddington, East Malling, Five Oak Green, Folkestone (East), Four Elms, Golden Green, Grafty Green, Hadlow, Halfway Houses, Hawkhurst, Headcorn, Higham, High Halden, Horsmonden, Hunton, Iwade, Larkfield, Lenham, Linton, Littlebourne, Lower Hardres, Lyminge, Manston, Marden, Meopham, Minster (centre, Sheppey), Minster (Scocles Rd, Sheppey), Minster

undertaken

(Thanet), Monkton, Nackington, Newenden, Newington (Swale), Newington (Shepway), Newnham, Otford, Paddock Wood, Patrixbourne, Penshurst, Plaxtol, Rusthall, Sarre, Sevenoaks (including Sevenoaks General, Cowden, Dunton Green, Eynsford, Edenbridge, Farningham, Knockholt, Kemsing, Hartley, Halstead, Hollybush, Idle Green, Marsh Green, Plymouth Rd South, Redlands Res Assoc, Seal, Senior Action Forum, Shoreham, Sundridge, Swanley Village, The Rise, Westerham, West Kingsdown, White Heart Res Assoc), Shepherdswell, Shipbourne, Sissinghurst, Smeeth, Staplehurst, St Nicholas, St Peters, Sutton Valence, Tenterden, Teston, Upchurch, Wateringbury, West Malling, Yalding.

#### Further information:

www.kent.police.uk/advice/community\_safety/initiatives/speed\_watch.html
www.kent.police.uk/about\_us/policies/p/p32.html

# 13. Additional Information

For further analysis on recent trends in Kent (excluding Medway) please see *Review of personal injury crashes on Kent roads 2012* which is available at the below website;

http://www.kent.gov.uk/roads\_and\_transport/road\_safety/crash\_and\_casualty\_data.aspx

If you require further information regarding road safety campaigns and education please contact;

Steve Horton: steve.horton@kent.gov.uk