ROAD CASUALTY DATA ANNUAL REPORT

То:	Highways & Infrastructure Committee				
Meeting Date:	9 July 2019				
From:	Steve Cox, Executive Director – Place & Economy				
Electoral division(s):	AII				
Forward Plan ref:	Not Applicable Key decision: No				
Purpose:	To provide details of the collisions on the county's road network for the 5 years 2014-2018.				
Recommendation:	The Committee is recommended to:				
 a) Note the changes to reporting processes for collisions outlined in paragraphs 2.1 to 2.4 and the impact of these. b) Approve the actions outlined in paragraph 2.4 to ensure a clean data set for 2020 onwards. c) Note the casualty data for the five year period 2014-18 outlined in paragraphs 2.5 to 2.20. d) Note the updated collision cluster site list in Appendix 2 					

	Officer contact:		Member contacts:
Name:	Matt Staton	Name:	Cllr Mathew Shuter/Cllr Bill Hunt
Post:	Interim Highway Projects & Road Safety	Post:	Chairman/Vice Chairman, Highways &
	Manager		Community Infrastructure Committee
Email:	Matt.staton@cambridgeshire.gov.uk	Email:	Mathew.Shuter@cambridgeshire.gov.uk
			/ William-hunt@hotmail.co.uk
Tel:	(01223) 699652	Tel:	(01223) 706398

1. BACKGROUND

- 1.1. Bedfordshire, Cambridgeshire and Hertfordshire (BCH) Police forces moved to the Department for Transport's (DfT) new collision recording system (CRASH) in April 2016. This replaced paper reporting of collisions with digital reporting in CRASH, which was then exported to the Local Authority and DfT.
- 1.2. Since the introduction of CRASH, BCH police officers have continued to use paper reporting forms which are then manually inputted into CRASH at the back-office. A copy of this form is received by the Council's Business Intelligence team for verification resulting in hundreds of paper forms being received by the local authority.
- 1.3. The use of a combination of the two systems has led to numerous queries each year where either a paper record is received with no corresponding CRASH record exported, or vice versa.
- 1.4. The introduction of CRASH, and the change to an injury-based method for assessing severity resulted in a significant increase in the number of casualties recorded as seriously injured across Cambridgeshire, as has been discussed at this committee previously.
- 1.5. The DfT issued a significant update to CRASH (version 7) in November 2018 and the changes brought about by this are outlined below, along with some proposed action to be taken moving forward.
- 1.6. On 13 March 2018 the Highway & Community Infrastructure committee (H&CI) discussed proposals to transform road safety services in the county and approved new methodology for assessing collision hotspots and high risk routes.
- 1.7. On 10 July 2018 the Highway & Community Infrastructure Committee approved an action plan for the transformation of road safety services, including changes to the way road casualty data is reported.
- 1.8. This report provides the first presentation of data using new dashboard tools which, once tested, will be used to disseminate the information both internally and externally in future.

2. MAIN ISSUES

There are two main issues to be discussed in the following sections:

- Changes to data collection processes
- Presentation of collision data for the 5 year period January 2014 to December 2018.

Changes to data collection processes

- 2.1 CRASH version 7 comes with a number of operational benefits to the Police and the Local Authority. The key benefits in relation to the Partnership are:
 - Improved mapping accuracy of collision location should improve and ability to produce "heat maps" in CRASH showing collision "hotspots"

- Analysis capability within CRASH individual or groups of collisions can be analysed within the CRASH software, including data dashboards and "heatmaps"
- Local Authority direct access to CRASH expected imminently, Local Authorities will be able to access a redacted version of CRASH directly, rather than relying on a data export and the paper copy of the collision form.
- Introduction of a dedicated CRASH mobile app to enable reporting from handheld devices by officers at the scene, including geo-tagging of scene photos to improve location accuracy.
- Faster data availability the reduced number of steps in the process will mean data should be available quicker, once the system is embedded.
- 2.2 However, the change also comes with a number of risks to the Police and the Council, as outlined below:
 - The information is only as good as the officer inputting it this has always been the case, however, the digital recording in the CRASH app by officers removes validation checks, relying on the prompts in CRASH to ensure officers collect all the necessary information. This is likely to result in a reduced data quality, certainly initially, as the new system and reporting mechanism is embedded. This should improve over time.
 - Detachment of Council and Police staff the paper-based system required twoway communication between the Police and Council data entry/analyst staff to undertake verification and provide reporting to the Department for Transport. CRASH provides the exports to the DfT automatically, including any subsequent corrections/updates made by either the Police or Council.
- 2.3 It is recognised that CRASH 7 is a positive step forward in improving the efficiency of recording, timeliness and, ultimately, consistency of the data. However, this comes with a recognition that the 2016-2019 data set will be adversely affected by the changes in reporting, both with the introduction of CRASH in April 2016 and the move to CRASH 7 and a paperless system in 2018/19.
- 2.4 Following discussion with the Police it is suggested that we recognise the fluctuation in data quality during this time period and, rather than invest significant time to correct the historical data now, the time of the analysts, in the Police, Council and other partners, be directed to introducing the processes to ensure a clean data set for 2020 onwards. This will involve:
 - Stopping the processing and validation of paper records immediately on receiving Local Authority access to CRASH, and not processing any paper records already received. This is expected imminently.
 - Close working between the Police, Local Authority and other partner analysts to provide appropriate methods to ensure data quality.

Accident data 2014 - 2018

- 2.5 In 2018 there were 27 people killed in road traffic collisions across Cambridgeshire and Peterborough, as well as 430 seriously injured and 2073 slightly injured.
- 2.6 Figure 1 shows a summary of these collisions in a new dashboard format produced in Power BI. With wider roll-out of Power BI across the Council, we will trial dissemination of these reports electronically, which will allow recipients to interrogate the data themselves as each section of the dashboard can be used to filter the data.



Figure 1 - Collision summary dashboard

- 2.7 Examples of what this filtering looks like has been reproduced in Appendix 1 for the following elements:
 - 17-29 year-old casualties Appendix 1a
 - 70+ year-old casualties Appendix 1b
 - Each district Appendix 1c-h
 - By severity Appendix 1i-k
 - Each road user type
 - Rural / Urban
- 2.8 Highlights from this analysis are outlined below:
- 2.9 The number of fatalities is at a 5-year low (27).

2.10 Young people age 17-29 remain at most risk of being injured in a road traffic collision, however this appears to be following a downward trend, as shown in Figure 2.







- 2.11 The number of older road user casualties (age 70+) is relatively small (approx. 6%) but appears to be on the increase, as shown in Figure 3. Frailty is a key factor in relation to the proportion of fatal and serious injuries experienced by this age group.
- Most districts have seen flat or slightly decreasing casualty trends, in line with the 2.12 county overall, with the exception of Fenland, which has seen year on year increases in the number of casualties across all severities since 2014, as shown in Figure 4.



Figure 4 - Fenland casualty trend

81% of fatal collisions in Cambridgeshire and Peterborough occur on our rural road 2.13 network. This is significantly above the national average, which is approximately 60%.

- 2.14 As outlined above, the change to injury-based reporting in 2016 has seen an increase in the number of casualties recorded as seriously injured.
- 2.15 Overall, there has also been a noticeable decrease in the number of slightly injured casualties. There is concern that this may be driven by reduced reporting levels as opposed to casualty savings, but this is yet to be corroborated through any robust data analysis.
- 2.16 There has been a 36% reduction in the number of motorcycle casualties over the last 5 years across Cambridgeshire and Peterborough, as shown in Figure 5. No other road user groups have seen similar reductions, particularly in relation to serious injuries.



Figure 5 - Motorcycle casualties trend

2.17 The collision cluster site report has been run using the agreed criteria of 6 injury collisions, or 3 fatal or serious injury collisions, within a 100m radius over the last 3 calendar years (2016-18). This has identified 53 collision cluster sites in Cambridgeshire, which are listed in order of their score (highest = worst) in Appendix 2.

3. ALIGNMENT WITH CORPORATE PRIORITIES

3.1 A good quality of life for everyone

The following bullet points set out details of implications identified by officers:

- Ensuring safe infrastructure is in place for new and existing communities is key to the approach
- 3.2 Thriving places for people to live

The following bullet points set out details of implications identified by officers:

• Ensuring safe infrastructure is in place for new and existing communities is key to the approach

3.3 The best start for Cambridgeshire's children

There are no significant implications for this priority.

4 SIGNIFICANT IMPLICATIONS

4.1 **Resource Implications**

There are no significant implications for this priority.

4.2 Procurement/Contractual/Council Contract Procedure Rules Implications

There are no significant implications for this priority

4.3 Statutory, Legal and Risk Implications

The following bullet points set out details of significant implications identified by officers:

- Under Section 39 of the Road Traffic Act 1988 the Council has a statutory duty to "prepare and carry out a programme of measures designed to promote road safety... must carry out studies into accidents arising out of the use of vehicles on roads or parts of roads, other than trunk roads, within their area [and] in the light of those studies, take such measures as appear to the authority to be appropriate to prevent such accidents, including the dissemination of information and advice relating to the use of roads, the giving of practical training to road users or any class or description of road users, the construction, improvement, maintenance or repair of roads for which they are the highway authority and other measures taken in the exercise of their powers for controlling, protecting or assisting the movement of traffic on roads." [bold formatting added by author for emphasis]
 - Serious road traffic collisions attract significant media attention and the Council's actions to reduce their occurrence comes under regular media scrutiny.

4.4 Equality and Diversity Implications

The following bullet points set out details of significant implications identified by officers:

• Residents in lower Index of Multiple Deprivation (IMD) quintiles are at higher risk of being involved in a collision as are younger drivers.

- Older drivers are more likely to sustain serious or fatal injuries in collisions due to their frailty.
- It is essential that the Council maintains an element of targeting in its approach to delivering road safety as those most in need of prevention services often do not demand these services. For example, young drivers in Fenland have been highlighted as being at particular risk of being involved in road traffic collisions but would not be inclined to access road safety interventions themselves. The new model is designed to enable a balance of universal, self-service interventions for those seeking support (e.g. parishes looking to address speeding) with targeted interventions aimed at high-risk groups.

4.5 Engagement and Communications Implications

The following bullet points set out details of significant implications identified by officers:

- Potential for shared service arrangements with Peterborough City Council, and within the wider road safety partnership.
- Serious road traffic collisions attract significant media attention and the Council's actions to reduce their occurrence comes under regular media scrutiny.

4.6 Localism and Local Member Involvement

The following bullet points set out details of significant implications identified by officers:

• The new processes should result in more timely data, which combined with the dashboard presentation should provide local members with more up to date information regarding collisions in their district area.

4.7 Public Health Implications

The following bullet points set out details of significant implications identified by officers:

- Road traffic collisions have a significant burden on health services.
- Public Health indicator 1.10, KSI casualties per 100,000 population, is currently red for Cambridgeshire, and specifically for East Cambs, Huntingdonshire and South Cambs districts (Fenland and Cambridge City are amber).

Implications	Officer Clearance
Have the resource implications been cleared by Finance?	Yes Name of Financial Officer: Sarah Heywood
Have the procurement/contractual/ Council Contract Procedure Rules implications been	Yes Name of Officer: Gus de

cleared by the LGSS Head of Procurement?	Silva
Has the impact on Statutory, Legal and Risk	Yes
implications been cleared by LGSS Law?	Name of Legal Officer: Fiona McMillan
Have the equality and diversity implications	Yes
been cleared by your Service Contact?	Name of Officer: Elsa Evans
Have any engagement and communication implications been cleared by Communications?	Yes Name of Officer: Eleanor Bell
Have any localism and Local Member	Yes
involvement issues been cleared by your Service Contact?	Name of Officer: Richard Lumley
Have any Public Health implications been cleared by Public Health	Yes Name of Officer: Stuart Keeble

Source Documents	Location
Road Safety across Cambridgeshire -	https://cmis.cambridgeshire.gov.uk/c
report to H&CI committee 13 March 2018	cc_live/Meetings/tabid/70/ctl/ViewMe etingPublic/mid/397/Meeting/570/Co
	mmittee/7/Default.aspx
Road Safety Action Plan – report to H&CI committee 10 July 2018	https://cmis.cambridgeshire.gov.uk/c cc_live/Meetings/tabid/70/ctl/ViewMe
	etingPublic/mid/397/Meeting/778/Co
	mmittee/7/Default.aspx

Appendix 1a - 17-29 year-old casualties



Appendix 1b – 70+ year-old casualties



Appendix 1c – Cambridge City casualties



Appendix 1d – East Cambs casualties



Appendix 1e – Fenland casualties



Appendix 1f – Hunts casualties



Appendix 1g – South Cambs casualties



Appendix 1h – Peterborough casualties



Appendix 1i – Fatalities



Appendix 1j – Serious Injuries



Appendix 1k - Slight Injuries



Appendix 11 – Car occupant casualties



Appendix 1m – Pedal cycle casualties



<u>Appendix 1n – Motorcycle casualties</u>



Appendix 1o – Pedestrian casualties



Appendix 1p – Goods vehicle casualties



Appendix 1q - Rural casualties (roads with a speed limit above 40mph)



Appendix 1r – Urban casualties (roads with a speed limit of 40mph or less)



Appendix 2 – Collision cluster sites 2016-2018

Location	Score	No. Fatal Collisions	No. Serious Collisions	No. Slight Collisions
BARNWELL ROAD 60 METRES S OF JUNCTION WITH NEWMARKET ROAD	32	0	5	17
A1307 HILLS RD CAMBRIDGE	27	0	1	24
LENSFIELD ROAD AT JN WITH TRUMPINGTON STREET	27	0	2	21
CHERRY HINTON ROAD ROUNDABOUT WITH MOWBRAY ROAD A1134	24	0	4	12
QUEENS ROAD JW MADDINGLEY ROAD	24	0	4	12
A603 EAST ROAD AT JUNCTION WITH BROAD STREET	20	0	4	8
DEVONSHIRE RD OS DEVONSHIRE ARMS PH CAMBRIDGE	20	0	4	8
MADINGLEY ROAD A1303 CAMBRIDGE ROAD	20	0	5	5
FREEDOM BRIDGE ROUNDABOUT	19	0	2	13
MILL RD JUNCTION EAST RD CAMBRIDGE	18	0	2	12
BROOKS ROAD A1134 COLDHAMS LANE	18	0	3	9
ELIZABETH WAY JW MILTON ROAD	18	0	3	9
MILL ROAD JUNCTION SEDGWICK ST CAMBRIDGE	17	0	2	11
C294 ST ANDREWS ST JUNCTION C295 NATIONAL WESTMINSTER BANK	17	0	3	8
CHESTERTON RD JUNCTION CARLYLE RD	14	0	4	2
ELIZABETH WAY A1134 CHESTERTON ROAD A1303	14	0	3	5
A1307 HILLS RD BROOKLANDS AV CAMBRIDGE	14	0	3	5
WESTBOUND A14 SPITTALS INTERCHANGE	14	0	2	8
HISTON A14 NEAR JN WITH CLOVERLEAF A14	14	1	2	4
MAIDS CAUSEWAY ROUNDABOUT VICTORIA ROAD CAMBRIDGE	14	0	2	8
STATION ROAD JUNCTION BACK HILL AND BROAD STREET	13	0	2	7
OUTSIDE BUSH FARM ELY ROAD LITTLEPORT	13	1	3	0
BABRAHAM ROAD A1307 HAVERHILL ROAD	13	0	3	4
M11 AT A428 JUNCTION	13	1	3	0
CHERRY HINTON ROAD AT JN WITH COWPER ROAD	12	0	3	3
A428. EXACT LOCATION UNCLEAR	12	0	1	9
SIXTEEN FOOT BANK B1098 AT JN WITH MANEA ROAD B1093	12	0	1	9
JUNCTION 24 A14 GODMANCHESTER	12	0	3	3
C315 MARKET ST JUNCTION LYNN RD ELY	12	0	3	3

TRUMPINGTON ROAD A1134 CHAUCER ROAD	11	0	2	5
WATERBEACH A10 DENNY END ROAD	11	0	2	5
B1043 HUNTINGDON STREET AT JN WITH B1428 CAMBRIDGE STREET	11	0	2	5
ST IVES ROAD A1096 60 METRES SOUTH OF JUNCTION WITH CAMBRIDGE ROAD				
A14	10	0	1	7
BAR HILL A14	10	0	0	10
ST NEOTS ROAD, ELITSLEY B1040 JUNCTION	10	0	2	4
JUNCTION 28 CAMBRIDGE SERVICES A14 EAST BOUND CARRIAGEWAY A14 100				
METRES EAST OF JUNCTION WITH A14	10	0	1	7
NORTHBOUND JUNCTION 12 M11	10	0	2	4
A14 AT JN WITH A1	9	1	0	5
TRUMPINTON ST 5M NORTH PEMBROKE ST CAMBRIDGE	9	0	1	6
A1303 AT JN WITH SWAFFHAM HEATH ROAD	9	0	3	0
CHESTERTON LANE (A1303) AT JUNCTION WITH CASTLE STREET	9	0	0	9
HUNTINGDON ROAD A1307 OXFOR ROAD	9	0	1	6
OUTSIDE SHELL GARAGE HIGH STREET, TRUMPINGTON	8	0	1	5
B1060 SOMERSHAM RD JUNCTION THE HEATH ST IVES	7	0	0	7
MAIN ROAD A47 NEAR JUNCTION WITH CROSS GUNS ROAD	7	0	0	7
HILLS ROAD SOUTH OF JUNCTION WITH STATION ROAD	7	0	0	7
FEN ROAD WISBECH GUYHIRN A47 NEAR JN WITH GULL ROAD	7	0	0	7
BUCKDEN N/B A(M)1 AT JN WITH BUCKDEN NORTHBOUND TOWARDS				
PETERBOROUGH A(M)1	6	0	0	6
SOUTH BOUND JUNCTION 17 A(M)1	6	0	0	6
STOW-CUM-QUY A14	6	0	0	6
LONG ROAD A1134 AT JN WITH HILLS ROAD A1307	6	0	0	6
NORTHBOUND JUNCTION 10 M11	6	0	0	6