

Report to:	Road Issues Scrutiny Panel		
Date:	20 th December 2006		
Report of:	Head of Highway Management	Report No:	10
Contact Officer:	Mark Edwards Principal Officer, Accident Investigation & Research	Tele No:	336461
Report Title:	Accident and casualty trends in Bolauthorities.	ton compare	d with other
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Confidential / Non Confidential:	(<i>Non-Confidential</i>) This report does not contain information which warrants its consideration in the absence of the press or members of the public		
Purpose:	To inform Panel of research into casualty statistics in Bolton compared with those of other local authorities.		
Recommendations:	Panel is recommended to note the content	ts of the report	
Decision:			
Background Doc(s):	None		

INTRODUCTION

- 1. This report summarises the findings of an extensive study commissioned from Greater Manchester Transportation Unit by Bolton Council to identify accident and casualty research into trends between 1994 and 2005 and to identify issues and possible target groups.
- 2. Statistics for Bolton were compared with those of Greater Manchester, the North West of England, comparative Metropolitan authorities (identified by population size) and Great Britain as a whole.
- 3. The comparative metropolitan Boroughs were Sefton, Wirral, Oldham, Salford, Stockport, Wigan, Sunderland, Barnsley, Doncaster, Rotherham, Coventry, Dudley, Sandwell, Walsall and Wolverhampton.
- 4. From this October 2006 report into accidents and casualty trends in Bolton some issues and trends have been identified.

Issue / Trend identified	Targeted area or group		
Decrease in KSI during the base line period	KSI target trends and borough performance		
Decrease in young (17-23) car occupant casualties in 2005	Young person passenger / driver casualties		
Young Driver risk at weekends	KSI trends and car occupant casualty trends		
Child Casualties	Child car passengers		
Pedestrian severity index	Child / Elderly casualties		
Pedestrian casualties by age and location	Child pedestrian casualties		
Motorcyclists 16-18 ages	The main casualty group aged 16-18 and on scooters.		
Casualty "spikes" by age in the year	Age related road safety		

- 5. In addition the final section of the report details BVPI 99 performance in 2005 compared to 2004 and the average of 1994 to 1998.
- 6. A more detailed summary of the findings is included at Appendix A

RECOMMENDATION

7. The Panel is recommended to note the contents of this report.

APPENDIX A

BOLTON RESEARCH SUMMARY – SUMMARY OF FINDINGS

In autumn 2006 GMTU were commissioned by Bolton Council to undertake accident and casualty research into trends from 1994 to 2005 to identify issues and possible target groups.

From this October 2006 report into accidents and casualty trends in Bolton since 1994 some interesting points have arisen. Bolton was compared to Greater Manchester, the North West of England, comparative Met authorities (population size) and Great Britain as a whole.

The comparative mets were – Sefton, Wirral, Oldham, Salford, Stockport, Wigan, Sunderland, Barnsley, Doncaster, Rotherham, Coventry, Dudley, Sandwell, Walsall and Wolverhampton.

STATISTICS FOR 2005

All Casualties

Bolton Casualty levels were 14% below the base (1994-98) worse than the others. GM were 33% down, other mets 19% down, and GB 16% down.

KSI

Bolton KSI levels were 8% below the base (1994-98). GM were 33% down, other mets 30% down, and GB 33% down. Bolton significantly underperforms. However in the base period (1994-98) Bolton's KSI levels fell a lot compared to other areas making further reductions a challenge and making targeting engineering measures difficult. This is illustrated by KSI levels in Bolton between 1996 and 1998 that had fallen by some 15% whereas in the comparison areas KSI levels had fallen by a few percent in the same period.

Child KSI

Bolton Child KSI levels were 30% below the base (1994-98). GM were 33% down, other mets 42% down, and GB 49% down.

Slight Casualties

Bolton Slight casualty levels were 12% below the base (1994-98). GM were 24% down, other metropolitan districts were 14% down, and GB 12% down.

The biggest numerical casualty groups in all the comparative geographical areas were Car Drivers, Car Passengers and Pedestrians. This reflects the dominant road user groups and indicates Bolton is similar to other areas in this regard.

In Bolton in 2005 the car occupant group saw a small decrease in the numbers of 17-23 year olds injured (fewer licenses etc?) The levels of young KSIs though are notable, especially car drivers, relative to their numbers on the road.

Casualty Trends

The highest accident risk for car drivers is on a Friday and least on a Sunday. The peak time is the peak hours (8-9, 16-18) with an extension into the evening for younger drivers. Young drivers are disproportionably represented in the Fri / Sat and Sat / Sun accident records between 1900-0400 hours.

Of the recorded Child Casualties the highest proportion came from the 11-14yr old age group in all the compared areas. The domainant groups are Pedestrians / Car Passengers /

Pedal Cyclists / Bus Passengers. In Bolton and GM child pedestrian casualties make up 50% of all child casualties, slightly lower proportions in other mets, NW and GB.

Severity index is a measure of the severity of injury expressed as a proportion of the total accidents in that category. The higher the value, the higher the likely resultant severity of injury.

The severity Index for pedestrians is highest for the elderly then for adults and finally children. The elderly Severity index is typically twice that for Children. However, this masks the numbers involved. Numerically the reverse is true for Pedestrian KSIs in Bolton, NW, Mets and GB where Children are the biggest pedestrian casualty group in numbers through to the elderly pedestrian casualty.

Adult pedestrians are more likely to be injured on A roads, Children on unclassified roads.

Monthly totals and casualty ages for Bolton in the last 3 years

16-25 yr olds are most likely to be injured in Dec / Nov / June / Jan / Mar and Oct.

Pedestrian ages are dominated by 11-15, 5-10 and 16-25 yr olds. Of the 11-15 yr olds the peak months are Nov/May/Feb, 32% of 11-15yr old pedestrians are injured Sept-Nov, 25% Dec-Feb and 25% in Mar-Apr.

Pedal Cyclists are dominated by 11-15 yr olds (25% of all cycle casualties). July to September represent the most dangerous months.

TWPV are seeing the 16-18 yr olds as the largest casualty age (27% of all casualties). October, September and May are the biggest months.

Over half of the Car Drivers casualties occurring on Bolton's roads occur to drivers aged from 16 to 35. (16-25=26%, 26-35=27%). The winter months are the most dangerous, especially for the 16-25 ages (Dec / Nov / Jan / Oct).

Car Passengers are dominated by 16-25 yr olds (36%) though 0-15 (19%) and 26-35 (17%) are notable too. The largest monthly totals are seen in Dec / Jan / May though there are Winter / Summer clusters.

Finding	Targeted	Issue	Way Forward
Decrease in KSI during the base line period	KSI target trends	The earlier decrease means future identification of KSI clusters and engineering solutions is increasingly difficult.	Over arching ownership of road safety and partners addressing KSI targets.
Decrease in young (17-23) car occupant casualties in 2005	Young person passenger / driver casualties	Only 3 in 10 young people now hold driving licenses. Is this the reason for the reduction and are they switching to scooters (see below)	Monitor the next few years and relate to license and scooter accident data.
Young Driver risk at weekends	KSI trends and car occupant casualty trends	Relative risk, numbers of car passengers, alcohol, drugs etc	Enforcement and education. Insurance restrictions. Partnership approaches.
Child Casualties	Child car passengers	Child car passengers are the second biggest child casualty group age 4 of 6	Safer routes and less car reliance. Publicising the actual risks.

Pedestrian severity index	Child / Elderly casualties	The elderly more likely to receive a serious injury, but numerically more child pedestrians.	Education of the elderly pedestrian.
Pedestrian casualties by age and location	Child pedestrian casualties	Child pedestrian casualties on estate roads	Speed management, hearts and minds and community ownership.
Motorcyclists 16-18 ages	The main casualty group aged 16-18 and on scooters.	Have scooters replaced the car as the chosen means of travel	Training etc
Casualty "spikes" by age in the year	Age related road safety	Targeted campaigns	Targeted monthly or seasonal campaigns at certain road users at certain times of year when they become the main road safety theme.

BV	PI 99 ROAD CASUALTIES		
	ALL KSI	CHILD KSI	ALL SLIGHT
BOLTON: BASE	136	36	1537
2004	113	24	1327
2005	125	25	1346
% change over previous year	10.6	4.2	1.4
% change since base	-8.4	-29.8	-12.4
BURY : BASE	72	15	954
2004	67	9	957
2005	83	16	866
% change over previous year	23.9	77.8	-9.5
% change since base	15.0	5.3	-9.2
MANCHESTER : BASE	294	71	3358
2004	270	42	3156
2005	284	42	2889
% change over previous year	5.2	0.0	-8.5
% change since base	-3.4	-41.0	-14.0
OLDHAM: BASE	109	29	1262
2004	88	28	1051
2005	98	21	983
% change over previous year	11.4	-25.0	-6.5
% change since base	-9.8	-26.6	-22.1
ROCHDALE : BASE	107	28	1209
2004	80	17	1071
2005	75	20	1125
% change over previous year	-6.3	17.6	5.0
% change since base	-29.6	-28.1	-6.9
SALFORD : BASE	126	25	1689
2004	92	10	1088
2005	84	13	1010
% change over previous year	-8.7	30.0	-7.2
% change since base	-33.3	-47.2	-40.2
STOCKPORT : BASE	111	16	1483
2004	64	10	1052
2005	80	11	933
% change over previous year	25.0	10.0	-11.3
% change since base	Page 5 of 6 -27.8	-29.5	-37.1

TAMESIDE : BASE	106	31	1076
2004	77	27	845
2005	70	17	735
% change over previous year	-9.1	-37.0	-13.0
% change since base	-33.7	-45.2	-31.7
TRAFFORD : BASE	74	18	1124
2004	71	9	714
2005	51	10	705
% change over previous year	-28.2	11.1	-1.3
% change since base	-31.5	-43.2	-37.3
WIGAN : BASE	147	37	1735
WIGAN : BASE 2004	147 120	37 25	1735 1240
2004	120	25	1240
2004 2005	120 130	25 30	1240 1133
2004 2005 % change over previous year	120 130 8.3	25 30 20.0	1240 1133 -8.6
2004 2005 % change over previous year % change since base	120 130 8.3 -11.3	25 30 20.0 -18.5	1240 1133 -8.6 -34.7
2004 2005 % change over previous year % change since base GREATER MANCHESTER : BASE	120 130 8.3 -11.3 1281	25 30 20.0 -18.5 304	1240 1133 -8.6 -34.7 15426
2004 2005 % change over previous year % change since base GREATER MANCHESTER : BASE 2004	120 130 8.3 -11.3 1281 1042	25 30 20.0 -18.5 304 201	1240 1133 -8.6 -34.7 15426 12501

Road Casualty BVPI99 for 2005 for Greater Manchester by District

The Best Value performance indicators above represent reported casualties in the 10 Greater Manchester Districts. Though the report year is 2005 these figures have not yet been declared to the Office of the Deputy Prime minister and will be submitted at the end of 2006/7.

The data describes 2005 in comparison to 2004 and the base year (the average of 1994-98) for three casualty categories. Killed and Seriously injured (KSI), Children Killed and Seriously injured and finally Slight casualties.

Comparisons with the previous year are always open to annual statistical variation so the trend or change in relation to the base year is far more meaningful. Changes in relation to the base year can also illustrate progress towards the original 2010 casualty reduction targets.

The 2010 targets are; KSI casualty reduction target was 50%, Child KSI casualty reduction target was 50% and the reduction target for slight casualties 10%.

For Bolton in relation to the base year KSI casualties have fallen 8% by 2005, Child KSI casualties reduced by 30% and slight casualties have reduced by 12%. This means the slight casualty target for 2010 has been attained, we are on target to achieve the child KSI target but are along way adrift of the general KSI target.