

ANGUS COUNCIL

INFRASTRUCTURE SERVICES COMMITTEE

2 JUNE 2009

**CASUALTY REDUCTION TARGETS UPDATE & ACCIDENT INVESTIGATION
PROGRAMME PREPARATION & IMPLEMENTATION**

REPORT BY THE DIRECTOR OF INFRASTRUCTURE SERVICES

ABSTRACT

This report outlines the current road accident situation in Angus and the progress made towards the National Government's casualty reduction targets. It summarises the progress of work towards the preparation and implementation of an Accident Investigation Programme for Angus Council roads.

1 RECOMMENDATION

1.1 It is recommended that the Committee:

- (i) notes the progress towards the national 2010 casualty reduction targets.
- (ii) notes the remedial proposals at those accident locations previously identified in Report No. 580/08.

2 INTRODUCTION

2.1 Report No. 580/08 submitted to the Infrastructure Services Committee on 3 June 2008 outlined the Government's casualty reduction targets to be met by 2010, calculated from the 1994-98 baseline average, and highlighted that the casualty reductions achieved in Angus up to 2006 already surpassed those targets.

2.2 The need for implementing and maintaining an Accident Investigation Programme (AIP) was also included in Report No. 580/08 with 35 accident cluster locations identified, both urban and rural, for further investigation based on the accident data in the three year period 2005 to 2007 inclusive. This included specific locations with three or more injury accidents within a 50m radius (site specific) and lengths of road with three or more injury accidents in a 500m length (route specific).

2.3 The 2007 and 2008 casualty reduction figures for Angus are discussed in this report as well as the remedial measures proposed to be carried out at the accident cluster sites previously identified.

3 DETAILS

	Target reduction to 2010	Actual Scotland to 2007	Actual Angus to 2007	Actual Angus to 2008
Killed or seriously injured (KSI)	40%	45%	50%	47%
Children (0 – 15 yrs) KSI	50%	67%	57%	91%
Slight casualty rate	10%	35%	47%	45%

- 3.1 The 2008 data for Scotland as a whole is not yet available though it can be seen from the above table that the latest road casualty reductions achieved in Angus exceed the Scotland reductions from 2007 and already surpass the target reductions for 2010. It is important however not to be complacent and in that regard the on-going emphasis placed on road safety by central government as set out below is welcomed.
- 3.2 Although the road casualty reduction targets appear to have been met there has been a slight increase in the KSI and slight casualty rate in Angus in 2008 when compared to the 2007 figures. One notable exception to this slight increase is that the KSI casualty rate for children has reduced significantly. For example, there were 2 child KSI's in 2008 in Angus compared with 21 from the 1994 – 1998 baseline average.
- 3.3 The Department for Transport issued a consultation document in April 2009 seeking views on targets and measures for improving road safety in Great Britain for the period beyond 2010. This received significant media coverage at the time of issue.
- 3.4 The Scottish Government is also in the process of developing a Scottish Framework for road safety which will be published this year. Report No. 407/08 submitted to this committee on 22 April 2008 outlined the Council's response to the Scottish Road Safety Strategy consultation document.
- 3.5 The implementation of an Accident Investigation Programme, updated on an annual basis, enables accident cluster sites to be identified and addressed. Resources are then targeted at reducing the occurrence of accidents at those locations with the intention of continuing the reduction in road casualties in Angus and achieving the current and future casualty reduction targets.
- 3.6 The analysis of the accident data at the 35 locations identified for further investigation is now complete and the proposed works are itemised in Appendix 1. A series of engineering measures have been identified taking cognisance of the bend assessment guidance note issued by Transport Scotland and the Council's guidance note on the use of road markings in Angus.
- 3.7 The type of works proposed include the provision of and improvements to warning signs, hazard marker posts, road markings and road studs as well as carriageway surface improvements to improve the skid resistance for example.
- 3.8 While the proposed works are not a panacea to stop accidents occurring, implementing a programme of remedial measures at specific locations where the incidence of accidents is above the investigatory threshold will assist in helping reduce the number of casualties towards achieving the national targets for 2010 and beyond.
- 3.9 All schemes will be monitored after implementation to determine their success or otherwise in reducing the number of accidents and reported as part of the future Accident Investigation Programme.
- 3.10 Works have already been undertaken at a number of the cluster sites identified from the accident data from the three year period 2005 – 2007. This includes signing, lining and surface improvements which have resulted in a reduction of accidents following the implementation of the works, as set out in Appendix 1 (Comment/Proposals column).

Consequently some of the initial cluster sites now have less than the investigatory level of three injury accidents when assessed against the accident data from 2006 – 2008 inclusive. Therefore those sites will not be included when the accident analysis in the three year period 2006 - 2008 is carried out to identify new cluster sites. The results of this analysis work will be reported to this committee later this year.

- 3.11 The work of the Angus Traffic Co-ordination Group is also commended to the committee. This group has representation from various council services including education, public transport, planning and roads as well as from Tayside Police and provides an invaluable forum to discuss specific road traffic issues and in particular to make recommendations to the various agencies represented in matters connected with road safety.

4 FINANCIAL IMPLICATIONS

- 4.1 The majority of the proposed works is low cost signing and lining works estimated to cost in the region of £20,000 in 2009/10. This cost can be funded from the Traffic Calming/Road Safety and Supplementary Traffic Schemes Capital Budgets with the surfacing works funded from the Maintenance budget for carriageway surface treatments all within current Roads division budgets. The cost of other works that are at consideration stage, for example junction treatment schemes and road widening to provide a right-turn harbourage, will be reported to this committee later this year.

5 HUMAN RIGHTS IMPLICATIONS

- 5.1 There are no human rights implications arising from the proposals in this report.

6 EQUALITIES IMPLICATIONS

- 6.1 The issues dealt with in this Report have been the subject of consideration from an equalities perspective (as required by legislation). An [equalities impact assessment](#) is not required.

7 SINGLE OUTCOME AGREEMENT

- 7.1 This report contributes to the following local outcome(s) contained within the Single Outcome Agreement for Angus.

15. **Our public services are high quality, continually improving, efficient and responsive to local people's needs.**

- Population changes are identified and planned for.
- Resources are used effectively.
- Services are targeted at those in greatest need.
- There is greater community involvement in the planning and delivery of services.

8 CONSULTATION

- 8.1 The Chief Executive, Director of Corporate Services, Head of Finance, Head of Law and Administration, Tayside Safety Camera Partnership, Firemaster and the Chief Constable were consulted in the preparation of this report.

9 CONCLUSION

- 9.1 The progress towards achieving the casualty reduction targets for 2010 is reported as well as the development of an Accident Investigation Programme and proposed works at the previously identified accident cluster sites.
- 9.2 The anticipated accident reduction schemes will be monitored and the AIP works programme will be updated on an annual basis allowing for new cluster sites to be identified and existing sites removed from the list where the remedial measures undertaken have proven to be successful in reducing accidents.

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DIRECTOR OF INFRASTRUCTURE SERVICES

NOTE:

The following background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973 (other than any containing confidential or exempt information), were relied on to any material extent in preparing this Report:-

Report No. 580/08: Casualty Reduction Targets & Accident Investigation Programme - Infrastructure Services Committee, 3 June 2008.

Accident Cluster Site Locations

Route – lengths of road with three or more injury accidents (1/1/2005 – 31/12/2007) within a 500m length (17 No.)

Site – specific locations with three or more injury accidents (1/1/2005 – 31/12/2007) in a 50m radius (18 No.)

(Routes)

Route	Description	* PIA's (05 – 07)	Severity Ratio (KSI %)	Comment / Proposals
A933	Bends at Greenlaw (& U447 junction area).	9	44	Bend realignment scheme carried out Jan - April 2009 at Greenlaw, including improved signing and lining works on either approach and at A933/U447 junction area. <i>Propose to monitor the effectiveness of these works. (Note: 5 PIA's in 2008)</i>
A92	Montrose to St Cyrus Road; junction with and bends adjacent to Kinnaber Road.	7	0	Retextured February 2008. Signing and lining upgraded 2007/08 as part of A92 Route Action Plan scheme. <i>Hazard marker posts to be installed around bends plus fence-top reflectors on existing safety barrier. (Note: 0 PIA's in 2008)</i>
A923	Dundee to Coupar Angus Road; bend east of access road to Muirloch Farm and Denhead.	6	33	Retextured February 2007. <i>Edge of carriageway markings to be renewed and hazard marker posts installed around bend. (Note: 0 PIA's in 2007 and 2008)</i>
C4	Monifieth to Duntrune Road; bends north of Ethiebeaton.	5	20	Signing and Lining ("SLOW" markings) provided 2006/07. <i>Propose to upgrade the existing chevron signing, additional "SLOW" marking southbound at bend warning sign as well as tree pruning to improve visibility. (Note: 1 PIA in 2007 and 0 in 2008)</i>
A935	Montrose to Brechin Road; bends east of Balwyllo Cottages.	4	25	<i>To be retextured 2009. A935 Route Action Plan bend realignment scheme currently being progressed, possible works 2010/11. (Note: 3 PIA's in 2008)</i>
A932	Forfar to Friockheim Road; bends at Burnside Mill.	4	50	Retextured February 2008. <i>Edge of carriageway markings and replacement hazard marker posts around bends to be installed as well as "SLOW" road marking eastbound at existing bend warning sign. (Note: 0 PIA's in 2008)</i>

A926	Forfar to Kirriemuir Road; bends south-east of Ballinshoe Smithy.	4	17	Surface Dressing to be carried out 2009. <i>"SLOW" to be installed southbound at bend south of Ballinshoe / Woodhead junction.</i> <i>(Note: 1 PIA in 2008)</i>
A92	Arbroath to Montrose Road; in the vicinity of Tarriebank Gardens.	4	0	New right turn harbourage provided 2007 at development, including street lighting at the junction into the development. <i>No action proposed at this time, continue to monitor for accidents.</i> <i>(Note: 0 PIA's in 2007 and 2008)</i>
B961	Monikie to Crombie Mill Road; bend east of Guildy.	4	40	Retextured February 2008. <i>Propose to install edge of carriageway markings and replacement hazard marker posts around bend as well as a "SLOW" road marking eastbound at existing bend warning sign.</i> <i>(Note: 0 PIA's in 2008)</i>
A933	Arbroath to Brechin Road; in the vicinity of B965 Station Road (Friockheim).	3	0	<i>Propose to install edge of carriageway markings and replacement hazard marker posts around bend.</i> <i>(Note: 0 PIA's in 2008)</i>
A928	Petterden to Glamis Road; bend through Milton of Ogilvie.	3	0	<i>Edge of carriageway markings and studs (possibly solar lit) to be installed on approach and through the bend.</i> <i>(Note: 0 PIA's in 2008)</i>
A932	Forfar to Friockheim Road; bends west of Milldens.	3	0	Section retextured near Trumperton junction February 2008. <i>Propose to fix reflectors to existing safety barrier and install a "SLOW" marking westbound.</i> <i>(Note: 0 PIA's in 2007 and 2008)</i>
B978	Broughty Ferry to Wellbank Road, north-east of access to Westhall Cottage to Bucklerheads.	3	33	Speed limit reduced (27 April 09) from 60 to 40mph for a distance of approx 150m either side of existing 30mph limits at Kellas. <i>No further action proposed at this time, continue to monitor for accidents.</i> <i>(Note: 1 PIA in 2008)</i>
B9113	Forfar to Montrose Road; bend north-east of Meadowlea.	3	66	Possible structural maintenance scheme in future years <i>Propose to install edge of carriageway markings and hazard marker posts around bend.</i> <i>(Note: 0 PIA's in 2007 and 2008)</i>
B961	Dundee to Friockheim Road; in the vicinity of the junction with B962.	3	66	Surface Dressed 2008. <i>No further action proposed at this time, continue to monitor for accidents.</i> <i>(Note: 0 PIA's in 2006, 2007 or 2008)</i>

B954	Dundee to Meikle Road; bends northwest of Hosie Park	3	33	High friction surfacing installed 2007. <i>Replacement chevron warning signs and hazard marker posts to be installed around bends. (Note: 1 PIA in 2008)</i>
B954	Dundee to Meikle Road; bends southeast of Hatton Farm Cottages. # (From Hatton Farm Cottages south to quarry bends)	3 5 (inc. 3 above)	67 80	Retextured February 2007 (part of route). <i>Propose to upgrade the existing chevron signs and hazard marker posts and renewal of the road markings. Drainage scheme to be designed and the carriageway to be assessed for a possible surface improvement scheme. The need for safety barriers to be assessed at bends near Hatton Farm and quarry access road as well as tree pruning. (Note: 3 PIA's in 2007 & 2 PIA's in 2008)</i>
# The accident study area has been extended to take into account the accidents occurring at the quarry bends				

* Total personal injury accidents over the 3 year period 2005 – 2007 inclusive

(Sites)

Site	Description	* PIA's (05 – 07)	Severity Ratio (KSI %)	Comment / Proposals
C604	Gravesend / Marketgate / Brothock Bridge junction, Arbroath	5	33	Brothock Bridge resurfaced October 2007. <i>Junction and direction arrow markings to be renewed at Gravesend / Marketgate and an advance Give-Way sign to be installed on Gravesend due to reduced visibility on junction approach. (Note: 0 PIA's in 2008)</i>
A935	Brechin, South Esk Street / Park Road Junction	4	75	<i>Junction treatment options to be considered, for example footway build-outs to reduce distance for pedestrians to cross the road. (Note: 0 PIA's in 2008)</i>
A930	Carnoustie, High Street / Lochty Street Junction	4	75	Resurfaced October 2007. <i>Junction treatment options to be considered. (Note: 0 PIA's in 2007 and 2008)</i>

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B9127	Arbroath to Douglastown Road junction with B9128 Forfar to Muirdrum Road	4	25	Retread and overlay east of junction carried out in May 2006. <i>“Crossroads Ahead” warning sign and “SLOW” markings on B9128 southbound to be installed. An advance warning give way sign on westbound approach to junction (B9127) is proposed due to reduced visibility as well as “SLOW” and improved markings on each approach (B9127) to junction. (Note: 1 PIA in 2008)</i>
B966	Brechin, Cookston Road / Clerk Street Junction	4	25	<i>Propose to renew the anti-skid on all approaches and install a “SLOW” marking and renewal of roundabout warning sign on eastbound approach (Cookston Rd) to junction. (Note: 2 PIA’s in 2008)</i>
A92	Arbroath, Burnside Drive south of Brothock Bridge	3	0	Resurfaced October 2007. <i>No further measures proposed; continue to monitor for accidents. (Note: 0 PIA’s in 2008)</i>
A92	Arbroath, Burnside Drive / Catherine Street Junction	3	0	Resurfaced October 2007 and Traffic Signals upgraded also. <i>No further measures proposed; continue to monitor for accidents. (Note: 0 PIA’s in 2008)</i>
A930	Carnoustie, High Street / Park Avenue Junction	3	0	Resurfaced October 2006. <i>Junction markings to be renewed. (Note: 2 PIA’s in 2007 & 0 PIA’s in 2008)</i>
A94	Forfar to Glamis Road junction with B9127 Douglastown to Arbroath Road	3	0	Resurfaced 2008. <i>Propose “junction on bend ahead” warning signs. Widening of road at junction to provide a right-turn harbourage on A94 into the B9127 to be considered. (Note: 0 PIA’s in 2008)</i>
A930	Monifieth, High Street / Reform Street Junction	3	33	Resurfaced February 2008. <i>Traffic signal control and pedestrian crossings are proposed at the junction as part of the Monifieth High Street Streetscape Improvement project. (Note: 1 PIA in 2008)</i>

A923	Muirhead, Coupar Angus Road / Newtyle Road Junction	3	0	<i>No measures proposed; continue to monitor for accidents. (Note: 0 PIA's in 2006, 2007 & 2008)</i>
B978	Kirkbuddo Crossroads	3	0	<i>"SLOW" road marking on westbound approach and renewal of the junction road markings to be carried out. (Note: 0 PIA's in 2008)</i>
Uncl	Brechin, High Street / Church Street Junction	3	33	Streetscape improvement works may be considered as part of the Brechin THI scheme. <i>No measures proposed at this time; continue to monitor for accidents. (Note: 0 PIA's in 2008)</i>
A935	Brechin, Market Street / St David Street Junction	3	0	Streetscape improvement works may be considered as part of the Brechin THI scheme. <i>Carriageway condition requires to be assessed prior to renewing the anti-skid surfacing at the pedestrian crossing. (Note: 1 PIA in 2008)</i>
C69	Montrose, Eastern Road / Union Road / Union Street Junction	3	0	Resurfaced 2008. <i>A lit Give-Way warning sign on eastbound approach (Union Road) to junction to be considered. (Note: 1 PIA in 2008)</i>
C64	Carnoustie, Thomas Street / James Street Junction	3	33	<i>No measures proposed at this time, continue to monitor for accidents. (Note: 0 PIA's in 2007 and 2008)</i>
B9095	Arbroath, West Port / Catherine Street Junction	3	0	<i>Junction markings to be renewed. (Note: 0 PIA's in 2008)</i>
Uncl	Arbroath, Mayfield Terrace adjacent to St Ninians Road	3	33	Recent resurfacing and shopping area regeneration scheme implemented, including new layout for on/off street parking. <i>No further measures proposed at this time. (Note: 0 PIA's in 2007 and 2008)</i>

