

Report of Director of City Development

Report to Scrutiny Board (Sustainable Economy and Culture)

Date: 17 March 2015

Subject: THE PROVISION OF 20MPH SPEED LIMITS IN LEEDS

Are specific electoral Wards affected? If relevant, name(s) of Ward(s):	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Are there implications for equality and diversity and cohesion and integration?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Is the decision eligible for Call-In?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information? If relevant, Access to Information Procedure Rule number: Appendix number:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Summary of main issues

1. The Scrutiny Board (Sustainable Economy and Culture) at the meeting on 18th of November 2014, asked for further information on casualty figures for Leeds and the associated costs. Members also asked that potential additional funding opportunities in relation to 20mph zones be explored with all partners, particularly the Police and health partners. This report presents the relevant findings.
2. The Best City ambition is to improve life for the people of Leeds and make our city a better place. The provision of twenty miles-per-hour (20 mph) speed limits contribute to this ambition by improving the safety and quality of life of Leeds residents by enabling safe pedestrian and cycling journeys in local communities. They also help reduce traffic collisions to make a specific contribution to the Best City for Communities and a Child Friendly City.
3. The previous report set out the approach and an ultimate aim - that the majority of residential streets will have 20 mph speed limits. The additional information in this report assists Members in understanding how road injuries are valued and the benefits of such schemes being established. More detailed information concerning the benefits of the Council's 20 mph scheme programmes implemented to-date is provided, together with funding opportunities.

Recommendations

4. Members of the Scrutiny Board (Sustainable Economy and Culture) are requested to:
 - i) note and comment on the content of this report; and
 - ii) that, having regard to the additional information contained in this report, endorse the approach to expanding 20 mph speed limits in Leeds as set out in the report presented to the Board on 18th November 2014.

1 Purpose of this report

- 1.1 The purpose of this report is to provide members of the Scrutiny Board (Sustainable Economy and Culture) with the information concerning the casualty figures and the valuation of accident prevention associated with 20 mph speed limits. The report also summarises opportunities for partnership working to deliver the benefits of lower speed limits more efficiently.
- 1.2 This follow-up report was requested at the Scrutiny Board meeting on 18th of November 2014, which considered the current provision of 20 mph speed limits in Leeds in light of the Deputation received from 20s Plenty for Us campaigns group.

2 Background information

- 2.1 The previous report set out details of the programmes the Council is following across the city to provide 20 mph speed limits in the environs of all schools in the city. It is presently anticipated that this programme will be completed by 2020 if funding continues at present levels. At the November meeting Board members requested further information about the cost of road injuries and accidents and the savings achieved by 20 mph scheme. The issue of opportunities for securing external funding to support the programme was also raised and this is explored further in this report.

Cost of accidents

- 2.2 The Department for Transport, as part of its wider work to support economic valuation and assessment of the benefits of transport investment, has undertaken research that places a valuation on the costs of road accidents and injuries which is regularly updated.
- 2.3 The DfT estimates the value of prevention of all reported road accidents in the UK in 2011 at £15.6 billion. Estimates suggest that, if all unreported accidents are included in the figures, this value may rise to £34.8 billion.
- 2.4 The valuation of accidents considers all economic and medical costs, as well as human costs. Although there is no absolute value that can be put on human pain, loss and suffering, the estimate the DfT provided uses the combination of the actual costs in terms of;
- The loss of output (loss of earnings and non-wage payments);
 - Cost of emergency attendance and subsequent treatment; as well as
 - the human cost (these are based on willingness to pay to avoid pain, grief and suffering to the casualty, relatives and friends, as well as intrinsic loss of enjoyment of life in the case of fatalities).
- 2.5 The human cost, including the loss of earnings, is much greater than the cost of attendance by emergency services and direct medical costs, as illustrated in Figure 1:

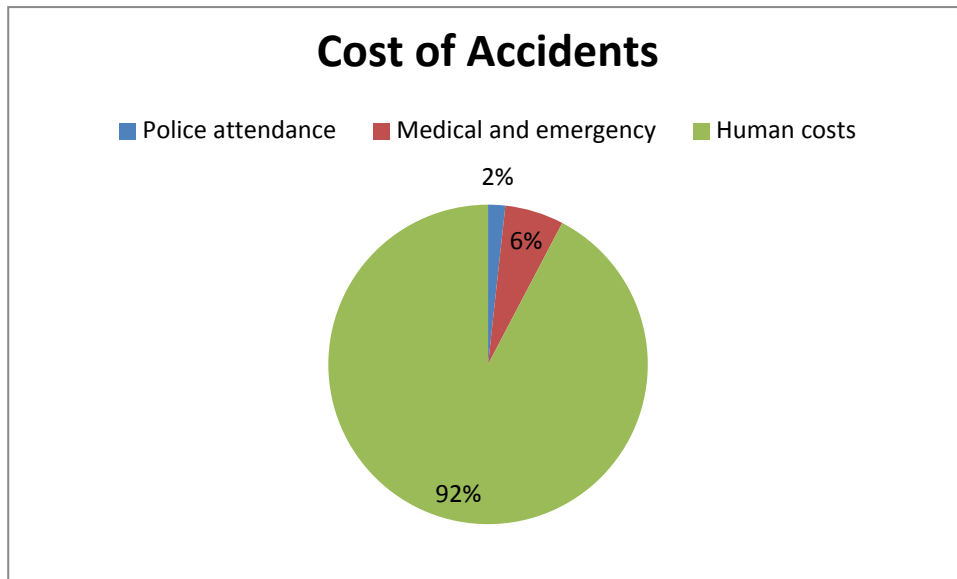


Figure 1 [Estimated value of accident prevention]

Cost of accidents

Accident/casualty type	Cost per casualty	Cost per accident
Fatal	1,686,532	1,877,583
Serious	189,519	216,203
Slight	14,611	23,136
Average for all severities	50,024	71,885
Damage only	-	2,027

2.6 The average cost of an accident is greater than the cost of a casualty as they often involve multiple casualties and include costs to the Police, insurance and damage to property.

Road injuries in Leeds

2.7 The accident data for Leeds show a consistent downward trend in the number of casualties. The total number of those killed or seriously injured has also shown an overall reduction, but here the savings have not been as great or consistent.

2.8 In 2014, the provisional figure for road casualties is 2543 as the result of road traffic collisions (as compared to 4912 in 2000); 253 casualties were children and 404 were pedestrians; with over half pedestrian casualties being children. 337 people were killed or seriously injured (KSI). Using the DfT's average estimates, the prevention value of all casualties in Leeds in 2014 was in the area of £127 million. In comparison the total number of accidents on Leeds roads in 2014 was 1937; the value of prevention of these accidents, using the DfT's average estimate, would have been in the area of £139m.

2.9 The last five year period (2010-2014) saw an overall 24% reduction in all casualties as compared to the previous 5 years (2005-2010), and a 14% overall reduction in KSI. However, 2014 saw an increase in the number of pedestrian casualties, child casualties and the overall number of those killed or seriously injured, in comparison to the previous year.

3 Main issues

The role of lower speeds in reducing casualties

3.1 ROSPA estimate that inappropriate speed contributes to around

- 14% of all road injury collisions,
- 15% of collisions resulting in a serious injury; and

3.2 24% of collisions which result in a death and are recorded by the Police. The risk of injury increases along with speeds of traffic; an average increase in speed of 1 mph increases the risk of injury by 3%. Research presented by ROSPA shows that 90% of people hit by vehicles at 40mph die, compared to 20% at 30 mph, and 2.5% at 20 mph – when hit at this speed, the pedestrian has a 97% chance of survival, as compared to a 10 % chance at 40 mph and 80% at 30 mph. 30 mph is regarded as a critical threshold above which the risk of death increases rapidly, both because of greater impact of collision and longer stopping distance.

3.3 However, about half of pedestrian fatalities occur at impact speeds of 30 mph or below, and ROSPA estimate that an average reduction of speed by 1 mph could reduce accident rates on urban main roads and residential roads with low average speeds, such as those where a 20 mph limit may be considered appropriate, by a further 6%.

3.4 Effective 20 mph speed limits have been shown to deliver tangible road safety benefits in Leeds. Schemes implemented in the years 2000 – 2009 show that the total number of accidents in the areas covered by 20 mph speed limit fell by 250 in the first five years after implementation (on average 50 fewer per year) – as illustrated in Figure. 2.

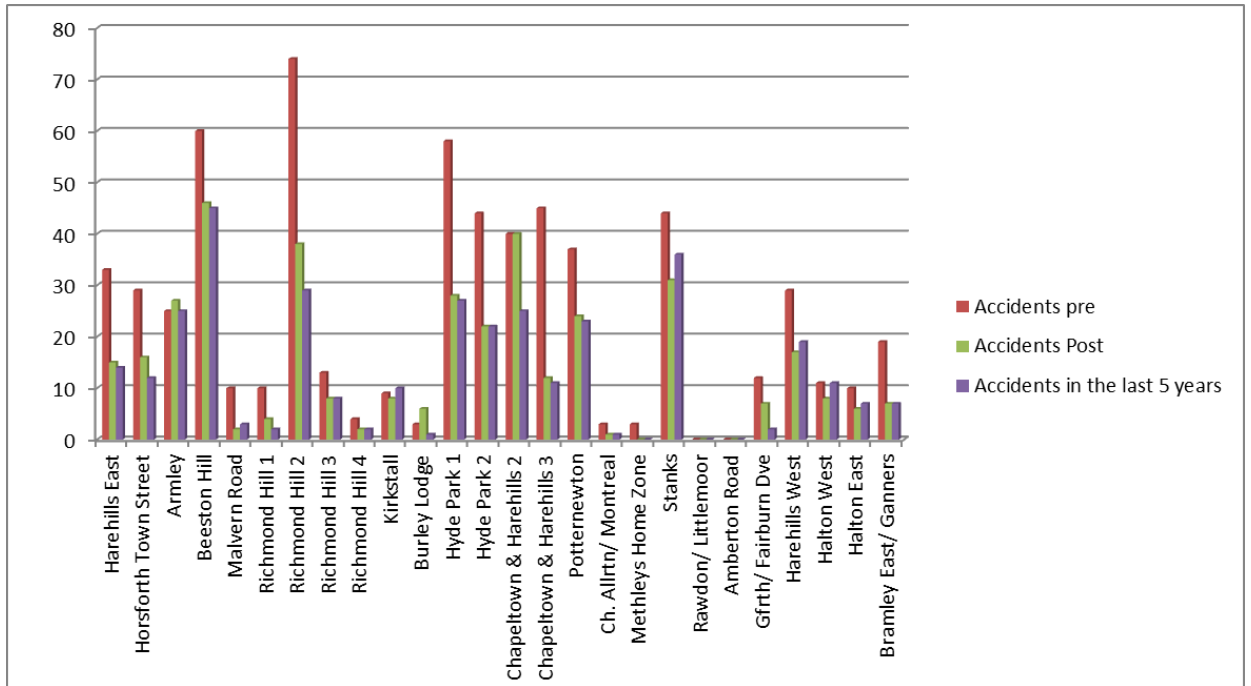


Figure 2: [Five years accident reduction figures for 20 mph schemes – pre and post implementation]

3.5 For the 26 monitored 20 mph schemes shown above, the following savings were achieved in the first five years post implementation:

- a reduction of 43% in the total number of accidents; from 625 to 375;
- an estimated accident prevention saving to the value of £3.6 million per year,
- 335 fewer casualties; including
- 87 fewer pedestrian casualties; and
- 36 fewer KSIs

The five year casualty saving figures for the monitored schemes delivered before 2010 are illustrated in Figure 3 below.

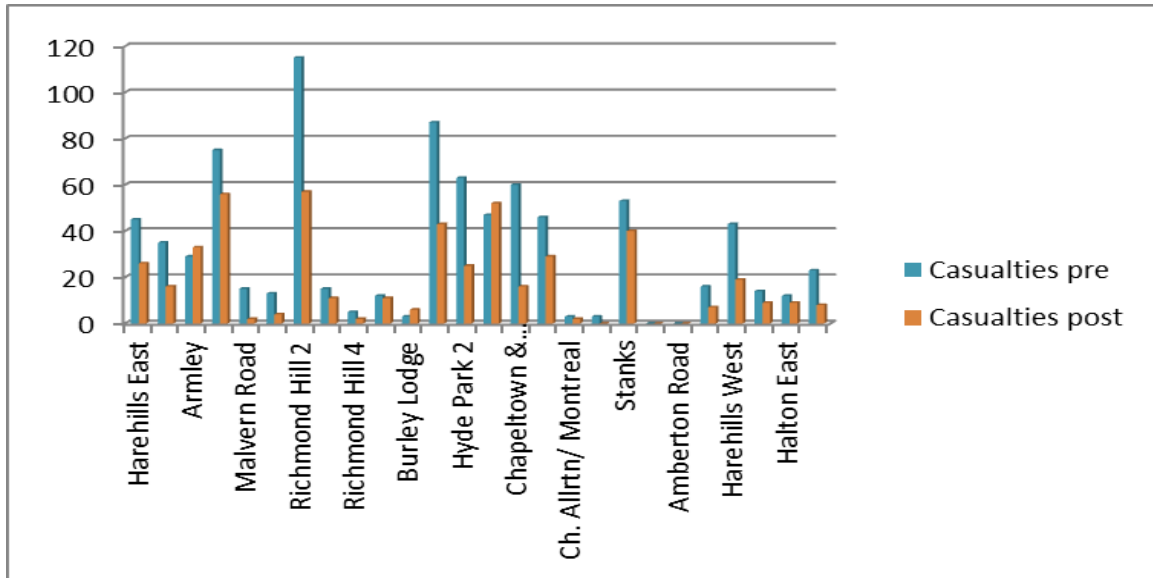


Figure 3: [Five year casualty saving for 20 mph schemes]

- 3.6 More importantly, perhaps, the accident figures for the last five years (2009-2014) for the same areas show that this reduction is sustained. Altogether, there were 342 accidents in areas covered by the above schemes - 33 fewer than in the initial five years of monitoring after implementation, so the above savings continue to be delivered.
- 3.7 Research consistently shows that 25% of all child casualties occur during the times of a school journey, and that over 90% of injuries to children on the school journey are sustained beyond the vicinity of the school. It is further estimated that 7% of all road collisions happen within 200 metres of a school, with typically 1 to 2% of injuries (about 5 annually) occurring in the immediate proximity of a school involving a child on a school journey.
- 3.8 To continue to deliver the road safety benefits of 20 mph speed limits, and to reduce the risks on the journey to school in particular, in 2011-12 a programme for the provision of a 20 mph speed limit was identified to encompass communities around every school in Leeds. The roll-out was prioritised according to the number of accidents per area, accidents involving children and accidents involving pedestrians. It is estimated that by the end of this financial year half of the areas initially identified around schools in Leeds will have a 20 mph speed limit.
- 3.9 As there are no five year comparative post-implementation data for the schemes delivered around schools after 2011 (with fewer engineering features), it is too early to conclusively demonstrate the success of these measures, but the early accident data (Figure 4 below) suggests a promising downward trend.

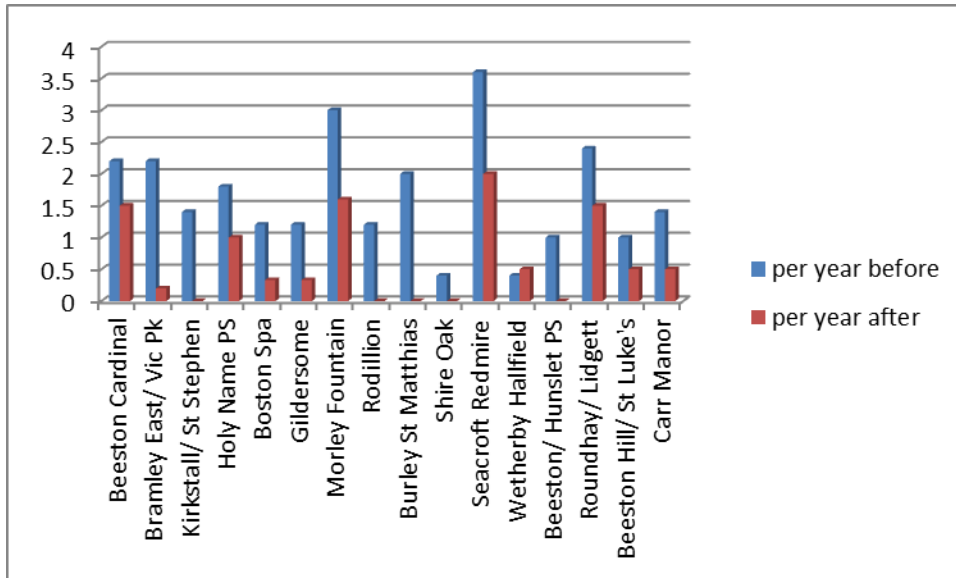


Figure 4: [Average reduction per year in number of accidents for recently introduced schemes]

- 3.10 As the areas with the most urgent casualty reduction needs are being addressed, the future schemes are unlikely to continue to achieve such dramatic accident and casualty savings, and are more likely to bring primarily other benefits in terms of encouraging and enabling active journeys to school. Their benefits will therefore lie more in the long term health improvements than in immediate better health outcomes due to casualty reduction.

Funding opportunities

- 3.11 The capital funding for the delivery of 20 mph speed limit is provided from the Local Transport Plan programme as part of the Combined Authority allocation for road safety schemes, aimed at road casualty reduction. The current implementation programme also includes schemes along the City Connect cycle superhighway, funded by the Cycle City Ambition Grant and Local Transport Plan. Elsewhere Ward Members have also contributed capital funding to the provision of 20 mph speed limits in their areas and worked with their neighbourhood policing teams to address issues anti-social driving and other issues that affect road safety.
- 3.12 20 mph speed limits are also identified through the planning process for new developments, which also included the school expansion programme. Whilst new developments are being designed with lower speeds in mind, opportunities for developers to extend the 20 mph speed limit beyond the boundary of the planned housing development to include wider community areas are also being explored within the planning process.
- 3.13 However, as casualty rates in local neighbourhoods fall, the benefits of future 20 mph schemes are likely to be seen more in terms of facilitating walking and cycling than casualty reduction. It is therefore anticipated that the emphasis on capital funding is likely to shift from road safety towards sustainable transport, walking and cycling. The experience of other Core Cities shows that information

and promotion will have a role to play in encouraging active modes in order to fully realise the benefits of lower speed limits.

Health partners

- 3.14 The Council's Public Health Directorate is already involved in schemes to encourage active travel modes as part of healthier lifestyles. Public Health have contributed £100,000 capital funding to the City Connect scheme, which includes an 'envelope' of 20 mph speed limit along the corridor of the cycle superhighway to be delivered in the next two years, and a further £82,000 incentivise the take-up of active travel modes and thus help realise the full benefit of 20 mph speed limits.
- 3.15 Public Health are further supporting the development of the 20 mph programme for 2015/16 with additional £30,000 which is to be allocated to promoting the benefits of the newly introduced speed limits and the opportunities for active travel.
- 3.16 Further opportunities for jointly funding new initiatives are being explored with the NHS Clinical Commissioning Groups, for example to deliver a campaign centred on active travel. Such opportunities will also be examined in the round with the development of the cycle network and measures to improve conditions for walking.

Police

- 3.17 It is recognised that attendance at road traffic accidents is part of the costs borne by the Police forces, even if these costs are a fraction of the overall cost of the accident. The reduction in the number and severity of accidents would reduce these costs to the Police by requiring less Police attendance. On the other hand, the Police are key partners in ensuring compliance with the lower speed limits which will have implications for resources, although the current approach to the provision of 20 mph speed limits aims to make these largely self-enforcing.
- 3.18 Leeds City Council is working closely with the Police as part of the Safer Leeds initiative and the Road Safety partnership. The Police and Crime Commissioner in West Yorkshire is responsible for all police budgets and effectively for how that money is spent in line with the key priorities of the police and crime plan 2014/15 across the five Districts, including Leeds. Any funding for traffic calming measures in Leeds would need to be approved by the Police and Crime Commissioner. However, it should be noted that, like other public services, the Police have experienced sharp reductions in their funding (by approximately a third), resulting in £154million of savings needed by 2016/17.
- 3.19 Certain funding streams are available to local communities who can bid to the Police and Crime Commissioners "Communities Fund" for local initiatives to help in any training or education programmes to help reduce casualties (for example near schools) and these could be perhaps explored as a matter of local priorities and in conjunction with the information and promotion work being currently developed together with Public Health.

3.20 As requested by ward members at the meeting of the Scrutiny Board, an approach has been made to the Department of Work and Pensions (DWP) to enquire about the possibility of a contribution of funding for the delivery of 20 mph schemes in terms of their wider benefits. Unfortunately the only funding available locally within DWP is the Flexible Support Fund (FSF) - a budget managed by District Managers to supplement mainstream services and tailor support to the needs of individuals. This is only payable strictly towards an activity that will move someone into work, for example if there is a gap in provision or a learning need which will move them towards employment. Due to the nature of the budget and the restraints that the department is under when making payments, they would not be able to support the roll out activity for the provision of 20 mph speed limits.

4 Corporate Considerations

4.1 Consultation and Engagement

4.1.4 Road traffic accidents and road safety are a major concern for local communities as the greatest impact of an accident are its human costs, borne directly by the members of the community. There is a positive drive from local communities to get involved in reducing road safety risk – this is evidenced by correspondence with ward members, officers, reports to the Police and a number of recent deputations concerning local road safety issues.

4.1.5 Leeds City Council welcomes and facilitates positive community engagement on road safety issues, for example through road safety education delivered in schools, provision of safe pedestrian crossing facilities and by providing physical measures to reduce the likelihood of collisions in response to community concerns and accident data. Twenty miles per hour speed limits are part of this process and through engagement and feedback during the development and implementation of these schemes they generate, in the main, a lot of community support.

4.1.6 Opportunities and initiatives outlined in this report will further strengthen links between different partner organisations and will also help communities to take the full advantage of lower speed limits in their area.

4.2 Equality and Diversity / Cohesion and Integration

4.2.1 An Equality, Diversity Cohesion and Integration Impact Assessment has been prepared for 20 mph speed reduction schemes around schools and residential areas and is attached as an appendix. The assessment identified the following key positive impacts:

- Make it more pleasant and safer to walk and cycle, encouraging a healthier lifestyle
- Improve the quality of life for the local community
- Provide safer passage while crossing the road for all pedestrians, but particularly beneficial for those with a mobility impairment, disabled people, parents supporting pushchairs, and younger and older people

- 4.2.2 No negative impacts were identified for any of the protected equality characteristics. Slight negative impacts were slightly increased journey times and potential impact of traffic calming features if installed incorrectly.
- 4.2.3 An EDCI screening has been conducted for this report. The screening identified equality characteristics where the negative impact of traffic, especially fast moving traffic, would be differential – these included children, older people and people with disabilities. People with these characteristics are more likely to be involved in a traffic accident, especially as a pedestrian, and the impact of the collision is likely to be far greater. Studies also suggest that children living in more deprived communities, and consequently ethnic minorities, are likely to be more exposed to road safety risks as they tend to live, walk and play close to busy roads.

4.3 Council policies and City Priorities

- 4.3.1 The Best City ambition is to improve life for the people of Leeds and make our city a better place. Twenty miles-per-hour schemes contribute to this ambition by improving the safety and quality of life of Leeds residents by enabling safe pedestrian and cycling journeys in local communities and reducing traffic collisions to make a specific contribution to the Best City for Communities and Child Friendly City ambitions.
- 4.3.2 Leeds road casualty targets are set within the West Yorkshire Local Transport Plan (LTP3) and reported within the best council plan (Indicator CD12). The target is a 50% reduction of the number of people Killed or Seriously Injured (KSI) in the district roads by 2026.

4.4 Resources and value for money

- 4.4.1 The delivery of 20 mph speed limit schemes forms part of the programmes for improving road safety contained in the West Yorkshire Local Transport Plan (WYLTP) and through the planning process as part of considerations for new developments. Such schemes generally show high value for money both for the direct benefits to road safety and their indirect benefits for active travel and health.
- 4.4.2 This report has potential implications for resources in the next phases of the implementation of West Yorkshire Local Transport Plan, depending on the nature of recommendations and the decision of the Scrutiny Board.

4.5 Legal Implications, Access to Information and Call In

- 4.5.1 There are no legal implications. The report is not eligible for Call-In.

4.6 Risk Management

- 4.6.1 It is anticipated that the current and planned programmes will deliver 20 mph speed limits across the city in a way which is inclusive and effective in improving road safety. By ensuring effective engagement, careful design which relates to local communities and their needs the risks of objections are minimised and similarly the most effective use of finance is also achieved. A more blanket wide area based approach, such as “Total 20” which has not been used in Leeds, runs

the risk that measures are not always effective and could lead to safety issues being overlooked at locations which actually need features or early improvements for pedestrians and cyclists.

5 Conclusions

- 5.1 The substantial reductions in accidents in areas where 20 mph speed limits and zones have been introduced demonstrate that lower speed limits have an important role to play in improving road safety overall, and in particular in reducing the severity of accidents and the number of accidents among vulnerable road users – pedestrians, cyclists and children. There are also significant cost savings implications of casualty reductions, with the majority of the savings being those in the ‘human costs’ of accidents.
- 5.2 Areas identified future schemes include fewer accidents and therefore their benefits are likely to be more focused on improved opportunities for walking and cycling and improved community cohesion. This will hopefully create opportunities for a multi-agency approach to realise the benefits of future schemes for both road safety, healthy and active lifestyles.

6 Recommendations

- 6.1 Members of the Scrutiny Board (Sustainable Economy and Culture) are requested to:
- i) note and comment on the content of this report; and
 - ii) that having regard to the additional information contained in this report, endorse the strategy approach to expanding 20 mph speed limits in Leeds as set out in the report presented to the Scrutiny Board on 18th November 2014.

7 Background documents¹

- 7.1 Executive Board Report
Equality Impact Assessment

¹ The background documents listed in this section are available to download from the Council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.

Appendix 2 - Accident and Casualty impact of 20 mph schemes 2000-2009

Name	Year completed	Accidents pre	Accidents Post	Accidents in the last 5 years	Casualties pre	Casualties post	Reduction in no accidents	Casualty reduction	Ped cas before	Ped cas after	
Harehills East	2007	33	15	14	45	26	-18	-19	6	2	-4
Horsforth Town Street	2007	29	16	12	35	16	-13	-19	17	10	-7
Armley	2007	25	27	25	29	33	2	4	6	7	1
Beeston Hill	2001	60	46	45	75	56	-14	-19	27	20	-7
Malvern Road	2001	10	2	3	15	2	-8	-13	7	0	-7
Richmond Hill 1	2001	10	4	2	13	4	-6	-9	1	3	2
Richmond Hill 2	2001	74	38	29	115	57	-36	-78	20	11	-9
Richmond Hill 3	2001	13	8	8	15	11	-5	-4	5	2	-3
Richmond Hill 4	2002	4	2	2	5	2	-2	-3	1	2	1
Kirkstall	2005	9	8	10	12	11	-1	-1	5	0	-5
Burley Lodge	2004	3	6	1	3	6	3	3	0	3	3
Hyde Park 1	2003	58	28	27	87	43	-30	-44	13	5	-8
Hyde Park 2	2005	44	22	22	63	25	-22	-38	6	5	-1
Chapelton & Harehills 2	2000	40	40	25	47	52	0	5	19	9	-10
Chapelton & Harehills 3	2004	45	12	11	60	16	-33	-44	14	3	-11
Potternewton	2004	37	24	23	46	29	-13	-16	12	10	-2
Ch. Allrtn/ Montreal	2007	3	1	1	3	2	-2	-1	0	0	0
Methleys Home Zone	2001	3	0	0	3	0	-3	-3	0	0	0
Stanks	2002	44	31	36	53	40	-13	-13	13	7	-6
Rawdon/ Littlemoor	2005	0	0	0	0	0	0	0	0	0	0
Amberton Road	2003	0	0	0	0	0	0	0	0	0	0
Gfrth/ Fairburn Dve	2001	12	7	2	16	7	-5	-9	6	1	-5
Harehills West	2007	29	17	19	43	19	-12	-24	8	8	0
Halton West	2007	11	8	11	14	9	-3	-5	2	4	2

Halton East	2007	10	6	7	12	9	-4	-4	3	3	0
Bramley East/ Ganners	2006	19	7	7	23	8	-12	-15	13	4	-11
TOTALS		625	375	342			250	-369			-87