
Decision Session
Executive Member for City Strategy

1 February 2011

Report of the Director of City Strategy

20mph Speed Limits: Your City Results and an Update on Policy Development

Summary

1. The report presents residents opinions gathered through the recent consultation on citywide 20mph speed limits undertaken through Your City and reports on the initial impact of the trial in the Fishergate area. It also advises on options for revising the policy on 20mph limits in the city. The advantages and disadvantages of the possible options are analysed and examples of the impact of the introduction of 20mph limits in other cities across the country is provided.

Recommendations

2. The Executive Member for City Strategy is recommended to:
 - i) Note the results of the 20mph speed limit consultation.
 - ii) Note the options presented and indicate which option to progress.

Reason: To enable a policy on 20mph limits to be developed in line with amended national guidance.

Background

3. The objectives of lower speed limits in residential areas include safer roads, improved quality of life and improved perceptions of safety. It is also promoted that lower speed limits are more conducive to walking and cycling leading to more general health benefits. However, the cost, value for money, enforcement and other implications must be considered before introduction to ensure that the limited resources available are directed to improvements, which will deliver significant benefit. It should also be recognized that the full implications of 20mph limits (enforced by signing only) are not yet fully confirmed due to their relatively recent introduction in other cities. York already has a significant number of roads and zones which have a 20 mph speed limit and which are enforced using vertical (road humps) and horizontal traffic calming measures.

4. The introduction of 20mph limits at particular locations within the city has been requested by a number of residents over recent years. The recent citywide consultation was undertaken to ensure that the views of the public were understood before changes to the existing policy was considered.
5. Prior to the discussion it is useful to clarify some of the terminology involved with 20mph speed limits.
6. **20mph Speed Limit** – A road (or a number of roads) that is subject to a maximum speed limit of 20mph and is indicated using 20mph signs at the entry points to the area covered by the speed limit in addition to smaller repeater signs within the area. No physical traffic calming (i.e. speed humps or chicanes) forms part of a 20mph speed limit. It is worth noting that should traffic calming be already in place then existing features can be retained if a 20mph speed limit is to be implemented on a road.
7. **20 mph Zone** – A road (or a number of roads) that is subject to a maximum speed limit of 20mph and is indicated using 20mph signs at the entry points to the area covered by the speed limits and has traffic calming features at regular intervals within the boundary of the zone.

National Guidance

8. Department for Transport (Dft) circular 01/06 states “successful 20mph zones and speed limits should generally be self enforcing” (p.19). With this in mind it is suggested by the Dft that only streets with a mean speed of 24mph or less are considered for 20mph speed limits. This is because signed only 20mph speed limits are proven to reduce speeds by only a small amount.
9. Revised intermediate guidance issued in December 2009 prior to the forthcoming revision of circular 01/06 does not place as much emphasis on 20mph speed limits being only applied to streets with a mean speed of less than 24mph. Therefore the guidance is somewhat more relaxed and does offer greater flexibility however the revised guidance letter does state;

“ We want to encourage highway authorities, over time, to introduce 20 mph zones or limits into

- streets which are primarily residential in nature; and into
- town or city streets where pedestrian and cyclist movements are high, such as around schools, shops, markets, playgrounds and other areas; where these are not part of any major through route.”

There is therefore a desire from central government to see greater use of 20mph limits or zones, but not on major through routes. The obligation to ensure that there is no expectation placed upon the police to carry out enforcement above their routine activity is still present and this still suggests that signed only 20mph speed limits should only be applied to streets with a relatively low mean speed. It has therefore been considered appropriate, locally, to remain within the 24mph bounds of the original guidance.

20mph Speed Limits in York

10. Current policy on 20mph areas in York is to introduce traffic calmed 20mph zones where appropriate, e.g. outside schools or play areas. 20mph speed limit requests and petitions have been prioritised into a list based upon, the proportion of households signing a petition, number of accidents in the area, the road being residential or mixed priority, the average speed being below 24mph and any wider benefits associated with walking and cycling. These suggestions and petitions are currently being progressed when funding is available.
11. All 20mph areas introduced in York prior to 2009 have been zones enforced with traffic calming measures. As a result of a petition and with some ward committee funding for consultation a trial of 20mph speed limits was approved in the Grange Street area, Fishergate. The results of the trial were delayed by the inclement weather in early December preventing the collection of speed data under normal road conditions.

Results of Fishergate Trial

12. Speed surveys in the Fishergate trial area were undertaken in early January at the same locations as the baseline data sites taken in November 2008. The before and after results are shown in the following table. Note: The 'after' results taken between 6 and 13 January may have been affected by icy roads in the early mornings on some of the days.

Street	Mean Speed (mph)		85 th Percentile Speed (mph)	
	Before	After	Before	After
Grange Street	16	13.2	20	15.9
Hartoft Street	16	12.9	19	16.8
Farndale Street	15	12.4	19	15.9

13. The results indicate that mean traffic speeds are between 2.6 and 3.1 mph lower in these streets than those recorded before the 20mph limit was introduced. However some of the reduction may have been due to the icy conditions on some mornings. The results are unlikely to yield a definite conclusion as to whether 20mph speed limits may be suitable across the whole city. It does show evidence of what it may be possible to achieve in narrow residential streets with already low mean speeds. No accidents were recorded in the area in the three years prior to implementation or during the trial period.

14. As a precautionary measure the speed surveys are being undertaken again because one of the larger 20mph signs at the entrance to Grange Garth had been removed prior to the start of the surveys. The location for the survey on Grange Street also had to be changed as the equipment could not be placed in the same location as the before survey. This will be rectified with the additional surveys.

South Bank Trial

15. In December 2009 it was decided to implement a larger, more representative trial area in South Bank. Prior to approval of implementation in December 2009 there had been fifteen slight accidents in the last ten years and five slight accidents in the previous three years. There is little evidence of accident clusters in residential areas across the city so South Bank offered the best location to provide some opportunity of change. Seven locations within the area were surveyed for speed. The trial will demonstrate whether speeds are likely to decrease with signed only 20mph speed limits and will also, to some extent, show if accidents can be reduced although the low base means that small variations will have significant impact on the percentage change.

20mph in Other Areas

16. 20 mph speed limit areas are being trialled or introduced in a number of towns and cities across the country including Portsmouth, Warrington, Oxford, Norwich etc. However, owing to the recent introduction of many of these schemes, the evidence for their impact over an adequate time period is not yet available. Results from Portsmouth and Warrington are indicated in the following paragraphs.

Portsmouth

17. The city council in Portsmouth was the first local authority in the country to introduce an area wide 20mph speed limit in 2007/2008. The final report of the intermediate results for the Portsmouth scheme has recently been published.¹ It is possible that the effects could be similar if York were to pursue a citywide 20mph policy.
18. 94% of road length (223 streets) in Portsmouth has been made 20mph. It should be noted that the geography of Portsmouth is somewhat different to York. There are more key radial and arterial routes used by through traffic in York. Most of the roads had mean speeds of 24mph or less, though 32 did not and therefore broke from Dft guidance at the time.
19. Across all streets in Portsmouth the average overall speed before the scheme was 19.8mph, reducing to 18.5mph after implementation. This therefore gives a reduction of 1.3mph across all streets. The streets with a mean speed of over 24mph prior to implementation saw a larger decrease in average speed of

¹ Interim Evaluation of the Implementation of 20 mph Speed Limits in Portsmouth, (Atkins, 2010)

6.3mph. No information is given on the numbers of motorists travelling over 20mph in the streets with an average speed of over 24mph.

20. The number of recorded road casualties (slight, serious and fatal) fell by 22% after implementation of the 20mph speed limits, though there was a drop of 14% nationally in comparable areas. York has seen a drop of 16% in a similar period. Killed and seriously injured (KSI) numbers have increased by 9% in the Portsmouth area although this is against a very low base number which may be too small to indicate significant trends.
21. The interim report suggests that there has been little difference to mode choice as a result of the 20mph scheme (p21.)

Warrington

22. Warrington has recently reported² on the three trials of 20mph speed limits that have been taking place in the town. Overall, the combined number of casualties has increased by just over 5%. This is despite a substantially reduced vehicle flow on the affected roads. Although casualties have increased the number of collisions has decreased by 25%, which is a positive development. Mean speeds decreased by 1.45mph. The recommendation from officers in Warrington is to make the trial areas permanent (excluding sections of through routes) and investigate the introduction of 20mph limits across the town.

Your City Consultation

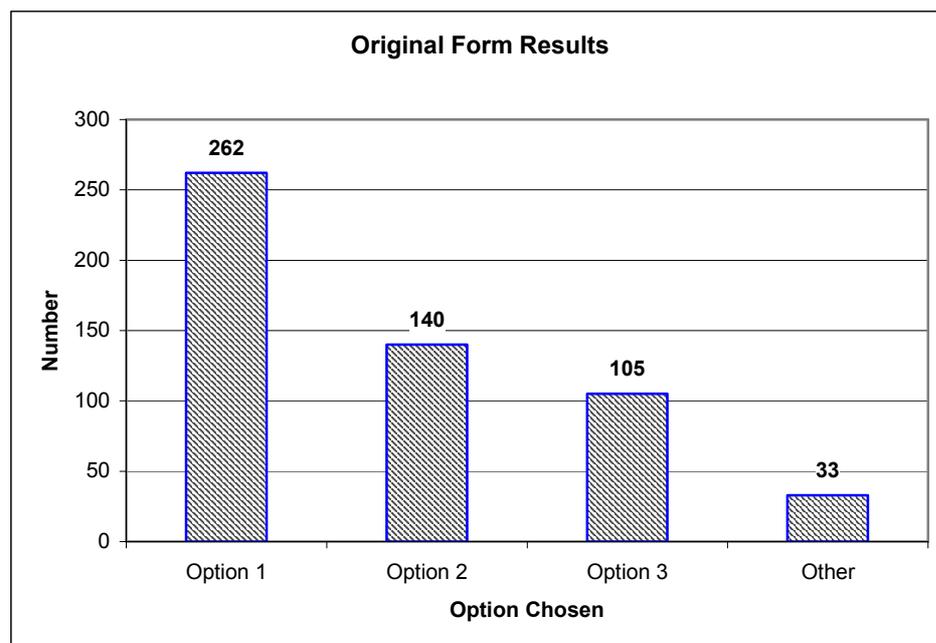
23. A question asking residents how they would like to see 20mph policy progressed in York was included in the October edition of Your City. In addition to a tear off response in the newspaper the same question was asked through Local Transport Plan 3 (LTP3) feedback forms and also as part of the LTP3 online questionnaire. Residents could also email in their choice of option. Returns only from people residing within the York boundary have been included. It was felt that, whilst people living outside York also use the roads in the city, it should be the people living on the affected streets who influence the decision.
24. In addition to the responses outlined above, photocopied Your City forms were also handed in to the Council reception in batches from campaign groups, from councillor canvassing and public meetings. It is understood that the majority of these returns were collected by the 20's Plenty for Us group. This group campaigns for the implementation of 20 mph as the default speed limit on residential roads in the UK. They consider 20mph to be the correct speed for residential areas.
25. The options offered to residents were:

² 20mph Speed Limits Experimental Traffic Regulation Orders, Warrington Borough Council, October 2010.

1. Continue our existing policy of setting the most appropriate speed limit suitable for individual roads.
 2. Create 20mph limits on all residential streets but not on main roads. An indicative plan of this option is included in Annex 1.
 3. A 20mph limit on all roads inside the outer ring road and within all surrounding towns and villages.
26. Some responses used either a combination of options or expressed a wish to see no 20mph speed limits at all. These have been marked under 'other'. The results have been analysed in several different ways: Original Form results only, Photocopied Form results only, and combined results.

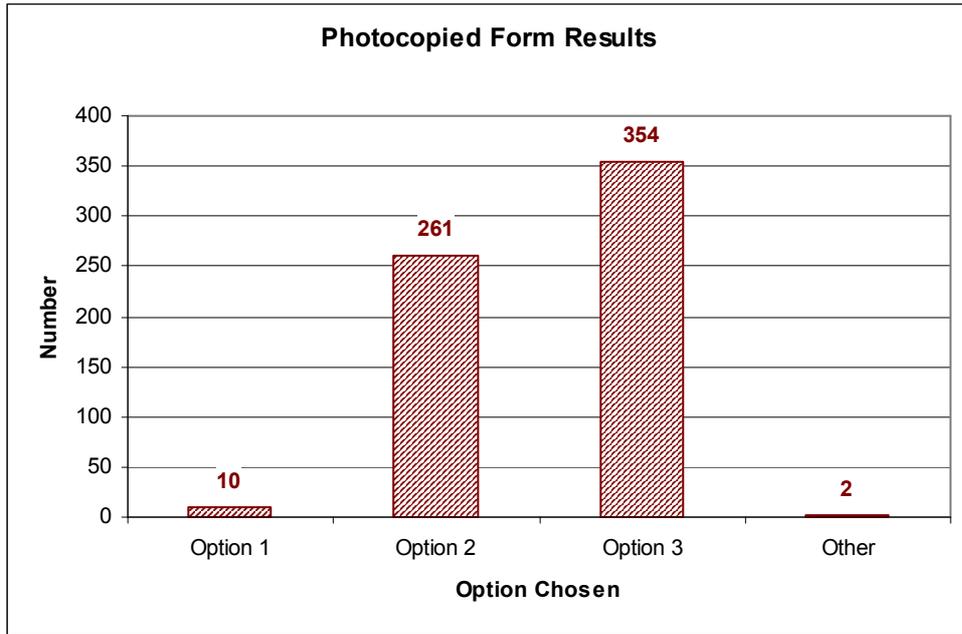
Original Form Results

27. 540 responses were received on the original Your City form. The option that received the highest number of positive returns was to retain the current policy. The chart below shows the split between options.



Photocopied Form Results

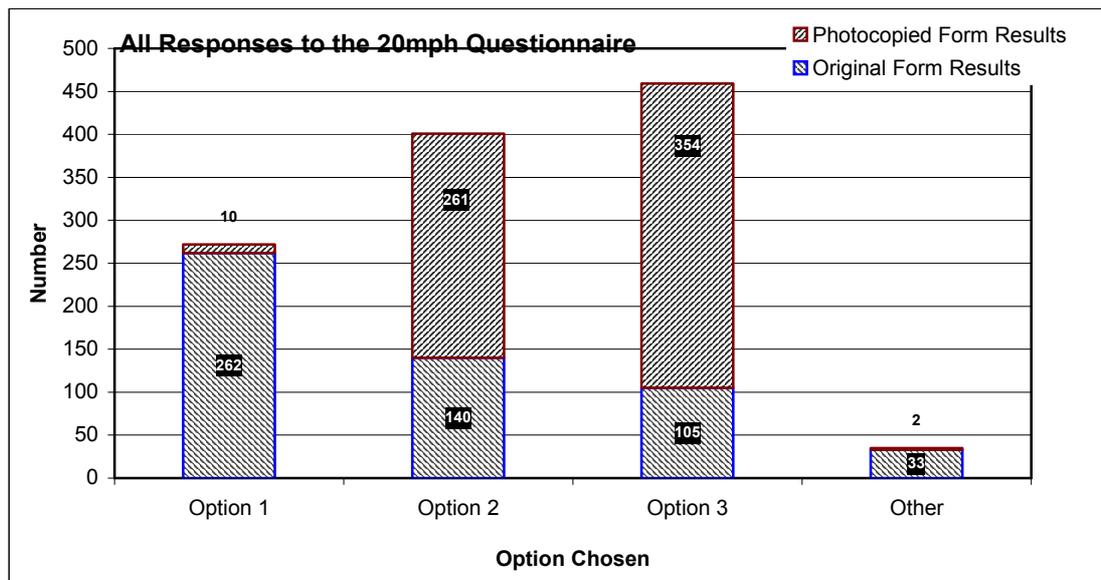
28. 627 photocopied forms were submitted to the Council in batches. Very few of these returns supported the continuation of the existing policy and most results were for the introduction of 20mph limits on all roads within the outer ring road.



29. The following table shows the results in percentage terms.

Option	Original Form Results %	Photocopied Form Results %
1	48.5	1.6
2	25.9	41.6
3	19.4	56.5
Other	6.1	0.3

30. Combining the responses provides the following results:



31. To further understand the results the data has also been assessed on a ward-by-ward basis. Tabulated results for each ward are included in Annex 2. The total numbers are slightly different to the tables above as some of the postcodes were not provided or recognisable.
32. There is a wide variation in the number of Your City (photocopied and original) responses from the different areas and also in the options that have the most support. Ward based results are provided in Annexes 2-4. In general there were fewer responses from rural/village areas e.g. 27 from Haxby & Wigginton, 17 from Strensall. Retaining current policy was the option with most support in the more rural and suburban wards, whilst the more centrally located wards showed significant support for options 2 and 3. For instance 10% of Micklegate respondents supported option one compared to support by 53% of respondents from Strensall. There are exceptions to the outlined general pattern, such as Bishopthorpe and Wheldrake where options three and two have most support respectively. It should also be noted that, due to the small numbers of respondents involved, the results may not be considered to be an accurate representation of the overall opinion in the wards and should be only used as a loose indication.
33. The responses submitted via photocopied forms from campaign groups, public meetings etc. also show wide variation across the city with most of the responses from the main urban area. There are significant differences between the original and photocopied form results. The photocopied form results from most of the wards indicated no support for Option 1 and no wards with majority support for Option 1 whereas the results from the original forms indicated majority support for Option 1 in 8 Wards. Support for option 3 was strongest in the photocopied form results in Hull Road, Guildhall, Osbaldwick and Fishergate.

Options

34. The options for the Executive Member for City Strategy to consider are:
35. **Option A.** To continue with current policy and to proceed with the South Bank trial to enable officers to assess the benefits or otherwise of 20mph speed limits in York.
36. **Option B.** To undertake more detailed feasibility work for the two citywide 20mph speed limit options included in the consultation and present recommendations to a future decision session meeting.
37. **Option C.** To undertake more detailed feasibility work for the introduction of 20 mph limits on all roads and present recommendations to a future decision session meeting.

Analysis

General Analysis Points

38. Consultation with the public to determine whether there is overall support for changes to the existing policy is the first stage of the process. If the policy for 20mph limits is to be considered for change across the city then additional feasibility work will need to be undertaken i.e for options B and C. Further information will be needed in the following areas in particular:

- **Views of key Stakeholders (police, bus operators etc.)**

It is essential to establish the opinions from organisations that may be affected by any changes to the existing policy. The police have previously stated that they are supportive of 20mph limits on the basis of casualty reduction if Dft guidance is adhered to. It is expected that 20mph schemes should be self-enforcing and the police should not be expected to provide enforcement where this is not the case. The police have also suggested that there is a need for a detailed feasibility study into all of the options in the Your City consultation. This would inform what is realistically deliverable and whether it could work.

If citywide 20mph adds significant time to bus journeys then there will be implications for operators and passengers. Bus operators have been asked for their initial views on the three options. One operator has suggested that a consistent 20mph speed limit is better than an inconsistent 30mph, but stressed that measures would be required to ensure buses were not obstructed by parked vehicles, traffic signals etc. Another operator felt that 20mph is too slow for all roads within the inner ring road but that it is important outside schools so the current policy is fine. The independent chair of the Quality Bus Partnership is in favour of a consistent 20mph speed limit on residential roads, but is of the opinion that 30mph and 40mph on main arterial routes is appropriate.

- **Accurate estimate for cost and value for money.**

A preliminary figure of £750k to £1.0m has been estimated for the costs for a scheme covering the entire residential area of the city. Prior to making a decision it will be necessary to establish an indicative signing plan to be able to draft more detailed costings. Additional works may also be required to introduce traffic calming measures on routes with speeds above 24mph if these are found not to be self-enforcing. With reduced budgets the value for money of schemes becomes even more important therefore it is essential that the costs and anticipated benefits of any proposals are investigated in detail before introduction.

- **Results from York trial areas.**

Results will be available from the Fishergate and South Bank trial areas, which can be used to establish the impact of 20mph limits in York.

- **Adequate citywide speed survey data to justify area-wide approach.**
Speed data is essential for monitoring the effects of 20mph speed limits and also for establishing which routes fall within the 24mph or lower criteria. A range of streets with different characteristics will need to be surveyed to provide an indication of current speeds and flows in York. It will be essential to survey a wide variety of streets in the city prior to any consideration of citywide 20mph speed limits. Different streets have different characteristics and could therefore expect different effects from lower speed limits. There are also some roads, certainly within the bounds of option three that are likely to have far higher average speeds than those recommended for 20mph speed limits e.g sections of Hull Road.
- **View on variation in emissions due to change in speed limits.**
It will be necessary to investigate the implications of the changes to speed limits on the air quality within the city. There is a potential for the changes to increase the number of people cycling and walking but changes to traffic flows and efficiency may increase the levels of pollution at key locations.
- **Analysis of accident data and assessment of potential benefit.**
More detailed analysis is required on types of accidents and in the areas where they occur. Initial analysis indicates that approximately 11% of accidents occur on residential roads in the city. The majority occur on major routes or arterial roads which would not be included if the 20mph limit was restricted to residential areas only.
- **Definitive results from other towns/cities.**
Any decision should reflect lessons learnt from schemes in other areas.

Option A.

39. Continuing with current policy will enable targeted road safety measures to be put in place where they are most needed. Evidence shows that 20mph zones enforced by traffic calming are proven to reduce speed significantly (Webster and Mackie 1996). 20mph speed limits enforced by signage only, however, reduce speed by a small amount and may therefore be considered to be a less effective alternative. The South Bank trial will enable officers to assess how effective 20mph speed limits could be in York and will provide more robust evidence for making any future decision on citywide 20mph speed limits.

Option B.

40. Developing more detailed proposals for citywide 20mph speed limits would acknowledge the desires of those who supported one of the two options involving policy change. Additional time is needed to gather the required information to enable a suitably informed decision on citywide 20mph to be made.
41. If Option B is chosen, officers will collect and subsequently present information on the items outlined under the general analysis points section. In particular the accident, speed data, cost, value for money, enforcement, air quality, results from trials and other schemes and environmental implications will be

investigated in greater detail. Staff resources will need to be diverted from other initiatives to enable the options to be investigated in detail.

Option C

42. Option C would recognise that a citywide 20mph speed limit on all roads within the outer ring road (A64/A1237) has significant support and would investigate the idea further by undertaking preliminary design and analysis work. However there are considered to be major issues to overcome before 20mph limits could be introduced across all routes within the city. In particular the following issues would need to be investigated and addressed.

- Disruption to public transport routes.
- Cost to implement – fewer signs due to lower number of ‘entry points’ however engineering traffic calming measures on arterial routes if required could be very expensive.
- Could involve implementation in areas/villages where there were no supportive responses to the consultation.
- Effect on emissions due to vehicles not travelling at the optimum speed.
- Extent of improvements for cyclists and pedestrians.
- Effect on accidents - could reduce the severity, and possibly number, of accidents in residential areas and on main routes.
- Enforcement - implementation of 20mph limits on arterial routes unlikely to be compliant with current guidance due to average speeds higher than 24mph.
- Could lead to the requirement to introduce engineering traffic calming measures to manage speeds on arterial routes.

43. A preliminary evaluation of the issues listed above suggests that the introduction of 20mph limits on arterial routes may not be suitable for many locations in York. The impact of any 20mph limit introduction on arterial routes can be considered as part of the investigation identified in option B.

Petitions

44. There are currently 6 outstanding petition requests for 20mph speed limits on roads in York.

Presented at Full Council	Location
7 October 2010	Murton Village
9 December 2010	Grayshon Drive
9 December 2010	Melwood Grove
9 December 2010	Sherwood Grove
9 December 2010	Bishopthorpe Road and surrounding streets
9 December 2010	Alma Terrace

45. Detailed investigation of these locations will commence, as resources become available.

Corporate Objectives

46. 20mph speed limits could reduce the number of casualties on York's roads and would therefore contribute to the Safer City theme. Benefits are potentially also achievable in increasing walking and cycling, which in turn, can improve health. As such 20mph speed limits could also contribute to the Sustainable and Healthy City themes. However the implementation of a City wide 20 mph zone would be expensive and could take resources away from more focussed accident prevention work.

Implications

47. At this stage of considering 20mph speed limits there are few implications. This would change considerably if citywide 20mph speed limits were to be implemented.

Financial

48. The investigation of the possible introduction of 20mph limits across the city would need to be undertaken using the limited safety team resources. It is likely that funding would need to be diverted from other work to enable the necessary investigations to be undertaken. Funding for the implementation of a scheme would need to be prioritised against other projects within the Local Transport Plan capital programme. Transport budgets are approximately 60% lower than 2010/11 in 2011/12 and future years. The current indicative estimate of £750k for the introduction of the scheme across the city would be approximately 50% of the entire annual Integrated Transport budget. The majority of funding for capital works in 2011/12 is effectively already committed to schemes which are in development or early stages of delivery such as the upgrade of Fishergate Gyratory and improvements to Blossom Street.

Legal

49. There are no foreseen implications

Equalities

50. There are no foreseen implications

HR

51. There are no foreseen implications

Information Technology (I.T)

52. There are no foreseen implications

Crime and Disorder

53. There are no foreseen implications

Sustainability

54. There are no foreseen implications

Property

55. There are no foreseen implications

Other

56. There are no foreseen implications

Risk Management

57. There are no known risks with the recommendations offered.

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Report Approved Date 18/01/2011

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Specialist Implications Officer(s)

None

Wards Affected:

All

For further information please contact the author of the report

Background Papers:

Interim Evaluation of the Implementation of 20 mph Speed Limits in Portsmouth, (Atkins, 2010).

20mph Speed Limits Experimental Traffic Regulation Orders, Warrington Borough Council, October 2010.

Webster D. and Mackie A. (1996) Review of traffic calming schemes in 20mph zones, TRL Report 215.

Annexes:

Annex 1: Indicative plan of citywide 20mph speed limits on residential roads only.

Annex 2: Combined Photocopied and Original Form Responses by Ward.

Annex 3: Original Form Responses by Ward.

Annex 4: Photocopied Form Responses by Ward.