

Prioritisation of 20mph Zones in Residential Areas

Craightinny and Duddingston Neighbourhood Partnership

16 March 2010

Purpose of report

- 1 To refer for consideration a report on Prioritisation of 20mph Zones in Residential Areas.

Main report

- 2 On 24 November 2009, the Transport, Infrastructure and Environment Committee considered a report seeking approval of the method used to prioritise appropriate residential areas for mandatory 20mph zones on road safety grounds and of the associated updated priority list.
- 3 The Committee agreed:-
 - 1) To approve the updated collision based method for the introduction of mandatory 20mph zones.
 - 2) To approve the updated priority list for the further introduction of mandatory 20mph zones.
 - 3) To note that a report would be submitted annually to the Transport, Infrastructure and Environment Committee summarising the post construction monitoring of 20mph zones as their 3 year after collision period was completed.
 - 4) **To refer the report to Neighbourhood Partnerships for information and potential funding from their Neighbourhood Environmental Programme (NEP) budget.**

Recommendation

- 4 **That Neighbourhood Partnerships, in conjunction with the Director of Services for Communities, consider through their Neighbourhood Environmental Programme (NEP), requests for traffic calming that would not be considered under the current road safety programme.**



Alastair Maclean
Head of Legal and Administrative Services

Appendix	Report by the Director of City Development
Contact/tel.	Gary Patton, City Development, Telephone: 0131 469 3674. Email: gary.patton@edinburgh.gov.uk
Wards affected	All
Financial implications	<p>City Development Department has an annual capital budget of £200,000 for the installation of 20mph zones on road safety grounds. The current annual NEP budget is £100,000.</p> <p>There is currently no clearly identified capital budget within either City Development or Services for Communities Departments for 20mph zones identified on environmental grounds.</p>
Background Papers	Report by the Director of City Development (attached).

Prioritisation of 20 mph Zones In Residential Areas

Transport Infrastructure and Environment Committee

24 November 2009

Purpose of report

- 1 To seek approval for the method used to prioritise appropriate residential areas for mandatory 20mph zones on road safety grounds and for the associated updated prioritised list.

Main report

- 2 This report outlines the methods that were used to identify the areas for the current priority list, based on the collision rate of each zone, collision type and the pedestrian generators within each zone. The current priority list was approved by Council in April 2004 using collision records up to August 2003; therefore it is now necessary to update the collision data to produce a new list. The top 50 schemes from this original priority list have been introduced over the last 4 years.
- 3 Approximately half of the residential areas in Edinburgh are now within a 20mph zone, which has been installed through either the residential or schools programme and it is now considered necessary to develop a priority system which is calculated by collisions alone to ensure funding is targeted at those residential areas where road safety benefits will be maximised.
- 4 A report titled "20 mph Zones – Update Report" was submitted to the Transport Infrastructure and Environment Committee on 28 July 2009. The report outlined the effectiveness of 20mph zones installed in Edinburgh in achieving collision and speed reductions. It concluded that the installation of vertical traffic calming features has improved road safety through targeted use in a number of residential areas across the City and that the current road safety programme should continue.
- 5 The definition of residential areas will remain as housing areas enclosed by major development breaks or by one or more main traffic/public transport routes. It is considered necessary to maintain a network of 30mph roads for the safe and efficient movement of traffic around the City and it is acknowledged that streets included within the proposed zone may change as consultation progresses.

- 6 The 20mph Zone prioritisation process detailed in the 2004 report is shown in Appendix 1 in the form of a flow chart. The priority list was calculated as follows:
- a) Collision rates for each zone were calculated;
 - b) Road lengths within a zone were measured which allowed the cost of a scheme to be estimated;
 - b) The first year rate of return (FYRR) was calculated based on predicted collision savings and the cost of the scheme;
 - b) The FYRR was then adjusted to reflect existing traffic calming in the zone, the collision type and potential pedestrian generators (e.g. schools, community centres, shops, etc); and
 - e) The priority list was produced by sorting the adjusted FYRR in a descending order.
- 7 Only individual areas with 3 or more collisions have been included within the calculation of the priority list. The length of streets and the type of road surface (asphalt or setts) is then measured to determine the estimated cost of the traffic calming features. The potential collision reductions are then calculated based on an estimated 50% collision saving in a 20mph zone. The costs of the collisions saved are then divided by the traffic calming scheme cost to give an economic indicator (FYRR). The zones are then ranked by the highest FYRR.
- 8 Appendix 2 details the updated Priority List i.e. those residential areas with 3 or more collisions ranked by FYRR.
- 9 The Council also receives requests for traffic calming that relate to the perceived problems associated with intrusive traffic, but for which there is no evidence that the traffic is causing collisions. Currently no process, programme or budget exists to deal with requests that fall within this environmental category.
- 10 As this problem has a direct impact on local communities, it would be beneficial if requests were considered at a local neighbourhood level. Traffic calming could be one of a package of traffic management measures, including one way streets and road closures used to tackle issues of intrusive traffic. This is a network management issue and should be progressed by the Director of Services for Communities in conjunction with the Neighbourhood Partnerships through their Neighbourhood Environmental Programme (NEP), so as to address the requests for traffic calming that will not be considered under the current road safety programme.

Financial Implications

- 11 City Development Department has an annual capital budget of £200,000 for the installation of 20mph zones on road safety grounds. The current annual NEP budget is £100,000. There is currently no clearly identified capital budget within either City Development or Services for Communities Departments for 20mph zones identified on environmental grounds

Environmental Impact

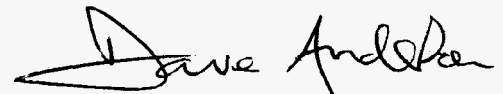
- 12 There are no adverse environmental impacts arising from this report.

Equalities Impact

- 13 There are no adverse impacts in relation to race, disability, gender, age, sexual orientation or religion/belief arising from the proposals contained in this report.

Recommendations

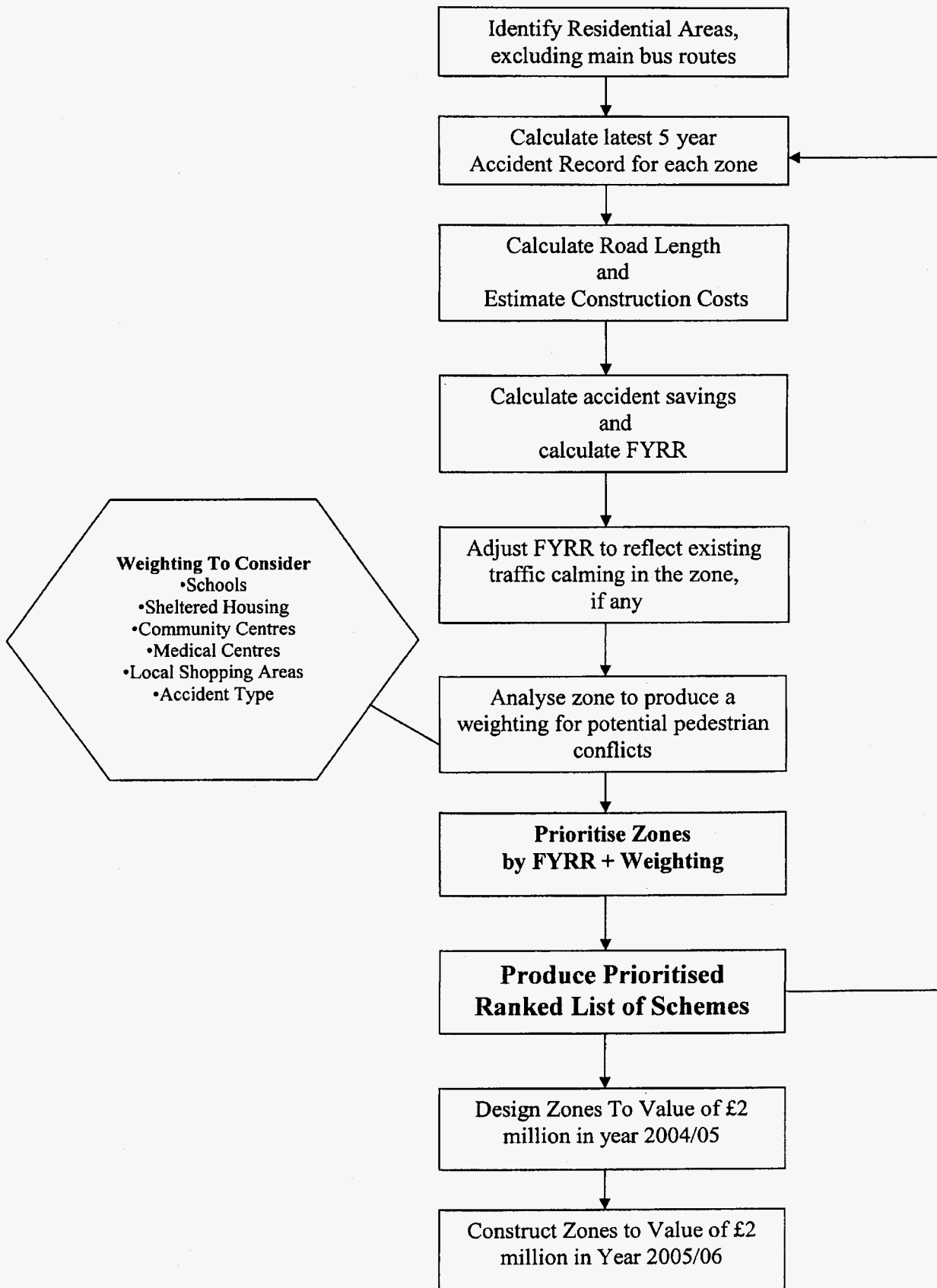
- 14
- a) To approve the updated collision based method for the introduction of mandatory 20mph zones.
 - a) To approve the updated priority list for the further introduction of mandatory 20mph zones.
 - b) To note that a report will be submitted annually to the TIE Committee summarising the post construction monitoring of 20mph zones as their 3 year after collision period is completed.
 - c) To refer the report to Neighbourhood Partnerships for information and potential funding from their NEP budget



Dave Anderson
Director of City Development

Appendices	1. 2004 Report : 20mph Zone Prioritisation Process Flow chart 2. Updated Priority List 2010/2011 onwards.
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Wards affected	All wards
Single Outcome Agreement	National Outcome 9. The installation of traffic calming helps reduce road danger risks and the number of casualties for road traffic collision is reduced
Background Papers	Report to the Executive 13 January 2004 "Priority List for the Introduction of 20mph Zones Residential Areas." Report to the Transport Infrastructure and Environment Committee 28 July 2009 "20mph Zones – Update Report"

Appendix 1 2004 Report: 20 mph Zone Prioritisation Process



Appendix 2:
Priority List for Residential 20mph Zones

Area Name	Ranking	Total No of Collisions	Estimated Cost of Features £	FYRR	Estimated Cumulative Cost £	Streets Included
Newbridge	1	7	25,340	172%	25,340	Old Liston Road, Bridge Street, Riverside, Parkside
North Fort Street	2	5	29,270	106%	54,610	Nicolfield, Dudley Bank, North Fort St, Bathfield, North Hillhousefield, Lindsay Road, Anchorfield
Deanpark, Balerno	3	3	17,955	104%	72,565	Deanpark Avenue, Deanpark Court, Deanpark Brae, Deanpark Grove, Main St, Ladycroft
Viewcraig	4	4	26,390	94%	98,955	Viewcraig St, Viewcraig Gardens, Dumbiedykes Road
Niddrie Mill	5	3	19,898	94%	118,853	Niddrie Mill Drive, Niddrie Mill Crescent, Niddrie Mill Place, Niddrie Mill Grove, Niddrie Mill Terrace, Niddrie Mill Avenue
Hawkhill	6	5	36,640	80%	157,493	Albion Road, Albion Terrace, Albion Place, Hawkhill Avenue, Lochend Park, St Clair St, St Clair Place, St Clair Road, St Clair Avenue, Albion Gardens, Hawkhill Court
Hermitage	7	5	42,283	74%	199,755	Greenbank Place, Braikburn Crescent, Braik Crescent, Comiston Terr, Comiston Place, Braik Road, Hermitage Gardens, Cluny Dr, Corrennie Dr, Corrennie Gardens
West End - Rutland Street	8	3	28,875	66%	228,630	Rutland St, Rutland Sq, Canning St, Rutland Court Lane, Canning St Lane, Atholl Cres, Atholl Cres Lane
Sciennes	9	7	73,355	59%	301,985	Meadow Place, Marchmont Cres, Warrender Park Road, Roseneath Place, Argyle Terr, Argyle Pk Terr, Roseneath Terr, Roseneath Road, Marchmont Cres (2), Chalmers Cres, Palmerston Road, Hatton Place, Mansionhouse Road, Lauder Road, Tantallon Place, St Catherine's Place, Sciennes, Sciennes House Place, Sciennes Gardens, Sciennes Hill Place, Melville Terr, Moncrieff Terr, Gladstone Terr
Morningside Park, Morningside	10	4	46,148	54%	348,133	Millar Place, Millar Place Lane, Morningside Terr, Morningside Pk, Morningside Place, Stable Lane, Tipperlinn Road, Merchiston Bank Gardens, Merchiston Bank Ave, Albert Terr, Abbotsford Cres, Abbotsford Pk
Spylaw Road, Merchiston	11	7	89,180	49%	437,313	Spylaw Road, Mid Gillsland Road, Gillsland Road, South Etrick Road, Etrick Road, Etrick Loan, Napier Loan, St Teresa Place, Napier Road, Merchiston Cres, West Castle Road, Mardale Cres, Rochester Terr, East Castle Road, Merchiston Gardens, Blantyre Terr, Merchiston Place, Etrick Gr, Merchiston Ave, Merchiston Pk, Polwarth Terr
Arboretum, Inverleith	12	8	118,073	42%	555,385	Arboretum Place, Arboretum Terr, Glenogle Road, St Bernards Row, Malta Terr, Liddesdale Place, Etrickdale Place, Bell Place, Kemp Place, Avondale Place, Teviotdale Place, Dunrobin Place, Balmoral Place, Collins Place, Colville Place, Rintoul Place, Hugh Millar Place, Reid Terr, Inverleith Terrace
The Jewel	13	3	48,650	38%	604,035	Corbie Wynd, Corbieshot, Vexhim Pk, Hosie Rigg, Parrot Shot, North Greens, The Jewel (Part)
Maritime Street, North Leith	14	3	48,688	38%	652,723	Maritime St, Maritime Lane, Carpet Lane, Broad Wynd, Waters Close, Burgess St, Water St, Tolbooth Wynd, Queen Charlotte Lane, Seaport St, Shore Place, Chapel Lane
Blackford Road	15	3	53,488	35%	706,210	Blackford Road, Hope Terr, Whitehouse Loan, Monkwood Court, Clinton Road, Church Hill, Pitsligo Road
Redford, Colinton	16	3	60,883	31%	767,093	Dreghorn Loan, West Garth Ave, Thorburn Road, Redford Dr, Redford Ave, Redford Loan, Thorburn Gr, Redford Cres, Redford Terr, Laverlockdale Cres
Dean Path, Ravelston	17	4	83,910	30%	851,003	Belford Road, Belford Mews, Bells Brae, Damside, Dean Path, Douglas Garden Mews, Hawthornbank Lane (Prospectively Public), Hawthornbank Lane (Public), Miller Row, Ravelston Terr, Sunbury Mews, Sunbury Place, Sunbury St, Upper Damside (Private), Upper Damside (Public), West Mill Lane, Backdean, Belgrave Mews
New Town - India Street	18	7	149,085	29%	1,000,088	India St, Jamaica St (W), Jamaica St (E), Jamaica St North Lane, Jamaica St South Lane, Royal Circus, Circus Gardens, Great Stuart St, Moray Place, Forres St, Damaway St, Wemys Place Mews, Wemys Place, Doune Terr, Gloucester Place, Gloucester St, India Place, Mackenzie Place, Gloucester Lane, Gloucester Square, Harlot Row, Wemyss Place
West Mains	19	3	73,080	26%	1,073,168	Watertoun Road, Macdowall Road, Ross Gardens, Savile Place, West Savile Gardens, West Savile Terr, West Powburn, Langton Road, Ross Place, Rankin Dr, Lussielaw Road, East Champanyale, Rankin Road, Rankin Ave
Newtown - Drummond Place	20	8	196,238	25%	1,269,405	Dublin St, Dublin St Lane South, York Lane, Albany St, Albany St Lane, Albany Lane, Dublin St Lane North, Broughton Market, Barony St, Abercromby Place, Nelson St, Northumberland St, Northumberland St NE Lane, Northumberland SE Lane, Dublin Meuse, Northumberland Place Lane, Drummond Place, Great King St, Cumberland St, NE Cumberland St Lane, SE Cumberland St Lane, Royal Cres, Dundonald St, Scotland St, West Scotland St Lane, Summer Bank, London St, Nelson Place, Old Broughton, New Broughton
Calton	21	3	79,675	23%	1,349,080	Royal Terr, Calton Terr, Regent Terr, Calton Terr Lane, Calton Terr Mews, Calton Terr Brae
Scotstoun, Queensferry	22	3	83,843	22%	1,432,923	Scotstoun Pk, South Scotstoun, Scotstoun Green, Provost Millne Grove, Sommerville Gardens, Wellhead Close, Atheling Grove, Moubray Grove, Scotstoun Avenue

**Appendix 2:
Priority List for Residential 20mph Zones**

Prestonfield	23	3	87,920	21%	1,520,843	Marchhall Cres, Marchhall Road, Priestfield Road North, Priestfield Road, Kilmaurs Terr, Kilmaurs Road, Kirkhill Road, Kirkhill Gardens, Kirkhill Terr, Priestfield Grove, Kirkhill Dr, Prestonfield Terr, Priestfield Cres, Priestfield Ave, Priestfield Gardens, Kings Meadow, Marchhall Place, Prestonfield Bank, Prestonfield Terrace, Prestonfield Avenue
Greenbank Drive	24	3	89,826	21%	1,610,670	Wester Stell, The Steils, Mid Steils, Easter Stell, South Stell, Rattray Dr, Littlejohn Wynd, Littlejohn Ave, Rattray Way, Rattray Loan, Rattray Grove, Littlejohn Road, Wester Hill, Syme Place, Morham Gardens, Morham Pk, Syme Cres, Morham Gait, Morham Lea, Syme Rigg, Greenbank Dr
Hillview Road, Corstorphine	25	3	90,318	21%	1,700,988	Barony Terr, Corstorphine Bank Ave, Corstorphine Bank Dr, Corstorphine Bank Terr, Forrester Road, Hillview Cres, Hillview Dr, Hillview Terr, Hillview Road, St Ninians Dr, St Ninians Road, Templeland Grove, Templeland Road
Broomhall, Corstorphine (excluding collisions on recently calmed route through area)	26	4	126,735	20%	1,827,723	Broomhall Dr, Broomhall Terr, Broomhall Road, Broomhall Place, Broomhall Bank, Broomhall Cres, Broomhall Pk, Broomhall Loan, Broomhall Gardens, Ladywell Ave, Ladywell Gardens, Dovecot Road, Castle Ave, Roull Road, Roull Grove, Roull Place, Ladymeadow, Broompark Road, Broompark Cres, Broomhall Ave, Broombank Terr, Broomburn Grove, Broomfield Cres, Broomside Terr, Broomfield Terr, Kirklands
Joppa	27	5	167,073	19%	1,994,795	St Mary's Place, St Mary's Place Lane, Brunstane Road, Joppa Terr, Joppa Grove, Joppa Gardens, Dalkeith St, Morton St, Woodside Terr, Coillesdene Dr, Coillesdene Grove, Coillesdene Ave, Coillesdene Cres, Coillesdene Terr, Coillesdene Gardens, Milton Dr, Coillesdene Loan, Milton Grove, Milton Terr, Seaview Cres, Eastfield Gardens, Windsor Place, Mount Lodge Place, St Marks Lane, Hope Lane North, St Marks place, Argyle Cres, Brunstane Grds, Brunstane Grds News, Brunstane Road (treated), Seaview Crescent
Dean Park, Comely Bank	28	4	133,978	19%	2,128,773	Bedford Court, Bedford St, Cheyne St, Comely Bank Place, Comely Bank Place Mews, Comely Bank Row, Carlton St, Dean St, Dean Park Mews, Dean Park St, Leamonth Garden Mews, Raeburn St, Dean Park Cres, St Bernards Cres, Leslie Place, Danube St, Ann St, Upper Dean Terr, Dean Terr
Grange	29	3	137,463	14%	2,266,235	Dick Place, Wyvern Park, Mansionhouse Road, Lauder Road, Cumlin Place, Seton Place, Findhorn Place, Dalrymple Cres, Lauder Loan, Grange Loan, Grange Cres, Grange Terr, Fountainhall Road, St Thomas Road, St Alban's Road, West Relugas Road, Relugas Road, South Lauder Road, Relugas Gardens, Grange Loan Gardens, Blackford Bank, Relugas Place, West Grange Gardens

126 2,266,235

In the above estimate it has been assumed that 20% of asphalt humps would require the carriageway underneath to be patched.
For the settled features cost allows for surfacing 1 metre either side of feature.
The First Year Rate of Return is based on the 2007 average injury collision cost.
Collision records to the end of March 2009 were used.