

Pedestrian Crossing Prioritisation Process

Transport Infrastructure and Environment Committee

28 July 2009

Purpose of report

- 1 Following the submission of a report to the Transport Infrastructure and Environment Committee on 10 February 2009 titled "Pedestrian Crossing Prioritisation Process", the Director of City Development was asked for a report detailing a new prioritisation process. The new process looks to establish an enhanced means of assessing pedestrian crossings, so that crossings are implemented on the justification that they make it easier for all pedestrian groups to cross.
- 2 The new process should look to reduce the number of locations on the pedestrian crossing priority list to locations that can safely accommodate a new crossing and can demonstrate a clear and tangible need. This need will be based upon a re-defined set of criteria.

Main report

- 3 A large number of requests for pedestrian crossings throughout the City are received each year from elected representatives, members of the public, community groups, etc. To date there have been requests for crossings at over 260 locations. It is acknowledged that it will take many decades for funding to be made available for all the locations on the list.
- 4 The current prioritisation process involves:
 - (a) surveys of pedestrians and vehicles at a given site, thus giving a base PV^2 value (a nationally recognised unit of measuring passing vehicles and pedestrians);
 - (b) investigations into the number and severity of pedestrian injury accidents for the preceding three years;
 - (c) assessments of 'environmental factors' in the vicinity of the proposed crossing occurred, to establish the potential demand to key trip-attractors e.g. schools, play areas and hospitals.

- 5 The development of a new and improved site assessment and prioritisation process will help to refine those crossings held within the new priority list. It will also look to reduce the resources used to assess and prioritise crossing requests. Appendix 1 (Pedestrian crossing assessment process) of this report contains a flow chart illustrating how this could be achieved.
- 6 The base PV^2 value has proved a viable starting point from which to prioritise requests, but it counts every pedestrian as having the same requirements, irrespective of age or disability. Feedback received from the general public, disability and community groups, and schools, clearly indicates that vulnerable pedestrian groups, including those under 16, those over 65 years of age, and people with disabilities, feel their road safety needs are not being met by the previous assessment process.
- 7 A new pedestrian crossing assessment and prioritising process is therefore proposed that builds upon the base PV^2 value, with adjustment factors (see Appendix 2 - Indicative layout of assessment results) applied to take account for the additional factors of:
 - (a) vulnerable user groups (under 16, over 65 and people with disabilities)
 - (b) the composition of vehicular traffic (higher levels of buses and HGVs impact upon the way people perceive risk in crossing roads, and the gaps required in traffic to facilitate 'safe' crossing);
 - (c) carriageway conditions: wide roads & high vehicle speeds that make crossing difficult; and
 - (d) the number of trip-attractors e.g. schools, surgeries, shops etc. within close proximity of the proposed location.
- 8 New thresholds will be set so establishing a particular value an assessment would need to achieve in order to be considered for a pedestrian crossing. The adjusted PV^2 value will determine the type of crossing facility that would be most suitable. A location with an adjusted PV^2 value of 1 or higher would be considered for a Puffin crossing. Locations with a value of less than 1 would be considered for treatment from the following package of measures:
 - Zebra crossings;
 - Refuge islands;
 - Build outs; or
 - Do nothing.
- 9 Crossing types however, will be site-specific and will depend on detailed site assessment.
- 10 New thresholds will also ensure consistency within the new assessment process, and thus help to better allocate limited resources. New thresholds are recommended in Appendix 1. It must be understood however that these are not definitive, and the crossing type will depend upon a detailed site-by-site investigation, due to varying environmental circumstances. Examples of assessment results can be found in Appendix 2.

- 11 Monitoring and review of the new pedestrian crossing assessment procedure will be undertaken annually, as part of reporting upon the 3 year rolling Capital Investment Programme to the Transport Infrastructure and Environment Committee.
- 12 The new assessment will also help ensure that requests made at locations with poor forward visibility, such as blind corners or brows of hills, are rejected at an early stage. Requests made on streets with setted surfacing, have wider impacts on streetscape that will necessitate wider discussion around streetscape issues.
- 13 Potential crossing locations will be re-assessed following approval of the new assessment process. This will result in the production of a new pedestrian crossing priority list. Those locations towards the top of the list will be subject to further site-investigation. This list will then be discussed with Neighbourhood Partnerships to allow local communities to have an input into the consultation process. The ultimate decision for the introduction of a crossing will be taken by the Transport Infrastructure and Environment Committee
- 14 A rolling 3 year pedestrian crossing Capital Investment Programme will be developed and reported upon annually to the Transport Infrastructure and Environment Committee

Financial Implications

- 15 It currently costs approximately £450 per location for a PV² assessment to be carried out at a proposed crossing location on the existing priority list. Funding would need to be made available from the annual capital budget for pedestrian crossings, currently set up to £200,000 per year, for sites with a high PV² value to be reassessed once a new prioritisation process has been agreed.

Environmental Impact

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

Equalities Impact

- 17 The new pedestrian crossing prioritisation process will take into account the road safety needs of all users, especially with regard to their age and ability.

Recommendations

- 18 To agree the new pedestrian crossing assessment process, that gives greater consideration of vulnerable users, whilst reducing the total number of locations to be assessed.
- 19 To note that the Council will consult with local community groups prior to finalisation of the priority list.
- 20 To note that there will be a report to the Transport Infrastructure and Environment Committee in the autumn 2009, which will recommend a 3 year pedestrian crossing Capital Investment Programme, and that this will be reviewed and reported upon annually.

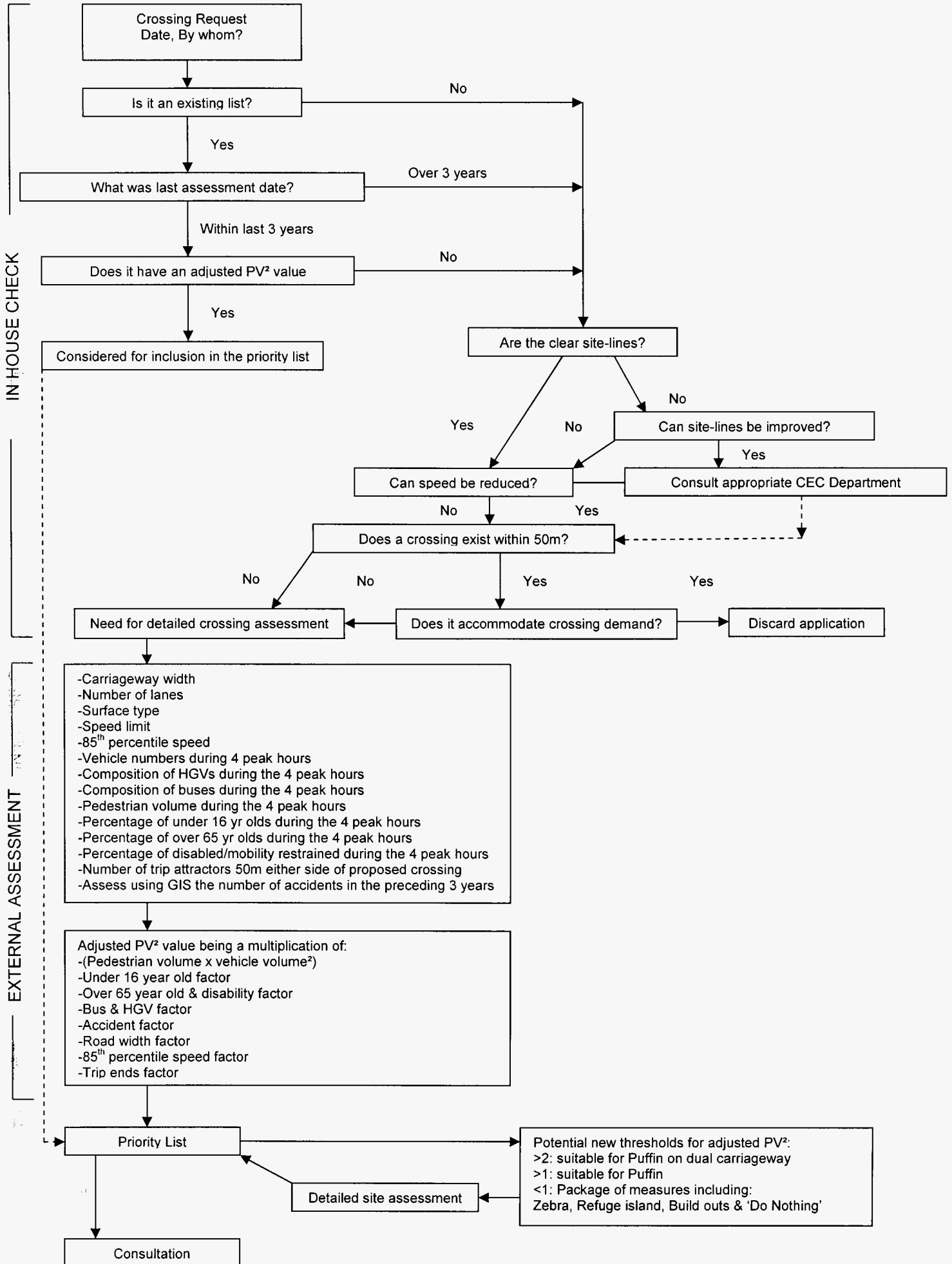


Dave Anderson
Director of City Development

Appendices	Appendix 1: Pedestrian Crossing Assessment Process Appendix 2: Indicative layout of assessment results
Contact/tel/Email	Steven Murrell 0131 469 3699 steven.murrell@edinburgh.gov.uk
Wards affected	All
Single Outcome Agreement	Supports National Outcome 9 – We live our lives safe from crime, disorder and danger.
Background Papers	Linked to Local Outcome – The number of casualties resulting from road traffic collisions is reduced. Report to the Transport Infrastructure and Environment Committee 10 February 2009 titled “Pedestrian Crossing Prioritisation Process”.

Pedestrian Crossing Prioritisation Process

Appendix 1 – Pedestrian Crossing Assessment Process



PEDESTRIAN CROSSING PRIORITISATION PROCESS
Appendix 2 – Indicative layout of assessment results

LOCATION	PV ² From previous pedestrian crossing assessments	U- Vulnerable Users		V- Vehicle Composition		Pedestrian Accidents (1/1/06-31/12/08)			A - Accident Factor (No. of accidents /10)	W - Road Width Factor			S - 85th Percentile Speed Factor (mph)					T- Trip Ends		Adjusted PV ² PV ² *U*V*A*W*S*T	Comment ¹	
		Children >15% (% plus 100)/115)	Elderly & Disabled >15% (% plus 100)/115)	Buses & coaches >10% (2)	HGVs >10% (2.3)	Slight	Serious	Fatal		Road width (m)	Road width ~7.3m (1)	Actual width/7.3	<30 (1)	30-35 (1.1)	36-40 (1.2)	41-45 (1.3)	>46 (1.4)	Serves 2 trip-ends i.e. school, shops, leisure, community (1.25)	Serves 3 trip-ends i.e. school, shops, leisure, community (1.4)			
1	0.723	1	1	1	1	1	0	0	1.1	9.1	1	1.2	1	1.1	1	1	1	1	1	1	1.091	Site to be investigated for a Puffin crossing
2	0.393	1.26	1	1	1	2	0	0	1.2	8.1	1	1.1	1	1.1	1	1	1	1	1	1	0.726	Private drives restrict crossing options: refuge island
3	0.088	1	1	2	1	2	1	0	1.3	12.8	1	1.8	1	1	1	1	1	1	1.4	1	0.562	Refuge island, due to little demand/trip-attractors

NOTE: examples are for illustration purposes only and do not relate to specific sites.

¹ Comment stems from internal site-visits and observations made at locations