

Agenda Item: 3700/2016

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Report to: the Chief Officer (Highways and Transportation)

Date: 21 June 2016

Subject: Design and Cost Report for the Pedestrian Crossing Review 2016

**Capital Scheme Number: Parent Scheme 99609** 

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

## Summary of main issues

- 1 The aim of this report is to obtain the Chief Officer's Approval in Principle for:
  - the new framework for assessing pedestrian crossing requests,
  - the recommendations of this year's pedestrian Crossing Review, conducted in accordance with the new framework; and
  - implementation for schemes to be progressed in the annual programme.
- The proposals contained in this report contribute to the Leeds ambition to be the Best City and the Best Council, in particular Objective 1: Supporting Communities and Tackling Poverty, as well as to two breakthrough projects the Best City to Grow Old in and a Child Friendly City. By minimising some of the negative effects of traffic we ensure that Leeds 'helps all its residents benefit from the effects of the city's economic growth' by improving access to local facilities and new developments.
- The report presents the revised framework and makes recommendations for five sites to be provided with formal pedestrian crossing facilities. The report also includes recommendations for sites which do not meet the criteria for the provision of a formal crossing, but where crossing opportunities for pedestrians can be improved by the introduction of some informal measures and would

- benefit the locality. It also highlights opportunities for improving pedestrian crossing facilities as part of current developments.
- 4 Site recommendations have been prepared using a revised assessment framework, which introduces a score based assessment process to allow to quantify potential benefits and impacts of a crossing facility on local businesses and residents as part of the overall assessment process.
- This report then seeks approval to agree and authorise the preparation and delivery of a programme of works identified by the Annual Pedestrian Crossing Review and (unless otherwise indicated) funded from the Local Transport Plan from the 2016-17 financial year.

#### 6 Recommendations

The Chief Officer (Highways and Transportation) is requested to:

- i) note the contents and recommendations of this report and the procedures carried out in respect of conducting the annual pedestrian crossing review;
- ii) endorse the framework used to inform recommendations contained in this report to be used for future assessments
- review and approve the recommendations of the Annual Pedestrian Crossing Review as the basis for the 2016/17 programme for introducing new pedestrian crossings; and give authority to commence the detailed design, consultation and implementation of the schemes described in Section 3.5 of the report and Appendix 4, up to the value of £250,000;
- iii) give authority to incur expenditure of £250,000 works costs inclusive of all fees and legal costs, which will fully funded from the Local Transport Policy Capital Programme.
- iv) give authority to display a notice on site under the provisions of Section 23 of the Roads Traffic Regulation Act 1984 in order to inform the public of the proposed pedestrians crossings; and
- vi) give authority to request the City Solicitor to draft and advertise a Notice under the provisions of Section 90C of the Highways Act 1980 for the implementation of speed tables to compliment some of the proposed pedestrian crossings; and
- vii) to receive such other further reports as may be needed to address any objections received to advertised Notices or other matters arising from the detailed scheme proposals; and
- viii) agree the recommendations in respect of the provision of externally funded crossing facilities.

## 1 Purpose of this report

- 1.1 The purpose of the report is twofold to consider and approve the revised framework for the consideration of requests for pedestrian crossing facilities and, should the framework be approved, to consider recommendations of the Annual Pedestrian Crossing 2015-16, prepared in accordance with the new framework.
- 1.2 This report also seeks approval to agree and authorise the preparation and delivery of these recommended works from the Local Transport Package during the year 2016-2017.

# 2 Background information

- 2.1 During the course of each year requests for the provision of new pedestrian crossings are received from members of the public and elected members. In order to prepare recommendations for a programme for the installation of new crossings, all such requests are investigated and the results collated and analysed. The process was first approved by the former Highways and Transportation Committee in 1996, following the publication of LTN 1/95 "The assessment of pedestrian crossings".
- 2.2 A crossing assessment framework was developed and approved in 2002, and revised in 2006 (Appendix 2). In line with the revised guidance for pedestrian crossing LTN 1/95, the new assessment principles were incorporated in multi-criteria framework. At the time established PV² formula thresholds for referencing traffic and pedestrian flows of the former policy were retained as a benchmark for site selection. As part of the process site assessments were also carried out and site characteristics noted, together with the presence of vulnerable pedestrians (children and older people) and road safety history. Since this time the PV² has remained an important part of determining the final recommendations in crossing reviews.
- 2.3 In recent years, however, the PV<sup>2</sup> value has played a reduced part in the final annual review recommendations as other factors such as the presence of vulnerable pedestrians and relative difficulty of crossing have carried greater weight in the evaluation and decisions.

#### 3 Main issues

3.1 In line with the evolving assessment process, a revised framework for the assessment of requests for pedestrian crossings has been developed. The framework continues to reflect the original recommendations of LTN 1/95 (which remains the DfT guidance), in terms of the type of facility that may be appropriate for local circumstances in terms of road character and pedestrian movement, but moves away from the numerical criteria based on the PV<sup>2</sup>. Instead, it introduces a score-based system to the multi-criteria framework, building on a review of practice elsewhere and long running experience in assessing requests. The revised process establishes thresholds for the introduction of a formal facility based on community benefit, road safety, observed difficulty of crossing (especially as experienced by children, older people and disabled people) and benefits for the locality as well as any potential disbenefits.

- The revised framework (see Appendix 1) continues to note the difficulty of crossing and pedestrian demand based on the PV² surveys, while looking to quantify the expected benefits and impacts of the provision of a formal facility on the local neighbourhood, residents and businesses and road safety, thus introducing the element of a feasibility assessment early on in the process. The thresholds have been carefully benchmarked against previous assessments which has established a reference score of 8 as most effectively indicating the conditions and circumstance where the provision of a formal crossing facility should be considered. The recommendations concerning the technical assessment as to what type of facility may be most appropriate for a particular setting remain unchanged, and are based on the agreed guidelines (revised in August 2008 and summarised in Appendix 3).
- 3.3 This review has been conducted in line with the revised framework (Appendix 1) which takes account of the range of sites and circumstances where crossings are requested, i.e.
  - The ease with which a pedestrian (including children, older people and disabled people) can currently cross the road;
- Whether a crossing site is on a pedestrian desire line and would be used regularly;
- Potential benefits to the local community and businesses in overcoming severance
- Potential impacts on residents and businesses, both positive and negative
- Potential impacts on road safety and traffic speeds; and
- Other relevant factors such as presence of bus stops, frontages, parking, junctions and other highway features, including proximity of existing formal and informal crossing points
- 3.4 The results of the assessment and recommendations are summarised in Appendix 4. The findings of this year's review have formed the trial for the new framework and the results have been found to equate closely to decisions from previous reviews and validated the move away from reliance on the PV<sup>2</sup> criteria.
- Following the review process, crossing facilities are recommended at the following sites, which will form the basis for the Local Transport Plan funded delivery programme.

#### **Site Location**

#### Information and Justification

 Harehills Lane near the Hovinghams, Gipton and Harehills This location is close to Hovingham Primary School; consequently the numbers of vulnerable pedestrians at the start and end of the school day are high. Harehills Lane continues to be one of the top Lengths for Concern due to high vehicular and pedestrian movements, while the number of junctions present and on –street parking make it more difficult to judge gaps in traffic and effectively mask younger pedestrians. The provision of a signal controlled crossing would help facilitate walking journeys to schools and help overcome community severance whilst the proposals to reduce traffic movements in and out of adjacent junctions will further help reduce the accident potential.

Recommended: Pelican

2) Ninelands Lane, Garforth

This location is close to the Ninelands Primary School and the Linesway traffic free cycling and walking route to Kippax and Allerton Bywater. Ninelands Lane is a local distributor with the speed limit of 30 mph amidst a 20 mph residential area and lacks consistent pedestrian provision on the eastern side. Currently pedestrians exploit a chicane feature to cross the road but the feature is now considered to be inadequate. Local ward members have agreed to partially fund a Zebra crossing here.

#### Recommended: Zebra

3) Commercial Street, Morley

This location is very close to assisted living accommodation and the Morley Market. Commercial Street runs through the heart of Morley Town Centre, parallel to the pedestrianized Queen Street and gives access to on and off street parking. Consequently, although the absolute numbers of vehicles are relatively low, there is a steady stream of slow moving traffic and vehicles manoeuvring in and out of the parking places, coupled with a four arm junction and a chicane arrangement that give some difficulty of crossing and delay for pedestrians. This location also has exceptionally high numbers of elderly pedestrians who find it difficult to judge and exploit gaps in traffic and an elderly person received a serious injury as the result of a road traffic collision within the last five years. A Zebra crossing at this location would complement the Morley (Public Transport) Hub.

Recommend: Zebra

4) Queenswood Drive, Headingley

The location of this proposed crossing lies on a very definitive desire line linking the Headingley Railway Station and the Beckett Park University and between inbound and outbound bus stops. The site is used by commuters, students and parents with schoolchildren. At pedestrian peak time traffic queues across the junction which makes it more difficult to exploit any gaps and also has a masking effect. Outside of the peak the vehicular flows form a barrier.

**Recommended**: Zebra on the existing speed table

5 Scott Hall Road (Southlands Avenue/ Carr Manor Parade), Chapel Allerton Scott Hall Road is a busy A class distributor road, carrying a considerable volume of traffic throughout the day. This length is fronted by mainly residential properties and is used as part of a route to school. The school is due to expand, which will bring many more children from across Scott hall Road to its catchment.

**Recommended**: Pelican as part of Carr Manor School expansion programme.

**Note:** Where a Pelican/Toucan is recommended, this may include any signal controlled crossing as appropriate.

3.6 The following sites have been investigated and, whilst they do not meet the criteria for a formal crossing, have other forms of improvement recommended (in order of priority):

#### Site Location

#### Information and Justification

6) Grove Lane, Headingley

This is a longstanding request to improve pedestrian access across Grove Lane (a Class B local distributor) in a location that is close to bus stops, the Meanwood Valley Trail and a fairly recent housing development. Traffic speeds and volumes are a barrier to pedestrian movements and, whereas relatively low pedestrian demand does not justify a formal crossing, a raised table would have beneficial effects on speeds and complement the other features along this road.

**Recommended**: Subject to feasibility, provision of a speed table to aid pedestrian movements.

7) Styebank Lane, Rothwell

Styebank Lane/ Haigh Road junction is a meeting point of the two local distributors which coincide with pedestrian corridors. The site has mainly residential frontages, bus stops and a cemetery. Pedestrian and vehicular movements are relatively low; however, excessive speeds (37 mph for the 85th percentile) and added complexity of vehicular movements add to the difficulty of crossing and contribute to vehicular collisions, where failure to give way has often been a factor. There are two refuges present at the junction, the addition of two more on the remaining arms will both improve crossing opportunities and aid road safety by reducing speeds.

Recommended: A pedestrian refuge island

8) Stainburn Drive/ Harrogate Road, Moortown The junction of Stainburn Drive and Harrogate Road has an excessive radius that is detrimental to pedestrian movements along the desire line which includes the shops on Harrogate Road and a local primary school

**Recommended**: Minor junction re-alignment to reduce crossing distances.

9) Nursery Lane, Alwoodley

This location is close to the rear entrance to the Allerton High School, with very high numbers of child pedestrians crossing at the start and end of the school day and relatively low numbers of vehicles. There is currently an informal crossing and limited traffic calming near the entrance. The area around the Nursery Lane is to have a new 20 mph speed limit introduced in the next financial year and an improved pedestrian facility should be considered as part of the scheme.

**Recommended**: A humped informal crossing point subject to feasibility as part of the new 20 mph speed limit.

10) Calverley Road, Oulton

Calverley Road is a busy class A distributor road. A crossing has been requested close to a busy roundabout junction with Leeds Road and near a popular bakery/ sandwich shop. Nearest informal facilities are a refuge near North Lane and a small splitter island at the roundabout with no provision of disabled pedestrians.

**Recommended**: Improvements to the splitter island to create a refuge

11) Bradford Road, adj. West Busk Lane, Otley,

Bradford Road is a local distributor linking Menston and Otley. A series of refuges is present in the residential area and the provision of an additional refuge near the junction with West Busk Lane (a bus route) will aid pedestrian movements here.

Recommended: A pedestrian refuge island

12) Westerton Road, Ardsley Westerton Road is a light-to-medium-trafficked local distributor and a crossing was requested near the junction with Haigh Moor Road. The junction has a wide radius which enables vehicles to turn in and out quickly, thus adding to the difficulty in judging traffic movements. Westerton Road is fronted by residential properties, a Post Office/newsagent and convenience store. There is high demand throughout the day for on street parking from passing trade and residents; parked vehicles mask pedestrians looking to cross, especially children, who form a significant proportion of pedestrians here. As the demand is relatively low, a formal crossing is not justified but an informal measure will improve the safety of those crossing. Two child pedestrians have been injured in collisions in the last five years

**Recommended**: Junction re-alignment to aid pedestrian visibility and reduce crossing distance

13) Park Lane, Roundhay

This location is at the junction of two relatively busy local distributors forming a wide space with complex traffic movements and no pedestrian facilities, which is detrimental for pedestrians. A refuge, as well as aiding pedestrians wanting to cross, would have an advantage in reducing excessive vehicular speeds (39 mph for the 85<sup>th</sup> percentile in a 30 mph limit).

Recommended: A pedestrian refuge island

14) Carlton Lane/ Jumbles Lane, Lofthouse

This location has low traffic flows but the junction design and intermittent pedestrian facilities result in a fairly hostile pedestrian environment. The restriction on HGV movements creates an opportunity to narrow the mouth of the junction and provide an informal

pedestrian facility.

#### Recommended: Minor junction adjustment

- 3.7 It is intended that those crossings in Section 3.5 and 3.6 will from part of the 2016-17 Integrated Transport Capital programme.
- A number of other locations submitted for consideration as part of the Pedestrian Crossing Review coincide with planning applications and junction development schemes. These involve the length of King Lane where pedestrian facilities were requested at the junction with Stonegate Road and Leafield Grove, Moortown, and it is expected that pedestrian facilities will form part of the junction improvement schemes associated with ELOR.
- Long Thorpe Lane, Thorpe, is a potential site for a Zebra crossing funded as part of a current planning application. A raised Zebra would complement the present 20 mph speed limit if vehicular volumes are likely to rise (pedestrian, especially child pedestrian, movements, are already high).
- 3.10 Current proposals linked with developments include junction signalisation on the A58 Wetherby Road in Collingham, which should include pedestrian facilities. Other locations may come forward as part of development proposals throughout the year and these proposals will be considered on their own merits subject to provision of developer funding.

## 4 Corporate Considerations

#### 4.1 Consultation and Engagement

- 4.1.2 No external consultations have been undertaken in respect of this report at this stage. The majority of the schemes in the proposed programme have originated from local communities; either from Ward Members, local residents or businesses. At this stage the detail and prioritisation has been assembled with input from the relevant officers from the Highway and Transportation service disciplines, but as the works programme develops, consultation on individual projects will be carried out as appropriate.
- 4.1.3 Subject to approval of the programme, each individual scheme will be subject to full consultation with Ward Members, local residents and businesses (as appropriate) prior to final detailed scheme being progressed. This will include any relevant statutory process, such as 90C notice and where any objections are received, these will be formally reported to the Chief Officer (Highways and Transportation).

## 4.2 Equality and Diversity / Cohesion and Integration

4.2.1 The Pedestrian Crossing Review process has been subject to an Equality Impact Assessment (EqIA), which is attached as an appendix. The Assessment identified positive impacts of the provision of pedestrian crossing facilities on local people and communities generally but, in particular; on older and younger people, pregnant women, people with children and disabled people. It also highlighted the

- need to continue to consider the needs of these equality groups and to ensure the transparency of the decision making process.
- 4.2.2 If a site does not meet the criteria for formal crossing facilities, the lack of such facility may impact most on children and elderly/ disabled people. Elderly and disabled people may be the most affected as they will find it more difficult to walk and cross at an alternative location, and will require additional time to cross. Blind people may also find it difficult or lack confidence to cross a busy carriageway without a dedicated facility. Children are less likely to be able to judge the speed of traffic and child pedestrians form a significant proportion of those killed or seriously injured in traffic collisions (36% nationally). The presence of the above type of users is recorded and weighs on the consideration as to whether a formal facility should be provided.
- 4.2.3 The lack of appropriate facilities to cross a busy road may also have a greater impact on disadvantaged communities (and on women and children in particular), as they are less likely to have access to a car and are more likely to walk, thus being more exposed to the negative effects of traffic.
- 4.2.4 The recommendations of the EqIA include:
  - Having regard for road safety records and analysis;
  - Consultations on individual sites, which do meet the criteria for provision, at the detailed design stage in order to determine and overcome any potential negative impacts;
  - Further study to be undertaken at more marginal locations where there is a significant proportion of vulnerable pedestrians and where difficulty of crossing/ road safety history justifies this;
  - Continuing to note and give consideration to the needs of disabled people when recommending sites for the provision of a crossing.
  - Ensuring transparency in the decision making process.
  - 4.2.5 The needs of elderly people, children and disabled people were weighed in the assessment process in favour of providing a formal facility at several sites noted throughout the report.

#### 4.3 Council policies and City Priorities

4.3.1 The Best Council Plan 2015-20 outlines how Leeds City will achieve its ambition to become the Best City in the UK and Leeds City Council the best local authority. Reducing the number of people killed or seriously injured on the roads is a key performance indicator for achieving the Objective 1: Supporting Communities and Tackling Poverty. By providing safe pedestrian crossing facilities where justified, linking communities and facilities, the Pedestrian Crossing Review will contribute to this objective being achieved. As children are ranked amongst the most vulnerable road users, the provision of safe crossing facilities where there is

demand from children will help facilitate active modes of travel on journeys to school, and contribute to the following policy objectives:

- Leeds Education Challenge, which is part of the Child Friendly City objective,
- the Better Lives programme;
- "Public Health which is embedded and effectively delivering health protection and health improvement".
- 4.3.2 By providing safe pedestrian crossing facilities where justified, the Pedestrian Crossing Review will help achieve Leeds' ambition to become the Best City by reducing the number of pedestrians killed or seriously injured on city's roads, by fostering links between the communities and local facilities, especially where the highway forms a considerable barrier, and by enabling more sustainable travel choices for local journeys, including for new developments within the city. In doing this, the proposals and the new expanded framework will support the Travel Choices Strategy which forms part of the WY Local Transport Plan 2011-26. The strategy focuses on partnership working to ensure that people can access important services and goods in their local area by sustainable travel modes. This includes health services, childcare, social and cultural activities, food shopping and also transport services, information, education and support.

## 4.4 Resources and value for money

4.4.1 The proposed pedestrian crossings are estimated to cost £250,000 inclusive of any legal fees, staff fees and works costs which will be fully funded from the Local Transport Plan Transport Policy Capital Programme, in accordance with priorities and budget provision set out in the Local Transport Plan 3.

Previous total Authority	TOTAL	TO MARCH		F	ORECAS	Т	
to Spend on this scheme		2016	2016/17	2017/18	2018/19	2019/20	2020 on
	£000's	£000's	£000's	£000's	£000's	£000's	£000's
LAND (1)	0.0						
CONSTRUCTION (3)	0.0						
FURN & EQPT (5)	0.0						
DESIGN FEES (6)	0.0						
OTHER COSTS (7)	0.0						
TOTALS	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Authority to Spend	TOTAL	TOMARCH	224245		ORECAS		
required for this Approval	£000's	2016 £000's	2016/17 £000's	2017/18 £000's	2018/19 £000's	2019/20 £000's	2020 on £000's
LAND (1)	0.0	2000 S	2000 5	2000 3	2000 3	2000 3	2000 3
CONSTRUCTION (3)	0.0						
FURN & EQPT (5)	0.0						
DESIGN FEES (6)	0.0						
OTHER COSTS (7)	0.0						
TOTALS	250.0	0.0	250.0	0.0	0.0	0.0	0.0
Total overall Funding	TOTAL	TOMARCH			ORECAS		
(As per latest Capital		2016	2016/17	2017/18	2018/19	2019/20	
Programme)	£000's	£000's	£000's	£000's	£000's	£000's	£000's
Government Grant - LTP	250.0		250.0				
Government Grant - LTF	250.0		250.0				
Total Funding	250.0	0.0	250.0	0.0	0.0	0.0	0.0
Balance / Shortfall =	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Parent Scheme Number: 99609

Title: LTP Transport Policy Capital Programme

## 4.5 Legal Implications, Access to Information and Call In

4.5.1 There are no legal implications for the contents of this report. The report is eligible for call-in as it affects multiple wards.

#### 4.6 Risk Management

4.6.1 All the schemes will be safety audited in order to ensure that any consequential accident risks arising from the siting of a new pedestrian crossing are addressed through careful design and appropriate siting of the facilities. Completed schemes will then be monitored.

#### 5 Conclusions

- 5.1 The Pedestrian Crossing Review 2016 reviewed 54 sites where crossing facilities were requested, and put forward ten sites to be funded through the West Yorkshire Local Transport Plan where sites meet the revised criteria as detailed in Appendix 1. It is hoped that these will help overcome some of the barriers to journeys on foot.
- 5.2 Approval to the development and delivery of the overall programme as detailed in this report will enable schemes to be delivered in a timely and efficient manner and will produce positive outcomes for road safety, businesses and communities.

#### 6 Recommendations

- 6.1 The Chief Officer (Highways and Transportation) is requested to:
  - note the contents and recommendations of this report and the procedures carried out in respect of conducting the annual pedestrian crossing review;
  - ii) endorse the framework used to inform recommendations contained in this report to be used for future assessments
  - review and approve the recommendations of the Annual Pedestrian Crossing Review as the basis for the 2016/17 programme for introducing new pedestrian crossings; and give authority to commence the detailed design, consultation and implementation of the schemes described in Appendix B at a cost of £250,000
  - iv) give authority to incur expenditure of £250,000 inclusive of any legal fees, staff fees and works costs which will fully funded from the Local Transport Plan Transport Policy Capital Programme.
  - v) give authority to display a notice on site under the provisions of Section 23 of the Roads Traffic Regulation Act 1984 in order to inform the public of the proposed pedestrians crossings; and

- vi) give authority to request the City Solicitor to draft and advertise a Notice under the provisions of Section 90C of the Highways Act 1980 for the implementation of speed tables to compliment some of the proposed pedestrian crossings; and
- vii) to receive such other further reports as may be needed to address any objections received to advertised Notices or other matters arising from the detailed scheme proposals; and
- viii) agree the recommendations in respect of the provision of externally funded crossing facilities.

## 7 Background documents<sup>1</sup>

7.1 None

<sup>&</sup>lt;sup>1</sup> 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 1 - Proposed Crossing Assessment Framework

- The current crossing assessment framework was developed and approved in 2002, and revised in 2006, to reflect the recommendations of LTN 1/95 the DfT's guidance for assessing pedestrian crossing. Established PV² formula thresholds of the former policy for referencing traffic and pedestrian flows continued to be used as a benchmark for site selection. As part of the assessment process site assessments were also carried out and site characteristics noted together with the presence of vulnerable pedestrians (children and older people) and road safety history. If necessary, the framework recommended the difficulty of crossing surveys. Since that time the PV² has remained an important part of determining the final recommendations in pedestrian crossing reviews.
- However, in recent years the PV<sup>2</sup> value has played a reduced part in the final annual review recommendations as other factors, such as presence of vulnerable pedestrians and relative difficulty of crossing, have carried increasingly greater weight in the evaluation and decisions. The existing framework did not, however, enabled all of these factors to be quantified to aid the decision making process.
- The proposed framework continues to note the difficulty of crossing and pedestrian demand based on the PV² surveys, while looking to quantify the expected benefits and impacts of the provision of a formal facility on the local neighbourhood, residents and businesses and on road safety, thus introducing an element of a feasibility assessment early on in the process. The PV² criteria have been replaced with a points scoring system, reflecting the above considerations; the thresholds have been carefully benchmarked against previous assessments. The recommendations concerning the technical assessment as to what type of facility may be most appropriate for a particular setting remain unchanged, and are based on the agreed guidelines.
- The proposed framework establishes the thresholds for the consideration of both informal and formal crossing facilities. Scores between 4 and 8 indicate some degree of crossing difficulty which can be eased by informal measures (for example refuges, junction narrowing or build-outs). Scores above 8 indicate that a formal facility (a Zebra, Pelican or Toucan) should be considered. Higher scores, arising from higher traffic speeds and volume, greater crossing difficulty and road safety record, may indicate the need for a higher-end facility (signal controlled crossing). However, the choice of the facility will be predominantly dictated by the road and traffic characteristics as well as pedestrian demand and waiting times and subject to a feasibility, engineering and road safety assessment.
- Whilst signal controlled crossing are generally more appropriate on busier and faster roads, zebra crossings can provide safe facilities where speeds are lower and can achieve reduced pedestrian delay. Overall, where used appropriately, they have achieved safety records just as good as equivalent light controlled crossings.

- Typical site characteristics and road conditions for a signal controlled crossings would be:
- Puffin crossing will generally be preferred for the busiest sites. These will be typically very busy roads where mean traffic speeds exceed 35 mph. Typically, traffic flows will exceed 1000 vehicles per hour and over 70 pedestrian movements in busiest hours, or there would be an indication of suppressed pedestrian demand. At some sites there will be a record of pedestrian injuries. Pedestrian waiting time will generally exceed 1 minute.
- Zebra crossing will generally be preferred at quieter sites. In some instance other informal measures may be recommended. These will be generally appropriate for medium trafficked roads with flows typically over 700 vehicles per hour in the busies hour(s) and where mean traffic speeds are below 35 mph. Pedestrian flows will typically exceed 40 in the busiest hours and should exceed those on adjacent sections of road by at least 3:1 thereby demonstrating a clear desire line. Most sites are unlikely to have a pattern of pedestrian casualties. Waiting times up to 30 seconds and occasionally exceeding 1 minute. Some sites at the higher end of the range may be best suited to Puffin crossing control. For sites are at the lower end of speed and traffic range zebra crossings will be preferred.

PEDESTRIAN CROSSING ASSESSMENT CRITERIA MATRIX 2016	ASSESSOR
SITE	DAY/DAY/TIME
	WEATHER & ROAD CONDITIONS

## **Section 1: Site Assessment**

SCORE	-3	-2	-1	0	1	2	3	Total
Impact on the local community		A worsening of condition in both i. Access to frontage property ii. Restrictions on waiting	A worsening of conditions in either:  i. Access to frontage property  ii. Restrictions on waiting	10 properties or less benefiting	Whole Street of up to 50 properties benefiting	Local neighbourhood o up to 200 properties benefiting	beyond the local area	
Crossing impact on the locality/ businesses	A worsening of conditions in ALL of: i) Access to premises made more difficult ii) Passing trade removed iii) Restrictions on waiting iv) Noise/Visual Pollution	A worsening of conditions in any TWO of:  i) Access to premises made more difficult  ii) Passing trade removed  iii) Restrictions on waiting  iv) Noise/Visual Pollution	A worsening of conditions in <b>ONE</b> of: i) Access to premises made more difficult ii) Passing trade removed iii) Restrictions on waiting iv) Noise/Visual Pollution	No real impact but maybe a couple of properties benefiting at most (commercial/ industrial)	A parade of 15 shops or business properties benefiting	A district centre benefiting	A town centre benefiting	
Public Interest				First request in 3 years	Two independent requests in last 12 months	Significant community interest with multiple representations		
Traffic Speed Assessment				Mean speeds within prescribed limit; the speed limit itself is 20mph (preferred)	Mean speeds exceed the limit by up to 10%, or the speed limit is 30mph or above	Mean speeds exceed the limit by up to 20%, or the speed limit is 40mph or above	Mean speeds exceed the limit by up to 30%, or the speed limit is 50mph or more	
Highway Assessment	I. Use Section	2 – Highway Assessmer	nt score					
Road Safety History	II. Use Section	3 – Road Safety History	score					
Traffic/ Pedestrian Surveys	III. Use Section	4 – Traffic/Pedestrian so	core					
						IV.	TOTAL SCORE	

# **Section 2: Highway Assessment**

Road character: Two way single carriageway, Dual Carriageway, etc	Type of Road Single carriageway	Road Classification B	Direction of flow (2 way)					
Carriageway width: *Between islands or central reserve for dual carriageways	Overall Width	Lane 1*.	Lane 2*.					
Other road features (presence of alterna	tive crossings, refuges islands	s, traffic calming, TROs etc):-						
Other road factors (adjacent junctions, a	accesses etc):-							
Frontage (✓ any)	Shops	Residential	School					
Other (hospital, day centre etc.):-								
Bus services/stops proximity:- yes	3							
Visual check of crossing opportur	nities (circle one):							
( 0 )Very easy - no diffic	ulty within a few sec	onds						
( 0 )Easy - short wait up	to 30 seconds							
( 1 ) Moderate difficulty -	wait of up to one mi	nute						
( 2 ) Difficult - more than a one minute wait								
(3) Very difficult - long v	vait of two minutes o	or more						
(3) Impossible - after wa	aiting several minute	s for an opportunity						

# **Section 3: Road safety history**

Judgement should be based on normal walking pace WITHOUT having to walk fast or run to cross in safety.

Accidents:	5 year period from 2010 to 2015								
Severity	slight	serious	fatal						
Adult pedestrian									
Child pedestrian									
Others									
Other factors:-									
-1	0	1	2						
Risk potential	No effect on safety	Risk potential	Some accident						
increased		reduced	savings possible						
to: Departed for 50 matres either side of study site									

Note: Recorded for 50 metres either side of study site.

# **Section 4: Traffic/Pedestrian Surveys**

Traffic/Ped surveys:	12 hours	Busiest hour	Second busiest hour
Flow:-	to	to	to
All vehicles			
Adult pedestrians (all)			
Child pedestrians			
Elderly people			
Other relevant groups 1. 2.			
Other details:-			
Speed Limit	85 percentile	Average (mean)	

Pedestrian volumes per hour at busiest hours:

$$25 - 50 = 1$$
 point,  $50 - 75 = 2$  points,  $>75 = 3$  points.

High volume of child/ elderly pedestrians + 1 point

# **Conclusions/ recommendations:**

#### **Guidance notes**

- 1) The purpose of this assessment framework is to ensure that the Council fulfils the requirements of LTN 1/95 "The assessment of pedestrian crossings" when considering requests for pedestrian crossings. The framework considers the difficulty of crossing and existing pedestrian demand as well as overall benefits and disbenefits of the potential provision for both pedestrians and local residents and businesses, as well as impact on road safety.
- 2) This approach is a development of the previous process approved by the Director of Highways and Transportation in 2002 (revised 2006) and has been benchmarked against previously approved crossings.
- 3) The first approach to all requests is an initial site inspection followed by a desk top study of the available accident and traffic data. As a rule this will be followed up by a 12 hour pedestrian and traffic survey. The survey will help determine the busiest times for both pedestrians and traffic and this in turn will inform the best periods for site observation.
- 4) The site visit should note the following
  - a) Any community facilities that are present (shops, library, school, community centre, pubs, bus stops, surgeries, PO, et)
  - b) Current parking arrangements (driveways, on-street parking)
  - c) Presence of any passing trade (foot and motorised)
  - d) Any pedestrian desire lines/ attractors
  - e) Any observed crossing difficulties and contributing factors (age, disability, highway characteristics, parking)
  - f) Any nearby features that facilitate crossing
- 5) The appropriate information needs to be entered into the assessment sheet, including data from the desktop study (speeds, accidents, pedestrian and vehicles volumes and pedestrian profile).
- 6) For sites which receive the score of >8 a formal crossing is recommended the exact type of the facility to be determined by the nature of the road, traffic and pedestrian flows and vehicular speeds, as per Pedestrian Crossing Site Assessment Guidelines.
- 7) In making recommendations, the assessor should be seeking to examine the most effective and economic means of ensuring that the observed volume of pedestrian traffic can cross the road in safety. In essence the objective is to provide measures which allow pedestrians the time they need to cross, either by a formal crossing, or where numbers or traffic flow does not justify it, the appropriate informal measures such as refuge islands, promontories etc

Appendix 2 - Existing and proposed thresholds

Proposed indicative score	Existing indicative PV <sup>2</sup> value	Guidelines for appropriate crossing provision	Typical site characteristics and road conditions
Category A Score of 8 and above	>0.75 (busiest 2 hours, all pedestrian s)	Puffin crossing will generally be preferred for the busiest sites.  Used at school or crossing patrol sites only where significant other pedestrian movements exist.	Very busy road where traffic speed >35 mph 85 <sup>th</sup> percentile. Typically traffic flows will exceed 1000 vehicles per hour and over 70 pedestrian movements in busiest hours, or there will be an indication of supressed demand. At some sites there may be a record of pedestrian injuries. Pedestrian waiting time will generally exceed 1 minute. For sites are at the lower end of speed and traffic range zebra crossings will be preferred.
Category B  Score of 8 and above	0.6 – 0.85 (busiest 2 hours, all pedestrian s)	Zebra crossing will generally be preferred at these quieter sites. In some instance other informal measures may be recommended.  There will be evident community benefit in either overcoming severance or improving access to local facilities and services.	Medium trafficked road with flows typically over 700 vehicles and where traffic speed <35 mph 85 <sup>th</sup> percentile. Pedestrian flows will typically exceed 40 in the busiest hours and should exceed those on adjacent sections of road by at least 3:1 thereby demonstrating a clear desire line. Most sites unlikely to have a pattern of pedestrian casualties. Waiting times up to 30 seconds and occasionally exceeding 1 minute. Some sites at the higher end of the range may be best suited to Puffin crossing control.
Category C 4-8	<0.6 (busiest 2 hours, all pedestrian s)	Informal measures to assist those having difficulty crossing the road.  At SCP sites package of measures to assist warden or as part of a school travel initiative may be appropriate.	Lightly trafficked road where flows usually <600 v.p.h. provide ample and frequent gaps in traffic. No discernible pedestrian desire line nor usually a pattern of pedestrian road injuries. Minimal delay crossing road within 30 seconds of reaching it. Exceptionally a formal crossing may be justified where there is additional crossing difficulty due to the road layout and/ or significant presence of vulnerable pedestrians, and where informal measures are not feasible.

# Appendix 3 – Site specific recommendations

			2 hour peak (per hour)						
	Traffic Flow (2 way)		Traffic Flow	Pedestri an Flow	Assist access to facilities	Assists School Journey	Score	Accident saving potential	Recommendation
	0700-190	0							Pelican
Harehills Lane near the Hovinghams	8420	1136	911	349	yes	yes	10	yes	
Ninelands Lane, Garforth	5369	701	624	199	yes	yes	10	Yes – 2 child pedestrian accidents.	Zebra
	3739	1635	413	182	yes		10	Yes – seriously injured elderly pedestrian	Zebra
Queenswood Drive, Headingley	7768	344	904	61	yes	yes	8		Zebra
Scott Hall Road (Southlands Avenue/ Carr Manor Parade), Chapel Allerton	16194	104	1659	28		yes	8	4 ; none pedestrian related	Pelican as part of school expansion programme
Grove Lane, Headingly	4731	240	559	47			6	No recorded accidents. Potential beneficial impact on speeds	Speed table
Styebank Lane, Rothwell	3806	262	531	26			7	3 slight accidents in the last 5 years	Refuge

Stainburn Drive/ Harrogate Road, Moortown	1450	343	201	75		yes	7		Junction realignment
Nursery Lane, Alwoodley	3326	547	396	220		yes	7		Informal measures as part of an upcoming 20 mph scheme.
Calverley Road, Oulton	14536	122	1038	28			5		
Bradford Road, Otley, adj. West Busk Lane	8649	43	892	10			4		Refuge to complement the existing provision
Westerton Road, Ardsley	4380	240	583	31	yes	yes	4	Potential accident saving – 2 child pedestrian casualties	Junction realignment to improve intervisibility
Park Lane, Roundhay	6459	149	735	28	yes		4 +	2 collisions	Pedestrian refuge
Carlton Lane/ Jumbles Lane, Lofthouse	2341	233	277	87	yes		4	Potential casualty prevention – 2 child pedestrian casualties	Junction realignment