

REPORT TO KINCARDINE AND MEARNS ARE COMMITTEE – 26 MARCH 2019

PEDESTRIAN CROSSING ASSESSMENT POLICY

1 Recommendations

The Committee is recommended to:

- 1.1 **Note the content of the report in relation to Roads Policy Note 15 – Pedestrian Crossing Assessment Policy and how this was applied in relation to planning application APP/2018/2118.**

2 Background / Discussion

- 2.1 At its meeting of 20 January 2019 this Committee considered planning application APP/2018/2118 relating to proposed housing in Marykirk ([Item 8\(B\) refers](#)). The Committee requested a future report on safe route to school as a formal pedestrian crossing on the A937 did not form part of the application.
- 2.2 The planning application refers to the erection of 27 dwellinghouses on land adjacent to Wester Balmanno Way, Marykirk and was granted approval on 20 January 2019. Members discussed the possibility of approving the application subject to a condition that a controlled crossing be installed on the A937 as part of the development.
- 2.3 A map showing the future development site, the location of the school and the sites where traffic data was collected is shown in Appendix 1. Both traffic counters were set up on the A937, one immediately south of Napier Place (point A on the map), and the other at the Marykirk Hotel in the middle of the village (point B on the map).
- 2.4 It was clarified at the Committee by the Senior Planning Officer that such a condition would be deemed unreasonable as the Roads Development Team did not consider it necessary for a crossing to be installed on the A937 as part of this development.
- 2.5 The Roads Development Team were able to use their experience of implementing the Pedestrian Crossing Assessment Policy to determine that pedestrian (P) flows of at least 120+ pedestrian movements per hour would likely be required to meet the minimum criteria for installing a zebra crossing for the typical peak vehicle flows (V) on A937.
- 2.6 The level of Pedestrian flow needed will not be generated by the new 27 house development and existing 30 house development at Wester Balmanno Way. The Roads Development Team would generally only recommend considering developer carry out a formal assessment to justify installation of a controlled pedestrian crossing on busy main distributor roads (for existing

roads, these are often but are not exclusively A or B class roads), for new development activity totalling 150 -200 houses.

- 2.7 There is however currently no assessment protocol that covers this for new developments, and this is largely determined using engineering judgement and is based on experience. 57 houses would (at the very best) only generate a peak hour pedestrian flow in the region of 45 to 70 pedestrian movements. This is an exceedingly generous assessment as it assumes all primary school children would walk to school and they would all be accompanied by one parent/adult per child. It also assumes that all secondary school pupils would also travel to school by bus.
- 2.6 Aberdeenshire Council has a specific policy in relation to assessing whether a site meets requirements for a formal pedestrian crossing. Road Policy Note 15 – Pedestrian Crossing Assessment Policy is included as Appendix 2.
- 2.7 Road Policy Note 15 describes the criteria required when reviewing if a site requires a formal pedestrian crossing. The assessment is evidenced based and requires a variety of data to be gathered to carry out the assessment.
- 2.8 Road Policy Note 15 also details the types of crossings available and when these crossing types can be applied. Crossing types include, among others, a central island refuge, zebra crossing or controlled crossing.
- 2.9 The key value of selecting which type of crossing is appropriate is the PV^2 conflict value where P is the number of pedestrians crossing the road and V is the number of conflicting vehicles. The PV^2 value is calculated from the arithmetic average of the four highest hourly values taken over a typical day.
- 2.10 A number of other factors are considered as part of the PV^2 calculation and these are detail in Road Policy Note 15. Actual traffic speeds, road width, recent accident history, pedestrian type (school children, elderly etc) and average waiting delay for pedestrians are examples of some of the other factors considered.
- 2.11 These additional factors are awarded points based on the criteria set out in Road Policy Note 15 and the total of these points determine the modifier applied to the PV^2 score which determines the level of intervention, if any, required.
- 2.12 Road Policy Note 15 – Pedestrian Crossing Assessment Policy is currently being reviewed by the Road Policy and Asset Management Team. Area Committees will be consulted as part of this process and it is anticipated that this will be carried out prior to the summer recess.

Future Actions

- 2.13 Although a crossing point on the A937 does not meet with the requirements set out within Road Policy Note 15, there are other interventions that can be undertaken to promote safe access to the school in Marykirk.
- 2.14 Transportation carry out school visits to promote a number of safety initiatives. Be Safe, Be Seen is an initiative that promotes road safety to school pupils

and has been carried out at similar schools in Aberdeenshire where concerns have been raised regarding a safe route to school.

- 2.15 Parksmart is aimed at congestion near the school and encourages parents to park responsibly and consider “park and stride” to reduce congestion at the school gate.
- 2.16 Officers from Transportation will engage with the school to determine which initiative may be appropriate.
- 2.17 The Head of Finance and Monitoring Officer within Business Services have been consulted in the preparation of this report and their comments are incorporated within the report and are satisfied that the report complies with the Scheme of Governance and relevant legislation.

3 Scheme of Governance

- 3.1 The Committee is able to consider this item in terms of Section B.1.1.2 of the List of Committee Powers in Part 2A of the Scheme of Governance.

4 Implications and Risk

- 4.1 An equality impact assessment is not required because no decision is being made by Area Committee in relation to this report.
- 4.2 There are no staffing and financial implications.
- 4.3 No Risks have been identified as relevant to this matter on a Corporate or Strategic Level.

Stephen Archer
Director, Infrastructure Services

Report prepared by Martin Hall, Strategy Manager
Date 8 March 2019



Roads Policy Note 15

Subject Pedestrian Crossing Assessment Policy

Approved By : Infrastructure Services Committee

Date : 29th November 2001

Revisions : 8th October 2012
Amendment to para 3 to reflect new development criteria

ABERDEENSHIRE COUNCIL'S PEDESTRIAN CROSSING POLICY

1 Introduction

This policy details the requirements for the introduction of different available types of crossing together with the methods for assessing which type of crossing, if any, should be installed and what supporting measures should be taken at the time of installation.

2 Types of Crossings

The options available are:-

- do nothing, no facility is warranted
- a central refuge island
- a zebra crossing
- a pelican crossing
- a puffin crossing (a more pedestrian friendly version of a pelican crossing)
- a toucan crossing (crossing for pedestrian and cyclists)
- full traffic signal control with a pedestrian phase

3 Selection Method

The key value of selecting which type of crossing is appropriate is the PV^2 conflict value where P is the number of pedestrians crossing the road and V is the number of conflicting vehicles. The PV^2 value is calculated from the arithmetic average of the four highest hourly values taken over a typical day.

To help determine which type of crossing facility is appropriate and further reflect local site conditions the following site data is collected

- the average gap size in the vehicle flow in which a pedestrian will cross the road
- the number of gaps in this vehicle flow per hour
- the average waiting delay for a crossing pedestrian, prior to accepting a suitable gap
- the type of pedestrian, such as elderly, school children, etc
- the use of the crossing by disability groups
- speed of approaching traffic
- sight lines to the proposed site
- accident record over the last three years

- lighting standard adjacent to and on the approach to the crossing area
- skid risk
- carriageway and footway width
- the percentage of cyclists who would use of could be encouraged to use a crossing point
- proximity to adjacent junctions
- waiting and loading restrictions
- proximity to adjacent crossing points

For new developments, it would be appropriate to estimate the pedestrian and vehicular traffic volumes (at completion stage). Safer Routes to School should be considered following the methodology below.

The modified PV² value is the PV² value modified upwards to take account of a list of factors which reflect local site conditions. These factors are:-

POINTS

(a) SPEED ADJUSTMENT

The following factors should be selected according to either the 85 percentile speed or the vehicle speed limit, whichever is the greater

Up to 35mph	0
36 – 45mph	+1
Over 45mph	+2

(b) VULNERABLE ROAD USERS

The following categories of pedestrians should be recorded in one hour intervals throughout the duration of the pedestrian survey. These totals should then be factored according to the total number recorded during the busiest one hour period.

Elderly/Infirm/People with disabilities/Children under 11 years old (ignore if a school crossing patroller is present)

Total of over 25 people from any of the categories in the highest hour	+1
--	----

(c) ROAD ACCIDENTS INVOLVING PEDESTRIANS *POINTS*

Each pedestrian accident occurring within 50 metres either side of the proposed crossing.	+1.5
---	------

(d) CARRIAGEWAY WIDTH

Less than 6 metres wide	-2
Between 6.0 and 7.0 metres wide	-1
Between 7.0 and 8.0 metres wide	0
Greater than 8.0 metres wide	+1

Note: For Dual Carriageways and sites where a staggered crossing is proposed the above widths should apply to one side of the crossing.

(e) PEDESTRIAN WAITING DELAY

Throughout the 12 hour survey, the waiting time of a random sample of ten pedestrians should be recorded on an hourly basis.

If the average waiting time in any one hour is greater than 30 seconds.	+1
---	----

(f) LOCATION OF PROPOSED CROSSING

(i) Trunk or district distributor road dividing a substantial community	+1
(ii) Adjacent to home for the elderly, disabled or infirm	+1
(iii) Adjacent to hospital or clinic	+1
(iv) Adjacent to school or community centre	+1
(v) Adjacent to busy shops	+1

The above points are totalled and the appropriate multiplication factor obtained. A modified PV^2 is then produced by applying this factor to the original PV^2 value.

No. of Points	Multiplication Factor
1	1.1
2	1.2
3	1.3
4	1.4
5	1.5
6	1.6
7	1.7
8	1.8
9	1.9
10	2.0
11	2.1
12	2.2

4 Selection of Appropriate Type of Crossing
The most appropriate type of crossing for a particular location is chosen with the use of the following flowchart.

