AGENDA ITEM NO 25

ANGUS COUNCIL

INFRASTRUCTURE SERVICES COMMITTEE - 23 AUGUST 2011

REQUEST FOR A LIGHT CONTROLLED PEDESTRIAN CROSSING
A923 COUPAR ANGUS ROAD, BIRKHILL/MUIRHEAD
AT THE MILLENNIUM HALL

REPORT BY THE DIRECTOR OF INFRASTRUCTURE SERVICES

ABSTRACT
Following direction at the council meeting of 22 June 2011 this report fulfils the request to submit details of costs and possible funding for the installation of a light controlled pedestrian crossing on the A923 Coupar Angus Road, Birkhill/Muirhead, adjacent to the Millennium Hall.

1  RECOMMENDATION

1.1 It is recommended that the committee:

   i) notes the results of the site surveys carried out following the request for a light controlled pedestrian crossing on the A923 Coupar Angus Road, Birkhill/Muirhead, adjacent to the Millennium Hall;

   ii) notes the estimated cost and funding options for the installation of a light controlled pedestrian crossing at this location;

   iii) determines whether or not the controlled crossing shall be provided on the basis set out.

2  BACKGROUND

2.1 Reference is made to item 6 of the minute of the meeting of the full Council of 22 June 2011 whereby the Council agreed to approve the terms of the motion submitted by Councillor Lee.

2.2 The Council agreed that "there exists a danger to pedestrians across all levels of mobility who wish to cross the A923 in the vicinity of the Muirhead and Birkhill Hall, to access the Hall, play park and parks, the main community resources in the area".

2.3 The motion instructed the Director of Infrastructure Services to bring forward to the Infrastructure Services Committee on 23 August 2011 a report setting out a fully costed proposal and funding options for the installation of a signal controlled pedestrian crossing at this location.

3  DETAILS

3.1 Prior to the approval of the motion submitted by Councillor Lee at the Council meeting of 22 June 2011 the Head of Roads initiated investigations at the location to assess the proposed installation of a light controlled pedestrian crossing in accordance with Angus Council policy.

3.2 This investigation was undertaken in accordance with the policy for the assessment and provision of signal controlled pedestrian crossings as approved by the Infrastructure Services Committee at its meeting on 22 January 2008 (Report No 95/08) (see Appendix 1).

3.3 A survey of vehicle and pedestrian movements was carried out at the location over a 10 hour standard assessment period (08:00 - 18:00). The survey was carried out on a weekday during school term time in June 2011 and was taken over a standard distance of 100m (see Appendix 2). Consideration was also given to school usage of the Millennium Hall and other usage.
3.4 The survey data confirms that the location’s data of ADPV² of 0.211 (x10^8) falls significantly short of the threshold figure (ADPV²) of 1.0 (x10^8) and therefore does not currently justify the provision of a signalised pedestrian crossing (see Appendix 3) in accordance with the agreed policy.

3.5 A further survey of vehicle and pedestrian movements was subsequently carried out at the location over a 3 hour non-standard assessment period (18:00 - 21:00) in order to take into account the evening activities held in the Millennium Hall. The survey was carried out on the same day of the week and was taken over the same 100m distance.

3.6 The data from both surveys was combined to give an assessment period of 13 hours. The combined survey data shows that the location’s data of ADPV² of 0.220 (x10^8) still falls considerably short of the threshold figure (ADPV²) of 1.0 (x10^8) and therefore does not currently meet the threshold usage figure for the provision of a signalised pedestrian crossing (see Appendix 4).

3.7 There have been no reported injury accidents on Coupar Angus Road involving pedestrians within 100m of the Millennium Hall over the last three years.

3.8 In accordance with the agreed motion an investigation was carried out to determine if a signal controlled pedestrian crossing could physically and safely be constructed at the proposed location. The investigations confirmed that a crossing could be located at this location provided the existing bus stop on the south side of the carriageway is moved to increase the visibility to the crossing points for oncoming vehicles. This would require a new bus stop with bus boarder kerbs to be installed to the west of the vehicular entrance to the Millennium Hall. The bus stop and bus boarder kerbs should be tied into the existing footway on the south side of the carriageway with the installation of a new footway, dropped kerbs and associated tactile paving at the entrance to the Millennium Hall. (See Appendix 5). It is further proposed that the re-positioned bus stop would replace the two existing stops one roughly equi-distant either side of the proposed new location.

3.9 The PUFFIN (Pedestrian User-Friendly INtelligent) crossing is now the most commonly employed type of signal controlled pedestrian crossing. Pedestrian detection is used to vary the length of the pedestrian green period, giving pedestrians the time they need to cross. By replacing the flashing amber period with a steady red signal to vehicular traffic, the Puffin gives pedestrians (particularly older people and those with mobility difficulties) a greater sense of protection compared with a Pelican crossing. The pedestrian signals are normally mounted on the nearside on primary poles and are positioned to allow pedestrians to watch approaching traffic, while keeping the pedestrian signal in their field of view. This is particularly helpful for those visually impaired people using crossings who find difficulty in clearly discerning signals mounted on the far side of the road.

3.10 It is important to point out that advice is given in the Department for Transport assessment guidelines, which is also contained within the Angus Council approved policy, that caution needs to be exercised where pedestrian flows are generally light for long periods of the day. Drivers who become accustomed to not being required to stop at the crossing may begin to ignore its existence, with dangerous consequences.

3.11 The Road Traffic Regulation Act 1984 (as amended) requires the Council to give “Public Notice” of its intention to establish, alter or remove a pedestrian crossing. The Council is also required by the statute to consult with the Chief Constable regarding any proposals.

3.12 Should the committee agree to proceed with the installation of a signal controlled pedestrian crossing and associated works at this location it is proposed that the installation will be undertaken within the current financial year (2011/12). The new Application for Works on the Road Network regulations state that three months advanced notification is required in order for these works to be carried out. Accordingly construction would not commence until after the required notice period.
4 **RISK**

4.1 If the Council agrees to progress this project which is contrary to the Council's policy there is likely to be pressure for further deviation with potentially significant financial implications.

5 **FINANCIAL IMPLICATIONS**

5.1 The estimated cost to install a “puffin” style signal controlled pedestrian crossing, including associated works at the location is £60,000, which can be funded from the 2011/12 Capital budget for the A923 Route Action Plan improvements.

5.2 There will also be ongoing maintenance costs associated with the establishment of a light controlled pedestrian crossing, of approximately £400 per annum, which will be financed from the annual revenue budget for Traffic Signals Maintenance, within the overall Roads Division revenue budget.

6 **HUMAN RIGHTS IMPLICATIONS**

6.1 There are no human rights implications arising from the proposals in this report.

7 **EQUALITIES IMPLICATIONS**

7.1 The issues dealt with in this report have been the subject of consideration from an equalities perspective (as required by legislation). An equalities impact assessment will be undertaken.

8 **ANGUS COMMUNITY PLAN AND SINGLE OUTCOME AGREEMENT**

8.1 This report contributes to the following local outcome(s) contained within the Angus Community Plan and Single Outcome Agreement 2011 – 2014.

- Our communities are safe, secure and vibrant.

9 **CONSULTATION**

9.1 The Chief Executive, Director of Corporate Services, Head of Finance, Head of Law and Administration and the Chief Constable were consulted in the preparation of this report.

10 **CONCLUSION**

10.1 This report fulfils the motion raised at the Angus Council meeting on 22 June 2011 by Councillor Lee for the Director of Infrastructure Services to submit a report showing costs and possible funding for a controlled pedestrian crossing on the A923 in Birkhill/Muirhead adjacent to the Millennium Hall. The committee are asked to make a determination with regard to the provision of the proposed controlled pedestrian crossing.

**ERIC S LOWSON**
**DIRECTOR OF INFRASTRUCTURE SERVICES**

**NOTE:**

No background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973 (other than any containing confidential or exempt information) were relied on to any material extent in preparing the above Report.

Roads JG/AS
POLICY FOR PROVISION OF SIGNAL CONTROLLED CROSSINGS

The assessment formula can be expressed as follows:-

\[ ADPV^2, \text{ where} \]
\[ A = \text{accident weighting factor} \]
\[ D = \text{difficulty factor} \]
\[ P = \text{weighted sum of pedestrian movements} \]
\[ V = \text{weighted factor of traffic} \]

The formula will be considered to be met 100% when the value of \( ADPV^2 \), based on the average of the four busiest hours for the \( PV^2 \) element, equals or exceeds \( 1.0 \times 10^8 \) (100 million) for a single carriageway road, or \( 2.0 \times 10^8 \) for a dual carriageway road.

The levels of justification on a road, for instance a dual carriageway, where it would be appropriate to install 2 separate crossings, will require justification to be double that of a single carriageway road. This is because pedestrians will be provided with two separate crossing points, each dealing with one direction of traffic flow.

For sites where the value of \( ADPV^2 \) is equal to or exceeds 0.5, detailed site evaluation will be carried out to determine a suitable solution which may include a central refuge; a zebra; or a signal controlled crossing. This prioritisation based on the \( ADPV^2 \) value will help the committee to prioritise programmes and allocate available budgets.

Local Transport Note No. 2/95 gives detailed guidance on the design, installation and operation of crossings. It explains how to take account of all types of junctions, school crossing patrols, visibility, crossing width, guard railing, surfacing of carriageways and footways, facilities for the disabled, lighting, signing, bus stops and street furniture.
# Angus Council Roads Division

## Summary Sheet

### VEHICLE & PEDESTRIAN SURVEY

Surveyed by: S Ogilvie, A Strachan, J Hawke, K Smart

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**Requested by:** J Green  
**Site:** Coupal Angus Road, Birkhill at Millenium Hall  
**Date:** Tuesday 7th June 2011  
**Weather:** cool, showers

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## Start Time

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<tr>
<th>Start Time</th>
<th>Pedestrians</th>
<th>Eastbound</th>
<th>Westbound</th>
<th>Total V</th>
<th>PV^2/10^8</th>
<th>Four Highest psq/km^8</th>
<th>Worst 4 Hours</th>
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<td>OAT's</td>
<td>Disabled</td>
<td>Horse</td>
<td>Others</td>
<td>CARS LGVS</td>
<td>HGV's</td>
<td>BUSES</td>
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**Worst 4 Hours - Average Value of PV^2/10^8**: 0.21025

**Worst 4 Hours - Average Peds**: 25.00

**Worst 4 Hours - Average Veohs**: 958.58

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Number of Pedestrian Accidents in Last 3 Yr: 0  
Accident Factor: 1

Width of Crossing Point: 7.3 m  
Difficulty Factor: 1.00

**Value of ADPV** = 0.211
# Angus Council Roads Division

## Summary Sheet

**VEHICLE & PEDESTRIAN SURVEY**

Surveyed by: S Opillvie, A Strachan, J Hawke, K Smart, (S Hunt)

**Requested by:** J Green

**Site:** Coopar Angus Road, Birkhill at Millenium Hall

**Date:** Tuesday 7th June 2011 (8:00-18:00), Tuesday 14th June 2011 (18:00-21:00)

**Weather:** Cool, showers

### Table

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<th>START TIME</th>
<th>PEDESTRIANS</th>
<th>EASTBOUND</th>
<th>WESTBOUND</th>
<th>TOTAL V</th>
<th>PV=2/10^8</th>
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**Worst Four Hours - Average Value of PV=2/10^8**

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**Worst Four Hours - Average Peds :**

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**Worst Four Hours - Average Vehs :**

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**Number of Pedestrian Accidents in Last 3 Yrs**

0

**Accident Factor**

1

**Width of Crossing Point**

7.3 m

**Difficulty Factor**

1.00

**Value of ADPV**

0.220