

## **EAST AYRSHIRE COUNCIL**

### **DEVELOPMENT SERVICES COMMITTEE – 23 OCTOBER 2001**

#### **ADVISORY 20 MPH SPEED LIMITS (TWENTY'S PLENTY)**

##### **Report By Director of Development Services**

## **1. PURPOSE OF REPORT**

**1.1** The purpose of the report is to: -

- (a) advise the Committee of the results of a national trial programme of advisory 20 mph speed limits in residential areas;
- (b) agree that authorisation be sought from the Scottish Executive to maintain the advisory 20 mph speed limits at the 3 trial sites in East Ayrshire; and
- (c) advise the Committee of new guidelines relating to 20 mph speed limits.

## **2. BACKGROUND**

**2.1** In 1997, in response to growing concern about the problem of inappropriate speed and its contribution to child pedestrian accidents, The Society of Chief Officers of Transportation, (SCOTS), invited Scottish Local Authorities to participate in a national trial programme of advisory 20 mph speed limits in residential areas.

**2.2** The aim of the trial was to assess the effectiveness of low cost 20 mph zones which do not include traffic calming engineering measures, and to secure compliance with the lower speed limit through advisory signing and publicity. The ultimate aim is to reduce the child pedestrian accident rate in Scotland.

**2.3** At its meeting of 27 January 1998, the Committee gave approval for 3 sites in East Ayrshire to be included in the national trial. The three sites in East Ayrshire were: -

- (i) Logan
- (ii) Gilfoot, Newmilns
- (iii) Lainshaw, Stewarton

**2.4** The key characteristics of the advisory zones were that they should primarily be self-contained residential zones carrying little or no through traffic. The recommended speed should be no greater than 20 mph to reduce the risk to vulnerable road users such as children, older people, cyclists, and disabled people.

**2.5** In total, 75 sites in 27 Council areas were selected for inclusion in the trial. The 20 mph zones were implemented in East Ayrshire between June and October 1998.

### **3. TYPE OF MEASURES EMPLOYED**

**3.1** At the trial sites in East Ayrshire, entrances to the advisory zones were marked with 20 mph zone signs which included the text "Twenty's Plenty". Repeater markings in the form of 20 mph roundels on the carriageway were also marked at regular intervals.

**3.2** In addition to the signing and lining measures, publicity leaflets were produced and distributed to households within each of the residential areas. The leaflets outlined the aims of the trial, highlighting the benefits of reducing speed, and encouraging drivers to comply with the speed reduction initiative. The leaflets also contained a short questionnaire to ascertain residents' attitudes towards the initiative.

### **4. MAIN FINDINGS**

**4.1** The Scottish Executive commissioned a three-year programme of research. The research considered speed data from all 75 trial sites and social survey data from 8 sample sites (none in East Ayrshire). The main findings were: -

- a reduction in average speed at 60% of the sites following implementation of the 20 mph speed reduction initiative;
- the overall average speed reduction was modest, from 23.4 mph before the schemes were introduced to 22.2 mph after;
- there was a considerable drop in the number of recorded accidents per year after the introduction of the trial 20 mph scheme, and also a significant reduction in severity, with serious or fatal accidents reduced from 20% to 14% of the total;
- residents believed that there had been a noticeable reduction in speed with the introduction of the 20 mph scheme, but that speeds had increased over time since then;
- overall, results from the attitudinal survey demonstrated strong local support for the scheme and almost three-quarters of respondents considered that the experiment had been either 'very' or 'partly' successful;
- a cost benefit analysis setting the costs of the scheme against the savings in accident reduction showed a strong positive rate of return.

**4.2** In summary, the advisory 20 mph speed limits offer a low cost option for promoting road safety by making drivers aware of the appropriate speed for the surroundings and giving the communities backing in their endeavours to create a safer place to live. Although the national trial has not resulted in reduced speeds in all local areas to 20 mph or below, it has been successful in 60% of areas. The schemes have clearly received strong local support and created perceptions of increased safety by the local communities.

## 5. EAST AYRSHIRE TRIAL SITES

5.1 The results from the 3 East Ayrshire trial sites are shown in the table below. All 3 sites were considered to be “successful” sites in the research report. The table shows that for Logan and Gilfoot, this was due to a reduction in the number of injury accidents following the introduction of the advisory 20 mph limit. In Logan there were 3 injury accidents in the 3-year before period compared with 1 in the 18 month after period. In Gilfoot, there was 1 injury accident in the before period and none in the after period. In Lainshaw there were no injury accidents in the period either before or during the trial period. However, only Lainshaw showed a reduction in vehicle speed.

	Average Speed Before (mph)	Average Speed After (mph)	Difference (mph)	Accident Rate
Logan	15.2	17.2	2.0	-33%
Gilfoot	14.6	15.1	0.5	-100%
Lainshaw	16.4	16.2	-0.2	0%

## 6. NEW REGULATIONS & GUIDANCE

6.1 The Scottish Executive authorised signs specifically for use at the trial sites, and this authorisation has now expired. Revised guidance in respect of advisory 20 mph speed limits has now been issued, including information about the type of signs that can be used. The Executive has stated that Councils can retain the existing signs at the pilot sites until the end of their natural life rather than incur the additional costs of replacing them with new signs, subject to authorisation from the Executive. The Committee is asked to agree that authorisation is sought from the Scottish Executive to maintain the advisory 20 mph speed limits in the 3 areas in East Ayrshire using the existing signs.

6.2 The Scottish Executive has considered that there is a continuing role for advisory 20 mph speed limits in certain circumstances. The revised guidance gives recommended criteria for future advisory 20 mph zones, which indicate that: -

- (a) selected sites should be in “self-enclosed” residential areas used mainly by local residents and with little or no through traffic;
- (b) roads which carry through traffic, bus routes, or roads which have a significant volume of non-resident traffic are unlikely to be suitable because of the difficulty in obtaining widespread support;
- (c) advisory 20 mph speed limits are most likely to be effective where existing speeds are in the range 25-30 mph;
- (d) where existing speeds are greater than 30 mph then some traffic calming measures to support the advisory speed limit is recommended;
- (e) residents should not be required to drive more than 600 metres before reaching the end of the 20 mph zone;
- (f) advisory 20 mph limits are unlikely to be appropriate in areas with a significant accident history (more comprehensive remedial measures are likely to be required in those areas);

- (g) support for the proposals should be actively sought from the local community.

The guidance also indicates that advisory 20mph speed limits should be monitored and evaluated after at least 12 months and not more than 3 years, with an assessment of speeds and accidents.

- 6.3 It is proposed that investigation of future suitable sites for advisory 20 mph speed limits will be carried out for consideration in future budget allocations. Priority will be given to those sites which meet the criteria set out in 6.2 (a) – (g) above.
- 6.4 In addition, the Ayrshire & Arran Health Board has indicated that in Ayrshire there is generally a higher incidence of transport accidents in the priority regeneration areas. Consideration will therefore be given to the priority areas in East Ayrshire in determining future proposals. Also, in view of the national target to reduce child pedestrian accidents and the Safer Routes to School proposals which are being developed in the context of the Council's Local Transport Strategy, higher priority will be attached to those areas in close proximity to schools.

## 7. MANDATORY 20 MPH SPEED LIMITS

- 7.1 Authorities now have power to introduce mandatory 20 mph zones (in which engineering measures are a standard feature to ensure that the zones are self-enforcing) and 20 mph speed limits, with or without traffic calming measures, at suitable locations.
- 7.2 With regard to mandatory 20 mph speed limits without traffic calming measures, the Scottish Executive guidance states that such limits should not be introduced where there is no realistic expectation that they will achieve the required decrease in traffic speeds, or where the police are unable to give an undertaking to provide an effective level of enforcement. Unrealistic and unenforceable speed limits will not bring about the expected road safety benefits and are likely to lead to pressure for the provision of traffic calming measures to ensure their effectiveness.
- 7.3 Following the assessment proposed in paragraph 6.3 above, Strathclyde Police will be consulted to ascertain whether or not mandatory limits **without traffic calming** might be considered appropriate at any of the sites identified.

## 8. FINANCIAL/POLICY IMPLICATIONS

- 8.1 Nil

## 9. LEGAL IMPLICATIONS

**9.1** Mandatory speed limits require a Traffic Order in accordance with the Road Traffic Regulation Act 1984 as amended.

## **10. RECOMMENDATIONS**

**10.1** It is recommended that the Committee: -

- (a) notes the findings of the national advisory 20 mph speed limit trials and that the 3 sites in East Ayrshire were considered a success;
- (b) agree that authorisation is sought from the Scottish Executive to maintain the advisory 20 mph speed limits at the 3 trial sites in East Ayrshire; and
- (c) agree that the Head of Roads & Transportation should identify potential 20 mph sites based on the principles set out in paragraphs 6.2 and 6.4 for consideration by Committee at a future date.

**Stephen Chorley**  
**Director of Development Services**

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8 October 2001

### **LIST OF BACKGROUND PAPERS**

- 1. National Trial of Advisory 20mph Zones, Development Services Committee, 27 January 1998.**

For further information contact Keith Orton on 01563 555714.

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**AGENDA**