

Research and Library Services



Northern Ireland Assembly

Research Paper 42/08

23rd April 2008

# “TWENTY’S PLENTY” SCHEMES

Research and Library Service

A three year Scotland-wide trial, co-ordinated by the Scottish Executive, examined the potential benefits of low cost advisory 20 mph schemes in residential areas. The project subsequently became known as “*Twenty’s Plenty*”. This paper provides information on the success of the Twenty’s Plenty scheme.

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## **THE 'TWENTY'S PLENTY' INITIATIVE**

In 1998, a three year Scotland-wide trial, co-ordinated by the Scottish Executive, examined the potential benefits of low cost advisory 20mph schemes<sup>1</sup> in residential areas. The project subsequently became known as *Twenty's Plenty*.

Following consideration of the results of the trial, in August 2001, the Scottish Executive published guidance<sup>2</sup> on the introduction of advisory 20 mph speed limits.

The guidance commented on the trials which involved low cost advisory 20 mph speed limits implemented by local authorities. The speed limits, which did not have self-enforcing features relied for their effectiveness on the co-operation and support of local people.

The evaluation of these trials found that average speeds were reduced at 60% of trial sites, that there was a considerable drop in the number and severity of recorded accidents, and that overall the schemes had received strong support from local communities.

Research from the Department for Transport provides a useful demonstration of the relevance of a 20 mph limit:

*"If a pedestrian is hit by a vehicle at:*

- 20mph there is about a 2.5% (1 in 40) of being killed or 97.5% chance of surviving;
- 30 mph there is about a 20% (1 in 5) chance of being killed or 80% chance of survival;
- 35 mph there is a 50% (1 in 2) chance of being killed or 50% chance of survival; and
- 40 mph there is about a 90% (9 in 10) chance of being killed or a 10% chance of survival.

*Add to this the fact that:*

- 58% of cars, 54% of motorcycles and 53% of HGVs exceed the 30 mph limit".<sup>3</sup>

Local Authorities are responsible for the setting and implementation of local speed limits. The remainder of this paper provides information on the success of *Twenty's Plenty* schemes adopted in North Lanarkshire and Angus council areas.

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<sup>1</sup> Low cost advisory signs are 'activated' invariable signs with a 20 mph roundel with the words "When Lights Flash". At each corner of the sign lights flash alternatively top and bottom.

<sup>2</sup> SEDD, Circular No. 6/2001, <http://www.scotland.gov.uk/Resource/Doc/159194/0043312.pdf>

<sup>3</sup> DfT, *Speed: Know your limits*, 2004, pg 3.

## **NORTH LANARKSHIRE**

Following the publication of the Scottish Executive Guidance on the introduction of 20 mph speed limits, North Lanarkshire Council, one of the largest council areas in Scotland, included a commitment in its 2000 Transport Strategy to implement advisory 20 mph speed limits in virtually every residential area in North Lanarkshire before the end of the 2001/02 financial year.

The primary objective of this scheme was to reduce both the number and severity of accidents throughout North Lanarkshire through the reduction of inappropriate speeds in housing areas.

The project involved the introduction of signing and lining features at the entrance to identified residential areas, avoiding the need for expensive physical traffic calming measures.

North Lanarkshire Council is still the only authority in Scotland to have introduced the advisory 20mph measures throughout its full area.

The success of the Council's advisory speed limit initiative can essentially be measured against three main criteria which include: reduction in the number and severity of accidents; reduction in vehicular speeds within residential areas; and the public's perception of the improvement within their local environment. For each of these three indicators a positive message was evident, highlighting the community benefit the scheme produced for the Council's 320,000 residents.

One of the primary results of the initiative was the significant reduction in the number and severity of accidents across the Council area. In the year following the introduction of the measures, North Lanarkshire had the largest reduction in personal injury accidents involving pedestrians of any authority in the west of Scotland, with an **18% reduction** in casualties recorded for 2002 compared with the figures for the previous year.<sup>4</sup>

Before and after traffic surveys showed an immediate **reduction in speeds at 30 out of 39 locations**. Some of the **reductions in speeds were recorded to be between 3-5 mph whilst 1 mph reductions were more typical**. It should be noted, that reducing vehicular speeds by as little as 1 mph can result in a 5% saving in accident numbers and severity.<sup>5</sup>

It has been recognised by the Traffic and Transportation Team at North Lanarkshire Council that the *Twenty's Plenty* initiative was unlikely to have been solely responsible for those reductions as there had been an ongoing programme of measures targeted at accident reduction. The Council's road safety section was delivering a wide range of educational campaigns and introduced a series of engineering features. In addition, partnership working with the Strathclyde Police in enforcement measures made a significant contribution.

Consultation with the Council confirmed that it recognised the need 'to keep speed-reduction at the forefront in drivers' minds'. Over the last number of years North Lanarkshire Council has continued to reiterate the road safety message through

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<sup>4</sup> North Lanarkshire Council, *Twenty's Plenty Advisory Speed Limit Scheme*, December 2007.

<sup>5</sup> DfT, *Speed: Know your limits*, 2004, pg 3.

various educational initiatives including information leaflets, production of community packs for residents to run their own campaigns, radio campaigns, road safety officers featuring on local radio as well as updating various posters and bus back advertising.

Just over £360,000 was spent on various elements of the scheme between 2001 and 2002 and is considered to have been extremely cost effective, demonstrating exceptional value for money for the council and substantially exceeded the council's accident reduction targets. The scheme has also received a number of regional and international road safety awards.<sup>6</sup>

### **ANGUS COUNCIL**

Angus Council conducted a Speed Limit Review of all A and B class local roads including the use of advisory 20mph speed limits in March 2008.<sup>7</sup>

The report noted that whilst advisory 20 mph speed limits were suitable for areas where the existing speeds were in the range of 25-30 mph, they could not be enforced and therefore, success was dependent upon the support of local residents.

Many advisory limits have been introduced in Angus over the years and these have been well received by residents. However, given that they were not enforceable, engineers at Angus Council have reported that the initial effect of the schemes soon wore off. Before and after speed measurements have shown only very minor reductions in speed.<sup>8</sup>

Guidance issued by the Scottish Executive recommended that monitoring the effectiveness of advisory speed limits be carried out and that consideration be given to the possibility of introducing mandatory limits if the advisory limits were deemed unsuccessful.<sup>9</sup> Angus Council have therefore proposed that, no further *Twenty's Plenty* schemes be introduced and that all existing schemes be reviewed with a view to making them self enforcing through the use of additional speed reducing measures.

The experience in Angus emphasises the effectiveness of additional engineering measures. The Department for Transport notes the following research:

*"Currently, the most effective way to reduce vehicle speeds to 20 mph or less is through engineering measures. Without traffic calming, reducing a speed limit to 20 mph has not been effective. It usually slows most vehicles by only 1 mph (Mackie 1998)".<sup>10</sup>*

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<sup>6</sup> North Lanarkshire Council, *Twenty's Plenty Advisory Speed Limit Scheme*, December 2007.

<sup>7</sup> Angus Council, Infrastructure Services Committee, Report No. 266/08, 4th March 2008, pg 10.

<sup>8</sup> *Ibid*, pg 10.

<sup>9</sup> SEDD, Circular No. 6/2001, <http://www.scotland.gov.uk/Resource/Doc/159194/0043312.pdf>

<sup>10</sup> DfT, *New Directions in Speed Management, A Review of Policy*, 2005.

<http://www.dft.gov.uk/pgr/roadsafety/speedmanagement/newdirectionsinspeedmanageme4802?page=3#a1012>