1. INTRODUCTION

Renfrewshire Council, like other local authorities, made a commitment to try to reduce the number of casualties, in line with or better than the government’s targets by 2010. Traditional measures, that increasingly reduced the number of decisions taken by drivers, were introduced to reduce traffic speeds i.e. traditional traffic calming measures such as speed tables or humps, lining and signing were implemented as packages to physically alter the road network for drivers. Guard rail, crossings and education were used to target pedestrians, particularly children, in an attempt to alter their attitudes and make them more aware and responsible for their behaviour.

This approach was adopted across the country. However successful this approach in reducing the number of accidents, particularly at cluster type sites, this approach a fundamental flaw was that it did not consider the underlying cause of many accidents – the responsibility the driver has, to drive at an appropriate speed for the conditions. In tandem with this, was the fact that the majority of roads within residential areas had a 30 mph speed limit (bearing in mind that all roads with street lighting and no speed limit signs are 30 mph limits).

This report discusses how Renfrewshire Council identified and introduced an alternative approach to try to tackle the fundamental problem in residential areas of driving too fast for the conditions.

2. BACKGROUND

Renfrewshire has 784km of roads (non-trunk) and comprises a mainly urban area with remote settlements. The population in 2004 was 171,000 with 70,000 households.

Accident analysis annually highlighted the types of area where accidents were occurring and the predominant reasons for these accidents. Cluster sites on main distributor roads and a spread of accidents distributed throughout residential areas were highlighted, investigated and where appropriate, physical traffic calming measures were introduced through the capital programme to try to reduce accidents and improve safety. Residential areas proved more difficult to tackle as accidents tended not to be clustered and were occurring in areas with traditional streets with on-road parking and a
mixture of housing types, (thus there would be a mix of families, singles and elderly people). As well as accident analysis, the Council were receiving calls from residents for traffic calming from every housing estate in Renfrewshire, of which, a considerable number were based on perceived road safety risk.

In conjunction with the on-road measures, the Council’s Road Safety team continued to tackle the traditional ‘E’s with a major part of the road safety resource being allocated to Education, particularly for children. (As with most other councils, the emphasis has been on teaching children to cross safely, heightening awareness of dangers and advising on playing safely.)

Increasingly, traffic calming measures were being implemented to reduce decision making for pedestrians and drivers. Increasingly, sites were overloaded with guard rail, lining and physical measures, all designed to reduce traffic speeds and achieve the objective of reducing the number and severity of accidents. This was not unique to Renfrewshire. This type of approach was popular across the country as a main approach to tackle road safety issues on our roads.

**What does this do for individual decision making?**

Measures for traffic calming, including location of speed cameras, has an immediate impact upon the numbers and severity of accidents at that particular location. Thus, traffic calming was generally successful where implemented. However, it must be noted that cost, acceptance and popularity have a bearing on the number of sites where traffic calming is placed and the quantity and type of traffic calming that can be implemented. In addition, a way had to be found to tackle the sporadically distributed accidents that were occurring through residential areas and to address the perceived road safety problems being brought to the attention of the Council by residents.

Driver behaviour around the locus of traffic calming measures was found to have altered – this was easily proven as the number of accidents at these locations reduced. However, away from traffic calmed areas such a change was not apparent. This was supported by evidence of accidents still occurring on these roads and speed counts indicated that average speed on some roads in Renfrewshire were still above the 30 mph limit. Within residential areas, sporadic accidents rather than clusters were occurring therefore the traditional approach was not suitable as it would have taken £50 million and up to 100 years to implement traffic calming in all residential areas.

In addition, the Council had to take into account that some Renfrewshire residents considered physical traffic calming measures to be insufficient, inappropriate, too noisy and a cause of vibration outside their homes. Therefore, there was debate between residents who supported implementation of physical traffic calming measures and those opposed to this approach as a solution.
Pivotal to the changes in the way the council was to deal with tackling accidents in residential areas was the changes to legislation relating to 20mph speed limits introduced in 1999. The revised legislation removed the requirement for local authorities to obtain the consent of the Scottish Minister before making an order in respect of a 20 mph speed limit (with or without traffic calming). Thus it became much easier and less time consuming for the local authorities to introduce a 20mph limit in residential areas. The SCOTS group (Society of Chief Officers for Transportation in Scotland) suggested that local authorities implement up to 3 pilot projects. Renfrewshire implemented pilots in Brediland, Kirklandneuk and Ben Nevis which were considered successful and importantly, were accepted by the local communities. Results, Scotland wide, were favourable. SCOTS reported that average speeds were reduced at 60% of the pilot sites and this was accompanied by a drop in the number and severity of recorded accidents. Importantly, the schemes received support from the local communities as a way forward to tackle speeding. Thus, it was considered that the 20mph schemes could be rolled out across Scotland by individual local authorities.

What was the basis for change?

- Renfrewshire was experiencing a reduction in the overall number of accidents in the local authority area however not necessarily in residential areas.
- Specific treatments for residential areas had been required in order to reduce accidents.
- Traditional traffic calming addresses speeding in the vicinity of the physical measures however it does not tackle driver responsibility to reduce speeds in other areas.
- It would take up to 100 years and £50 million for traffic calming to be introduced across all residential areas.
- 30 mph is considered to be too fast and 20mph without traffic calming did not comply with Scottish Executive Guidelines was not considered enforceable across the majority of residential areas.
- Changes in legislation were required to make it easier for councils to introduce 20mph in certain areas without the permission of the Scottish Minister, although Scottish Executive Guidance still had to be followed.
- The traditional approach to road safety education was to have children always take responsibility for their behaviour. It was considered that issues surrounding driver behaviour and driver responsibility should be addressed.

3. RENFREWSHIRE’S ACTIONS

The fundamental basis for the Community Road Safety Initiative in Renfrewshire was to tackle driver behaviour and in particular, to encourage drivers to reduce their speed to under 20mph in all residential areas. In residential areas, studies had shown that it was predominantly local drivers who were using the local roads. The average traffic speed on these roads was
between 25 and 30 mph and distances travelled along each section of road
was usually less than 600m. i.e. off distributor roads and along a short
distance on the local road to their destination.

It was considered that a simple solution (but not necessarily an easy solution
to implement to all drivers) was to help communities to recognise that it was
within their own powers to address the issues in their own areas and indeed to
consider the speed they drive at when in other residential areas.

The Community Road Safety Initiative, spearheaded by Renfrewshire Council
attempted to motivate local communities to take action to address local road
safety concerns. The initiative was formulated in response to the above issues
and the high demand for traffic calming throughout Renfrewshire that could
not be achieved through existing capital resources and was not supported by
all in the community.

By 2000 a request had been made for traffic calming in almost every
residential area in Renfrewshire. In many residential areas the requests were
based on perceived danger as opposed to historically proven accidents. This
was a difficult area to address as in most locations the residents had a valid
concern and while there were few casualties the potential risk was significant,
especially to children playing in areas where inappropriate speeds by vehicle
drivers were commonplace.

The way forward – Tackle driver attitudes and behaviour through
introducing the Community Road Safety Initiative

In March 2001, Renfrewshire Council attempted a pilot project that would
stimulate the community to take collective action on road safety without the
council being required to allocate substantial sums of money. The new
approach focussed on housing areas within Johnstone following an emotive
reaction after a young child was knocked down.

The housing areas involved were high density housing with little or no
through-traffic. The areas had a number of social problems relating to
unemployment and variable standards of housing. These areas typically
represent locations where high child casualty rates could be expected due to
a combination of inappropriate driving by residents combined with many
children playing in the street.

The areas chosen were well served by their community council and a number
of Tenants’ Associations and good communication links existed through the
forums dealing with initiatives on crime reduction and environmental
improvement associated with the Council’s Community Plan. There was an
opportunity to extend these initiatives to incorporate road safety issues.

At the outset, it was considered essential that road safety initiatives should
involve all of the community and be locally based.
Renfrewshire Council, in partnership with Strathclyde Police Community Branch, the Community Council and the Tenants Associations agreed to produce a local poster campaign and a community leaflet which could be distributed to all residents. School children designed the poster and message as part of a competition. The poster was displayed in community facilities, libraries and local shops and clubs throughout the target area.

A leaflet was produced using local photographs and highlighting very local issues encouraging drivers to keep their speed to 20 mph or less. The leaflet highlighted appropriate driving standards for residential areas and indicated ways that parents could consider the safety of their children. The leaflet included quotes from local residents and local councillors on the reasons why they thought drivers should slow down and had a strong emphasis on how the community were driving the initiative forward for the benefits of all who lived in the area.

The distribution of leaflets was once again based on community involvement. In some areas the Tenants association undertook to distribute leaflets, in other areas it was the community council with additional volunteers. In one area, the community council knocked on doors in local streets to hand over the leaflet to individual householders in order that they could discuss what the leaflet was about and gauge a reaction from the resident. Feedback from the community council reported that the leaflets were well received and that almost all residents stated that they always drive below the 30mph speed limit in the area. Most residents had noticed the new 20mph signs and the 20’s Plenty roundels that were placed on the carriageway. Importantly, the initiative was received very positively and raised the profile of the need to drive not at 30mph but at 20mph or under in the residential areas.

The key to the success of the leaflet pointed to the fact that it had been produced very much in conjunction with the local community and that it was an individualised leaflet for the neighbourhood. Photographs were of the local area, with local children and with quotes from local residents.

**Pilot Projects**

17 residential areas across Renfrewshire were chosen in 2002 for the roll out of the Community Road Safety Initiative. The criteria for choosing residential areas was based on the area being self contained with mainly local traffic, fully residential with the likelihood of children playing in the streets.

In each area, meetings were arranged with the local groups as described above and where support was forthcoming, the Community Road Safety Initiative was taken forward. The physical measures introduced to each area were as follows:

- 20 mph bespoke localised signs were designed and implemented specifying the community name with signs placed at key entry points to
the community. This typically resulted in 4 to 8 signs for each community.

- 20 mph roundells were painted on the carriageway at selected locations throughout the residential area to remind drivers of the speed limit.

Cost for a typical Community Road Safety Initiative amounted to around £1500 for the road signs and roundels. (This is compared to a typical physical traffic calming scheme which can cost around £15,000 for 10 speed cushions).

The local community council, residents and tenants associations met with council officers to agree the photographs and quotes that would be included in the local community leaflet. A typical leaflet carried the message that reducing speeds even by a small amount could have a significant impact on severity of any accidents. The cost for production of the leaflets was met by the local authority, funded through the Scottish Executive’s Walking, Cycling, Safer Streets allocation. Leaflets for each community averaged at around £300 (This included photography and printing).

Between 1000 and 1500 leaflets were produced for each area. The leaflets were distributed by the community council, councillor or tenant association to each individual household. This raised the profile that it was the community wishing to take it into their own hands to address the issues surrounding speeding traffic and the need to reduce speed. In total, 25,000 leaflets were printed for the pilot project areas.

In addition, the council carried out an advertising campaign with local press articles and coverage in the council magazine which is distributed to every household across Renfrewshire (70,000 households) on a quarterly basis.

Once the campaign was up and running, regular meetings took place with the Community Council and community police to determine how best to support the initiative as an on-going project. It is clearly important that the road safety issue is adopted at the heart of community council activities and is not considered as a one-off exercise. The campaign benefited strongly from being bottom-up in approach and not a direct consequence of a central government initiative which the local community can sometimes have difficulty relating to. The main message being put across related directly to the Foolsspeed campaign and it was anticipated that this Initiative would support and re-inforce the understanding and meaning of the national campaign.

4. RESULTS

Raising awareness and reducing traffic speeds in the residential areas had the effect of reducing the number of casualties within the residential areas across Renfrewshire. Speed surveys were undertaken in 6 communities to
establish base speeds. This indicated that the areas did not have a significant speeding problem in that drivers typically drove at 26 – 30 mph on streets where a 30mph limit was in place. However, due to the nature of the residential areas, often with on-road parking there was a perception from residents that speeding was a problem.

The 20mph roundels and signs had the effect of reminding drivers of the need to drive not at the 30mph limit but at the advisory 20 mph limit.

Monitoring is ongoing to establish actual speed reduction in all of the Initiative areas however it is considered that by raising awareness, drivers are reducing their speeds and this has had the result of reducing the number and severity of casualties in the residential areas.

This Initiative was considered as a simple solution to help communities recognise that it was within their own powers to address the issues – particularly as most traffic was actually localised and not through-traffic or rat-runners as previously expected.

Most households in the areas were families with children thus raised awareness that not only were they doing it for their children but doing it for other people’s children---most drivers said they always drove at appropriate speed – i.e. the 30mph limit set on the road. The campaign emphasised the message that at 20 mph most survive however at 30 mph about half are killed. Thus, raising awareness locally, through press advertising and the community leaflets, also re-inforced the national speed reduction campaigns being carried out by Road Safety Scotland and other agencies.

Attitudinal Surveys

A questionnaire was forwarded to each councillor for feedback on how their community had received and embraced the initiative. All areas reported that the campaign had been received favourably and most felt that the campaign had impacted upon the behaviour of local drivers. Over half of the councillors also stated that they felt there was a need for an ongoing campaign to maintain momentum and ensure that drivers did not lapse back into speeds above 20mph in the residential areas. The questionnaire also requested any ideas or changes that should be introduced. The only change requested was in the design of the leaflet. Several councillors felt that a map instead of list of streets be included on the leaflet.

The ongoing campaigning and publicity requested by the councillors is being taken forward in the form of introducing a Community Charter. This will involve the community council and / or councillor engaging with locals to get them to sign up that they will always drive at less than 20mph in their residential and other residential areas. This again is a form of publicity and reminder to the local community of the need for reduced speeds.
The Community Road Safety Initiative has now been rolled out to cover 95% of all residential areas across Renfrewshire. To date, leaflets have been produced covering 40 residential communities across Renfrewshire (distribution to all areas is anticipated by June 2006). Getting the message across was made easier in the subsequent phases/roll-out of the initiative as the campaign was already underway to highlight to all drivers the need to slow down to less than 20mph in all residential areas. The key to the success of this further roll out will be to keep up the momentum and regularly remind drivers to slow down.

5. FUTURE ACTIONS

It is essential that monitoring and evaluation of speeds, accident locations/causes and residents opinions is undertaken. This will allow longer term view to be taken regarding whether there is a need for further measures or show where the initiative could be altered to provide additional benefits to the local communities. In addition, it is intended that Renfrewshire Council will:

- Continue to market/advertise the need for reduced speed in residential areas – under 20 mph.
- Ensure that this initiative is implemented in conjunction and in support of other road safety campaigns including the roll-out of the community speed watch initiative.
- Set up a Community Charter - by the community, for the community. – This will be taken forward in 2006/07 in 3 pilot areas. The campaign to address the issues should not be implemented and then left with no follow-up if speeds are not down sufficiently. The message of 20’s Plenty has to be repeated in order to remind drivers to slow down.
  Accident analysis indicated that there are certain age groups more likely to be involved in accidents – under 30 yrs old. This group can be young adults living at home, young and single/couples with or without children or with children too young to be out playing in street. Therefore, this group may not consider that speeding in the community is a significant issue that involves them. Therefore the Community Charter will have cover two areas – families (a reminder that there is a need to reduce speed in all residential areas) and younger people, more likely to be involved in accidents. (It is considered that the groups may have to be approached via different types of advertising to get the message across).
- Monitoring, evaluation and review of scheme
  - undertake surveys to measure changes in driver speeds,
  - subjective evaluation through door to door interviews/attitude surveys through the citizens panel,
  - ongoing accident analysis,
  - education in schools, colleges to target young drivers/pupils – attitudes etc. Use of Scottish Household surveys etc to find out if any relevant info.

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6. CONCLUSIONS

The Community Road Safety Initiative has now been rolled out to 40 different residential communities across Renfrewshire (some works are still underway and should be completed by June 2006). From a successful pilot in one area in 2001 followed by the 17 areas chosen for the extension of the pilot, the Community Road Safety Initiative has been embraced by the local communities across Renfrewshire as a way forward for them to have a positive impact on reducing the number of accidents in their residential areas. The success of the pilot schemes speaks for itself as there was demand from other communities for the Initiative.

To date, the 40 residential areas have been covered by around 40,000 leaflets, approximately 200 signs and 450 roundells painted on the roads. The cost for implementation of this Initiative amounted to considerably less than implementing physical traffic calming in the form of road humps and could be judged to have an even greater impact due to its effect on driver behaviour on a wider geographical area.

What have we learned from the Community Road Safety Initiative?

- Drivers are reasonable and do not wish to cause road accidents.
- Most adults, especially those with children, support the scheme and are convinced that it’s always someone else doing the speeding...when asked, they always indicate that they drive within the speed limit of 30mph. In a recent survey of Renfrewshire households, 83% state they always drive at 20 mph or less in any residential area.
- Most householders relate to the need for reduced speeds as they have safety concerns for their own children or local children.
- A large proportion of householders are of the opinion that it is strangers to the area, particularly white van drivers, who are speeding. However, surveys have indicated that it’s local drivers in the local area.
- Partnership working is essential and should include the council, police, community council, residents, tenants and local associations/groups – the more people promoting the message, the better.
- The individual components of the initiative were not unique in themselves however bringing about change in attitudes and behaviour required the package of measures and essentially required local residents to take ownership of the initiative.
- In order to keep up momentum and maintain the speed reduction in residential areas it is essential to continually market / highlight / campaign and remind individuals to consider their speed, particularly in residential areas.
This Community Road Safety Initiative has had an impact in getting across the message:

- that driving in residential areas should be carried out in a different way to driving on other types of roads – if it takes putting down coloured strips, signs or lines then it should be done to remind drivers.
- that it is local drivers who know their local area. They should consider that there may be children playing in the street who do not always stop and think before crossing the road.
- that drivers may be well aware of the road layout. Where parking usually takes place etc but drivers cannot predict where and when children may be playing—drivers familiar with the environment usually pay less attention to the signs etc than when driving in an unfamiliar area. Thus, introducing some change such as roundels on the road or a new sign will usually, initially catch the driver’s attention and be a reminded about the speed limit.
- that 20mph should be a maximum speed in all residential areas in order that casualty severity can be limited.

The average cost of implementing the Community Road Safety Initiative is in the region of £1800 - £2000 for signs, roundels and leaflets for one residential area. The initiative is aimed at all residents in the local area and is considered to have an impact of driver behaviour within the area as well as outwith that particular locality. In comparison, a typical physical traffic calming scheme for a location can typically cost £15,000 and has an immediate impact on driver behaviour usually only at the particular site. Thus, it follows that a much greater impact can be gained through trying to have an effect on individual driver behaviour for all residential areas and to raise awareness of the need for reduced speeds in certain conditions.

Until there are intelligent vehicles in place that automatically adjust speed in relation to the driving conditions and environment, it is necessary to rely on intelligent and considerate drivers who have regard for others in their society. These drivers exist……..they just sometimes need reminders that they have the power and it is within their control whether Peter plays safely in the street and grows into adulthood unharmed by the trauma of becoming a road casualty statistic.