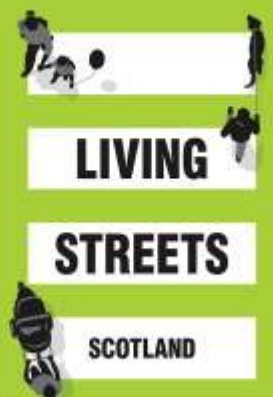


A Review of Practice in the Implementation of 20mph Limit Areas

March 2018



We are Living Streets Scotland, part of the UK charity for everyday walking. We want to create a walking nation where people of all generations enjoy the benefits that this simple act brings, on streets fit for walking.





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A Review of Practice in the Implementation of 20mph Limit Areas



1. Introduction

This Review explores the practice of introducing 20mph limit areas in Scottish local authorities, draws on the experience in English local authorities, and studies which have been undertaken on the effectiveness of current practice.

The Review covers the process of introducing 20mph areas, the coverage to date, and the experience of, and barriers to, their introduction. It explores the experience of involving communities – whether as organised groups or residents – in the process of introducing the areas, the benefits which their introduction is expected to bring, and whether these benefits have been realised. It examines the experience to date in Scotland and other parts of the United Kingdom, drawing on case studies and other literature.

Living Streets Scotland secured funding from the Scottish Government to work in four areas across Scotland. The project explored how community engagement could support the introduction of 20mph areas, encourage greater public acceptance of them, and how community involvement and engagement could lead to greater benefits – speed reduction as well as active travel. The project worked with local authorities and other partners with the intention of learning lessons which

would lead to greater local authority capacity in community engagement on this issue – and ultimately more 20mph areas being introduced.

2. Why Introduce 20mph limits?

There is a wealth of evidence on why 20mph speed limits should be introduced, and their benefits.

Safety


The safety benefits of lower speeds have been outlined in a range of studies and publications. All point to a direct relationship between increased severity and number of casualties, and an increase in speed. The most frequently cited contributory factor to fatal crashes in the UK is excessive speed. Speed also affects injury severity; 80% of pedestrian or cyclist fatalities occur at between 20 and 40 miles per hour, whereas fatal impacts at 0–20mph account for only 5% of fatalities among vulnerable road users. Around 40% of pedestrians who are struck at speeds below 20mph sustain serious injury, whereas at impacts of up to 30mph, 90% sustain serious injury.¹

The increased likelihood of sustaining serious injury in streets where the speed limit is above 20mph is borne out in other studies, which also show that for pedestrians and cyclists, built up areas are the most dangerous when speeds are above 20 mph. The Good Practice Guidelines on 20mph Speed Restrictions (Transport Scotland 2016)² stated that between 2009 and 2013 almost 90% of cycle accidents and 95% of pedestrian casualties in Scotland happened on roads where the speed limit was 40mph or less. Across the UK, a 2015 study found that the majority of pedestrian casualties occur in built up areas: 20 of the 25 child pedestrians and 288 of the 383 adult pedestrians who were killed in 2015, died on built-up roads. For cyclists, almost half of cyclist deaths (48 of 100) and most cyclist casualties (17,252 of 18,884) occurring on these roads.³

In addition, when travelling at higher speeds drivers have less time to identify and react to what is happening around them and it takes longer for the vehicle to stop. The result of this is that a crash is more severe and greater injury is caused to those in the car or hit by the car.²

The argument for increased safety was echoed by the Glasgow Health Commission⁴ in 2009 which included as one of its recommendations the introduction of mandatory 20mph areas. They suggested it would save lives, reducing the severity of accidents, and preventing accidents in deprived neighbourhoods. This was seen as benefitting children, older people and people with a disability.

Many people are discouraged from making the shift from car based travel to walking or cycling because of real or perceived safety concerns. This was highlighted in the recent Scottish Parent and Teacher Survey⁵ by Sustrans and the Scottish Parent Teacher Council. Of the parents surveyed, 42% cited safety reasons as the main reason why parents are reluctant to allow their children to walk or cycle



to school. The impact of safety concerns can be seen in Sustrans⁶ analysis of its Hands Up Scotland Survey results from 2008-15. This survey, which looks at the ways children travel to school, showed that less than 50% of children walk, cycle or scoot to school and that this rate has dropped marginally since 2008.

The importance of perception of speed or safety should not be overlooked – those areas where speed was already low before the introduction of 20mph limits still showed increases in feelings of safety after the limit was introduced.

Effect on Those Living in Deprived Areas

Evidence shows that those in deprived communities are more likely to be affected by traffic accidents, despite owning fewer cars. Scottish household data from 2015 shows that fewer people from households with incomes of less than £10,000 per year usually drove to work than those with annual incomes of over £40,000. Commuters from low income households are more likely to walk or take the bus. Glasgow Centre for Population Health⁷ analysis of trends in pedestrian and cyclist casualties in Scotland 1999/2003 and 2009/2013 showed that child and adult pedestrians are more likely to be casualties both as a result of accidents in the most deprived areas and if they live in deprived areas. Child pedestrian casualties were 3.2 times higher and adult pedestrian casualties were 2.4 times higher.

Active Travel

The introduction of 20mph areas is also seen as a means of encouraging more active travel and the adoption of more active lifestyles.

In its report, the State of Child Health, Recommendations for Scotland (2017)⁸, RCPCH sets out a specific action on 20 mph which it sees as contributing to the recommendation *Tackle Childhood Obesity Effectively*:

‘The Scottish Government should encourage physical activity for all children and young people and support parents and families to adopt healthy lifestyles by improving social and physical environments. Local authorities should ensure planning decisions include a public health impact assessment and should introduce 20mph speed limits in built up areas to create safe places for children to walk, cycle and play.’

Research has shown that active forms of travel are not only important to health for their contribution to increasing physical activity. They can also help address obesity, improve mental health, tackle climate change, reduce air pollution, and can help build more connected communities.

Social Cohesion

Studies have also attested to the increased positive benefits for neighbourhoods and those living in them through the impact of lower speeds and a lessening of traffic.

*Donald Appleyard*⁹ identified in 1969 that sociability reduces as traffic increases, showing that far less people cross roads to visit or talk to people in busier streets. His research found that streets with high volumes of traffic are associated with lower

social interaction, less outdoor activity on the street and smaller perceptions of one's 'home' territory. Appleyard found that *"...residents of lightly trafficked streets had two more neighbourhood friends and twice as many acquaintances as those on the heavily trafficked streets"*.

And it is not just residents who benefit, businesses do too. Research has shown that those who walk or cycle are more likely to spend money locally than those in cars who tend to drive through.¹⁰

Local Impact


There have been a number of studies on the introduction of 20mph speed limits in local areas. These examined the intended and actual impact, and issues which merit consideration when introducing speed limits in order to achieve the intended benefits.

Speed and accident reduction feature as an intended and actual impact in all studies. In Edinburgh 'Delivering the Local Transport Strategy'¹¹ clearly set out that reduction in speeds and reduction in numbers and severity of road casualties on relevant streets was the intended impact. This was reiterated in Bristol¹², where a reduction in road casualties was one of three objectives set for the 20mph programme. In the South Central Edinburgh pilot scheme,¹³ before the implementation of the city-wide approach, measurements following the introduction of 20mph showed speed reductions in both those streets where the speed limit was changed to 20mph and those which remained at 30mph.

The Edinburgh scheme was 'signs only' and the speed reduction achieved – an average reduction of 1.9mph – is reiterated in other studies. A much larger reduction in speed is found in 20mph zones with physical measures. As stated in the Steer Davies and Gleave study for the London Borough of Merton¹⁴ 'There is strong evidence that 20mph zones result in significant casualty reductions..... Such zones result in a decline in speeds of about 9mph on average.' The report concludes that 'The evidence is clear that reducing vehicle speeds results in fewer and less severe collisions, particularly for vulnerable road users.'

The disparity in speed reduction between areas with and without physical measures is, in the main, a result of the average speeds before implementation (these tend to be higher in areas selected for physical measures). The wider benefits to be realised from a reduction in speed is reiterated across literature and studies.

As well as the stated impact on speed and casualties previously noted in the Edinburgh Local Transport Strategy¹¹, 20mph was also seen as delivering an increase in walking and cycling and changes in residents' perception of the 'liveability' and 'people-friendliness' of Edinburgh's streets, for example how happy people feel about walking and cycling in their neighbourhoods. In Bristol¹², the introduction of 20mph was proposed by the Director of Public Health and was seen as a population level strategy to improve public health. In addition to reducing road casualties, the programme objectives were to increase levels of walking and cycling and improve social cohesion in communities. A report to the London Road Safety Unit on 20mph Zones and Road Safety in London¹⁵, found that ..'because the goals



of 20mph zones are multi-faceted, there are many potential outcomes of interest, such as speeds, road traffic collisions, road traffic injuries, neighbourhood cohesion, or walking and cycling patterns’.

A 2004 study¹⁶ examined the views of residents in the outskirts of Glasgow six months before and six months after the introduction of a 20mph zone. 20% of respondents claimed to walk more as a result of the traffic calming scheme. Pedestrian counts showed increases in the number of pedestrians. The survey also reported that most respondents felt that road safety had improved. Road safety for cyclists and motorists, traffic nuisance, pedestrian facilities and traffic smells and fumes were reported to be significantly less of a problem after implementation of traffic calming measures.

A National Study of Local Impact

Atkins¹⁷ has been commissioned by the Department for Transport to undertake a study into signed only speed limits, which aims to address an evidence gap regarding the effectiveness of 20mph speed limit only schemes. The study’s objectives are:


- To evaluate the effectiveness of 20mph speed limits, in a range of settings.
- To examine drivers’ and residents’ perceptions of 20mph limits.
- To assess the relative costs/benefits to vulnerable groups e.g. children, cyclists, and the elderly.
- To evaluate the processes and factors which contribute to the level of effectiveness of 20mph speed limit schemes.

Interim findings from a survey of residents and drivers views as reported in summer 2017 are:

Approximately half of residents (51%) surveyed supported the introduction of a 20mph limit prior to implementation, while only 9% thought it was a bad idea. Following implementation, support increased with 75% feeling the limit was beneficial for the local community. Drivers were also very supportive, with 66% saying the new limits were a good idea.

The majority of residents are perceived to be aware of the 20mph limit in their street. *But*, some residents remain unaware and are unlikely to perceive any benefits.

20mph limits have had limited impact on driving behaviour. Only 22% of residents and 32% of drivers thought the average speed of vehicles had reduced. Only 7% of drivers and 4% of residents thought the number of vehicles using the road had reduced. However, 8% of drivers said they avoided driving in 20mph areas. Only a fifth of residents thought the 20mph limit made drivers more considerate to pedestrians (21%) or cyclists (17%). Most residents and drivers do not perceive an improvement. But, many drivers report that they are now more aware of hazards and risks.




20mph limits are perceived to be beneficial for pedestrians, cyclists and residents; and the questionnaire results suggest a *small* number of residents are walking and cycling more in some of the case study locations. Less than one in ten thought more people were out and about on their street.

Importance of Supporting Measures

Go Slow: an umbrella review of the effects of 20mph zones and limits on health and health inequalities¹⁸ found that ‘...effects on physical activity—most notably walking and cycling and children playing outside—were less clear. This may have been because the interventions evaluated in these studies (standard road humps or zones) might not have provided the cultural change necessary in terms of

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- 20mph is better for drivers – drivers cut their spacing as braking distances contract.
 - Shorter gaps mean more vehicles can use the available road space, reducing standing traffic.
 - Filtering at junctions becomes easier. It is far easier for motorists to pull into traffic travelling at 20mph than at 30mph. It is also much easier for cycles to avoid being cut up by cars and lorries when they are travelling more slowly and turning left less rapidly.
 - Motor traffic volumes decrease, since slower speeds encourage active, sustainable and shared travel.
 - Buses operate more efficiently. The reduced length of traffic queues means that bus journey times decrease, and become more reliable. Buses become a more attractive alternative to the car.
 - More children are likely to walk or cycle to school on their own. Parents are not tied to the school run, and children have their freedom increased.
 - Older people are less fearful of going out of their home, trying to cross the street, or of driving their own cars at a reasonable (i.e. slower) speed, rather than always at 30mph.
 - All those people who are afraid to cycle become more likely to cycle. The population as a whole benefits from not sitting in cars and getting fatter and fatter.
 - Pollution is reduced, less petrol is consumed, and – ultimately – fewer wars need be fought over oil. Areas like the Antarctic may not need to see oil wells and pollution engulf them.
 - Neighbourhoods work better locally. There is a greater incentive to use local shops rather than drive to supermarkets. 20mph is very good socially, locally as well as environmentally, globally.

3. Implementing 20mph speed limits

Background

This Review is concerned with 20mph speed limit areas. It is important at this point to highlight the difference between a 20mph speed limit area and 20mph speed limit zones.

20mph speed limit zones use traffic calming measures, speed humps, road narrowing, and since 2016 repeater signs and road markings, to reduce speed. 20mph limit areas do not require any physical measures other than signage.

The introduction of 20mph areas is governed by a range of legislation and guidance. This sets out the process of lowering speed limits, the factors which should be taken into account, signage, the advertising of Traffic Regulation Orders, dealing with objections and the final agreement.


The most recent guidance, which sets the scene in Scotland and sets the framework for the introduction of 20mph areas, is the Good Practice Guide on 20mph Speed Restrictions 2016². This sets out positive reasons for the introduction of 20mph areas and relates their introduction to wider Scottish Government policies. In particular it states: 'This Guide aims to provide clarity to local authorities on the options available to them and aid greater consistency on the setting of 20mph speed restrictions throughout Scotland. It also aims to encourage local authorities to set 20mph speed restrictions.'

The guidance sets 20mph speed restrictions within a range of measures which can be taken to manage speed, improve safety and encourage other objectives including active travel. 20mph areas therefore do not sit on their own as a consideration, but as a prerequisite are seen as contributing to a variety of objectives. The guidance states that the Scottish Government wants to see vulnerable road users protected, encourage walking and cycling and limit the impact of vehicles.

The introduction of 20mph areas

When considering the introduction of 20mph speed restrictions, six factors should be taken into account:

- Road/street function
- Composition of road users
- Existing traffic data
- Accident data
- Road environment
- Local community



The Guidance gives detail on the speed factor, stating that ‘Local authorities should collect and assess both (mean and 85th percentile speeds) when considering introducing a 20mph speed limit and in the monitoring of an initiative. However, mean speeds should be used as the basis for determining whether to introduce 20mph speed restrictions’.

The Guidance is clear that, where the intention is to introduce a 20mph area without the need for additional traffic calming or road engineering measures, these should be considered where existing mean speeds are no more than 24mph.

20mph zones and areas should not be introduced with a need for extensive police enforcement. It is clearly stated that routine police enforcement will not be available. The road or street conditions should be self-limiting; with a proviso where other measures do not support the lowering of speed that a return to a 30mph speed limit should be considered.

The Guidance, rightly, gives detail on the process for introducing Traffic Regulation Orders, signage and placing and spacing of traffic calming measures.

A range of other measures which could support the lowering of speeds are set out, including behaviour change, traffic activated signs, and traffic calming. However, there is no detail within the guidance on either the importance of behaviour change methodologies or references to case studies where this has been extensively employed.

Along with this there is no reference either to responding to public requests for speed limit restriction or supporting public acceptance of speed limit restriction. Given the Guidance is explicit about the means by which this supports Scottish Government policies on health, accident prevention and active lifestyles this is an interesting omission. It presents the introduction of speed limits as a mechanistic process without giving support and guidance on wider actions which could aid their introduction.

Progress in Scotland

A range of surveys have been carried out on local authorities’ introduction of 20mph speed restrictions, and their future intentions.

In 2017 the Scottish Green Party, as part of the preparation for Mark Ruskell MSP’s Private Member’s Bill to replace the 30mph default speed limit with 20mph, wrote to all local authorities. 18 out of the 32 Scottish local authorities responded. The FOI asked for the number of streets currently designated as 20mph, and the number the local authority intended to introduce in the 2017-18 budgetary period. The responses received showed a wide variation. Some local authorities were able to identify hundreds of roads which had a 20mph limit, others appeared to have concentrated on schools. It is not possible to extrapolate from the information the percentage of roads within an individual local authority covered. However, although some local authorities were able to identify 100s of roads, this does not appear on the face of it to be a high percentage of their total road network. The responses also highlight the differences in approach and patchwork of coverage. The survey

confirmed that only a third of local authorities had any plans to introduce 20mph zones or areas in the 2017-18 period.

20mph in Transport Policy

An analysis was undertaken of a sample of 14 local authorities strategies or plans with a relevance to 20mph: Local Transport, Active Travel and Road Safety. It was clear from this analysis that there is no consistent approach to 20mph across local authorities in Scotland. This inconsistency covers whether there is a policy or strategy addressing 20mph, whether 20mph limits extend from schools to residential areas, whether 20mph speed limits are advisory or mandatory, and whether the local authority wishes to implement 20mph areas or zones.

In 4 of the 14 local authorities there was no specific commitment to, or indeed mention of, 20mph in any of the documents examined although issues of speed and road safety are alluded to. In the majority there was a commitment to supporting 20mph outside schools, in some there was mention of ensuring 20mph was included in new residential developments, and in others to piloting 20mph areas.

Another 4 of the local authorities had specific commitments across a range of documents. These commitments linked the issue of 20mph with safety, active travel, vulnerable groups and speed reduction.

Contrasting examples are:

***Glasgow City Council Road Safety Plan to 2020*²⁰**

“The aim of this extended project [Go Safe Glasgow] is to ensure that drivers reduce their speeds to 20mph or less in identified residential areas, thus making it safer for all road users particularly those who are more vulnerable such as older pedestrians and children... to conform with current regulations, the new 20mph zones must have traffic calming measures such as speed cushions, speed tables or chicanes on the road. The zones therefore become self enforcing and require little or no enforcement from police. We have already delivered Phase 1,2 and 3 of the project, which has seen over 140 km of roads now covered by a mandatory 20mph speed limit. Phase 4 of the project will be implemented during 2014 and will include Hillhead, Knightswood and Mansewood.”

***South Lanarkshire Council - Local Transport Strategy (2013)*²¹**

- Solutions to accidents in urban areas could lead to the introduction of pedestrian crossings or traffic signals. Speeding issues, particularly in residential streets or near to schools, can be treated with installation of vehicle activated signs... and where appropriate the speed limit can be reduced to 20mph.”
- “Schemes such as advisory 20mph areas, while involving some engineering and education, play a key role in terms of encouraging drivers to travel at an appropriate speed.”

- “The Council will support and encourage driving at 20mph or below in residential areas and outside schools.”
- Measures (to encourage more pupils to travel to school actively) include cycle racks, walking buses.... 20mph zones outside schools and enforceable parking restrictions.”

An examination of regional transport and road safety plans shows a similar disparity in approach. Although speed, road safety and active travel are a feature in all plans, there are very few which highlight, mention or indeed contain a commitment to the introduction of 20mph.

The Tactran Walking and Cycling Strategy Action Plan²² makes reference to improving road safety for cyclists and pedestrians and recognises that high traffic speeds are a risk, but makes no reference to 20mph limits.

Although the Tactran Regional Transport Strategy 2015-2036²³ does have an action to ‘Assign greater priority to pedestrians and cyclists in the design and management of the road network and design residential streets to keep vehicles at or below 20mph.’


4. How Scottish Transport Authorities are approaching the Introduction of 20mph Speed Limit Areas

As part of this Review, and to inform its work in the 4 project areas, Living Streets surveyed all Scottish local authorities. The purpose of this survey was to explore local authorities’ approach to community engagement and involvement in the development and decision making on 20mph areas.

From the survey responses it would appear that local authorities’ approach to the introduction of 20mph is an even mixture of a strategic approach and a response to road safety concerns. Less than 10% of those responding stated that their approach was in response to community led requests. This is also reflected in the fact that over 80% stated that a review of accident or speed statistics had been most influential in the implementation of 20mph areas.

When asked when communities were involved in the 20mph process, there was a spread of responses. A mere 10% said communities were involved in setting the local authority strategy, however, 50% stated that communities were involved in scoping or setting sites, and 60% that communities were involved in some form of pre formal TRO consultation. 70% stated that communities were involved in consultation during the formal TRO stage.

Communities appear to be involved in a range of ways: 50% of local authorities stated that this was through meetings or workshops, 20% through some form of online consultation and 50% through exhibitions. However, overwhelmingly (90%) said it was as part of the advertised TRO process.



Local authorities were then asked what impact this involvement had. Over 70% stated that there had been minor changes in response to community concerns raised. These changes included extending the area to be covered and including specific roads. Responding to community concerns was seen as reducing the number of likely objections and, more positively, sprang from a desire to bring the community with them.

When asked which other partners have been involved in the process of implementing 20mph, overwhelmingly local authorities noted the involvement of Police Scotland and active travel organisations such as Sustrans. There was a fairly even split to the question on whether other teams in the local authority were involved. Those that were involved tended to be education or regeneration.

There was a 100% positive response to the question as to whether community engagement skills and an enhanced capacity to engage would help in getting 20mph schemes accepted. This shows that local authority transport staff know that getting local communities involved in the process of developing and delivering 20mph schemes is important, but either lack the skills or the capacity to involve teams within the local authority with community engagement skills.

Analysis of an FOI request to all Scottish local authorities on the Freedom of Information website '**WhatDoTheyKnow**', reiterates the piecemeal approach to the introduction of 20mph areas. It also highlights that the majority of those local authorities responding rely on the mechanism of the Traffic Regulation Order to engage local communities. Some local authorities specifically mention consultation with community councils as representative groups. However, few mention a more proactive approach to engagement - supporting local people to be involved in the design and development of schemes. Many local authorities were clear that community views were part of the decision making process and had an impact on this, but in the majority of cases engagement or involvement is viewed as a reactive consultative exercise.

Trunk Roads

In addition to talking to local authorities, Transport Scotland was also approached on their process for introducing 20mph on the trunk road network. In 2013 Transport Scotland announced that they intended to pilot 20mph areas in five communities. In announcing the pilots Transport Scotland²⁴ stated: 'The Scottish Government aims to promote the safe and efficient use of the roads it is responsible for. Where these pass through towns and villages, there are frequently competing pressures between their strategic purpose, and community interests relating to safety and amenity.'

The pilots were therefore selected and designed to support road safety in general, but also to target benefits at vulnerable road users. The initial selection included sites where communities had requested lower speed limits and those where there was evidence of safety issues.

The approach to the final selection of the five sites was evidence led with the criteria being:

- Personal Injury Accidents particularly those involving vulnerable road users
- Vehicle speeds – not being significantly above an average of 24 mph
- Traffic volumes
- Vehicle composition including the HGV proportion of total traffic volume
- Road Environment including layout, key buildings and social amenities


Additionally, the pilot sites were selected on the basis that they would not require significant engineering and would be self-enforcing.

Pilot Sites

The five selected sites were Maybole, Biggar, Langholm, Oban and Largs. Transport Scotland's approach to introducing the 20mph sites was to work with local authorities, communities and wider stakeholders in each area. A public exhibition was held in each area and significant attempts were made to address concerns and objections both before and after the issuing of the TRO. Transport Scotland was keen to dovetail with local authority intentions to introduce 20mph speed limits on roads leading on to the trunk road, in an effort to ensure that there was a clear hierarchy of speeds for motorists and pedestrians.

However, the mixed response to the pilot seems to indicate that Transport Scotland's approach has not been wholly successful. Despite some communities coming forward to request 20mph, it was not necessarily these communities which were selected as the criteria set was evidence led. The reliance on a public exhibition alongside formal letters as a means of communication of intent meant that the introduction of a 20mph area was often presented to or viewed by communities as a *fait accompli*. This, and a focus on responding to objections, meant that Transport Scotland relied on messaging and communication which, it has been agreed, was not always effective in the early days. Meetings were only offered, mainly with community councils, where concerns or objections were raised. Many communities wanted other measures alongside 20mph signs to enforce the speed limit. Site specific FAQs were subsequently developed on the Transport Scotland website to try and offer increased information.

In Oban the local authority is keen to see a 20mph scheme on the trunk road, alongside its desire to implement a 20mph speed limit on surrounding roads. There are a number of streets with 20mph limits in place, some of which go back some time, however it is quite piecemeal. Therefore, when Transport Scotland approached Argyle and Bute Council about the trunk road, it seemed sensible for the local authority to extend its limits to match in with the trunk road. In particular, given that Oban is a busy town with a high number of pedestrians moving in and around the town centre road network, it was seen as making sense from a road safety perspective to restrict the speed to 20mph. However, the community council has raised objections.



In Langholm the local authority was supportive but more than 300 people wrote to complain about sign clutter. Meanwhile in Biggar and Maybole the schemes were implemented without objection.

The response of local people to this pilot shows again the importance of working with communities. The Transport Scotland approach for trunk roads was essentially top down where local communities were presented with an option and given little opportunity to be meaningfully involved in the development of the scheme except as consultees or objectors. This approach had few problems where there was limited scope for objections, but in the other sites a more participatory approach could have led to local issues being identified earlier in the process and would have allowed discussion and dialogue to come to a resolution, leading potentially to a speedier introduction of the schemes.

5. Bristol and Edinburgh – Two Approaches

Both Bristol and Edinburgh Councils have instituted a wide ranging and strategic approach to the introduction of 20mph areas, with 20mph rolled out across most of the city through a phased approach.

Both local authorities defined the intended benefits of their 20mph schemes as wide ranging – in addition to lowering speed and casualties 20mph was viewed as bringing an increase in walking and cycling rates, the liveability of streets and in Bristol, social cohesion. In fact, the Bristol scheme was defined as a public health intervention.

Consultation with residents confirmed that this wider approach is supported and indeed sought through the introduction of 20mph areas. The top reasons residents in Edinburgh reported for supporting the introduction of 20mph were:¹³

- Reduced speed will increase safety and responsible driving
- It will improve the environment of the city
- Safer communities for all road users (particularly vulnerable road users)
- It will get more people walking and cycling
- Positive impact on health issues
- Reduced noise levels

For Bristol¹² the top three reasons reported by residents for supporting 20mph were:

- Fewer serious accidents
- Children can play more safely
- Makes our streets more pleasant to live in

This wider approach to 20mph reiterates the benefits and reasons for their introduction argued by proponents of 20mph areas outlined in the Benefits section of this report.

Research in both cities has shown that residents' support for 20mph areas on the whole remains and increases after their introduction.

In Edinburgh research into residents' views as part of the South Central Edinburgh pilot¹³ found that overall level of support for the 20mph speed limit increased from 68% to 79% after its introduction', while the proportion of respondents strongly supporting the 20mph speed limit increased significantly from 14% to 37% after. The percentage opposing its introduction fell slightly from 6% to 4%.

In the Bristol pilot¹² research found that 88% of residents favoured 20mph in their street compared with 74% before it was introduced.

Surveys of residents have also focussed on the wider benefits – perceptions of safety, active travel and liveability of streets - often through proxies such as children playing outside. Both the Bristol and Edinburgh pilots showed improvements in this regard.

In Edinburgh¹³:

The proportion of children walking to school increased marginally from 63% to 65%.

- The proportion of older primary school children allowed to play unsupervised outside their home, on the pavement, or in the street rose from 31% to 66%.
- When considering how safe their street is for walking and cycling, the majority felt that speeds were safe (78% compared with 71% 'before').
- Respondents consider traffic speeds in the local area as safer for both walking and cycling.
- The proportion of children cycling to school increased from 4% to 12%; with increases notable amongst older primary school age children cycling to school (from 3% to 22%).

In Bristol¹² household surveys of public attitudes pre and post 20mph in the central area found that:

- 88% of residents were walking for 10 minutes or more in their local area most days, compared with 78% pre 20mph
- Cycling among senior school age children increased (40% cycling at least once a week against 24% pre 20mph)
- The % of Phase 1 area residents reporting being disturbed by the sound of passing traffic was down significantly post 20mph implementation, from 43% to 28%
- The percentage of Phase 1 residents feeling it was safe for children to walk to school on their own has rose from 50% pre 20mph to 63% post 20mph implementation

Both councils instituted social marketing campaigns of varying length and complexity to support the introduction of their schemes, focussing on the positive benefits to be gained through reductions in speed. These involved local residents and public partners voicing their support for 20mph and the reasons for its introduction. There was significant use of the press and social media to highlight

the roll out of 20mph, to give positive reasons for its introduction – and to counter any negative press and comments attracted.

Both local authorities have developed websites which give local people information on the reasons for the introduction of 20mph, its benefits, the roll out, and how local people can become involved. Bristol has a 'Become a Pace Car' campaign where residents can display the sticker 'A little Bit Slower. A Whole Lot Better' while driving at 20mph to show their support for 20mph. Edinburgh has developed a high profile school street closure programme in tandem with the 20mph scheme roll out to support residents in reaping the benefits of lower speed and the liveability of streets where children can play.


Both cities are committed to continuing the social marketing in support of 20mph once the roll out is complete in recognition that behaviour change is a gradual process which requires on-going support.

Social Marketing in Support of 20mph

In support of its scheme Bristol City Council commissioned the University of the West of England²⁵ to research and develop a practical guide to the “soft” or social marketing measures that can influence the social acceptability of slower speed limits. This provides a comprehensive exploration of the motivations of drivers, pedestrians and cyclist. It has valuable lessons on the steps which are needed if both a reduction in speed, and changes in attitude and behaviour are to be achieved. Although focussing on speed reduction, this study has important lessons for wider behaviour change.

Some of the key messages from this study are the need to:

- Develop a shared, bigger vision for 20mph, communicate it and draw those who can contribute to this into an active partnership
- Acknowledge that the vision includes two sets of behaviour change – to driving and active travel – but realise that these are not necessarily two different sets of people
- Develop social norm messaging e.g. local residents want you to drive at 20mph
- Develop sound bites that easily lodge in the memory
- Emphasise that there is majority support for 20mph
- Emphasise that streets are living spaces rather than ways to get from A-B and develop and support community based actions which put this into practice.



Lastly, and importantly, it sets out the need for a properly funded budget to support the social messaging campaign, and the willingness to continue this over a longer period of time than the physical siting of 20mph signs.

A 20 step process towards making 20mph a reality is included – this has huge resonance when exploring how to realise additional benefits to 20mph schemes:

1. Recognise that signs are **just a legal tool** and cannot work in isolation;
2. Get **technical and political support** to deliver soft measures;
3. Allocate an **adequate budget** (>10% physical implementation) to deliver supporting soft measures;
4. Appoint **project staff with soft skills** in communication, marketing and community engagement;
5. Be ambitious about the **big vision** for 20mph;
6. Identify and engage with potential stakeholder **champions and threats** early on in the project;
7. Assemble a **broad Steering Group** to achieve cross-disciplinary and city-wide perspectives and buy in;
8. Try to work closely with the **police at all levels**;
9. Work hard to **overcome language and cultural barriers** with all stakeholders but particularly the police;
10. Identify and **agree shared outcomes** for 20mph – is it reduced collisions? Or increased cycling? Or active kids?
11. Ask **questions and listen** to gain insights into how people/communities feel about traffic and speed;
12. Be **ready for the negative arguments** – look at pro-motoring media, websites, blogs;
13. **Don't alienate "drivers"** – almost everyone uses a car sometimes;
14. Find **stories to tell** – in every community there will be enthusiastic 20mph supporters;
15. Use the **voices of children** to communicate why 20mph offers a better future;
16. Culture change is a **long, slow process**; so don't expect to win people over immediately;
17. Make the 20mph limit **as visible as possible** - drivers will need constant reminding
18. **Support communities to be creative** and develop their own ways of responding to 20mph;
19. **Help people to dream**;
20. Keep on **communicating success** and reminding people of the bigger vision.

6. Engaging Communities in 20mph

Analysis of current practice in the introduction of 20mph areas shows a piecemeal approach to the engagement of local residents.

The TRO process asks for consultation once a scheme has been proposed, but does not see this as mandatory in the development of a scheme. This is despite the Guidance defining local community as one of the factors to be taken into account when considering the introduction of a speed limit. A proactive approach to community engagement through responding to public requests for speed limit restriction or supporting public acceptance of speed limit restriction is also not covered.

Responses to the Living Streets survey of local authorities show that communities were involved in **consultation** on speed limit areas through meetings, workshops, online consultations and exhibitions. Some of this took place during the pre TRO stage, but overwhelmingly this happened as part of the formal, advertised TRO process. Only 50% of local authorities said that communities were involved in scoping or setting sites. This is supported by the responses to the FOI request by **'WhatDoTheyKnow'** which showed that local authorities relied on the TRO to engage communities.

Local authority and regional transport strategies are in the main silent on the involvement of local communities. Only one, East Lothian, mentions the role of communities:

East Lothian Council Road Safety Action Plan²⁶

“Following the East Lothian Council Plan key actions for transport, introduce measures to reduce speeding, including 20mph speed limits where appropriate and where these are supported by residents.”

However, this is not to say that local authorities do not appreciate the importance of community engagement to ensure community acceptance of a 20mph scheme. Transport staff responded positively to Living Streets that community engagement skills and an enhanced capacity to engage would help in getting 20mph schemes accepted. This shows that local authority transport staff know that getting local communities involved in the process of developing and delivering 20mph schemes is important, but either lack the skills or the capacity to involve teams within the local authority with community engagement skills.

7. Conclusions

The conclusions which can be drawn from this review of current practice are that:

1. There remains a focus on the safety benefits of 20mph rather than broader benefits linked to, for example, active travel. This would appear to influence both the lack of accompanying measures to support wider gains and be reflected in analysis of the difference a 20mph speed limit has brought.
2. Clear guidance is available to local authorities in Scotland, but this is safety-led and predicated on engineering solutions.
3. The approach being adopted is in the main a top down one, with reliance in the introduction of a TRO rather than a broader community engagement approach.
4. Local authority appetite for the introduction of 20mph areas appears limited, although it is not clear whether financial constraints is the main determinant of this.
5. The introduction of 20mph is at times linked to broader benefits such as active travel or more liveable streets. And there is evidence that these benefits are realisable and looked for by local communities. However, success in this will depend on the adoption of new approaches, which includes community engagement, partnership working, behaviour change, and marketing and promotion.

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