Appendix ‘A’

LANCASHIRE COUNTY COUNCIL

SPEED MANAGEMENT STRATEGY

January 2007
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1. **Policy Statement**

Lancashire’s Speed Management Strategy will aim to balance the needs of traffic flow with the safety of all road users. This will be achieved through the setting of appropriate speed limits and by encouraging drivers and riders, by the use of engineering, education and enforcement, to travel within those speed limits and at a level appropriate to the immediate environment and prevailing conditions.

1.1 **Introduction**

It is widely recognised that speed plays an important part in both the frequency and severity of road traffic collisions. It is estimated that speed is a contributory factor in approximately one third of all road traffic injury collisions and research by the Transport Research Laboratory (TRL), an independent body providing independent and impartial research, consultancy, advice and testing for all aspects of transport, has shown that a reduction of 1mph in the average of all speeds would lead to a 5% reduction in crashes although this could be as much as 7% in rural areas. A reduction in speeds would also lead to a lessening in the severity of casualties. This is particularly important in relation to vulnerable road users.

Speed in road safety terms is generally categorised as 'excess' or 'inappropriate'. Inappropriate speed means driving too fast for the conditions but not breaking the speed limit, whereas excess speed is both inappropriate and in excess of the speed limit. It is important to stress that the speed limit is not necessarily the safe speed at which to drive, but is the maximum speed at which a driver/rider is allowed to travel, although this may be too fast for the prevailing conditions.

This document, therefore, is aimed at addressing these two issues through the setting of appropriate speed limits and the use of engineering, education and enforcement to encourage drivers to not only comply with the speed limit but to drive appropriately within that limit.

1.2 **Strategy Aims**

- To set appropriate speed limits on all roads within Lancashire.

- To encourage drivers and riders to travel within those speed limits and at a level appropriate to the immediate environment and prevailing conditions.

- To establish a monitoring system to review and measure performance.
2. WHERE ARE WE NOW?

2.1 How Are Speed Limits Currently Assessed?

Prior to this document individual speed limits were assessed based on Circular Roads 1/93 Setting Local Speed Limits. More recently, in the knowledge that the guidance in this document was outdated and being updated, the County Council developed an interim policy taking into consideration the nature of the road and its predominant use. Up to date this had been done on an ad hoc basis following complaint letters, MP/Councillor requests or District and Parish Council requests, and as a result this led to some inconsistencies in the setting of speed limits.

2.2 How Do We Currently Measure Speeds On The Road Network?

At the present time various aspects of the highway are regularly monitored to alert the authority to take appropriate action. One aspect for which data is randomly collected is vehicle speed. This information could provide an important indicator for overall traffic management and safety, especially in areas where interventions have been introduced which are targeted specifically at speed reduction.

There are a variety of reasons why speed data is collected and a number of ways in which this is done.

- Fixed camera sites

  Speed readings were initially collected on each length of road as part of the justification for the fixed camera using a Peek Automatic Data Recorder (ADR) and pneumatic tubes. Since the sites have been established, Gatsometers have been used to monitor the effectiveness of the sites up to twice yearly.

- Mobile camera sites (approved sites)

  Speed readings using Peek ADRs and pneumatic tubes laid across the road were undertaken on the length of road as part of the justification for the fixed camera. These sites have since been monitored at the same frequency as the fixed camera sites.

- Community concern sites

  All new submissions being considered for mobile enforcement at community concern sites have speed data collected using Peek ADR recorders. Those that are accepted into the programme are
monitored once per year starting six months after commencement of the programme.

- Speed map sites

These sites have been established to achieve a cross-section of sites on different classifications, speed limits, road types and volumes across the county. Data is collected using Golden River Per Vehicle Recorders (PVRs) linked to permanent inductive loops cut into the carriageway and at present the data is analysed using software developed by the University of Manchester Institute of Science and Technology (UMIST). This system produces the greatest accuracy for both volume and speed due to the provision of separate loops for each lane.

- Ad hoc sites

These are usually 'one-off' requests for speed readings to support individual investigations by highway engineers. These sites are monitored using Peek ADRs with pneumatic tubes laid across the road.

All these methods of speed measurement enable an assessment of compliance with the speed limit to be undertaken. Many of these surveys, however, are taken at locations where measures have been introduced to reduce speed and therefore do not necessarily relate to the highway in general. The speed map sites have the potential to provide information which is representative of the level of speed limit compliance on the roads in general across Lancashire.
3. **WHAT INITIATIVES ARE USED TO ENCOURAGE COMPLIANCE?**

Addressing road casualties has always been a priority within Lancashire. It is recognised that speed is an important factor in road traffic collisions and therefore the County Council utilise a number of measures which will reduce speeds and in turn reduce road casualties. In engineering and enforcement terms these include:

- Speed limits
- Countdown markings
- Speed limit roundels – signs painted on carriageway or on pole
- Warning signs
- High impact signing
- Carriageway markings
- Rumble strips
- Gateways
- Speed cameras
- Interactive signs
- Speed trailers
- Traffic calming
- Road humps
- Chicanes
- Mini-roundabouts
- Junction tables
- Bus cushions
- Coloured surfacing
- Priority narrowing/pinch points
- 20mph zones.

In addition to these there are also education, training and publicity interventions in the form of road safety campaigns and the speed awareness training course.

3.1 **How Are They Implemented?**

The engineering and enforcement measures highlighted above are currently implemented using funding from one of four budgets:

- Local Safety Schemes,
- Lancashire Partnership for Road Safety through the National Safety Camera Programme,
- the Network Management signing and lining budget, and
- the 20mph zone budget.

There are a variety of criteria and assessment frameworks used to ensure that these budgets are utilised in the most effective manner in terms of achieving objectives. There are, however, some schemes...
which fall outside these budgets where funding is provided through other sources, such as developer contributions, District/Parish Councils and more recently through Lancashire Locals.
4. The Way Forward

4.1 Setting Speed Limits

Speed is a major concern to many communities across Lancashire, ranging from those living in small rural villages to those in urban residential housing estates. In order to address these concerns it is necessary to have a consistent approach to the assessment of speed limits with a reliable and understandable method of addressing the concerns raised.

In August 2006 the Department for Transport issued Circular 01/2006 Setting Local Speed Limits, which is their revised guidance to local authorities. Some of the key points identified in the document in relation to the principle of speed limits are:

i) Speed limits should be evidence-led and self-explaining and should seek to reinforce people's assessment of what is a safe speed to travel. They should encourage self-compliance and should not be seen by drivers as being a target speed at which to drive in all circumstances.

ii) Traffic authorities set 'local speed limits' in situations where local needs and considerations deem it desirable for drivers to adopt a speed which is different from the national speed limit. Local speed limits could be reduced or increased depending upon conditions and evidence.

iii) The new guidance should be used for setting all local speed limits on single and dual carriageway roads in both urban and rural areas. It should also be used as the basis for future assessments of local speed limits and for developing route management strategies and speed management strategies.

iv) The underlying aim should be to achieve a 'safe' distribution of speeds which reflects the function of the road and the impacts on the local community. The needs of vulnerable road users must be fully taken into account.

v) Traffic authorities are asked to review the speed limits on all their A and B roads and implement any necessary changes by 2011.

4.2 Reviewing and Implementing Speed Limits

The requirement that Local Authorities review the speed limits on all their A and B class roads and implement any necessary changes by 2011 in accordance with the guidelines has a large resource implication for local
authorities in terms of both staff time and finance. In order that this review can be completed by 2011 it is essential that it commences as soon as possible. However, consideration also needs to be given to the procedure for responding to requests received for roads which fall outside these classifications. In addition there is the assessment of villages.

It is therefore proposed that the review of A and B class roads and the review of roads outside these classes be treated as two separate issues. In line with government policy as set out in Circular 01/2006 it will be the aim in Lancashire that, where appropriate, a 30mph speed limit should be the norm in villages.

4.3 A and B Class Roads

There are 130 different A and B class roads within Lancashire, all of which will require assessment. It is proposed that the assessment of these roads will be done in two stages:

- The review of the current and appropriate speed limit for each road
- Implementation of any recommended changes to the limit.

The review of speed limits should be carried out in accordance with the guidelines as detailed in Circular 01/2006 and as shown in the tables at Appendices G and H. The review of these routes is likely to be highly resource intensive and in order to progress this process and ensure it is completed in the shortest possible time it is proposed to outsource this work.

The implementation of changes to speed limits identified as part of the review will then be undertaken in priority order taking account of criteria which will include:

- Level of local concern - Lancashire Local Committees
- Casualties
- Existing speed limit
- Difference between the measured average speed and the existing speed limit
- Future maintenance programme.

4.4 Roads Other Than A and B Class

There is no requirement for a review on roads other than those classified as A and B class and therefore there will be no programme of work formulated which will ensure that all other roads are reviewed. It is felt that there will, however, be numerous requests received for reviews to
be undertaken and again in order to ensure that the volume of requests can be managed successfully it is important that a separate prioritisation system is established. This criteria should include:

- Level of local concern - Lancashire Local Committees
- Casualties
- Existing speed limit
- Difference between the measured average speed and the existing speed limit.

4.5 Villages

Circular 01/2006 and Traffic Advisory Leaflet 1/04 state that, where appropriate, a 30mph speed limit should be the norm in villages and give a broad definition of a village based on the following simple criteria relating to frontage development and distance:

- 20 or more houses (on one or both sides of the road) and
- a minimum length of 600 metres.

If there are fewer than 20 houses, traffic authorities should make extra allowance for any other key buildings, such as a church, shop or school. A more detailed explanation of 30mph limits in villages can be found in DfT documents, Circular 01/2006 and Traffic Advisory Leaflet 1/04.

In considering the appropriateness of applying a 30mph limit in a settlement that meets this broad definition for a village, account will be taken of:

i) Existing measured traffic speed.

ii) Relationship between density of residential units and length of road being assessed.

iii) Additional service functions such as village hall, schools, public houses, retail outlets, churches, healthcare centres and local businesses having three or more employees.

iv) Frequency of reported injury collisions.

It is intended that this policy is adopted in Lancashire.
5. **Implementing Speed Limit Changes**

Implementing any changes to speed limits which are identified during the review of a road should be undertaken in priority order based on the criteria previously mentioned. Where it is identified that a speed limit should be amended then this should be done in the first instance without incorporating other speed management measures (this does not apply to the introduction of 20mph zones where it will still be required to introduce appropriate measures to ensure the speed limit is self-enforcing). However, should there still be a problem with speeding then the following measures could be considered as a means of encouraging compliance, although the implementation of any additional speed measures will be dependent on the availability of funding and in some instances the fulfilment of the relevant criteria and the undertaking of public consultation.

5.1 **Interactive Signing/Driver Feedback Signs**

There are generally two types of interactive sign which are used:

- Speed Indicator Device (SpID) which tells the driver the speed they are travelling
- Interactive Warning Sign which warns the driver of a potential hazard ahead, e.g. a bend or a junction, accompanied with a message such as ‘SLOW DOWN’.

Attached at Appendix C is a process map which shows the procedure to follow in deciding which type of sign is appropriate depending on the identified problem.

The use of interactive or driver feedback signs is one option to help reduce speeds and can be particularly useful in rural areas. A trial of SpIDs has been carried out in conjunction with the Police with encouraging results, both in terms of speed reduction whilst the signs were operational and in public perception of their benefits.

There are five separate checks detailed at Appendix D that need to be satisfied for each site before agreement is reached to proceed with the site. The preferred mounting is on an existing lamp column or post with the bottom of the base plate 2.1 metres above ground. In exceptional circumstances where there is clear justification for using the SpID and there is no existing suitable position to mount the base plate then the provision of a new post will be considered.

5.2 **Road Safety Campaigns**

Road safety campaigns relating to speed are generally undertaken by the Lancashire Partnership for Road Safety (LPfRS) and target both the
generic population and specific road user groups. Many communities express concerns about traffic speeds and how this affects safety in their local environment. Local communities do have the opportunity to address local concerns through the Community Action Guide, operated by the LPfRS, which aims to support any voluntary-based organisation that would like to help make the roads safer by contributing to the aims of the LPfRS.

The Community Action Guide includes:

- Useful information about who does what to reduce road casualties
- Some ideas about locally organised road safety projects
- Guidance on applying for assistance to deliver a locally based road safety project.

The Pack is not about helping groups to campaign for traffic calming or changes to speed limits; there are already things in place to help people do this. It is about encouraging locally based groups to deliver locally based projects that will help to reduce speeds, reduce drink driving and increase the wearing of seatbelts.

The LPfRS will provide grants of up to £1,000 subject to approval to help communities fund their campaigns.

5.3 Traffic Calming and 20mph Zones

The implementation of engineering measures is generally carried out through the Local Safety Schemes Programme or the 20mph Zones Programme.

5.3.1 Local Safety Schemes

The Local Safety Schemes Programme will target all funding at casualty reduction which may as a consequence reduce vehicle speed. Schemes are implemented based on their potential to reduce casualties and a rigorous selection procedure is employed to ensure that those schemes which will provide the greatest benefit in terms of accident reduction are included in the programme. Engineering measures can be expensive, however, and with the limited budget available this means there will be a limited number of schemes implemented each year. It is important that the focus of the Local Safety Schemes Programme remains casualty reduction, although this in many instances will also result in reduced speeds, therefore decisions on whether traffic calming can be implemented on a road should
generally be made on the basis of it attaining sufficient priority to warrant a place in the Local Safety Schemes Programme.

5.3.2 20mph Zones and Limits

20mph Zones

The County Council has a policy to introduce 20mph speed restriction zones in residential areas reflecting the Government's National Road Safety Strategy.

It is recommended that they are imposed over an area consisting of several roads. The purpose of this type of area-wide traffic management is to create conditions in which drivers naturally drive round at 20mph because of the general nature of the location or as a result of traffic calming measures being put in place. It is the intention that 20mph schemes should not rely on enforcement action to reduce and maintain speeds at an acceptable level. A 20mph zone is indicated by specially designed 20mph zone entry and exit signs and the statutory provisions require that no point within the zone must be further than 50 metres from a traffic calming feature unless in a cul-de-sac less than 80 metres long.

In April 2006 the County Council's Cabinet Member for Sustainable Development approved revised criteria and prioritisation for 20mph zones as it was considered that such a revision would foster more efficient implementation and would address residential concern and meet individual road safety needs within specific areas. This document has updated the criteria, taking account of the views expressed through the Lancashire Locals. The assessment involves a system of point scoring and weighting in relation to the importance of each categorised criterion and will be applied to each proposed scheme. It would be possible for a scheme to score highly without one of the criteria being met, eg accidents. The criteria are: local concern as determined by the Lancashire Local, accidents, average speed, daily traffic volumes, social inclusion and schools/community centres/facilities. A detailed explanation of the criteria for 20mph zones is attached at Appendix F. As with the Local Safety Schemes Programme, there is limited funding for 20mph zones and all requests should be considered in light of this new criteria for prioritising schemes.
20mph Limits

20mph limits should be used for individual roads or for a small number of roads. Research into 20mph speed limits has shown that where speed limits alone were introduced, reductions of only about 2mph were achieved. 20mph speed limits are therefore only suitable in areas where vehicle speeds are already low (the Department for Transport would suggest where mean vehicle speeds are 24mph or below) or where additional traffic calming measures are planned as part of the strategy. A 20mph speed limit is indicated by terminal signs and repeater signs are required at regular intervals along the road covered by the limit.

5.4 Safety Camera Enforcement

The primary objective of safety cameras is to reduce deaths and injuries on our roads by reducing the level and severity of speeding and red light running. The Department for Transport have issued rules and guidance which cover the installation of safety cameras. Included within these rules are the criteria that must be met if approval for a camera site, fixed or mobile, is to be given. These criteria are set out at Appendix E. Safety cameras should only be used after all other options have been considered and discounted. These rules and the associated selection criteria are only valid until 31 March 2007 when the National Safety Camera Programme will cease. From this time local authorities will be able to determine their own local criteria for the use of cameras. The revised criteria for Lancashire from 1 April 2007 is attached at Appendix E.

5.5 Community Concern Safety Camera Enforcement

The rules produced by the Department for Transport do permit some safety camera enforcement time at sites which do not meet the above criteria (exception sites) and these sites within Lancashire are classed as sites of community concern.

In view of the limited time that can be afforded to 'exception' sites it is necessary to restrict the number of separate sites so that a reasonable frequency of enforcement can be carried out at each site. In Lancashire, including the unitary authorities, this was determined as 12 sites per Police division, producing a total of 72 sites. In order to ensure that selected sites are of genuine community concern, proposals for consideration are sought from each of the 14 District Community Safety Partnerships towards the end of each year. These sites are then assessed against a criteria based on three attributes, namely measured speed, potential conflict with pedestrians, children and cyclists, and
recorded injury collisions. Weighting of 50%, 30% and 20% is given to these three attributes respectively. Whilst the speed and accident scores are objectively assessed, the potential conflict element is a more subjective assessment.

This assessment produces a score for each site and the top 12 scores within each Police division provisionally form the enforcement list. Officers from the local authority and the Police then assess these to ensure that there is a viable location to carry out the mobile enforcement, taking into consideration safety to the operatives, limitations on parking and visibility sight lines. Any sites where enforcement cannot be carried out are replaced with the sites immediately below them in the assessment score listing and these in turn are site assessed until there are 12 sites in each division where mobile enforcement can be carried out. The Community Safety Partnerships are then notified of the sites where enforcement is to be carried out for the following year.

As previously mentioned, the rules relating to camera enforcement are changing from 1 April 2007. The policy relating to community concern camera enforcement is therefore currently under review with a view to increasing the number of sites allowable and improving flexibility.

Prior to any enforcement taking place it is necessary for camera warning signs to be permanently erected at each end of every site. If the site is within a 30mph zone this sign will be to Diagram 880 in the Traffic Signs Regulations and General Directions 2002. Otherwise a sign to Diagram 879 will be erected as near as possible and preferably on the same post as the relevant speed limit repeater sign.

During the course of a year there may be occasional locations that emerge where community concern about speeding drivers becomes an issue. So that these sites do not have to wait for up to 12 months before being considered and included as an approved site, a procedure has been developed such that these sites can be compared to those on the approved sites list. The following process is proposed as a means of addressing this issue.

i) Complaint received regarding speeding vehicles.

ii) Initial assessment by Police Community Beat Manager within one week of complaint.

iii) If complaint is considered valid it will be forwarded to the County Council's Environment Directorate for objective assessment against the following criteria (in the order given) within one month:
- Prospect of inclusion in Local Safety Schemes Programme
- National Safety Camera criteria
- Community Concern criteria of measured speed, conflict and accident criteria.

iv) If score against Community Concern criteria is higher than the lowest already on the list then add to list of Community Concern sites. A maximum of two extra sites per Police division per year will be allowed.

v) If site does not meet criteria of any the above then originator is informed, stating reasons for refusal.

If the Community Safety Partnerships include any of the additional sites for the annual assessment they will be reassessed as part of the annual review of sites.
6. **Monitoring Progress**

As part of a Speed Management Strategy it is important that evaluation and monitoring work is undertaken to assess whether there is progress in encouraging drivers to comply with speed limits. As previously mentioned, some speed monitoring does already take place but it is necessary that a more formal procedure is adopted which will provide better information on both the type of measures which are effective in reducing speeds and if this effect is localised or across the road network. It is proposed therefore that the following monitoring work be undertaken.

- **Safety Camera Sites**
  
  Speed measurements taken at each site (fixed and mobile) on an annual basis.

- **Local Safety Schemes**
  
  Where one of the objectives of a local safety scheme, as identified in the project initiation document, is speed reduction then speed readings will be taken prior to construction and again within one year of construction.

- **Speed Limit Changes**
  
  Speed measurements taken one month and six months after the commencement of the new limit.

- **Speed Map Sites**
  
  It is proposed that these sites are monitored on a monthly basis and that consideration be given to identifying new permanent monitoring sites.
# APPENDIX A - A and B Class Roads in Lancashire by District

<table>
<thead>
<tr>
<th>District</th>
<th>Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burnley</td>
<td>A6068, A6114, A646, A671, A678, A679, A682, B6238, B6239, B6434</td>
</tr>
<tr>
<td>Chorley</td>
<td>A49, A5083, A5106, A581, A6, A6061, A673, A674, A675, B5229, B5246, B5247, B5248, B5249, B5250, B5251, B5252, B5253, B5256, B6227, B6228, B6229, A59</td>
</tr>
<tr>
<td>Fylde</td>
<td>A5230, A583, A584, A585, A586, A588, B5192, B5233, B5259, B5260, B5261, B5266, B5269</td>
</tr>
<tr>
<td>Hyndburn</td>
<td>A6119, A6177, A6185, A678, A679, A680, B6231, B6234, B6236, B6237, B6535</td>
</tr>
<tr>
<td>Lancaster</td>
<td>A5105, A588, A589, A601M, A6070, A683, A687, B5272, B5273, B5274, B5275, B5290, B5321, B6254, B6480, A6</td>
</tr>
<tr>
<td>Pendle</td>
<td>A56, A6068, A682, B6247, B6248, B6249, B6250, B6251, B6252, B6383</td>
</tr>
<tr>
<td>Preston</td>
<td>A583, A5071, A5072, A6, A6063, B5269, B5411, B6241, B6242, B6243, A59, A5085</td>
</tr>
<tr>
<td>Ribble Valley</td>
<td>A59, A666, A671, A677, A678, A680, A682, B5269, B6243, B6244, B6245, B6478, B6246</td>
</tr>
<tr>
<td>Rossendale</td>
<td>A56, A6066, A671, A676, A680, A681, A682, B6214, B6235, B6236, B6238, B6377, B6527</td>
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<td>South Ribble</td>
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<tr>
<td>West Lancashire</td>
<td>A506, A5068, A5147, A5209, A565, A570, A577, A581, B5195, B5197, B5240, B5241, B5242, B5243, B5246, B5250, B5312, B5319, B5375, B5420, A59</td>
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<tr>
<td>Wyre</td>
<td>A586, A587, A588, A6, B5258, B5266, B5267, B5268, B5269, B5270, B5272, B5293, B5377, B5409, B5412, B5439, B6430</td>
</tr>
</tbody>
</table>
APPENDIX B - Prioritisation Criteria For Roads Other Than A and B Class

<table>
<thead>
<tr>
<th>Elements of Criteria</th>
<th>Weighting</th>
<th>Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local concern as determined by the Lancashire Local *</td>
<td>4</td>
<td>Priority Ranking 5</td>
</tr>
<tr>
<td>Difference between measured mean speed and speed limit (mph)</td>
<td>2</td>
<td>1-2</td>
</tr>
<tr>
<td>Accidents</td>
<td>2</td>
<td>1-2</td>
</tr>
<tr>
<td>Existing speed limit</td>
<td>1</td>
<td>20mph</td>
</tr>
<tr>
<td>Future maintenance programme</td>
<td>1</td>
<td>5+ years</td>
</tr>
</tbody>
</table>

* The Lancashire Local will take account of the strength of local support using such evidence as:
  - Letter
  - Letter with member involvement
  - Petition with <50% household support
  - Petition 51-75% household support
  - Petition >75% household support.

All requests for a review of speed limits on roads other than A or B class will be brought to the Lancashire Local to be ranked. The Lancashire Local will then award the appropriate value to the request as set out in the table above, eg a scheme with a priority ranking of 5 or below will score 1 point.

Example

A request is received for a reduced speed limit on a 50mph road supported by a residential petition signed by 75% of households.

- Speed surveys have taken place along the road and the resulting mean speed is 54mph. The difference between the mean speed and the speed limit is (54 - 50) = 4mph.
- Two accidents have occurred along the section of road being considered.
- The existing speed limit is 50mph.
- There are no plans for maintenance work within the next five years on this road.

The calculation for the road is:
<table>
<thead>
<tr>
<th>Local concern</th>
<th>Petition</th>
<th>= 5 points x 4 weighting</th>
<th>= 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference between mean speed and speed limit</td>
<td>4</td>
<td>= 2 points x 2 weighting</td>
<td>= 4</td>
</tr>
<tr>
<td>Accidents</td>
<td>2</td>
<td>= 2 points x 2 weighting</td>
<td>= 2</td>
</tr>
<tr>
<td>Existing speed limit</td>
<td>50</td>
<td>= 4 points x 1 weighting</td>
<td>= 4</td>
</tr>
<tr>
<td>Future maintenance programme</td>
<td>5+</td>
<td>= 1 point x 1 weighting</td>
<td>= 1</td>
</tr>
</tbody>
</table>

Therefore the total score is $20 + 4 + 2 + 4 + 1 = 31$. 
APPENDIX C - Interactive Sign Process Map

1. Request for site to be considered for an interactive sign
2. Are there 5 or more recorded crashes in 3 year period?
   - Yes: Consider for use as a permanent site
   - No: Forward details to Police Division to deploy temporary sign

3. Measure vehicle speeds to establish extent of speeding problem
   - Excessive: Consider for temporary speed indicator type sign in short term subject to ongoing local research into their use on a permanent basis
   - Inappropriate: Consider for specific warning type sign
   - Neither: Is site suitable for use as a temporary site?
     - Yes: Local authority to assess post/lamp column for load suitability
     - No: No further action but continue to monitor

4. Sites prioritised on estimated FYRR
5. Sites included in annual programme of interactive sign implementation

6. Consider for specific warning type sign
7. Police Division to use temporary sign as appropriate
APPENDIX D – Speed Indicator Devices (SpID) Criteria Check

Suitability

The sites identified are where there is genuine public concern about speeding vehicles. Usually these sites will be well known as such to both Police and County Officers but where there is any doubt about the level of excess or inappropriate speed then site observations, or as a last resort speed readings, should be carried out to quantify the extent of the problem.

Detection

Does the chosen location afford a clear and uninterrupted sight of the device for detection purposes? The device can detect vehicles up to 100 metres away and the approach length should preferably be fairly straight.

Visibility

Will the device be clearly visible to approaching drivers? If there are likely to be parked vehicles, especially high sided vans or HGVs, then an alternative location should be investigated.

Operational

Is there a safe and legal position for operational staff to park nearby to load/unload the device and to mount it on its base plate? The device weighs about 8kg so a short walk would be acceptable, but probably not more than 50 metres.

Loading

If the chosen location for the base plate is on a lamp column, its precise location and (if visible) reference number should be noted, as each column will have to be separately authorised for use by the County Council's Street Lighting Engineers. It is known that some columns, particularly the older ones, may not be strong enough to support the SpID, especially when wind loading is taken into account.

Once each site has been approved, County Council Engineers will arrange for the base plates (and any new posts where necessary) to be erected before notifying the operatives of the SpIDs. The deployment of these devices is undertaken by the Police and the operation of any new sites will be dependent on the resources of the Police and their capacity to operate them.
### APPENDIX E - Safety Camera Criteria (applicable till 31 March 2007)

<table>
<thead>
<tr>
<th>Rule</th>
<th>Fixed Speed Camera Sites</th>
<th>Mobile Speed Camera Sites</th>
<th>Routes</th>
<th>Red Light or Combined Red Light Speed Camera Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site or route length requirements</td>
<td>Between 0.4km and 1.5km²</td>
<td>Between 0.4km and 5km.</td>
<td>Between 5km and 20km.</td>
<td>From stop line to stop line in direction of travel³.</td>
</tr>
<tr>
<td>Number of killed and serious collisions (KSI)</td>
<td>At least 3 KSI collisions per km in the baseline period*.</td>
<td>At least 1 KSI collision per km (average) in the baseline period*.</td>
<td>A minimum of 3 existing core sites within the length (there are no further requirements). OR Has at least 1 KSI collision per km (average) in the baseline period* and meets the PIC total value below.</td>
<td>At least 1 KSI collision within the junction in the baseline period*. Selection must be based upon a collision history of red light running.</td>
</tr>
<tr>
<td>Total value required</td>
<td>Built-up 22/km Non-built-up 18/km</td>
<td>Built-up 11/km Non-built-up 9/km</td>
<td>Built-up 8/km Non-built-up 6/km</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>For sites up to 1km the above value is required. For sites longer than 1km the value is per km.</td>
<td>Plans for routes will require liaison with the Programme Office.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>85th percentile speed at proposed sites</td>
<td>Speed survey shows free-flow 85th percentile speed is at or above ACPO enforcement threshold in built-up areas and 5mph over maximum speed limit in non-built up areas. This can apply to all vehicles or a vehicle class but must be compared consistently.</td>
<td>Not applicable.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site conditions that are suitable for the type of enforcement proposed</td>
<td>Loading and unloading of camera can take place safely.</td>
<td>Location for mobile enforcement is easily accessible and there is space for enforcement to take place in a visible, legal and safe manner.</td>
<td>The location of collisions in the baseline period will determine the length of route.</td>
<td></td>
</tr>
<tr>
<td>Suitability of site for camera enforcement</td>
<td>The Highway Authority must undertake a site survey, demonstrating the following: a) The speed limit has been reviewed confirming that camera enforcement is the right solution; b) There is no other cost-effective engineering solution that is more appropriate; c) The Traffic Regulation Order (where applicable) and signing are lawful and correct.</td>
<td>Loading and unloading the camera can take place safely.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- Built-up area is defined as a road with a speed limit of 40mph or less.
- Non built-up area is defined as a road with a speed limit of 50mph or more.

* The baseline period is the most recent 36 month period available when the proposal is submitted, where the end date is within 12 months of the date of submission.

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1. Average speed cameras are considered to be types of fixed camera and therefore must meet the rules for a new fixed camera. Cost benefits should be considered taking account of the capital cost and ongoing revenue costs versus those of alternative fixed or mobile enforcement.
2. Although average speed cameras are usually dealt with as ‘fixed cameras’ their site length may need to be longer than 1.5km.
3. Where this condition cannot apply, liaise with Programme Office.
Safety Camera Criteria (applicable within Lancashire from 31 March 2007)

<table>
<thead>
<tr>
<th>Rule</th>
<th>Fixed Speed Camera Sites</th>
<th>Mobile Speed Camera Sites Other Than Community Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site or route length requirements</td>
<td>Between 0.5km and 1.0km.</td>
<td>Between 0.5km and 5km.</td>
</tr>
<tr>
<td>Personal injury collisions</td>
<td>The assessment will take account of all injury collisions during the baseline period* with killed or seriously injured having a value of 5 and slight injury having a value of 1.</td>
<td>The assessment will take account of all injury collisions during the baseline period* with killed or seriously injured having a value of 5 and slight injury having a value of 1.</td>
</tr>
<tr>
<td>Total value required</td>
<td>22/km or 15/500m</td>
<td>11/km or 8/500m</td>
</tr>
<tr>
<td>85th percentile speed at proposed sites</td>
<td>Speed survey shows free-flow 85th percentile speed is at or above ACPO enforcement threshold in built-up areas and 5mph over maximum speed limit in non built-up areas. This can apply to all vehicles or a vehicle class but must be compared consistently.</td>
<td>Location for mobile enforcement is easily accessible and there is space for enforcement to take place in a visible, legal and safe manner.</td>
</tr>
<tr>
<td>Site conditions that are suitable for the type of enforcement proposed</td>
<td>Loading and unloading of camera can take place safely.</td>
<td></td>
</tr>
<tr>
<td>Suitability of site for camera enforcement</td>
<td>The relevant Highway Authority must undertake a site survey, demonstrating the following: a) The speed limit has been reviewed confirming that camera enforcement is the right solution; b) There is no other cost-effective engineering solution that is more appropriate; c) The Traffic Regulation Order (where applicable) and signing are lawful and correct.</td>
<td></td>
</tr>
<tr>
<td>New camera sites will be selected using an assessment that includes the level of fatal, serious and slight collisions. The combined level of collisions will be expressed as a numerical scale (see below). Fatal or serious injury collision = 5 (ie 2 serious collisions = 10) Slight injury collision = 1 (ie 5 slight collisions = 5)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The baseline period is the most recent 36 month period available when proposal is submitted, where the end date is within 12 months of the date of submission.
APPENDIX F - 20mph Zone Criteria
Criteria for Prioritising Requests for 20mph Zone Schemes

<table>
<thead>
<tr>
<th>Elements of Criteria</th>
<th>Weighting</th>
<th>Scores</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local concern as determined by the Lancashire Local *</td>
<td>4</td>
<td>Priority Ranking</td>
<td>5</td>
<td>Priority Ranking</td>
<td>4</td>
<td>Priority Ranking</td>
<td>3</td>
</tr>
<tr>
<td>Average speed across the area (mph)</td>
<td>2</td>
<td>20-24</td>
<td>25-30</td>
<td>30-35</td>
<td>35-45</td>
<td>&gt;45</td>
<td></td>
</tr>
<tr>
<td>Daily traffic volumes</td>
<td>2</td>
<td>51-200</td>
<td>201-500</td>
<td>501-1,000</td>
<td>1,001-2,000</td>
<td>&gt;2,000</td>
<td></td>
</tr>
<tr>
<td>Accidents</td>
<td>2</td>
<td>1-2</td>
<td>3-5</td>
<td>6-8</td>
<td>9-10</td>
<td>&gt;10</td>
<td></td>
</tr>
<tr>
<td>Social inclusion indices for ward in which the roads lie</td>
<td>1</td>
<td>0-0.5</td>
<td>0.6-1.0</td>
<td>1.1-1.5</td>
<td>1.6-2.0</td>
<td>&gt;2</td>
<td></td>
</tr>
<tr>
<td>Schools/community centres, play areas, retirement homes, medical centres, shops, libraries</td>
<td>1</td>
<td>One facility</td>
<td>2-3</td>
<td>4-5</td>
<td>6-7</td>
<td>&gt;7</td>
<td></td>
</tr>
</tbody>
</table>

* The Lancashire Local will take account of the strength of local support using such evidence as:

- Letter
- Letter with member involvement
- Petition with <50% household support
- Petition 51-75% household support
- Petition >75% household support.

All requests will be brought to the Lancashire Local on an annual basis as part of the prioritisation process and programme formulation for 20mph zones. The Lancashire Local will then award the appropriate value to the request as set out in the table above, eg a scheme with a priority ranking of 5 or below will score 1 point.

Hypothetical Examples

Example A

A 20mph zonal area request is received from a resident. The relevant surveys take place on the submitted area and the following results are received:

- Speed surveys take place on each road within the area (three for this example) and the resulting mean speeds are 25mph, 33mph and 35mph. The average speed in the area is therefore \( \frac{25 + 33 + 35}{3} = 31 \text{mph} \).
- The respective traffic volume data at the same locations are 100, 60 and 120. The average traffic volume in the area is \( \frac{100 + 60 + 120}{3} = 93 \).

- Four accidents are distributed throughout the area.

- All the roads in the area fall into the same ward and the social indicator for this ward is 0.7.

- The zone has one school, one play area and one medical centre in its boundary, thus there are three facilities in the zone.

The calculation for the zone is:

<table>
<thead>
<tr>
<th>Lancashire Local Priority Ranking 5</th>
<th>Letter</th>
<th>= 1 point x 4 weighting</th>
<th>= 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average speed in area</td>
<td>31mph</td>
<td>= 3 points x 2 weighting</td>
<td>= 6</td>
</tr>
<tr>
<td>Average traffic volume in area</td>
<td>93</td>
<td>= 1 point x 2 weighting</td>
<td>= 2</td>
</tr>
<tr>
<td>Accidents</td>
<td>4</td>
<td>= 2 points x 2 weighting</td>
<td>= 4</td>
</tr>
<tr>
<td>Social inclusion</td>
<td>0.7</td>
<td>= 2 points x 1 weighting</td>
<td>= 2</td>
</tr>
<tr>
<td>Facilities</td>
<td>3</td>
<td>= 2 points x 1 weighting</td>
<td>= 2</td>
</tr>
</tbody>
</table>

Therefore the total score is \( 4 + 6 + 2 + 4 + 2 + 2 = 20 \).

**Example B**

A 20mph zonal area request is received that includes a residential petition with 76% household support:

- Speed surveys take place on each road within the area (two for this example) and the resulting mean speeds are 41mph and 38mph. The average speed in the area is therefore \( \frac{41 + 38}{2} = 40 \) mph.

- The respective traffic volume data at the same locations are 450 and 400. The average traffic volume in the area is \( \frac{450 + 400}{2} = 425 \).

- No accidents have occurred in the area.

- All the roads in the area fall into the same ward and the social indicator for this ward is 1.2.

- The zone has one school, one shop and one play area in its boundary, thus there are three facilities in the zone.

The calculation for the zone is:
<table>
<thead>
<tr>
<th>Lancashire Local Priority Ranking 1</th>
<th>Petition</th>
<th>= 5 points x 4 weighting</th>
<th>= 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average speed in area</td>
<td>40mph</td>
<td>= 4 points x 2 weighting</td>
<td>= 8</td>
</tr>
<tr>
<td>Average traffic volume in area</td>
<td>425</td>
<td>= 2 points x 2 weighting</td>
<td>= 4</td>
</tr>
<tr>
<td>Accidents</td>
<td>0</td>
<td>= 0 points x 2 weighting</td>
<td>= 0</td>
</tr>
<tr>
<td>Social inclusion</td>
<td>1.2</td>
<td>= 3 points x 1 weighting</td>
<td>= 3</td>
</tr>
<tr>
<td>Facilities</td>
<td>3</td>
<td>= 2 points x 1 weighting</td>
<td>= 2</td>
</tr>
</tbody>
</table>

Therefore the total score is 20 + 8 + 4 + 0 + 3 + 2 = 37.

In both cases examples A and B would be compared to all the schemes submitted for assessment. Therefore whether the example schemes were chosen or not would be dependent on how they scored relative to the other schemes.
### APPENDIX G - Speed Limits in Urban Areas

<table>
<thead>
<tr>
<th>Speed Limit</th>
<th>Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>20mph</td>
<td>In town centres, residential areas and in the vicinity of schools where there is a high presence of vulnerable road users.</td>
</tr>
<tr>
<td>30mph</td>
<td>The standard limit in built-up areas with development on both sides of the road.</td>
</tr>
<tr>
<td>40mph</td>
<td>Higher quality suburban roads or those on the outskirts of urban areas where there is little development. Should be few vulnerable road users.</td>
</tr>
<tr>
<td></td>
<td>Should have good width and layout, parking and waiting restrictions in operation, and buildings set back from the road.</td>
</tr>
<tr>
<td></td>
<td>Should, wherever possible, cater for the needs of non-motorised users through segregation of road space and have adequate footways and crossing places.</td>
</tr>
<tr>
<td>50mph</td>
<td>Usually most suited to special roads, dual carriageways, ring or radial routes or bypasses which have become partially built up.</td>
</tr>
<tr>
<td></td>
<td>Should be little or no roadside development.</td>
</tr>
</tbody>
</table>
### APPENDIX H - Speed Limits for Single Carriageway Roads in Rural Areas*

<table>
<thead>
<tr>
<th>Speed Limit</th>
<th>Upper Tier Roads with predominant traffic flow function</th>
<th>Lower Tier Roads with important access and recreational function</th>
</tr>
</thead>
<tbody>
<tr>
<td>60mph</td>
<td>Recommended for most high quality strategic A and B roads with few bends, junctions or accesses. ** When the assessment framework is being used, the accident rate should be below a threshold of 35 injury accidents per 100 million vehicle kilometres with this speed limit.</td>
<td>Recommended only for the best quality C and unclassified roads with mixed (ie partial traffic flow) function with few bends, junctions or accesses. In the longer term, these roads should be assessed against upper tier criteria.</td>
</tr>
<tr>
<td>50mph</td>
<td>Should be considered for lower quality A and B roads which may have a relatively high number of bends, junctions or accesses. ** When the assessment framework is being used, the accident rate should be above a threshold of 35 injury accidents per 100 million vehicle kilometres at higher speeds. Can also be considered where mean speeds are below 50mph, so lower limit does not interfere with traffic flow.</td>
<td>Should be considered for lower quality C and unclassified roads with a mixed function where there are a relatively high number of bends, junctions or accesses. ** When the assessment framework is being used, the accident rate should be below a threshold of 60 injury accidents per 100 million vehicle kilometres.</td>
</tr>
<tr>
<td>40mph</td>
<td>Should be considered where there is a high number of bends, junctions or accesses or substantial development, where there is a strong environmental or landscape reason or where there are considerable numbers of vulnerable road users.</td>
<td>Should be considered for roads with a predominantly local, access or recreational function, or if it forms part of a recommended route for vulnerable road users. ** When the assessment framework is being used, the accident rate should be above a threshold of 60 injury accidents per 100 million vehicle kilometres.</td>
</tr>
<tr>
<td>30mph</td>
<td>Should be the norm in villages.</td>
<td></td>
</tr>
</tbody>
</table>