

ENVIRONMENT CAPITAL SCRUTINY COMMITTEE	Agenda Item No. 8
20 JANUARY 2011	Public Report

Report of the Executive Director of Operations

Contact Officer(s) – Peter Garnham & Andy Tatt
Contact Details – 453458 & 453469

CRITERIA FOR RESURFACING FOOTPATHS

1. PURPOSE

- 1.1 The report has been requested by the Committee to enable scrutiny of the criteria for deciding which footpaths are resurfaced and if necessary make appropriate recommendations.

2. RECOMMENDATIONS

- 2.1 No significant change to the current footway scheme selection criteria is considered necessary however in consideration of factors such as the Government's localism agenda and ongoing budget pressures the following recommendations are proposed to improve upon current practice:-
1. That the Committee supports the proposal to increase by up to 50% the current programme of footway micro-asphalt surface treatments in future years in order to provide a significant preventative maintenance benefit to Peterborough's residents and visitors at minimal additional cost. Funding for this is likely to come at the expense of other footway or carriageway schemes however it is felt essential that more resource is directed to such preventative treatments in order to arrest the deterioration of the network and avoid more expensive treatments being required at a later date.
 2. That the Committee supports the proposal to work more closely with Neighbourhood Teams to capture and understand the needs of the communities from the local perspective and apply these findings to programmes as and where appropriate. This may require a formal process to be put in place whereby Neighbourhoods are able to canvas their communities asking what they actually feel are the priorities at a local level; potentially these priorities may not be shared across the greater Peterborough area.
 3. That the Committee supports the proposal to undertake a review of the current Hierarchy 1a, 1 and 2 footways in order to establish whether the existing network is representative of Peterborough's high use footways within the current available budget.
 4. That the Committee considers whether a defined minimum proportion of 20 – 25%, of LTP, Capital and Revenue scheme allocations should be applied to Peterborough's footway and cycleway network to safeguard against the potential for carriageway schemes to take precedent as the wider network takes the strain in the coming years.

3. LINKS TO THE SUSTAINABLE COMMUNITY STRATEGY

<p>Creating opportunities - tackling inequalities</p>	
<p>Improving health – so that everyone can enjoy a life expectancy of the national average or above and benefit from speedier access to high quality local health and social care services.</p>	<p>Transport networks are an important part of any community and footways and cycle ways are probably more so at a local level in that they allow the free and easy movement of people on a daily basis whether this be children travelling to and from school or residents visiting friends, neighbours or the local shops. Indeed, in the majority of cases all journeys must begin and end on these local networks even if this is the short walk to the car or to the bus stop. The condition of footways and cycle ways is important in order to ensure that vulnerable people particularly the elderly or disabled can feel safe and able to make short journeys to use local amenities at their convenience. It is hoped that by providing conditions conducive with the use of more sustainable modes of transport more people will choose to make short trips on foot or bicycle as an alternative to the car with the obvious health benefits.</p>
<p>Supporting vulnerable people – so that everyone can access support and care locally to enable them to maintain independence, should they be affected by disadvantage or disability at any point in their lives.</p>	
<p>Creating strong and supportive communities</p>	
<p>Empowering local communities – so that all communities and individuals are engaged and empowered, and take their opportunities to shape the future of Peterborough.</p>	<p>Through closer links via the Neighbourhood Council's local communities will be provided with the opportunity to have their say on what happens in their area. This may be particularly important where the needs within the community do not align with the maintenance need that is based rigidly on set engineering principles.</p>
<p>Creating the UK's environment capital</p>	
<p>Conserving natural resources – so that we reduce Peterborough's overall consumption of the Earth's natural resources.</p>	<p>Peterborough has an established network of independent footways and cycle ways that allow users in many cases to travel without having to use the road network, in many cases local journeys can be quicker on foot or bicycle than they are in a car. Through the focused maintenance of the footway and cycle way network more people will choose to walk or ride and leave the car at home. The annual slab replacement programme is completed with all waste slabs being crushed, graded and reused as sub-base material on other footway schemes.</p>
<p>Increasing use of sustainable transport – so that Peterborough has the highest proportion of citizens using sustainable transport modes in the UK.</p>	
<p>Delivering substantial and truly sustainable growth</p>	
<p>Creating a safe, vibrant city centre and sustainable neighbourhood centres – so that people have more diverse and improved places to visit and enjoy.</p>	<p>The promotion of sustainable transport modes such as walking and cycling will support the aim to build strong communities with residents feeling less isolated and more likely to use local networks to access nearby amenities. This can only improve community spirit and make the area feel a better place to live. All footway treatments, even cost effective treatments such as footway micro-asphalt (slurry), have a significant visual benefit to neighbourhoods and communities and can engender pride in a street.</p>
<p>Creating better places to live – so that we provide better places to live for both new and existing communities, ensuring the highest environmental standards of new building</p>	

4. BACKGROUND

4.1 Highway maintenance is a wide ranging service that includes the following activities: -

- Reactive maintenance – responding to inspections, complaints or emergencies
- Routine maintenance (Cyclic) – providing works to a regular consistent schedule generally

for patching, repainting faded road markings, investigating drainage problems, repairing and replacing worn and damaged road signs etc.

- Programmed maintenance (Planned) – providing larger schemes primarily resurfacing, surface treatments or reconstruction of carriageways and footways to a planned schedule.
- Regulatory maintenance – inspecting and regulating activities of others
- Winter Service – providing salting and clearance of snow and ice
- Emergency response – providing a planned emergency response to weather related and other emergencies affecting the network

- 4.2 Programmed or Planned maintenance schemes may be more expensive than routine or reactive treatments in initial cost, but should be designed to have a lower whole life cost, therefore providing value for money. The determination of priorities between competing schemes needs to be based more objectively to ensure the benefits are realised.
- 4.3 Area Highway Inspectors carry out a basic assessment of the condition of footways during routine safety inspections within their geographic areas and this is complemented by ad-hoc inspections triggered by reports from the public, Councillors or other parties.
- 4.4 Where an Inspector believes that it is not economically viable to restore a section of the network to a satisfactory condition with limited routine maintenance works he/she will complete an assessment form (see Appendix A) identifying the location and type of treatment he /she feels appropriate. Once complete this form is submitted to the Highway Maintenance Team Senior Engineer who will initially complete a desk top audit of the information provided before adding the site to the Highway Maintenance Scheme proposal database to be surveyed and rated accordingly.
- 4.5 Throughout the year the Senior Engineer surveys sites on the database applying three other factors namely, condition, hierarchy and cost to complete the assessment process. Having established the applicable factors to the surveyed site the factors are multiplied together and ranked accordingly against each other with a maximum score possible of 100.
- 4.6 When assembling maintenance schemes it is important to consider other programmes of work affecting the network both internally in the case of improvement and street lighting schemes and externally in the case of major works proposed by utilities and developers. In some cases opportunities to co-ordinate works can be achieved and where applied these support Peterborough's goals to minimise disruption in accordance with LTP2 and the Traffic Management Act 2004.
- 4.7 A final judgement is then used to decide on which schemes should go forward for inclusion in the Draft Highway Maintenance Programme that is submitted to the Environment Capital Scrutiny Committee each year. The programme for 2011/12 is currently being developed and will be considered at the Joint Scrutiny meeting which is proposed for late February.
- 4.8 The significant difference between the method used to rate carriageway and footway schemes is that carriageway schemes can be prioritised using formal structural condition surveys the outputs of which, in addition to priorities, inform timing and treatment types using the United Kingdom Pavement Management System (UKPMS).
- 4.9 Current formal footway condition surveys (Detailed Visual Inspections or DVI's) are confined to a small fraction of the total footway/cycleway network (see Appendix C) and results are used primarily to confirm our former National Indicator BVPI 187 now collected as a Local Indicator to inform LTP2.

5. KEY ISSUES

- 5.1 **Maintenance Costs** associated with the different treatments available are often significant and have to be considered as part of an on going maintenance strategy with budget allocations having a direct impact on treatment selection (see table below).

Treatment Type	Life	Cost per sq.m
<u>Footway Reconstruction</u> The complete footway structure is removed and a totally new footway constructed.	25 years	£38.00
<u>Footway Resurfacing</u> The removal of the existing surfacing material, usually to a depth of 70mm, and resurfacing with new.	25 years	£27.00
<u>Footway Overlay</u> On suitable sites it is possible to overlay the surface of an existing footway with a new surface course.	15 years	£9.50
<u>Footway Micro-asphalt (slurry seal)</u> This method is effective in sealing an existing footway where the surface course is beginning to fail. It involves the application of a thin layer of bitumen emulsion and fine aggregate and in addition to extending the life of the footway by preventing water ingress (sealing the surface) it also provides a consistent finish and texture.	6 years	£4.40

- 5.2 In addition to the above treatments a slab replacement footway programme has been undertaken following a best value review of the service in 1999 and a policy adopted of using bituminous refurbishment as a construction treatment unless the site is within a conservation area. The LTP consultation process identified a clear public preference for replacing slab footways with bituminous footways and during the financial years 07/08, 08/09 and 09/10 approximately 36,600m² of slab footways were replaced with bituminous footways.
- 5.3 Budgets are under increasing pressure and this impacts upon the Council's ability to maintain current service levels and standards. With this in mind a shift toward a 'holding strategy' would be prudent with a larger portion of available budgets being targeted toward preventative maintenance measures that are cost effective and not only provide an engineering solution but also a real visual improvement to the street scene in any community.
- 5.4 Using the figures from the draft Highway Maintenance Programme 2011/12 it is evident that some 22,700m² of footway is planned to be treated with footway micro-asphalt at a cost of £100k (£4.40/m²) as opposed to 14,731m² of footway planned for resurfacing or slab replacement at an average cost of £276k (£19.00/m²).
- 5.5 Slurry seal surface treatment is not an appropriate maintenance choice for all footways given that many are already beyond the intervention point for such a treatment. However, in the current financial climate it would be appropriate to extend our surface treatment programme in order to arrest the deterioration of the footway network as a whole and to prevent more expensive treatment options at a later date. When considering future maintenance strategies it should be borne in mind that the use of surface treatments such as footway slurry seal is usually limited to two treatments maximum and therefore it can only be expected to delay more significant work rather than to replace the need for it totally.
- 5.6 Another benefit of footway surface treatments sometimes overlooked but often recognised by residents is the improvement to the visual street scene with aged footways normally looking tired and worn with minor surface blemishes, previous repairs and utility openings. This treatment gives the appearance of a new footway at a fraction of the cost (see Appendix B).
- 5.7 **Third party insurance claims** on Peterborough's transport network follow a typical trend experienced by other authorities and described in the 'Highway Risk and Liability Claims' document published in July 2009 by the UK Roads Board and the Institution of Civil Engineers.

Claims received in Peterborough in the 08/09 and 09/10 years for incidents on footway and cycle

ways whilst being on average four times less frequent as carriageway claims were in fact more costly to the authority by a factor of 1:3. A good example would be comparing a trip or rocking slab with a pothole where the former is likely to result in personal injury and in an elderly person can lead to serious complications by contrast the latter would rarely lead to loss of control and serious or fatal injury.

5.8 **Carriageway and footway funding** – Given the insurance claim statistics above the question could be asked as to whether the current emphasis toward carriageway schemes should be reconsidered with the view that the overall proportion of funding directed to footpaths and cycle ways should be increased. This would support Peterborough’s LTP transport priority ‘tackling congestion’ and help to attract car drivers to the alternatives of walking or cycling (Indicator reference ‘Cong’ 4, 7, 9, 10 & 11) but would also put more strain on the road network. The table below shows the budgetary split (shown as a percentage) between carriageway, footway and other assets in respect of the 08/09 to 10/11 LTP, Capital and Revenue scheme allocations with the 11/12 proposals in red.

	08/09	09/10	10/11	11/12
Carriageway	75%	71%	59%	69%
Footway	13%	18%	25%	13%
Other	12%	11%	16%	18%

5.9 The evidence supports a steady increase in footway funding as a proportion of the available budget since 08/09 however this has not been able to be sustained as we move into the 2011/12 financial year. This is predominantly as a result of the harsh winter of 09/10 that caused widespread damage to Peterborough’s road network with footways being less affected by winter damage. It is to be expected that the current severe winter will result in similar problems on the network and where the Government provided emergency funding in 10/11 this cannot be counted on in future.

5.10 There is a danger that as budgets come under more pressure there could be a temptation to reduce footway budgets in an effort to maintain carriageway schemes. Through more rigorous selection of carriageway schemes and extended holding treatments such as surface dressing and micro-asphalt surfacing road condition can be maintained without the need to reduce footway expenditure. The setting and agreement of a virtual proportion of carriageway and footway major maintenance budgets would be welcomed in order to ensure consistency, promote sustainability and engender ownership across the wider community and authority.

5.11 **Footway Hierarchy’s** are applied to Peterborough’s footway network which is broken down into appropriate classifications relevant to what use a particular section of the network is put to. This classification impacts directly on how a particular section of the network should be maintained and are identified in the Code of Practice for Highway Maintenance Management as follows: -

Cat	Name	Description
1 (a)	Prestige Walking Zone	Very busy areas of towns and cities with high public space and street scene contribution
1	Primary Walking Zone	Busy urban shopping and business areas and main pedestrian routes
2	Secondary Walking Zone	Medium usage routes through local areas feeding into primary routes, local shopping centres etc.
3	Link Footways	Linking local access footways through urban areas, busy rural routes
4	Local Access Footways	Footways associated with low usage, short estate road to main routes and cul-de-sacs

5.12 Peterborough’s Category 1(a), 1 and 2 footways are shown in Appendix C and account for only approximately 13km of Peterborough’s total 1,157km footway and cycleway network. Whilst much work has been done during the life of LTP2 to reassess carriageway hierarchies and we are now able to apply these hierarchies to our carriageway scheme assessment process with confidence,

the same however cannot be said for our footway network at the current time. Some residents and communities may consider there to be other similar footways to those shown in Appendix C across the greater Peterborough area that are not classified with the same hierarchy and this would suggest the need for a review not only of the current routes but all of Peterborough's footways. Given the scale of this task it is recommended to focus on a review of only Cat 1(a), 1 and 2 footways as these are likely to be high usage, high amenity routes that will impact not only on scheme selection but other maintenance functions such as potential winter service footway reactive snow and ice clearance programmes.

- 5.13 The condition of footways is reported on annually at a local level (BVPI 187) in accordance with LTP2. These values are based on formal walked condition inspections of the Cat 1(a), 1 and 2 footway network known as Detailed Visual Inspections (DVI's). It is likely that any significant increase in the length of these category footways whilst providing the benefit of a more representative sample will have an impact on condition survey budgets.

6. IMPLICATIONS

- 6.1 It is important that communities are able to influence future footway programmes and only through proper and timely consultation we will be able to make the best use of the resources available, working closer with communities to achieve shared goals.
- 6.2 With the continued pressure on budgets it is vital that we continue to apply asset management principles when considering the needs of the network and seek cost effective solutions to our maintenance needs. Through a shift toward completing more preventative maintenance solutions such as surface treatments we will be able to manage the deterioration of the network keeping the roads, footways and cycle ways safe and available for all to use, although in the longer term there remains a need for more comprehensive works. Equally, only by seeking to improve our knowledge of our network in the case of footway hierarchies and condition surveys will we be able to make informed decisions to optimise expenditure.
- 6.3 It is likely that a review of our high use, high amenity footways will result in an increase in length and this will have an inevitable impact on the budget available for condition surveys to satisfy National and Local Indicators.

The report has implications on a city-wide basis.

7. BACKGROUND DOCUMENTS

Used to prepare this report, in accordance with the Local Government (Access to Information) Act 1985

Peterborough City Council Local Transport Plan 2005 – 10

Peterborough Highway Asset Management Plan 2010

Well maintained Highways 'Code of Practice for Highway Maintenance Management 2005

Highway Risk and Liability Claims – A practical guide to Appendix C of The UK Roads Board Report 'Well Maintained Highways: Code of Practice for Highway Maintenance Management'

8. APPENDICES

- 8.1 Appendix A - Asset Assessment Form
Appendix B – Footway Slurry seal – Before & After photographs
Appendix C – PCC Cat 1(a), 1 and 2 Footway Network