# APPENDIX J (1) - HIGHWAYS CAPITAL ISSUES 

### 1.0 Street Lighting.

### 1.1 Background

From $1^{\text {st }}$ April 2009 Central Bedfordshire Council will be responsible for the maintenance of over 21,000 lighting columns. Each column has an average design life of 30 years and the cost of replacing lifeexpired street lighting stock over a 30 year cycle, is approximately £520,000 pa.

For many years, County Council investment in street lighting has been less than a third of the required level and has focussed on replacing the stock of concrete columns which have been identified as a priority for both road safety and structural integrity reasons. Despite this strategy, and because of poor investment over time, a backlog of aging columns exists. Based on sample surveys that have been carried out, it is estimated that up to $25 \%$ of columns are life expired.

### 1.2 Finance

The cost of replacing the aged stock of lighting columns is approximately $£ 2.2 \mathrm{~m}$ per year over the next 4 years. Thereafter, $£ 520 \mathrm{k}$ pa will be needed to keep the stock properly maintained.

### 1.3 Risk

Section 41 of the Highways Act places highways authorities under a duty to maintain the highway. Failure to maintain an asset which is known to be life expired would place the Authority and its staff at risk of prosecution under Health and Safety legislation in the event that someone is injured as a result of structural failure.

### 2.0 Bridges

### 2.1 Background

Since the introduction of 40 tonne lorries on European roads, the Department for Transport has required local highway authorities to assess the load bearing capacity of the existing bridge stock and to take appropriate measures to ensure their safety. Of the 400 structures in Central Beds, 25 structures remain to be assessed and 10 structures need to be reassessed to see if a more detailed analysis will show that they are able to carry the required load. Strengthening measures are planned on 10 structures known to be under capacity.

### 2.2 Finance

Number of road structures (excluding rights of way) 400
Number of structures which have failed their initial assessment 35
Number of structures in need of reassessment 10
Number of structures which are awaiting their initial assessment 25

| Budget requirements | Capital $£$ | Revenue £ |
| :--- | :--- | :--- |
| Estimated cost to complete the assessment / <br> reassessment of structures. |  | 500,000 |
| Estimated cost to complete the strengthening <br> programme | $3,000,000$ |  |
| Estimated cost of width restrictions proposed | 100,000 |  |
| Estimated cost of weight restrictions proposed <br> to safeguard weak or bridges not to be <br> assessed this year |  | 33,000 |
| Annual cost of monitoring weak bridges |  | 25,000 |
| Total | $3,100,000$ | 558,000 |

A capital budget of $£ 620$ k is needed over the next 5 years in order to complete the bridge strengthening and assessment programme

### 2.3 Risk

Section 41 of the Highways Act places Highways Authorities under a duty to maintain the highway. Regular bridge inspections ensure that any serious maintenance issues are dealt with but potential structural failure under load would not be picked up during an inspection. There have been 3 separate bridge collapses in the United States in the last 10 years but none in this country. Failure to assess a structure which subsequently collapsed under a 40 tonne load would place the Authority and its staff at risk under Health and Safety legislation in the event that someone is injured as a result of structural failure.

### 3.0 Roads

### 3.1 Background

In common with other local authorities in England, Bedfordshire County Council's highways maintenance capital allocation from Central Government has been insufficient to allow the Council to maintain the value of its existing highways asset over the long term. In order to respond to this challenge, the County Council injected additional capital funding into roads infrastructure maintenance for the past 3 years to raise the budget to a level that would maintain its roads and footways at target levels.

In order to deal with possible strains on capital budgets, officers have identified a strategy that seeks to meet Member priorities and table 2 sets out the proposed budget to meet targets and proposed reductions in the capital programme if budgets are cut by $£ 1 \mathrm{~m}$ increments up to £5m.

A £1m cut would mean dropping 26 resurfacing schemes on unclassified roads from the programme (equivalent to 12.7 km ), and 12 local footway schemes (equivalent to 2.5 km ). These schemes are necessary to maintain public satisfaction levels but do not contribute significantly to the economy or to the objective of encouraging walking.

In addition to the above, a $£ 2 \mathrm{~m}$ cut would lead to 4 resurfacing schemes being dropped on B and C class roads (equivalent to 2.5 km ) as well as abandoning the parish partnership scheme which is used to deliver road and footway improvements in local parishes that do not have sufficient priority to be entered into the main programme. Abandoning the parish partnership scheme would adversely affect public satisfaction levels. The reduction in maintenance on B\&C class roads will affect targets vital to the economy and to managing growth.

In addition to the above, a $£ 3 \mathrm{~m}$ cut would lead to a further 12 resurfacing schemes being dropped on $B$ and $C$ class roads (equivalent to 7.6 km ) which will again affect targets vital to the economy and to managing growth.

In addition to the above, a £4m cut would lead to 44 surface dressing schemes on unclassified roads being dropped from the programme (equivalent to 34 km ). These schemes have already had preparatory work carried out in 2008-09, which would be abortive if cancelled from the programme. They are also necessary to maintain public satisfaction levels but do not contribute significantly to the economy.

In addition to the above, a $£ 5 \mathrm{~m}$ cut would lead to 4 resurfacing schemes (equivalent to 3 km ) being dropped on A class roads which will affect targets vital to the economy and to managing growth.

Preparatory work on B\&C class roads would need to be cancelled, leading to a reduction in surface dressing schemes the following year and hence a reduction in value for money, and 8 drainage schemes would also need to be dropped, which are regarded by the public as high priority.

### 3.2 Finance

The ongoing cost of maintaining Central Bedfordshire's roads and footways at target levels is approximately $£ 7.5 \mathrm{~m}$ per annum as set out in table 1 below and the effect of incremental $£ 1 \mathrm{~m}$ cuts in the budget up to $£ 5 \mathrm{~m}$ is set out in Table 2.

Table 1, Central Beds (carriageway length as of $1 / 4 / 08$ )

| Class of road | Length (km) | Latest BVPI for <br> \% of roads in <br> need of repair | Target \% of <br> roads in need <br> of repair | Annual cost <br> to maintain <br> in target <br> condition <br> $(£ m)$ |
| :---: | :---: | :---: | :---: | :---: |
| A | 151 | $2.8 \%$ | $3.5 \%$ | 1.73 |
| B | 73 | $4.7 \% \mathrm{cvi}$ | $7.5 \% \mathrm{cvi}$ | 0.67 |
| C | 392 | $6.3 \% \mathrm{cvi}$ | $7.5 \% \mathrm{cvi}$ | 2.15 |
| U/C | 769 | $9.38 \%$ | $7.5 \%$ | 1.94 |
| ALL | 1385 |  |  | 6.49 |

Table 2, Central Beds (Footway length as of 1/4/08)

| Class of <br> footway | Length (km) | Latest BVPI for <br> \% of footways <br> in need of <br> repair | Target \% of <br> roads in need <br> of repair | Annual cost <br> to maintain <br> in target <br> condition <br> $(£ 000 ' s)$ |
| :---: | :---: | :---: | :---: | :---: |
| Primary | 12 | $14.88 \%$ | $12 \%$ | 27 |
| Secondary | 27 | $14.88 \%$ | $12 \%$ | 35 |
| Link | 151 | Repair every 40 years |  | 107 |
| Local access | 1,001 | Repair every 50 years |  | 567 |
| ALL | 1191 |  | 736 |  |

CENTRAL BEDFORDSHIRE BUDGET ALLOCATION 09-10


| Carriageway \& Footway Schemes | 1,730 | 1,730 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A Roads |  |  |  | 1,730 |  | 1,730 | 1,730 | 1,230 | 4 schemes dropped equivalent to 3 km |
| B \& C Roads | 2,820 | 2,820 |  | 2,460 | $\begin{array}{r} 4 \\ \text { resurfacing } \\ \text { schemes } \\ \text { dropped } \\ \text { equivalent } \\ \text { to } 2.5 \mathrm{~km} \\ \hline \end{array}$ | 1,460 | 1,460 | 1,160 | prepatching for following year dropped |
| Local Roads | 1,840 |  | $\begin{array}{r} 26 \\ \text { resurfacing } \\ \text { schemes } \\ \text { dropped } \\ \text { equivalent } \\ \text { to } 12.7 \mathrm{~km} \end{array}$ | 936 |  | 936 |  | 0 |  |
| Hierarchy 1 \& 2 Footways | 64 | 64 |  | 64 |  | 64 | 0 | 0 |  |
| Other Local Footways | 96 | 0 | 12 schemes dropped equivalent to 2.5 km | 0 |  | 0 | 0 | 0 |  |
| Drainage \& Other | 200 | 20 | 0070 | 2006,211 |  | 200 | 200 | $3,211$ | 8 drainage schemes dropped |
|  | 7,570 | 6,570 |  |  |  | 5,211 | 4,211 |  |  |
| Central Beds Parish Partnership | 640 | 640 |  |  | parish partnership scheme abandoned | 0 | 0 | 0 |  |
| Central Beds Transport Infrastructure Dev | 665 | 665 |  | 66 |  | 665 | 665 | 665 |  |
| Central Beds Major Schemes | 0 | 0 |  | 0 |  | 0 | 0 | 0 |  |
| Lump Sums (Contracted Overheads) | 887 11537 | 887 |  | 887 |  | 887 8.537 | 887 7.538 | 887 6.538 |  |
| Total Capital Budget Allocation | 11,537 | 10,537 |  | 9,537 |  | 8,537 | 7,538 | 6,538 |  |

