

**REPORT TO: ENVIRONMENTAL SERVICES COMMITTEE ON 16 APRIL 2008**

**SUBJECT: REVENUE BUDGET 2008/2009 – ROAD MAINTENANCE.  
CAPITAL BUDGET 2008/2009 – RESURFACING, LIGHTING  
COLUMN REPLACEMENT, HYDRO UNDERGROUNDING AND  
LIGHTING IMPROVEMENTS.**

**BY: DIRECTOR OF ENVIRONMENTAL SERVICES**

**1. REASON FOR REPORT**

- 1.1 To ask the Committee to approve detailed plans for the expenditure of funds allocated from the Revenue Budget 2008/2009 to Roads Maintenance and from the Capital Budget 2008/2009 to resurfacing/reconstruction, lighting column replacement, hydro network alterations and lighting improvements.
- 1.2 This report is submitted to the Committee in terms of Section E (13) of the Council's Administrative Scheme relating to the functions of the Council as Roads Authority.

**2. RECOMMENDATION**

**2.1 The Committee is asked:**

- a to approve the detailed allocation of funds, from the Revenue Budget 2008/2009 to Roads Maintenance activities, as detailed in Appendix I of this report.
- b to agree that the Capital Allocation for carriageway resurfacing/reconstruction may also be used for works on other roads assets provided such works are in accordance with the Prudential Code for Capital Finance in Local Authorities, and to agree the allocation of these funds, as detailed in Appendix I of this report.
- c to grant authority to the Roads Maintenance Manager to proceed with works whilst noting that the Roads Maintenance Manager will, as soon as possible, publish a main list of schemes, which can be funded by the budget provision recommended in this report, and a reserve list of desirable schemes, which cannot presently be funded, along with a list of projects to be funded from the Capital allocation.
- d to note that the list of schemes will be drawn up in accordance with the principles and objectives detailed in this report.
- e to grant delegated authority to the Roads Maintenance Manager to approve, in the event of any project being unable to proceed, the substitution of high priority schemes as replacements.

**3. BACKGROUND**

- 3.1 Reference is made to the allocation of revenue and capital funds for 2008/09 agreed at the meeting of the Moray Council on 14<sup>th</sup> February 2008 (para 2 of the Minute refers).
- 3.2 In approving capital funds for 2008/09, the Council agreed to further approval being required from the relevant Service Committee in relation to: the work to be undertaken, a reliable estimate of cost, the benefits arising, and the revenue implications before any capital funded project can proceed. This report satisfies the above requirement as well as presenting proposals for all roads maintenance expenditure.
- 3.3 In order to meet Committee dates, this report had to be drafted by the 26 March 2008. This is an extremely busy time for officers – concluding the 2007/08 programme and preparing the 2008/09 draft programme whilst dealing with the vagaries of winter weather. It has not been possible to prepare detailed lists of proposed maintenance works in the various categories to accompany this report. The alternative would have been to wait until the next scheduled Committee meeting on the 4<sup>th</sup> June 2008 but work on the programme has to start in April. Detailed lists will be circulated to Members at a later date. Unless there are insurmountable reasons otherwise, planned schemes that were cancelled in 2007/08 will be included in planned work for 2008/09.
- 3.4 The Council is responsible for the maintenance of 1534km of road, 440 bridges, and 16,750 street lighting units, which have been adopted by the Local Authority in terms of the Roads (Scotland) Act 1984. The Act places a duty on the Local Authority to maintain the roads, lighting units and structures so adopted, but does not prescribe the level of maintenance to be delivered.

#### **4. PROGRESS DURING 2007/2008 AND CONSIDERATIONS**

##### General

- 4.1 The table in **Appendix I** includes a summary of estimated outturn expenditure for 2007/2008 and proposals for 2008/09. The combined funding available for roads maintenance is increased by £69k. Capital funding is £319k more and revenue £250k less.
- 4.2 There is no allowance for inflation in the revenue budget. Inflation due to fuel and particularly bitumen price increases continue to cause concern.

- 4.3 The revenue budget has decreased by £626k over 2 years. This has been more than accommodated by increases in capital allocation. Unfortunately, routine maintenance works cannot be funded from capital – the Prudential Code requires that works funded from capital add value to the asset as against maintaining the asset value.
- 4.4 The allocation to general maintenance covers reactive and cyclical work which is vital to ensuring the safety of users of the network. There is the potential for limited reductions only from this work as recommended in Section 5.
- 4.5 About 40% of the 2007/08 revenue budget was used to fund planned maintenance other than carriageway resurfacing, i.e. surface dressing, footways, bridges, drainage. A proportion of this work does add value to the roads asset and could be funded from capital. £2.25m has been allocated to carriageway resurfacing/reconstruction. With Committee approval, it is proposed that £500k of this allocation is used for work on these other parts of the road network.

#### Reserve List

- 4.6 Details to be provided to Members at a later date will include the reserve list – a list of desirable works that cannot be funded. **Appendix II** is a summary of the value of reserve list works from 1999. There are various aspects that will have an effect on the value of the reserve list. These include:
- Inflation – construction inflation is presently about 8% per annum
  - Available budget
  - Enhanced condition information from the Scottish Road Maintenance Condition Survey (SRMCS)
  - More comprehensive inspection of bridges and other structures
  - More use of the reserve list database to record desirable works
  - Mix of work, for example, high value resurfacing or low value drainage

From work done by SCOTS in 2006 (Maintaining Scotland's Roads) it was estimated that Moray would need to spend £3,233,000 pa on carriageway maintenance to reduce backlog over 10 years with an estimated £2,653,000 pa thereafter to sustain the improvement (based on 2004/05 figures). This report proposes spending £2,400,000 on carriageway structural maintenance and surface dressing in 2008/09.

The reserve list provides a subjective measure of the backlog of works necessary to bring the roads network into good condition. It is not comprehensive, but neither is it limited by what is acceptable in terms of the condition of the roads asset. There will always be a backlog of work: as asset management planning is developed, issues regarding what is a reasonable backlog, what standards do road users want and what risks will be developed.

### Roads Maintenance

4.7 2007/08 was a busy year with the significant capital allocation masking the effects of inflation and reversing the limited availability of work that had been a feature of 2006/07. There is some evidence to suggest that inflationary increases were countered, to an extent, by increased efficiency. Also, the roads Statutory Trading Organisation was able to absorb some cost by review of profit achieved. It is estimated that roads maintenance expenditure for 2007/2008 will be on budget. Inevitably, some works have been cancelled. Where possible these will be carried forward into the 2008/09 programme. Most of the cancelled schemes are under the Drainage and Other Works heading which is underspent as a consequence. The planned surface dressing works budget was also underspent, principally because the extent of pre surface dress patching was less than had been anticipated. This was balanced by an increase in general maintenance with drainage and ditching, grass cutting and sweeping exceeding allocation. Unplanned works include:

- U20E culvert replacement
- C5E replacement of collapsed culvert near Colfield
- Drainage on B9040 @ Greenbrae

### Scottish Roads Maintenance Condition Survey (SRMCS)

4.8 This survey currently measures texture, rutting, profile and cracking . Texture is a measure of the road surface and is most often treated by surface dressing. Rutting is deterioration in the wheel tracks and can often be treated by resurfacing although more extensive strengthening can be required. Poor profile influences ride quality and can be an indication of structural failure which, to make a lasting repair, requires expensive strengthening or reconstruction. Cracking is measured across the whole carriageway and can be an indication of, or lead to structural failure. The survey does not yet measure edge damage which is a major issue on many of our narrow roads.

4.9 Up until this year, results from the survey were combined to give a Statutory Performance Indicator (SPI). In agreement with Audit Scotland, this indicator is changing to a Road Condition Indicator (RCI) which will be reported on a rolling two year basis, to average out sampling inconsistencies. The two indicators have been/will be calculated over several years to provide continued trend information. The last four years results from the Scottish Road Maintenance Condition Survey are shown averaged over two years for the two indicators.

<b>Scottish Roads Maintenance Condition Survey Results</b>	2004/06	2005/07	2006/08
SPI (rank out of 32)	<b>42.4% (10)</b>	<b>43.4% (11)</b>	<b>40.3% (8)</b>
RCI (rank out of 32)	<b>28.4% (6)</b>	<b>30.7% (7)</b>	<b>28.2% (7)</b>

The new indicator applies different weightings to the survey information and takes account of cracking for the first time. As a result, Moray's position relative to other Scottish authorities has marginally improved for 2006/08.

- 4.10 **Appendix IV** gives more detailed results from the survey, matched against expenditure per Km. Although there are peaks and troughs, the trend is for improvement in the indicators with the exception of non-principal roads with poor texture, which shows a slight increase, and principal road cracking which returned a very high percentage in 2006-07. A degree of caution must be exercised when making year on year comparisons as only our A roads are surveyed every year. In drafting this budget, the expenditure trends for principal roads resurfacing and surface dressing and non principal roads surface dressing have been maintained. The expenditure trend for non principal roads resurfacing will reduce in approving this report.

## 5. **GENERAL PROPOSALS**

- 5.1 The table in **Appendix I** contains summary details of recommended expenditure against work type for 2008/2009.

### Resurfacing/reconstruction

- 5.2 This work will be funded solely from capital with a recommended budget of over £1.75 million if the Committee agrees to re allocating £500k of this budget to work on other roads asset groups (see 4.5 above). The objective, when determining specific works to be carried out from this budget, is to have regard to road maintenance condition survey results, to seek to stabilize carriageway condition in terms of rutting, cracking and profile.

- 5.3 Capital funded work is about improving the asset. In resurfacing that might include, for example, widening where overriding of road edges is taking place, improvements at bends for safety reasons, improved drainage, and limited provision of passing places for safety and maintenance reasons. In lighting schemes it will allow the replacement of obsolete/corroded equipment and improvements to lighting standards and quality.

### Lighting

- 5.4 The table below shows number of columns removed and number erected over the last two years with indicative numbers based on the budget allocation for 2007/08.

Budget £,000	2006/07		2007/08		2008/09 estimate	
	No of columns removed	No of columns erected	No of columns removed	No of columns erected	No of columns to remove	No of columns to erect
			Last years estimate in brackets			
<b>Capital Column replacement</b>	169	183	298 (322)	316 (350)	316	346
<b>Capital Lighting Improvement</b>	88	98	79 (125)	117 (130)	108	118
<b>Quality of life</b>	5	34		16		
<b>Additional funding</b>			-	7		

Figures for 2007/08 are lower than had been estimated however, in addition, 84 lanterns were replaced in 2007/08 (including those purchased for Mid-street Keith to be installed in 2008/09) and it is forecast that 120 lanterns will be replaced in 2008/09.

- 5.5 **Appendix III** shows the current age profile of columns and a possible forecast of age profile in 5 years time, showing that the number of columns over 30 years old will continue to increase. The increases in funding are welcome, however the fact is that more columns are being added to this asset group every year than can be replaced (by developers, when improving existing lighting schemes) so it is inevitable that the number of columns over 30 years old will continue to increase .
- 5.6 The objective, in determining column replacement schemes, will be to maximise the reduction in numbers of columns in excess of 30 years old, having regard to those which have deteriorated the most. Any system of lighting so replaced will be designed to current standards using modern, energy efficient components.
- 5.7 The objective, in determining lighting improvement schemes, will be to replace unreliable systems of lighting and/or those which do not provide lighting that is fit for purpose. A secondary consideration will be the age and condition of the lighting columns.
- 5.8 Hydro network alterations funding is to fit in with any plans developed by Scottish & Southern Electricity to carry out network alterations.
- 5.9 In all cases this should reduce demand on the revenue budget as modern systems are more reliable than those they replace.

#### Winter Maintenance and Other Emergencies

- 5.10 At the time of writing, it is anticipated that winter maintenance and other emergencies expenditure for 2007/08 will be below budget.
- 5.11 Other emergencies work was mainly routine, attending to road accidents, slippery road surfaces due to oil spills, wind blown trees, coastal flooding and storms. This does include initial responses to pluvial flooding at Rothes and other locations.

**Weather Summary**

	Minimum Temperature	Precipitation	No of Grass Frosts more or less than average	Number of Winter Actions	
	Degrees above or below average			% of average	am
<b>October</b>	+0.5	50%	more	0	1
<b>November</b>	+2.0	175%	less	10	13
<b>December</b>	-1.0	75%	more	24	27
<b>January</b>	+1.0	150%	average	25	24
<b>February</b>	+1.0	75%	less	15	19
<b>March</b>					

5.12 The table above shows selected met office statistics for the winter and number of morning and evening treatments. October had more frosty mornings and was drier, November warmer but wetter, December colder and drier, January slightly warmer but wetter but with average grass frosts, February warmer and drier. Winter actions range from all gritters deployed to only a few on high ground and they do not reflect severe events where treatment may continue all day. There were 34% more action days to February 2008 than there were during the same period last year which was, in turn 20% less than 2005/06.

**General Maintenance**

5.13 This budget was reduced, in 2007/08, in favour of planned maintenance, despite it having been under pressure the previous year, with drainage works and grass/scrub cutting having exceeded budget. These activities exceeded budget again this year and that trend has been recognised in the draft allocation to general maintenance. It is recommended that, within this heading, the frequency of gully emptying is reduced to once per year except for known problem areas. This will save £46k in a budget that will otherwise increase by £197k.

**Lighting Maintenance.**

5.14 It is proposed to reduce this budget by £30k by not carrying out any painting of older columns.

5.15 To balance the revenue budget therefore, requires a reduction in other works of £417k. As stated in 4.5 above, it is recommended that £500k of the capital funding allocated to carriageway resurfacing is used for those other works that can be capitalized. It is recognised this will have an affect on carriageway structural condition which has generally been improving.

### Surface Dressing

- 5.16 This budget includes the cost of pre surface dress patching. It is proposed that this budget is increased by 5% to allow for bitumen and fuel price increases. Roads that are surfaced using coated macadam mixes are pervious and should be sealed within one to three years. It is proposed that this element of surface dressing will be capitalised as was the original surfacing. The texture of principal roads has been improving over recent years, with that of non principal roads remaining static. This allocation should allow these trends to continue.

### Footway Works

- 5.17 Given the emphasis on active travel, it is proposed to increase the budget by £50k funded from the capital allocation.

### Bridges

- 5.18 It is proposed to maintain the increase made to this budget in 2007/08 with £150k of the £275k total being funded from capital. Details will be provided in a separate structures report dealing with capital and revenue funded plans.

### Traffic works

- 5.19 There is £155k of priority works detailed in the reserve list and the proposal is to fund all of that priority work from revenue (reduced from £178k budget in 2007/08).

### Drainage and other works

- 5.20 Drainage problems and solutions often take considerable staff time to investigate and develop leading to schemes not being completed in year one. Drainage items in the general maintenance budget have overspent suggesting more planned work is needed. A modest increase of £30k is proposed with £150k of the £416 budget being funded from capital.

### Private (Unadopted) Roads

- 5.21 There is a significant 45.2km of road listed as Private (Unadopted). These roads receive some very basic maintenance to the surface only, in an attempt to minimise the worst deterioration. It is proposed to maintain this budget at £10,000.

### Transportation Studies and Integrated Transport Initiatives

- 5.22 The above are funded from revenue, transferred from capital due to the definition of capital funding.

## **6. DETAILED PROPOSALS**

- 6.1 Members are asked to note that, for reasons referred to in paragraph 3.3, they have not been issued with specific proposals for maintenance works in the various categories but are being asked to approve the monetary allocations to the various types of work.

- 6.2 The Roads Maintenance Manager will as soon as possible, publish a main list of schemes, which can be funded by the budget provision recommended in this report, and a reserve list of desirable schemes, which cannot presently be funded, along with a list of projects to be funded from Capital. Practicalities dictate that some of these works will have started in advance of the full list being available. Notwithstanding budget constraints, response repair works will be required throughout the forthcoming year, to maintain the roads in a safe condition.
- 6.3 Members are asked to appreciate that priority will be given to schemes on the basis of engineering judgement and safety issues, and many of those will have been placed ahead of schemes identified from public requests.
- 6.4 Funding priorities will therefore continue to be directed towards essential maintenance works – resurfacing, surface dressing, patching, drainage, street lighting, bridge maintenance, verge maintenance, road markings and signing for safety.
- 6.5 Members are asked to consider that if public requests for additional works are received during the course of the financial year, they be assessed, and unless they constitute an immediate safety hazard, are added as appropriate to the Reserve Lists for consideration in future years programmes based on priority and budget provision.
- 6.6 In formulating these recommendations, staff have given, and will give, their best consideration, from the information available, to recommending works that will maintain the roads network in as serviceable a condition as possible whilst aiming to minimise whole life costs in so far as budgets allow.

## **7. FUTURE DEVELOPMENTS**

- 7.1 The local roads network is hugely valuable, probably the most valuable asset the Council have stewardship over. The latest Codes of Practice for Management of Roads, Bridges and Street Lighting reflect the need to ensure asset management principals are applied to the management and maintenance of this asset.
- 7.2 Following an unsuccessful bid by SCOTS (Society of Chief Officers of Transportation in Scotland), on behalf of all 32 local authorities in Scotland, for funding towards developing common asset management plans, a less costly scheme has been taken forward, to developed a common roads asset management framework. Glasgow City Council are lead authority on behalf of the Scottish councils and have appointed a Consultant to lead this development and thereafter assist each authority in drawing up their own roads asset management plans over a 4 year period.
- 7.3 To assist this process, tenders have been invited for suppliers to provide and install asset management software for use within Moray Roads sections.

## 8. **SUMMARY OF IMPLICATIONS**

### (a) **Corporate Development Plan/Community Plan/Service Improvement Plan**

8.1 This report relates to one of the eight highest priorities of the Council – maintaining and improving roads – and clearly fits within the scope of the Environmental Programme as detailed in the Corporate Plan.

8.2 A sufficient roads and lighting network clearly supports many of the Community Plan objectives, for example; increasing physical activity, discouraging anti-social behaviour, providing access to services, improving travel facilities, choices and safety, working for increased prosperity.

### (b) **Policy and Legal**

8.3 The Council is responsible for the maintenance of 1534km of road, 440 bridges, and 16,750 street lighting units, which have been adopted by the Local Authority in terms of the Roads (Scotland) Act 1984. The Act places a duty on the Local Authority to maintain the roads, lighting units and structures so adopted, but does not prescribe the level of maintenance to be delivered.

8.4 Codes of Practice for Highway Maintenance Management, Management of Highway Structures and for Highway Lighting Management identify good practice and consideration has to be given to this advice.

8.5 The Council have agreed standards for response to identified roads and lighting defects (public performance standards).

8.6 The Council's Winter Maintenance Policy and Procedures set out requirements in relation to provision of a winter maintenance service.

### (c) **Resources (Financial, Risks, Staffing and Property)**

8.7 The proposals detailed in this report can be accommodated within the 2007/08 revenue and capital allocation to roads maintenance which are:

Capital	£2,996,000
Revenue	£5,536,115

8.8 There is limited risk of exceeding budget. Adjustment will be made to programmes of planned work to match the allocated budgets. The principal risk arises late in the financial year if unforeseen works have to be carried out to comply with legal and policy obligations, for example, a worse than average winter.

8.9 There are no staffing implications, however, in determining the mix of work, it is important to have regard to maintaining the size of the workforce, particularly to provide a winter maintenance service in line with Council Policy and in accordance with legislation on health & safety, drivers hours and working time directives.

**(d) Consultations**

8.10 Lorraine Paisey (Principal Accountant) has been consulted and agrees with the financial implications detailed in this report.

8.11 The Principal Solicitor (Commercial & Conveyancing) has been consulted and has no comment on the report.

**9. CONCLUSION**

**9.1 The committee is asked to note the estimated expenditure against programmed expenditure set for 2007/08, to note the road condition and lighting condition trends reported and to agree the split of revenue and capital allocation to the various maintenance headings for 2008/09.**

Author of Report: Roads Maintenance Manager

Background Papers: Report to Environmental Services Committee on 28<sup>th</sup> March 2007

Report to the Moray Council on 14<sup>th</sup> February 2008

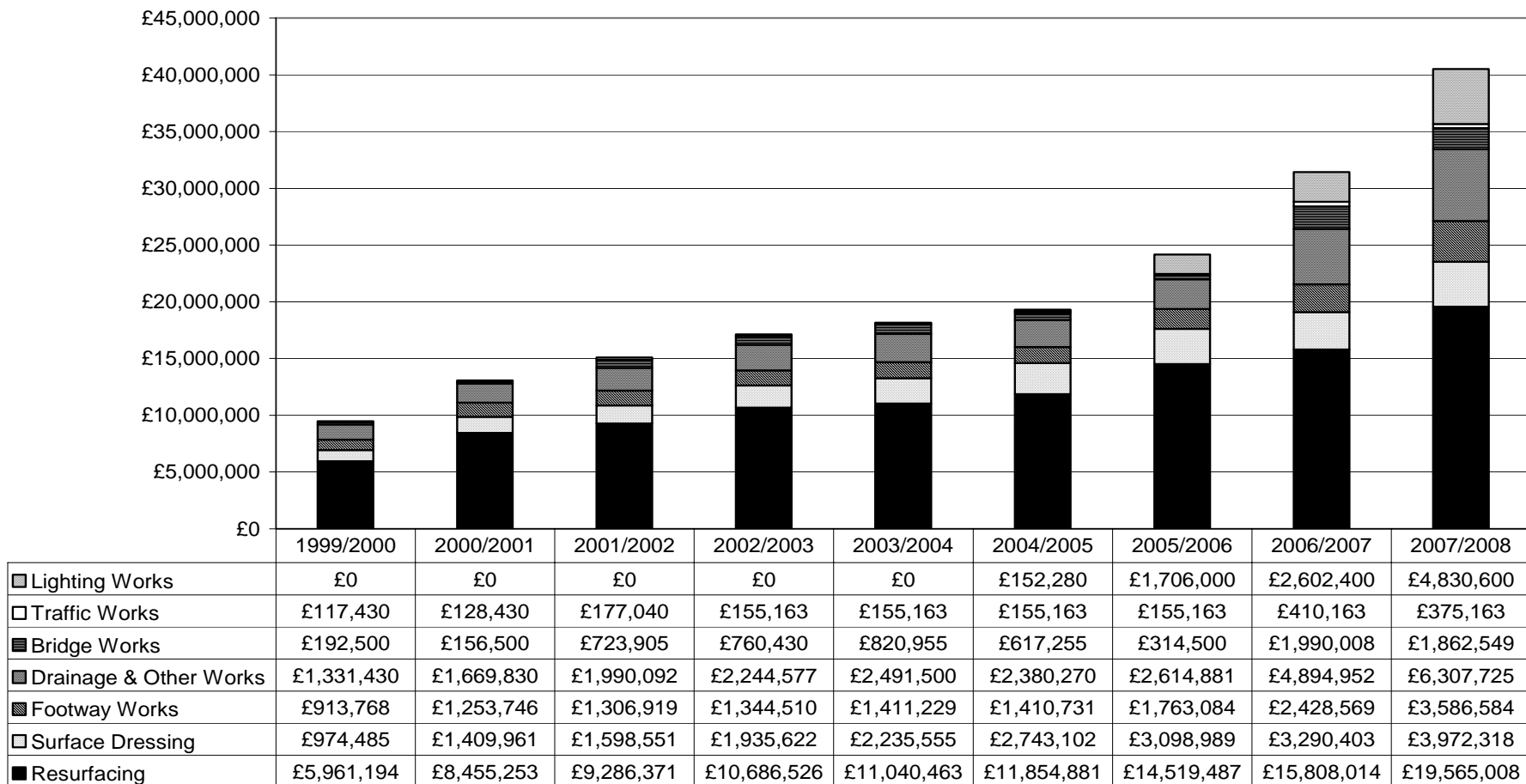
Ref:

## APPENDIX 1

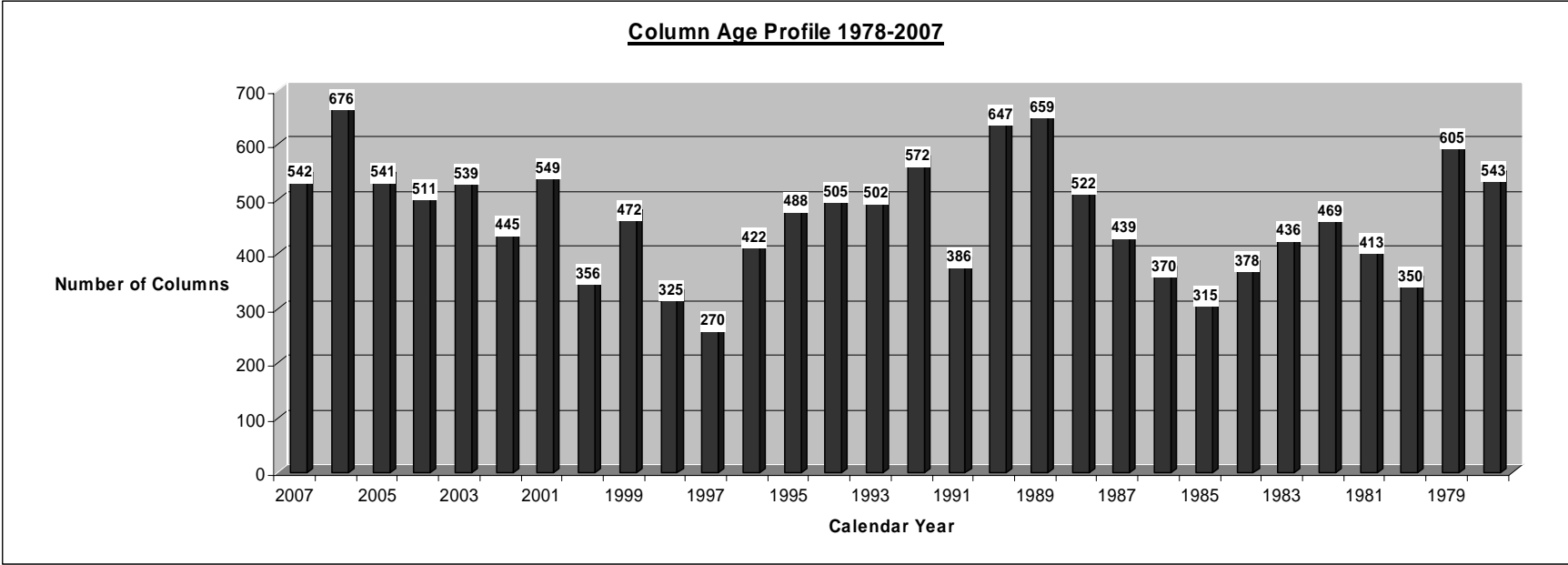
	2007/2008 Approved Budget	2007/2008 Estimated Expenditure	2008/2009 Proposals
<b>Capital</b>			
Carriageway Resurfacing/Reconstruction	£2,050,000	£2,013,697	£1,750,000
Surface Dressing (recently resurfaced roads)			£150,000
Footway Resurfacing/Reconstruction			£50,000
Bridges Non-routine Works			£150,000
Drainage and Other Assets Replacements			£150,000
Lighting Improvements	£185,000	£176,404	£220,000
Lighting - Hydro Network Alterations	£22,000	£44,765	£26,000
Column Replacement	£420,000	£403,251	£500,000
<b>Sub-total</b>	<b>£2,677,000</b>	<b>£2,638,117</b>	<b>£2,996,000</b>
<b>Winter Maintenance &amp; Other Emergencies</b>			
Winter Maintenance	£1,872,369	£1,743,736	£1,872,369
Other Emergencies		£92,788	0
<b>Sub-total</b>	<b>£1,872,369</b>	<b>£1,836,524</b>	<b>£1,872,369</b>
<b>Electricity</b>			
Signs	£12,000	£12,000	£12,000
Lighting	£467,000	£467,000	£467,000
<b>Sub-total</b>	<b>£479,000</b>	<b>£479,000</b>	<b>£479,000</b>
<b>Revenue Budget (Roads Maintenance)</b>			
General Maintenance	£1,448,746	£1,663,370	£1,688,000
Single Status Adjustment	£42,000		
Surface Dressing	£620,000	£527,753	£500,000
Footway Works	£155,000	£152,101	£150,000
Bridge Works	£275,000	£274,998	£125,000
Traffic Works	£178,000	£170,307	£155,000
Drainage and Other Works	£385,000	£299,539	£265,746
Lighting Maintenance	£285,000	£283,313	£255,000
Private (Unadopted) Roads	£10,000	£13,495	£10,000
Transportation Studies	£40,000	£40,000	£40,000
Integrated Transport Initiatives	£10,000	£10,000	£10,000
<b>Sub-total</b>	<b>£3,448,746</b>	<b>£3,434,876</b>	<b>£3,198,746</b>
<b>TOTAL</b>	<b>£8,465,115</b>	<b>£8,376,517</b>	<b>£8,534,115</b>

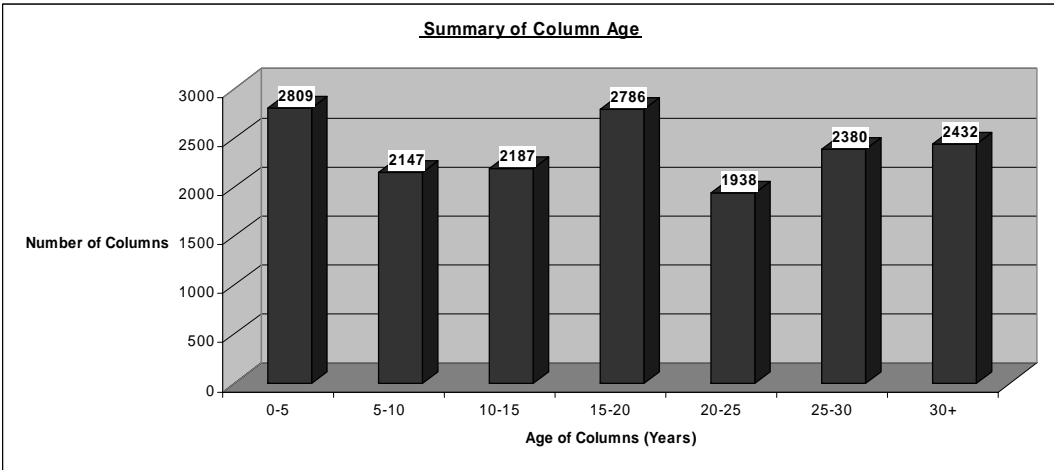
Items shaded grey were adjustments to budget.

Reserve List

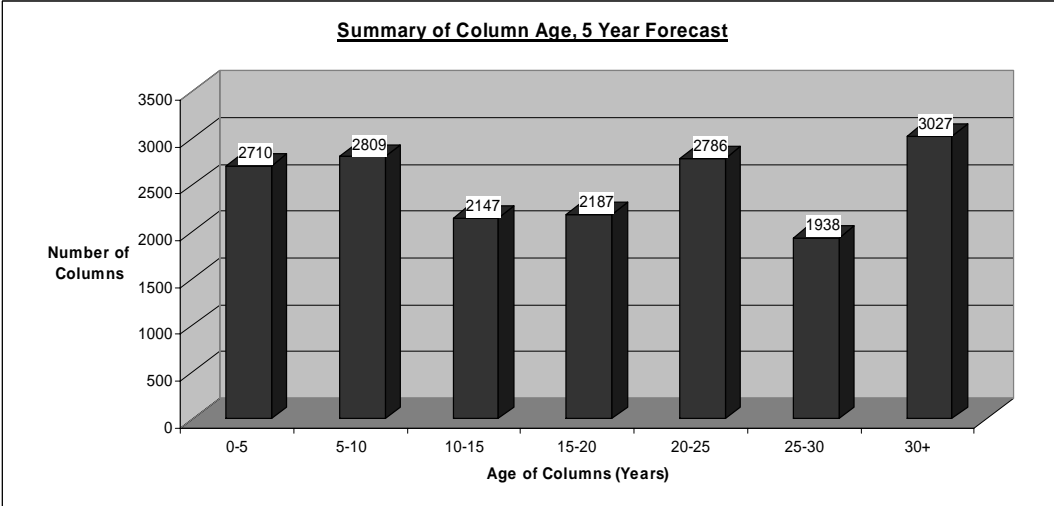


\*Ref para 4.6 in main report





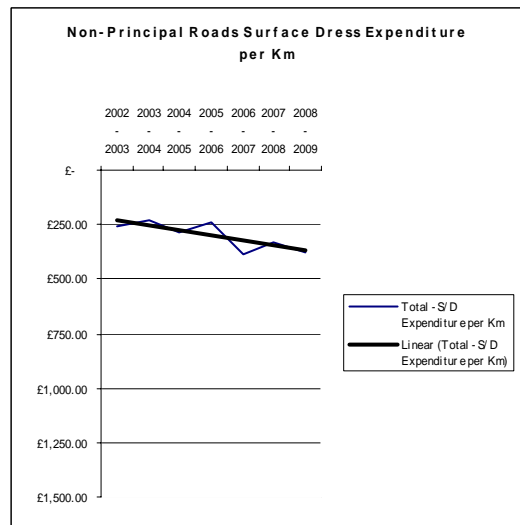
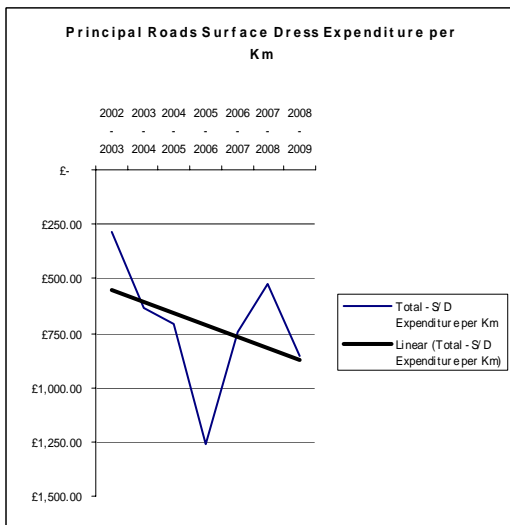
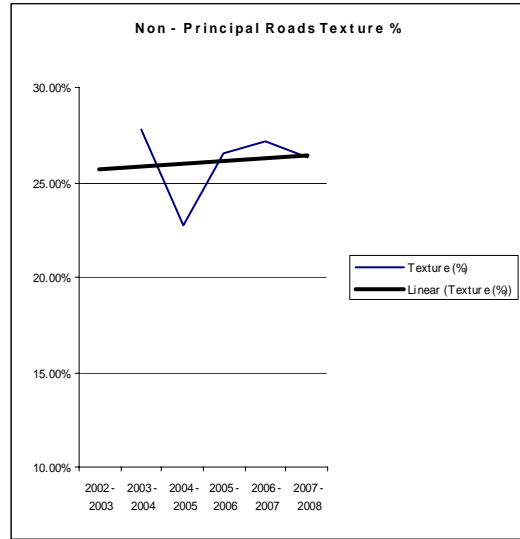
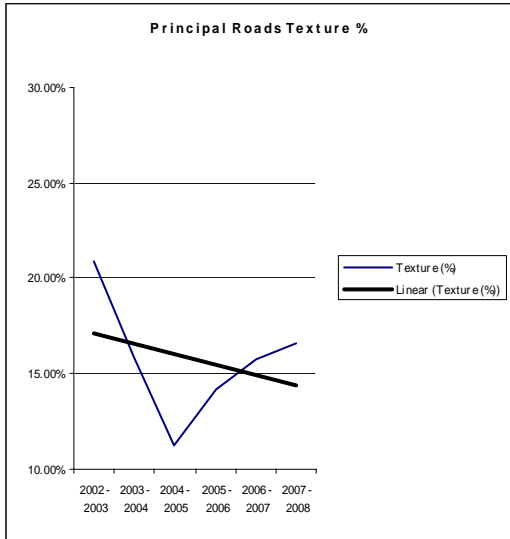
**CURRENT POSITION**



**FORECAST POSITION IN 5 YEARS**

(subject to funding, inflation, rate of development within Moray)

**APPENDIX IV**



**APPENDIX IV**

