

REPORT TO: ECONOMIC DEVELOPMENT AND INFRASTRUCTURE SERVICES COMMITTEE ON 20 APRIL 2010

**SUBJECT: REVENUE BUDGET 2010/2011 – ROAD MAINTENANCE.
CAPITAL BUDGET 2010/2011 – RESURFACING, LIGHTING
COLUMN REPLACEMENT 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 2010/2011 to roads maintenance and from the Capital Budget 2010/2011 to resurfacing/reconstruction, lighting column replacement, hydro network alterations and lighting improvements.
- 1.2 This report is submitted to the Committee in terms 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 2010/2011 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.
- f. to grant delegated authority to the Roads Maintenance Manager to amend the programme of planned works should works of higher priority emerge due, for example, to a sudden deterioration in condition, to the consequential effects of winter or flooding.

3. BACKGROUND

- 3.1 Reference is made to the allocation of revenue and capital funds for 2010/11 following the review of the Council's Four Year Financial Plan at the meeting of the Moray Council on 11 February 2010 (Para 4 of the Minute refers).
- 3.2 In approving capital funds for 2010/11, 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 submitted by the 7 April 2010. It has not been possible to prepare detailed lists of proposed maintenance works in the various categories to accompany this report. Detailed lists will be circulated to Members at a later date. For reasons described further in this report, it is not possible to offer the usual assurance that, unless for insurmountable reasons, planned schemes that were cancelled in 2009/10 would be included in planned work for 2010/11.
- 3.4 The Council is responsible for the maintenance of 1,539 km of road, 440 bridges, and 16,889 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 2009/2010 AND CONSIDERATIONS

General

- 4.1 The table in **Appendix I** includes a summary of estimated outturn expenditure for 2009/10 and proposals for 2010/11. Capital funding is £268k or 8.5% less and roads revenue funding is £100k or 3% less than allocated in 2009/10 (excluding winter and electricity). However, the Government have since allocated an additional £5 million to Scottish local authorities to help with the cost of repairing winter damaged roads. Moray's share is £128k. There may be a further £12 million available in Scotland from the £100 million announced in the UK budget in March for road repairs.

- 4.2 Whilst the Council has allowed for a 1% pay award this year, this has not been factored into roads maintenance budgets at yet. Budgets will be adjusted later as appropriate. The cost of fuel and bitumen based products continues to rise.
- 4.3 Capital and revenue budgets were under spent as resources were directed to deal with flooding and winter and due to uncertainty about how these additional costs were to be met.
- 4.4 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. The allocation to general maintenance covers reactive and cyclical work which is vital to ensuring the safety of users of the network.
- 4.5 Whilst the allocation, in the Council's capital plan, is designated to 'carriageway resurfacing/reconstruction' it is proposed, as last year, to use a proportion of that to fund planned maintenance other than carriageway resurfacing, i.e. surface dressing, footways, bridges, drainage, where that work adds value to the roads asset. £2,230m has been allocated to carriageway resurfacing/reconstruction. With Committee approval, it is proposed that £477k of that allocation is used for this other work.

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 to April 2009. The list has not yet been updated to reflect road asset conditions and inflation at April 2010. There are various aspects that will have an effect on the value of the reserve list. These include:
- Inflation
 - 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
- 4.7 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. There will always be a backlog of work. Paragraph 4.11 below provides further supporting information.

Roads Maintenance

- 4.8 The weather has, for a second year, impacted significantly on budgets and roads asset condition. Serious flooding occurred in September and November 2009 whilst winter weather brought heavy snow falls and very cold temperatures from December to March. £1 million of capital and revenue funded maintenance has not been undertaken, flooding damage has cost £1.45 million to date and winter budgets have overspent by £1.5 million. DLO charges for winter maintenance are designed to cover fixed costs over an average year.

Because the DLO over recover costs in a busy year, it will make a profit beyond target. The net effect will be to lessen the impact of weather related budget overspend however, the deterioration in our roads has been markedly visible. Given the Council's financial situation, capital underspends may not be carried forward from last year. Planned works that were not been carried out in 2009/10 will not necessarily be carried forward into the 2010/11 programme.

Scottish Roads Maintenance Condition Survey (SRMCS)

- 4.9 This survey currently measures road surface 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.
- 4.10 Up until 2008, results from the survey were combined to give a Statutory Performance Indicator (SPI). In agreement with Audit Scotland, this indicator was changed to a Road Condition Indicator (RCI) which is 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 five years results from the Scottish Road Maintenance Condition Survey are shown averaged over two years for the two indicators.

Scottish Roads Maintenance Condition Survey Results	2004/06	2005/07	2006/08	2007/09	2008/10
SPI (rank out of 32)	42.4% (10)	43.4% (11)	40.3% (8)		
RCI (rank out of 32)	28.4% (6)	30.7% (7)	28.2% (7)	22.7% (2nd equal)	24.4% (1st)

Moray's overall position relative to other Scottish authorities has improved for 2008/10 however it is important to examine the detail behind this change.

Change in position	2006/08	2007/09	2008/10
Whole network	7 th	2 nd equal	1 st
A class (100% surveyed each year)	7 th	4 th	5 th
B class (50% surveyed each year)	2 nd	1 st	2 nd
C class (50% surveyed each year)	5 th	5 th	4 th
U class (10% surveyed each year)	13 th	7 th	1 st

Moray's A and B class roads have worsened relatively. As only 10% of U class roads are surveyed each year the reported improvement is a less reliable statistic. Trend information for each class or road is shown in **Appendix III**.

Backlog Calculations

4.11 The Society of Chief Officers of Transportation in Scotland (SCOTS) commissioned work to update headline backlog figures for local authority carriageways. The computer model used is far more sophisticated than with previous calculations allowing a further three scenarios to be modelled. The model used 2007/09 SRMCS results. The results for Moray are:

- The headline backlog = £33,700,000
(A theoretical value which represents the cost to immediately clear all of the red and amber defects).
- The steady state carriageway budget = £5,100,000 per annum
(The budget required to maintain carriageways at 2007/09 condition for the next ten years).
- The Road Condition Index = 45% red and amber after 10 years if the 2009 carriageway structural maintenance budget (£2,600,000 per annum) is maintained.
- The Road Condition Index = 46% red and amber after 10 years if the 2009 carriageway structural maintenance budget is reduced by 10%.

4.12 The value of carriageway structural maintenance work in the Council's Reserve List at the start of April 2009 was £31,788,913. This correlates very well with the headline backlog figure above.

4.13 The model used 2007/09 SRMCS results. The 2008/10 results showed a deteriorating carriageway condition. The flooding and very low temperatures experienced this winter have introduced a step change in the rate of deterioration of our roads.

- 4.14 The model deals only with carriageways and not with other asset groups such as bridges, footways and drainage. Earlier work undertaken by SCOTS suggested that the headline backlog for carriageways is typically 50% of the backlog for all roads asset groups. It might therefore be implied that the headline backlog for all roads assets in Moray is £70 million. The total value of all maintenance work in the Council's Reserve List at the start of April 2009 was £45 million.

5. GENERAL PROPOSALS

- 5.1 The table in **Appendix I** contains summary details of recommended expenditure against work type for 2010/2011.

Resurfacing/reconstruction

- 5.2 This work will be funded solely from capital with a recommended budget of £1.753 million. Over the winter, roads exposed to very hard frosts have suffered badly with examples of disintegrating surfaces, frost heave and subsequent water damage. The emphasis this year is to repair the worst of these surfaces – the highest priorities - whilst using a combination of patching and surface dressing to hopefully hold further deterioration of other road surfaces. Poor surface conditions will persist on some of our roads.

Lighting

- 5.3 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 2010/11.

Budget £'000	2008/09		2009/10		2010/11 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			
Capital Column replacement	290	294	268 (290)	272 (310)	290	300
Capital Lighting Improvement	133	107	104 (115)	104 (110)	100	95

In addition, 69 lanterns were replaced in 2009/10 (180 forecast). It is forecast that 60 lanterns will be replaced in 2010/11.

Appendix IV 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 Council have sustained recent increases in funding, 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, etc) so it is inevitable that the number of columns over 30 years old will continue to increase. One way of minimising the risk that might arise in the future is by installing columns that have a longer design life. Aluminium columns are guaranteed for 50 years. Galvanised steel columns are guaranteed for 30 years but have an anticipated life expectancy beyond that date. It is only in recent years that the statutory performance indicator changed from number of columns over 25 years to number of columns over 30 years old, reflecting actual experience. The decision to use aluminium or galvanised is, at any time, influenced by the price which fluctuates as commodity markets fluctuate. Whilst the Council will be influenced by whole life costs, that is less the case with developers who base judgements on capital costs.

- 5.4 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.
- 5.5 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.
- 5.6 The capital allocation towards hydro network alterations has been discontinued. This was a contingency to fit in with any plans developed by Scottish & Southern Electricity to carry out network alterations and has not been required in the last few years. In the future such contingency will have to be found by delaying planned lighting work.
- 5.7 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.

- 5.8 Winter maintenance was the subject of a separate report to this Committee on the 23 February 2010 (agenda item 13) with a further report due later in the summer.

Surface Dressing

- 5.9 This budget includes the cost of pre-surface dress patching. As mentioned in 5.2 above, this work will be used to hold further deterioration of roads that suffered over the winter. Ideally many of those roads should be resurfaced.

Footway Works

- 5.10 Given the emphasis on active travel, this budget was increased last year. Unfortunately works had to be cancelled and this year the priority for work on this asset has been down graded to concentrate on carriageway surfaces.

Bridges

- 5.11 Bridges and other structures suffered badly due to swollen rivers during the floods in September and November 2009. Significant works had to be undertaken on many bridges with planned work curtailed. The proposed budget is similar to last year and details will be provided in a separate structures report dealing with capital and revenue funded plans.

Private (Unadopted) Roads

- 5.12 At 45.2km, there is a significant length 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.

Drainage and Other Works

- 5.13 This is another area where there was significant under spend. Typically this work is carried out in the autumn/winter after other more weather sensitive works have been completed. This budget is therefore prone to being cut due to other pressures. Yet drainage works are vital to protecting the roads asset – even the most basic tracks will last longer if they are well drained. There is less budget allocated to drainage this year as higher priority is given to repairing deteriorated road surfaces.

Transportation Studies and Integrated Transport Initiatives

- 5.14 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.

FUTURE DEVELOPMENTS

- 6.7 The local roads network is hugely valuable. A recent exercise estimated the replacement cost of elements of the roads asset in Moray as follows:

Element	Gross Replacement Value
Carriageway	£810 million
Footways	£43 million
Lighting columns	£34 million
Barriers	£0.27 million
Structures	£78 million

- 6.8 Work is ongoing across all 32 local authorities, co-ordinated by SCOTS (Society of Chief Officers of Transportation in Scotland), to develop roads asset management plans over a 4 year period (started early 2008). To assist this process, an asset management system was installed in April 2009 and has brought about efficiencies as it is developed. Less progress has been made on producing actual roads asset management plans due to difficulties in dedicating stretched resources to this task. £50k of the revenue budget has been allocated towards this objective with a view to accelerating progress through dedicated resources.

7. SUMMARY OF IMPLICATIONS

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

Whilst not directly mentioned in the above, an appropriately maintained public road network is a key enabler in achieving many of the objectives in the above plans.

(b) Policy and Legal

The Council is responsible for the maintenance of 1,539 km of road, 440 bridges, and 16,889 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.

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.

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

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)

The proposals detailed in this report can be accommodated within the 2010/11 revenue and capital allocation to roads maintenance which are:

Capital	£2,885,000
Revenue	£5,645,181

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.

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, driver's hours and working time directives.

(d) Consultations

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

Aileen Scott, Principal Solicitor (Commercial & Conveyancing) has been consulted and has no comment on the report.

8. CONCLUSION

- 8.1 The committee is asked to note the estimated expenditure against programmed expenditure set for 2009/10, 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 2010/11.**

Author of Report: Bill Ross Roads Maintenance Manager

Background Papers: Report to Environmental Services Committee - 31 March 2009

Report to the Moray Council - 11 February 2010

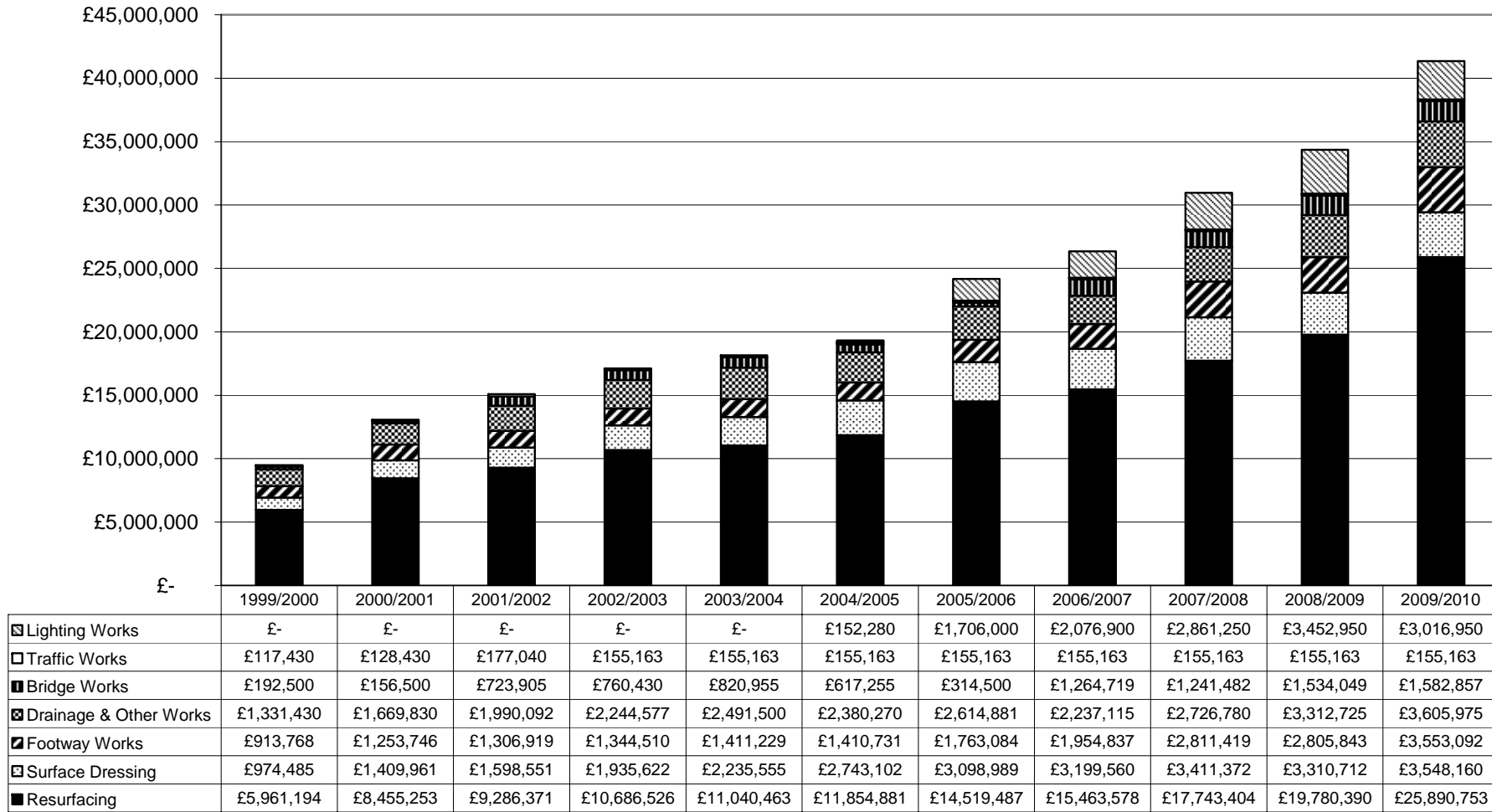
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APPENDIX 1

	2009/2010 Approved Budget	2009/2010 Estimated Expenditure	2010/2011 Proposals
Capital			
Carriageway Resurfacing/Reconstruction	£1,825,000	£1,716,000	£1,753,000
Surface Dressing (recently resurfaced roads)	£200,000	£190,000	£236,000
Footway Resurfacing/Reconstruction	£50,000	£0	£99,000
Bridges Non-routine Works	£150,000	£30,000	£142,000
Drainage and Other Assets Replacements	£150,000	£55,000	£0
Lighting Improvements	£240,000	£202,000	£200,000
Lighting - Hydro Network Alterations	£10,000	£0	£0
Column Replacement	£528,000	£444,000	£455,000
Sub-total	£3,153,000	£2,637,000	£2,885,000
Winter Maintenance & Other Emergencies			
Winter Maintenance	£1,900,454	£3,379,000	£1,900,454
Other Emergencies	0	£42,000	
Sub-total	£1,900,454	£3,421,000	£1,900,454
Electricity			
Signs	£17,200	£17,200	£16,000
Lighting	£583,000	£583,000	£550,000
Sub-total	£600,200	£600,200	£566,000
Revenue Budget (Roads Maintenance)			
General Maintenance	£1,640,000	£1,541,000	£1,771,727
Surface Dressing	£525,000	£516,000	£557,000
Footway Works	£175,000	£109,000	£40,000
Bridge Works	£170,000	£74,000	£170,000
Traffic Works	£155,000	£184,000	£155,000
Drainage and Other Works	£262,727	£25,000	£262,000
Lighting Maintenance	£259,000	£251,000	£259,000
Private (Unadopted) Roads	£10,000	£13,500	£10,000
Transportation Studies	£40,000	£40,000	£40,000
Integrated Transport Initiatives	£10,000	£10,000	£10,000
Sub-total	£3,246,727	£2,763,500	£3,274,727
TOTAL	£8,883,181	£9,404,500	£8,610,181
Flooding (Roads Maintenance)			
Fochabers Bridge capital expenditure		£530,000	
Possible capital expenditure		£633,000	
Potential Bellwin Claim		£105,000	
Revenue expenditure		£177,000	
TOTAL		£1,445,000	

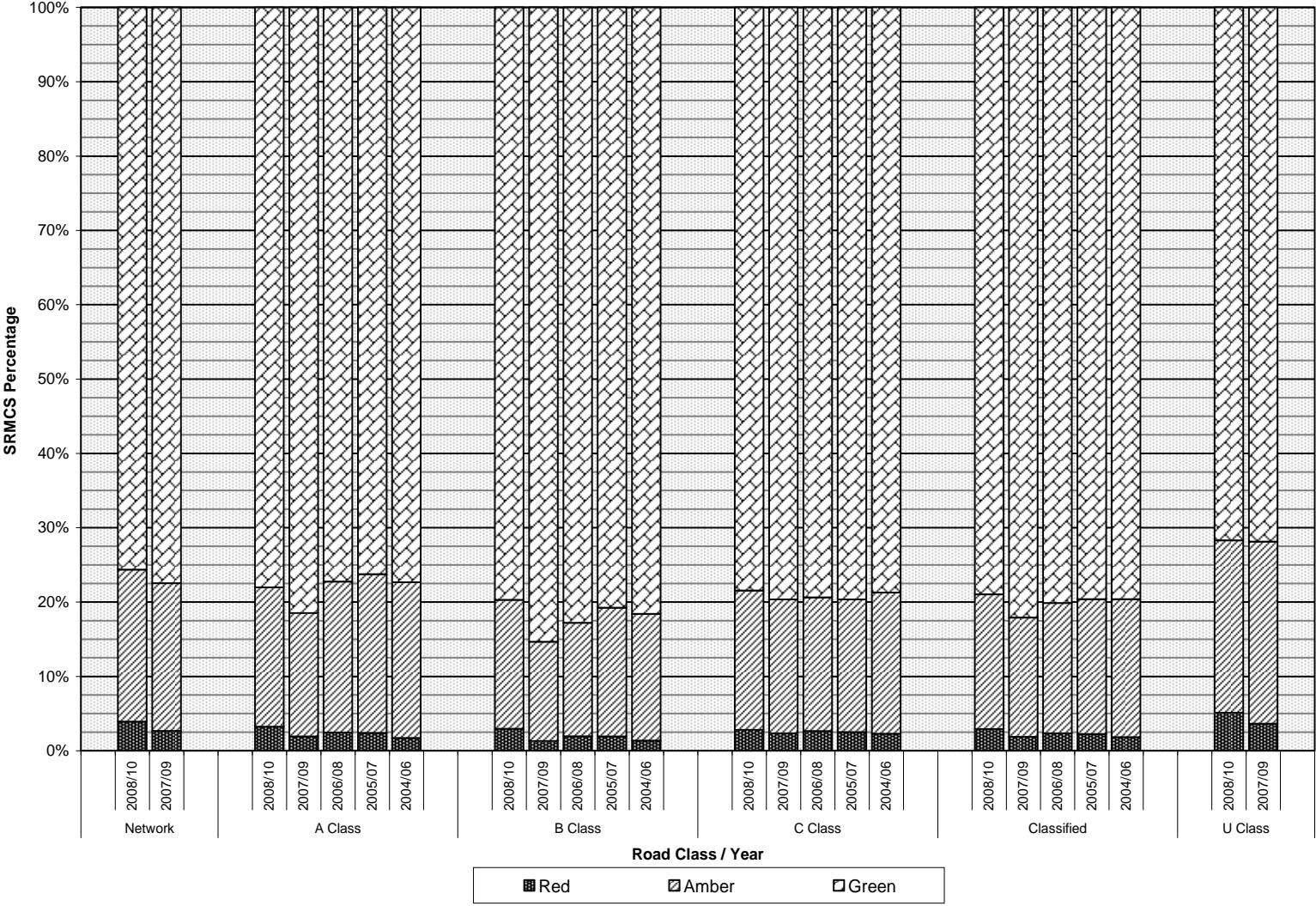
Items shaded grey were adjustments to budget.

Reserve List

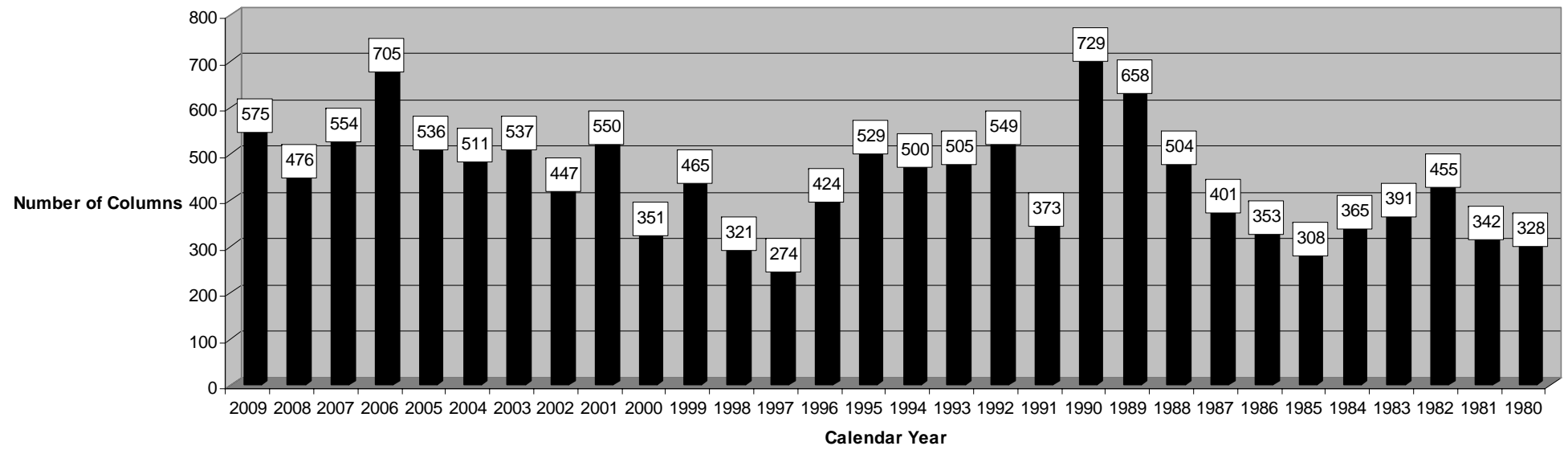


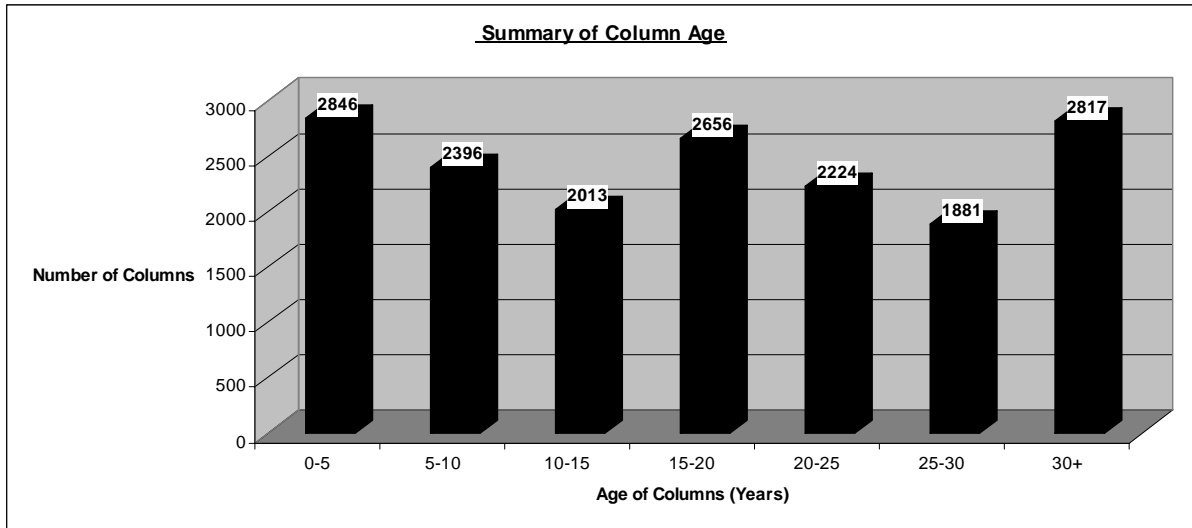
*Ref Para 4.6 in main report

Moray - SRMCS Results

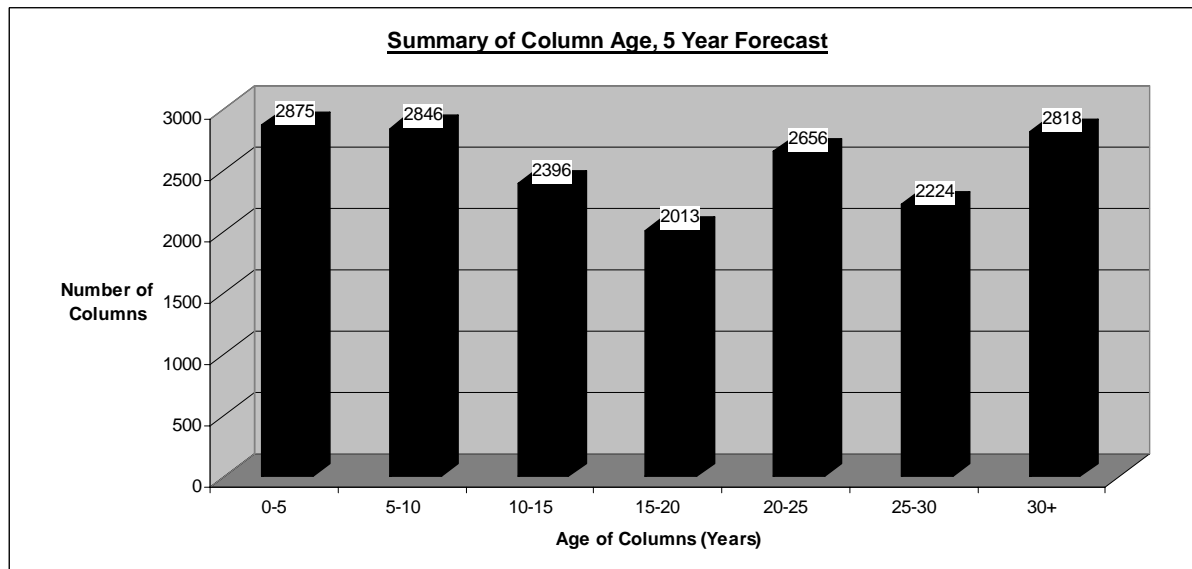


Column Age Profile 1980-2009





CURRENT POSITION



FORECAST POSITION IN 5 YEARS

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