



MAJOR HIGHWAY MAINTENANCE ALLOCATION PROCESSES

GUILDFORD LOCAL COMMITTEE

9th DECEMBER 2004

KEY ISSUE

This report describes the processes and systems used for the allocation of capital funds for large scale repairs to the structure of roads in the County

SUMMARY

At the Transportation Select Committee on 8 July 2004, one of the points that emerged was the need for better understanding on how the major maintenance programmes are decided. Major maintenance schemes on the highway have been funded in recent years from the Local Transport Plan settlement for maintenance. This year, the Prudential Code has provided an additional source of funding. Both these capital budgets are distributed according to needs based assessments. The system used for the allocation of Prudential maintenance funds is similar and complementary to the system used for the allocation of Local Transport Plan funds. The resulting programmes of major maintenance schemes provide treatments for the most deserving County roads.

Report by

Surrey Atlas Ref.

LOCAL TRANSPORTATION DIRECTOR

N/A

GUILDFORD B.C. WARD(S)

COUNTY ELECTORAL DIVISION(S)

ALL

ALL

OFFICER RECOMMENDATIONS

This report is for information only.

INTRODUCTION

- 1 There has been an annual programme of major maintenance schemes on County highways for many years. The programme is determined centrally and implemented by Surrey's partner constructors in liaison with the Local Transportation Services (LTSs). This report provides a guide to the funding allocation systems for these activities.

THE SCOPE OF MAJOR MAINTENANCE ACTIVITIES

- 2 Major maintenance complements revenue funded minor maintenance, routine and cyclic maintenance to repair and protect Surrey's highways. Major maintenance is invariably applied to carriageways and a range of treatments is used to extend the serviceable life of the roads. The minimum treatments can comprise a veneer or dressing to seal cracks in a road and improve the running surface, whereas reconstruction involves excavation down through the layers of the road. Improving technology has prompted an increase in the use of "thin surfacings", which serve to add to the structure of the road as well as reducing tyre noise. Processes to re-use excavated material are frequently used to reduce use of new materials and transport implications. Innovation to increase efficiency and reduce costs is facilitated through the County's partner Constructors.

FUNDING OF MAJOR MAINTENANCE

- 3 Major maintenance schemes can range in cost from less than £5,000 to £500,000. Funding for highway major maintenance has been provided in recent years from the Local Transport Plan (LTP) settlement for maintenance and this year the capital budget is £7.028 million. However, this year is also the first year of the Prudential Code funding for major maintenance, which is providing an additional £5 million capital budget.
- 4 Prudential funding refers to a new system for funding capital expenditure which came into effect on 1st April 2004. In the past the government restricted local authorities from spending capital, mainly by only allowing us to enter into long term borrowing if we had specific approval to do so (i.e. we had been given a "credit approval"). So in the past the government, through the LTP, would give us the authority to borrow a set amount and that was our main source of capital investment.
- 5 The main benefit of the new prudential system is that we can enter into long term borrowing over and above the specific capital allocations we already receive for transport, education, etc. As long as we can demonstrate to our external auditors that we have a sound capital investment strategy in place and that we are borrowing within reason (i.e. that we have taken account of the impact of future loan repayments), we can borrow additional money to fund an enhanced capital programme.

- 6 The County Council has therefore decided to allocate an additional £5m in each of the next 5 years to structural maintenance using this prudential system. The name "Prudential" refers to the requirement for local authorities to be prudent with our borrowing and investment, and has nothing to do with the Prudential Assurance Company.
- 7 The LTP and Prudential programmes of schemes are determined centrally in the County to ensure that the funds are utilised where the need is greatest. Schemes are selected on the basis of road condition data and assessment of need.

USE OF ROAD CONDITION DATA

- 8 Every road in the County is regularly surveyed to give condition data. The data is used to identify those roads which are most likely to need major maintenance. The data is also used to calculate Best Value Performance Indicator (BVPI) results.
- 9 The principal road network (A roads) is currently surveyed using a 'Deflectograph' machine. This imposes a heavy moving load on the road, causing the road structure to deflect. The extent of the deflection is measured, and this indicates the structural condition of the road through all its layers. However, BVPI requirements are changing and it is intended that all County roads will in future be surveyed with the new 'TRACS'-type machine, which measures the structural condition based upon defects identified visually in the road surface.
- 10 The non-principal road network (B & C roads) continues to be surveyed annually by Coarse Visual Inspection (CVI), which is an assessment of the carriageway defects from a moving vehicle. The unclassified road network (D roads) is also surveyed by CVI, but over a four year cycle.
- 11 Three BVPIs are used to measure the condition of the road network:
- BVPI 96 for Principal (A) roads
 - BVPI 97a for non-principal (B and C) roads, and
 - BVPI 97b for unclassified (D) roads.

In each case, the performance indicator is the percentage of the network of roads of that classification which has negative residual life, i.e. the road construction has exceeded its useful life. Clearly, the lower the percentage in each case the better. Recent performance data for each of these BVPIs is shown in the **TABLE** below.

BVPI ref	2002/03 actual	2003/04 actual	2004/05 target	2005/06 target	2006/07 target
BVPI 96	12.9	15.2	Awaiting TRACS survey data		
BVPI 97a	20.12	16.9	15	13	11
BVPI 97b	20.21	15.5	14.5	13.5	12.5

- 12 The current data for BVPI96 appears to show an increase in the proportion of principal roads that have negative residual life and need maintenance, but there is confidence that Surrey's own targets for maintenance will be met. In line with the County Council's emphasis on improving the non-principal network it is pleasing to note BVPI97a shows a significant reduction in the proportion of non-principal roads that are in need of maintenance so this indicator is judged to be on track for the 2006 target. The calculation procedure for BVPI97b for unclassified roads has changed since last year so results are not directly comparable but early trends suggest that this too is on track.
- 13 Potential major maintenance schemes are derived from the condition data, from suggestions by the Local Transportation Services (LTS) and from recommendations from the Constructors. All potential schemes are assessed for defects such as rutting, cracking, carriageway disturbance and edge deterioration. The assessment produces a rating value and a code value, which give an indication of how many defects are present on the scheme and its urgency. All potential schemes are included on the major maintenance rolling programme, which is used to derive a list of schemes for construction in the following financial year.
- 14 The list has traditionally been prepared in provisional form in advance of the budget announcement in February, and will be ready in November this year. However, it is intended that the provisional list will be prepared even earlier next year for better coordination with the Integrated Transport provisional programmes, which are normally considered in early autumn. LTSs will then have better information for advising Local Committees on the planning of all highway schemes, including opportunities to include improvement initiatives within the construction programme for major maintenance.

ALLOCATION OF MAJOR MAINTENANCE FUNDING

- 15 The LTP and Prudential funded Major Maintenance programmes are progressed concurrently. Both programmes are determined centrally for the County to ensure the most deserving schemes are progressed. Agreement to progress each scheme is discussed with the appropriate LTS. A report is being prepared for the Transportation Select Committee recommending the adoption of the following systems for the allocation of the major maintenance funds.
- 16 It is proposed the LTP major maintenance funds will be allocated as in previous years, on the basis of technical need using the code and rating of schemes, taking into account anticipated gain toward the relevant performance indicator. This ensures that the available funding is directed to those schemes that score highest in terms of condition need.
- 17 It is proposed that Prudential major maintenance funds will be divided between the districts and boroughs on the basis of technical need determined by BV97a and BV97b. Priority for schemes within a district would be based on their code and rating, together with local views.

ANALYSIS AND COMMENTARY

- 18 Both the Comprehensive Performance Assessment (CPA) of the County Council and the Community Survey have indicated that more could and should be done to improve the basic condition of our highway network. As an integral part of the CPA, in 2002 the Audit Commission undertook a Best Value Review of the whole of the transportation service. This rated the service as “good with excellent prospects for improvement”. The report nevertheless drew attention to the relatively poor condition of our highway network as measured by the national indicators, BVPI 96 and BVPI 97a and b. The County Council Executive’s Mid Term Review has responded to that challenge through the use of the Prudential Code to increase funding of major maintenance.
- 19 It is important that the decision mechanisms for Major Maintenance schemes are clear and transparent. It is also important that schemes contribute to the BVPI criteria as well as address community concerns. The proposed processes, including central decision making, will ensure that the programmes are derived from needs based criteria so that the most deserving schemes are progressed. LTSs and Local Committees will continue to be involved in the processes, and it is proposed that provisional programmes will be prepared earlier for the benefit of local coordination of highway activities.

FINANCIAL IMPLICATIONS

- 20 This report is for information only and has no direct financial implications.

SUSTAINABLE DEVELOPMENT IMPLICATIONS

- 21 The maintenance of the asset which the highway represents has a moderate effect on the local economy since roads nearing the end of their effective lives require greater levels of reactive maintenance which may cause traffic delays and congestion. The choice of major maintenance treatment may also have environmental effects depending on the extent of recycling of materials which occurs.

CONCLUSION

- 22 This report provides information on the processes used for the preparation of the Major Maintenance programmes. It explains proposed systems for the allocation of funds for Major Maintenance and invites the Local Committee to comment in advance of a proposed report to the Transportation Select Committee.

LEAD OFFICER	DEREK POOLE SENIOR PRINCIPAL ENGINEER
TELEPHONE NUMBER	01737 737340
BACKGROUND PAPERS	None
