



meeting **ENVIRONMENT AND SUSTAINABILITY SELECT COMMITTEE**

date 12 DECEMBER 2005

agenda item no

REPORT OF THE DIRECTOR OF ENVIRONMENT

THE CONDITION OF ROADS IN NOTTINGHAMSHIRE

Purpose of Report

1. The aims of this report are:
 - a) to provide Committee with a general overview of the condition of roads in Nottinghamshire;
 - b) to outline the assessment surveys carried out and how these are reported in Best Value Performance Indicators (BVPI's);
 - c) to indicate the level of investment undertaken on roads.

Background

2. The County Road Network consists of 461km of "A" roads, 272km of "B" roads, 769km of "C" roads and 2663km of unclassified roads, giving a total length of road in the County of 4165km. In addition there are 156km of motorway and trunk roads (A46, A52, A453 and A1) running through the County which are maintained by AMScot on behalf of the Highways Agency.
3. The County Council, as local Highway Authority, has a statutory duty of care under Section 41 of the Highways Act 1980 to maintain highways in a safe and acceptable condition. Appropriate funding allocations are made by Central Government via the Revenue Support Grant and the LTP (Local Transport Plan) for planned structural maintenance of the carriageway and footways on the County Road Network (excluding trunk roads).

4. There are two types of maintenance on the network, routine and planned.
 - a) Routine maintenance consists of cyclic activities such as grass cutting, sign and lighting maintenance pot holing, patching and winter maintenance. These are operations the Authority has to carry out to fulfil our duty under the Highways Act and maintain the network in a safe condition. The work is funded from Environment Departments highway maintenance revenue budget.
 - b) Planned maintenance as the name implies is not responsive but planned in advance. It covers structural maintenance of carriageways and footways and replacement of drainage items. These are items of work, which maintain the asset value of the network and are generally funded from LTP capital. Investment in planned maintenance will reduce the demand on routine / cyclic maintenance and in the long term is more cost effective.
5. The draft NCC Community Safety Strategy (2005-2009) highlights the need *“to travel easily and safely and being able to access all the services people need”* and within that the business community has criticised the adequacy and maintenance of current roads. Similarly a MORI Poll (2002) undertaken as part of our own Highway Services Best Value Review confirms that the residents of Nottinghamshire see the repair and maintenance of local roads (80%) and footways (76%) as being important; with satisfaction regarding speed of repair being at the lower end of the spectrum.

Highway Condition Assessment Surveys

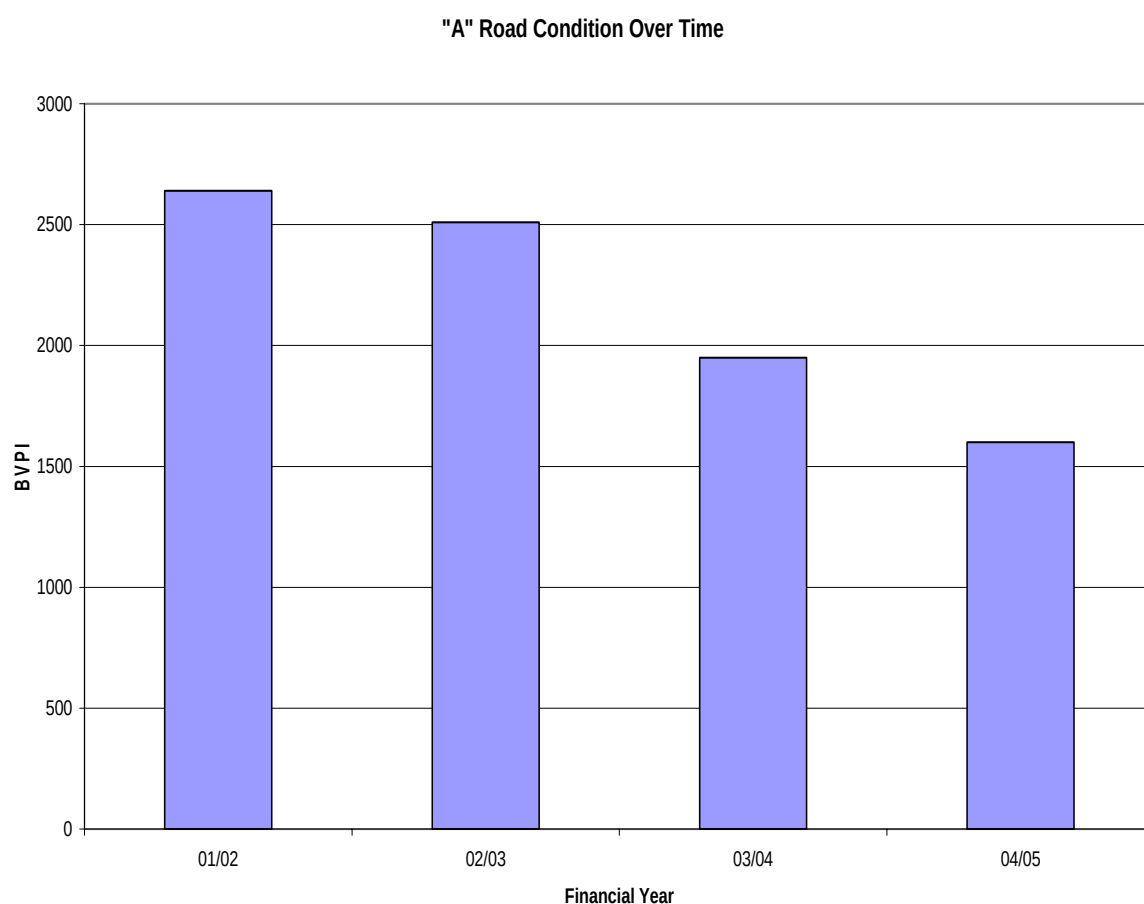
6. Assessment Surveys are commissioned each year by the Authority to establish the condition of the network which allows us to prioritise investment, and demonstrate to the Central Government, in achieving national BVPI's for improving the road network. Details of the surveys undertaken can be found in Appendix A. Historically, inconsistencies in the data obtained has caused concern when comparing results. This has been recognised by the DfT who have now introduced machine based SCANNER surveys [see c) appendix A], initially on “A” roads in 2004/05, and now extending to “B” roads and 10% of “C” roads. Ultimately it is hoped to extend this to the unclassified network. This type of survey enables accurate direct comparison to be made year on year and demonstrate improvements both locally and nationally.

Main “A” Roads

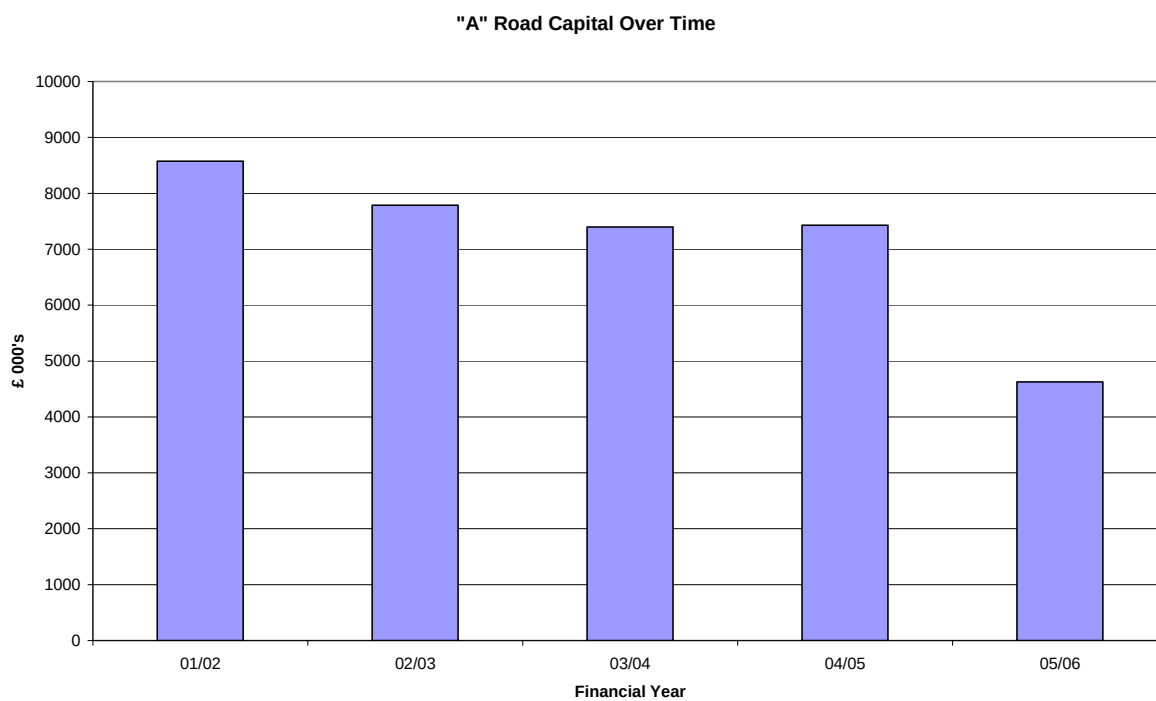
7. The structural maintenance of the main “A” road network, up to 1993, was wholly funded from revenue funds obtained from the revenue budgets of individual authorities derived from Revenue Support Grant and Council Tax revenues. By the mid 1990's with increased traffic flows and significant deterioration occurring, Central Government became concerned about the condition of the main roads and as a consequence made additional capital funds available through the then TPP (Transport Policies and Programmes).

This budget was ring fenced and could only be used for highway structural maintenance.

8. In 2001 the government published it's Ten Year Transport Plan which stated the Government's aim was to remove the backlog of structural repairs on England's roads by 2010 and backed this up with a substantial injection of funds. In order to align the County Council with the Governments aims the Authority set its own Strategic Plan Target to remove 80% of the backlog of repair on the "A" road network by 2005, and reinforced this in the LTP (Local Transport Plan) by setting an LTP Target to totally remove the backlog on "A" roads by 2005/06
9. The Strategic Plan target has not been wholly met, but this is mainly due to the fact that Government has cut back on it's promised funding. However it is the Governments aim to provide sufficient LTP funding to eliminate the backlog of repairs by 2010. not withstanding this, significant progress has been made and below is a graph which shows the outstanding backlog of repairs.



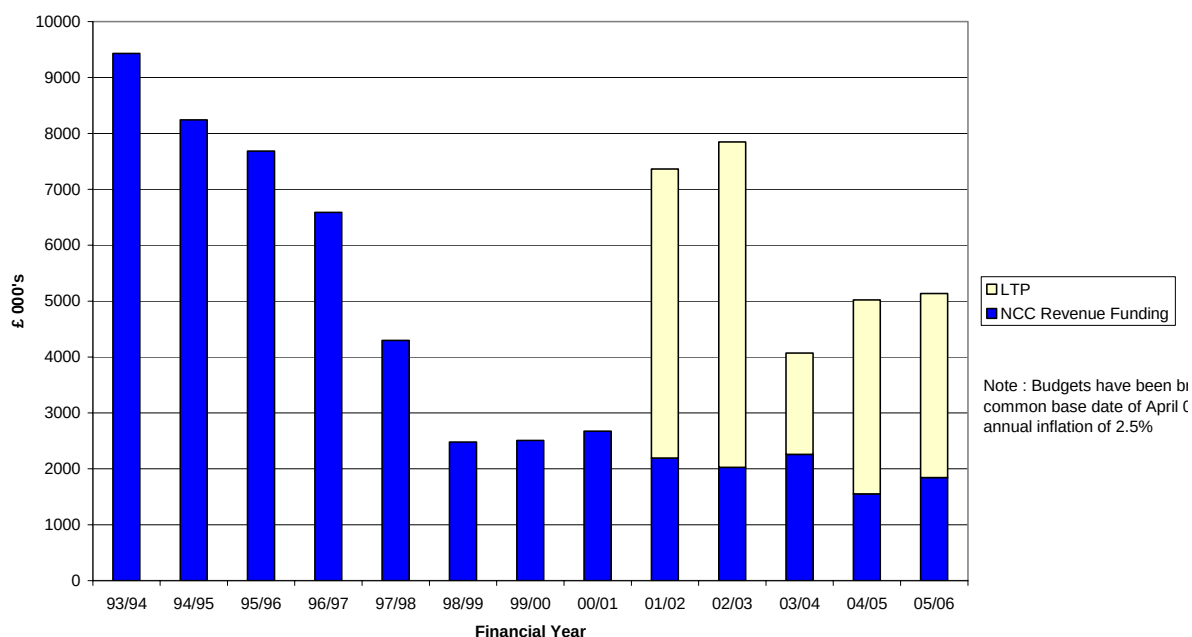
10. Additional LTP monies received by this Authority over the same period is shown below



The "B", "C" and Unclassified Roads

11. Unlike the "A" road network the "B", "C" and unclassified network had until 2001/2002, when the Government published its Ten Year Transport Plan, only been funded from revenue sources. The LTP funding in 2001/2002 allowed Authorities to use some of their allocation for structural maintenance on this network. However because of the Authorities targets the majority of capital funding has been invested in the "A" road network.
12. Structural maintenance work on the "B", "C" and unclassified network has always been funded via the "Detailed Works" revenue budget. The programme of works funded by this budget has been prioritised using visual surveys and allocated on a needs basis. Unfortunately as revenue budgets have been reduced over the past years, and elements of routine maintenance such grass cutting, lighting and winter maintenance have to be undertaken the only areas where these cuts can be made is in the programmed works. The graph below shows the downturn in investment,

Graph of "B" "C" & unclassified Revenue & Capital Budgets Over Time



13. Despite the top up of funds from LTP sources, the investment in the "B", "C", and unclassified road network has failed to halt the increase in backlog of work, which was recently estimated, based on the CVI survey, to be in the region of £65 million. In essence even with the additional LTP monies the level of investment in 2001/02 and subsequent years is significantly less than it was in 1993/94. It shows that considerable investment from the County Council's own revenue and capital streams is still needed to bring this network back into an acceptable state.

Summary

14. The Authority has virtually achieved the national target with respect to the "A" road network, and "B" and "C" roads are in a satisfactory condition.
15. "Unclassified" roads are in the poorest condition and serious investment is needed to stop further decline. These findings are borne out by the recently published national survey results. Therefore, a substantial level of additional investment which has to come from the LTP and the County Council's own resources to ensure the entire network is maintained properly in a safe and acceptable condition.
16. Members are requested to note the present condition of the network and the future investment required.

Peter Webster
Director of Environment

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APPENDIX A

Listed below are the surveys undertaken giving details of what they measure, what they are used for, and some indication of how much we survey.

- a) CVI (Course Visual Inspection) – This as the name implies is a quick visual survey, which is carried out from a slow moving vehicle. This being a visual survey it is difficult to achieve consistency, hence the reason the DfT has moved to SCANNER surveys (see 5c below). The County Council is required to survey 25% of its unclassified roads each year.
- b) DVI (Detailed Visual Inspection) – Once the CVI survey has been completed and highlighted areas of concern, the DVI is a more detailed survey of the condition of the roads and footways. It is also carried out on sections of road where Officers or Members have concerns. Once the survey is completed it is processed through a suite of computer programmes and various statistics produced, one of which is a priority list for repair. This list is used to produce a programme of works for the following year. The Authority surveys approximately 300km of road in this way annually.
- c) SCANNER (Surface Condition Assessment of National Network of Roads) - SCANNER is now the preferred survey tool of the DfT and has replaced the majority of the CVI surveys. It is a machine based survey which can be driven around the network at normal traffic speeds picking up vast amounts of condition data including, rutting, cracking, texture, ride quality and road geometry such as radius and gradient. Also a very useful by-product is a forward looking video. As the survey is machine based it is repeatable and provides consistent results, hence the reason it is so popular with the DfT.
- d) SCRIM (Sideway force Coefficient Routine Investigation Machine) – This again is a machine based survey and measures the slipperiness of a road. This is not a measure that feeds into any BVPI but is used to monitor the safety of the network and identifies sites for treatment annually. We survey a third of the “A” and “B” road network each year.
- e) Deflectograph – This machine-based survey measures the deflection of the road under a fixed load hence the name Deflectograph. This deflection is then converted into a measure of the strength of the road via a predetermined set of empirical formulas
- f) NRMCS (National Road Maintenance Condition Survey) – The survey is supported by the DfT, the Local Government Association, and the Highways Agency and is managed by the Roads Board of the CSS (County Surveyors Society). The aim is to provide a firm national statistical basis for road condition and maintenance need in England and Wales. The survey is a visual survey similar to the CVI survey. The results when taken on just a County basis are not statistically accurate

but the Authority has always considered it necessary to partake so a national picture can be set and used when making a case for additional funding to the DfT On a national level, it has highlighted rural unclassified roads as being in most need of investment.