

# **AGENDA MANAGEMENT SHEET**

<b>Name of Committee</b>	<b>North Warwickshire Area Committee</b>
<b>Date of Committee</b>	<b>20th July 2005</b>
<b>Report Title</b>	<b>Highway Maintenance Plan 2005/06 and Five Year List of Structural Maintenance Schemes</b>
<b>Summary</b>	The report provides information about the highway maintenance work proposed in 2005/06 and lists other sites where maintenance work will be required in the future.
<b>For further information please contact</b>	Roger Poole Policy Officer Tel. 01926 738980 rogerpoole@warwickshire.gov.uk
<b>Would the recommended decision be contrary to the Budget and Policy Framework?</b>	Yes/No
<b>Background Papers</b>	None

## **CONSULTATION ALREADY UNDERTAKEN:-**

*Details to be specified*

Other Committees	<input type="checkbox"/> .....
Local Member(s) (With brief comments, if appropriate)	<input checked="" type="checkbox"/> Councillor R Sweet – for information
Other Elected Members	<input checked="" type="checkbox"/> Councillor K Browne ) Councillor Mrs E Goode ) for information Councillor Mrs J Lea )
Cabinet Member (Reports to The Cabinet, to be cleared with appropriate Cabinet Member)	<input checked="" type="checkbox"/> Councillor M Heatley – for information
Chief Executive	<input type="checkbox"/> .....
Legal	<input checked="" type="checkbox"/> K Scales – comments incorporated
Finance	<input checked="" type="checkbox"/> C Holden – for information

Other Chief Officers	<input type="checkbox"/>	.....
District Councils	<input type="checkbox"/>	.....
Health Authority	<input type="checkbox"/>	.....
Police	<input type="checkbox"/>	.....
Other Bodies/Individuals	<input type="checkbox"/>	.....

**FINAL DECISION**                      **YES/NO**      *(If 'No' complete Suggested Next Steps)*

**SUGGESTED NEXT STEPS :**

*Details to be specified*

Further consideration by this Committee	<input type="checkbox"/>	.....
To Council	<input type="checkbox"/>	.....
To Cabinet	<input checked="" type="checkbox"/>	8th September 2005
To an O & S Committee	<input type="checkbox"/>	.....
To an Area Committee	<input type="checkbox"/>	.....
Further Consultation	<input type="checkbox"/>	.....

## North Warwickshire Area Committee - 20th July 2005

### Highway Maintenance Plan 2005/06 and Five Year List of Structural Maintenance Schemes

#### Report of the Director of Planning, Transport and Economic Strategy

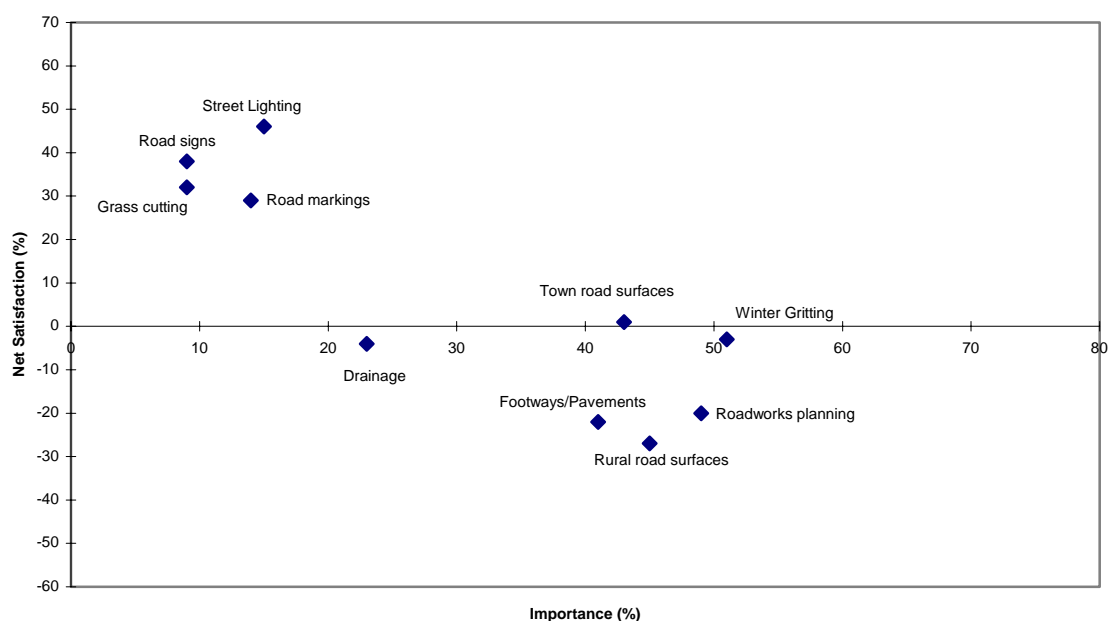
##### Recommendation

Area Committee is invited to make comments on the Highway Maintenance Plan 2005/06 so that Cabinet can be informed of Members' views.

#### 1. Highway Maintenance Annual Plan

- 1.1 The Highway Maintenance Plan for 2004/05 is attached as **Appendix A**. This is the fourth plan which has been produced and, as in previous years, it includes details of the surface dressing, road resurfacing, road reconstruction, footway surfacing and footway slurry sealing work planned for the year.
- 1.2 Some of the points Members may like to note from the plan are:-
  - (i) By undertaking extra surface dressing and a structural maintenance treatment on at least 80km of non-principal roads and 5km of principal roads in 2004/05 there has been a slight improvement in the condition of B and C class roads and a marked improvement in Unclassified roads. These improvements were helped by the extra structural maintenance work made possible by "prudential borrowing" in 2004. This funding will, however, reduce the highway maintenance revenue by about £130,000 a year for the next 25 years.
  - (ii) The operation of the highways contact centre has improved during the year.
  - (iii) The results from the latest public satisfaction surveys (carried out through the Warwickshire Panel in 2004) are shown in the grid below. It is expected that the next survey will be undertaken in 2006.

### Highway Maintenance : Citizens Panel 2004 Net Satisfaction v Importance



1.3 There are now some trends beginning to emerge with satisfaction with roadworks planning and grass cutting showing a slight upward trend. It will be difficult for County Highways to achieve the public satisfaction targets agreed by Cabinet in July 2002.

1.4 An analysis of the condition of the carriageways in each District area is shown in the table below. In the past the differences between areas were probably due to:-

- (i) Different maintenance regimes undertaken in the north and south of the county between 1985 and 1996.
- (ii) Different sub-soils, which mean that roads in some areas are more likely to crack in dry weather.
- (iii) Newer roads (mainly in the urban areas) are constructed to higher standards and have a longer life than the older (mainly rural) roads.

Carriageways with Defects above the Best Value Performance Indicator Thresholds of the United Kingdom Pavement Management System (UKPMS) Surveys							
		North Wark'shire	Nuneaton & Bedworth	Rugby	Stratford	Warwick	Total
2004	Length (km)	81.2	44.2	99.4	302.9	98.6	626.3
	%age	15.2	11.9	16.3	21.2	14.7	17.3
2005	Length (km)	82.3	44.5	82.25	261.4	92.9	563.35
	%age	15.2	12	13.4	18.3	13.4	15.44

- 1.5 In recent years works programmes have taken account of the differences in road conditions, with more work carried out on the roads in the south of the county than in the north. This is beginning to reduce the differences in road conditions across the County. There is still a need for the roads in Stratford District to improve but it will now be necessary to look at new areas (such as North Warwickshire) when their roads deteriorate.
- 1.6 The table below provides information about the lengths of roads which are to be treated in each area of the county during the year

Location	Surface dressing (length and percentage of the total network to be treated)			Structural maintenance (length and percentage of the total network to be treated)		
	04/05		05/06	04/05		05/06
	km	km	%	km	km	%
North Warwickshire	40	29	5.3	6.7	0.9	0.2
Nuneaton and Bedworth	39	24	6.3	2.4	1.5	0.4
Rugby	42	38	6.1	8.9	0.3	0.05
Warwick	51	38	5.5	9.8	3.4	0.5
Stratford	53	69	4.8	57.0	31.2	2.2

- 1.7 The main reason for the variability in treatments in the different areas of the county is that, as last year, a greater length of road is being overlaid in the Stratford area to try to even out condition throughout the county.

## 2. Highway Maintenance Five Year Plan

- 2.1 As with last year, a list of sites which require a maintenance treatment, but which could not be included in this year's programme, has been drawn up. This is intended to provide Members, and the public, with greater reassurance that maintenance work will be carried out, even if it is not programmed in the current financial year. A list of roads in the North Warwickshire area which should receive a structural treatment in the next five years is included as part of the Highways Maintenance Plan. The roads which are listed are those which are felt should definitely receive a structural treatment
- 2.2 The list includes a number of "A" roads and some pavements/footways. There are a limited number of carriageway sites included in the urban areas. This is because most of the roads in urban areas are treated by surface dressing or by resurfacing and do not normally require a strengthening treatment.
- 2.3 A separate list of roads where street lighting replacements are needed is also provided.

### 3. Conclusion/Issues

3.1 Members are invited to comment on the Highway Maintenance Plan and Five Year List of Structural Maintenance Schemes. Members may particularly wish to comment on other issues which feature in the plan. Some of the issues include:-

- (i) The priority for highway maintenance spending has traditionally been for maintaining safety and for maintaining the structural condition of the road. Maintaining the appearance of the network has generally been considered to be a lesser priority with the funds available.
- (ii) Patching work is carried out to keep the roads and pavements in a safe condition. Potholes and other defects are dealt with when they are found during the regular inspections or when they are reported by the public. Patching work is also undertaken prior to carriageway surface dressing or pavement slurry sealing. Revenue resources for patching have been significantly reduced this year and priorities will be strictly focussed on ensuring that the network is safe.
- (iii) The overall condition of the street lighting stock in Warwickshire is better than in many counties. However, about 25% of the lighting stock is over 30 years old. It is currently estimated that Warwickshire should be replacing at least 1000 (2.5%) of its streetlights every year to maintain the overall condition. The past few years funding has allowed just 50%-25% of the required replacements. During the past 12 months 6 columns collapsed unexpectedly. Fortunately, no personal injuries were sustained but the potential danger of an ageing stock is clear. To manage the potential risks in the short term it is proposed to increase the programme of testing to determine the maximum "residual" life of the columns. A substantial part of the street lighting budget is spent on energy. In April 2005 a two year contract for Green Energy was secured for the first time for Warwickshire County Council (WCC).
- (iv) The cost of tree maintenance is increasing and there is pressure on planting more trees to improve the environment. Trees are an important part of the street scene but increasing costs will reduce funds for other maintenance work.

JOHN DEEGAN

Director of Planning, Transport and Economic Strategy  
Shire Hall  
Warwick

1st July 2005

## **Appendix A of Agenda No**

### **North Warwickshire Area Committee - 20th July 2005**

#### **Highway Maintenance Plan 2005/06 and Five Year List of Structural Maintenance Schemes**

##### **1. Introduction**

- 1.1 In 2002 the Audit Commission said that the highway maintenance service in Warwickshire was a good (two star) service with promising prospects for improvement. This plan set out the actions being taken to try to improve the service to an excellent (three star) service.
- 1.2 Information is provided about the way in which the highways budgets will be spent in 2005/2006. Details of the structural condition of roads in the county are given and an assessment is made of progress towards targets. Other information such as public satisfaction with the service is also provided.

##### **2. Highway Maintenance Policy**

- 2.1 Maintenance work is carried out in accordance with the Warwickshire County Council Highways Maintenance Policy Document and, in addition, any Member decisions on budgets. Policies were reviewed as part of the 2001 and 2002 Best Value reviews of the structural, routine and winter maintenance services.
- 2.2 In 2003 the Environment and Rural Affairs Overview and Scrutiny Committee endorsed the strategy for the maintenance of the highways.
- 2.3 A further review of policy will be carried out in 2005 following the publication of a revised national Code of Practice for Maintenance Management.

##### **3. Maintenance Contract**

- 3.1 2005/06 is the second year of the seven year maintenance contract awarded to Carillion which covers all the highway maintenance work.
- 3.2 The contract is fulfilling one of the actions identified in the best value reviews. Work is continuing with the contractor to identify and implement improvements which can be made to ensure better value for the maintenance spend.
- 3.3 Following a review of the Highway Maintenance Contract an Improvement Action Plan was drawn up (reported to Environment and Rural Affairs Overview and Scrutiny Committee 12th February 2005). A further report

on progress on the contract will be made to Environment Overview and Scrutiny Committee in September 2005.

## **4. Targets**

4.1 Members agreed three main targets following the best values of the service.

(i) **Target 1 - Condition of the road network**

To reduce the backlog of repairs by 2010 by undertaking structural maintenance strengthening work on an average of at least 50km of B, C or D roads each year.

(ii) **Target 2 - Public satisfaction**

To increase levels of public satisfaction by at least 10% by 2010 as measured by net satisfaction and overall satisfaction score (these forms of measuring satisfaction were adopted in the best value review).

(iii) **Target 3 – Safety**

To reduce wet road skidding accidents in line with Government targets. Casualty Reduction Targets were stretched to 2009 by WCC and will be stretched even further by PSA2 and the proposed LTP to be published in 2006.

## **5. Funding**

5.1 To achieve the targets the overall funding is allocated to various elements of the service. Details of how the budget will be spent is given in the table below. The figures do not include staff costs or agents fees. For comparisons the figures from the last four years are included.



<b>Maintenance Allocations (Revenue and Capital)</b>					
	<b>2001/2002</b>	<b>2002/2003</b>	<b>2003/2004</b>	<b>2004/2005</b>	<b>2005/2006</b>
Insurance	£443,443	£454,529	£665,892	£683,000	£762,000
Street Lighting including energy	£2,035,076	£2,073,203	£2,188,783 (energy £860,000)	£2,723,000 (energy £965,000)	£3,010,000 (energy £1,258,000)
Winter Maintenance	£1,163,000	£1,192,075	£1,341,877	£1,359,000	£1,258,000
Principal Road Structural and Surface Dressing	£1,438,000	£1,461,000	£1,202,705	£1,064,000	£610,000
Non Principal Surface Dressing	£1,050,282	£1,723,699	£1,623,545 (2)	£1,874,000	£2,082,000
Non Principal Structural Work including road and footway surfacing, slurry sealing microasphalt, and drainage schemes	£4,449,783	£4,169,227 (1)	£3,853,750 (2)	£4,179,000 (3)	£4,528,000
Other maintenance activities	£4,147,416	£4,275,267	£4,324,128	£4,646,000	£4,144,000
TOTAL	£14,727,000	£15,349,000	£15,200,680	£16,528,000 (3)	£16,617,000

#### Notes

- (1) In addition some extra money was made available because an improvement to Portobello Bridge, Warwick was postponed. If the scheme proceeds in the future funding for it will have to be recovered from a future years maintenance allocation.
- (2) Final surface dressing costs were about £200,000 less than budget which allowed extra spending on structural works.
- (3) In addition £2 million was made available from prudential borrowing.

5.2 In 2004/05 prices under the new Highway Maintenance Contract changed for some activities compared to the prices under the old contracts. Some of the 2005/06 budget changes are a result of changes to the allocations of depot and other overhead costs.

5.3 The following are the main activity changes in 2005/2006 compared to 2004/2005:-

- (i) The substantial increase in the street lighting allocation has been required to pay for an increase in electricity cost (approx £293,000).
- (ii) The spending on Principal Roads has been decreased and spending on Non Principal roads increased in line with government recommendations in their annual capital allocations.
- (iii) Surface dressing allocations remain higher than in 2001/02 to try to ensure that greater lengths of road are sealed to reduce the likelihood of potholes developing.
- (iv) The funding for structural maintenance includes about £1.155m for footway surfacing and slurry sealing.

- (v) The allocation for 'other' maintenance activity takes account of an increasing cost of tree maintenance. The Patching allocation has been substantially reduced as it is hoped that less patching will be necessary if road condition is improved by increased surface dressing and resurfacing.

## 6. Public Satisfaction

- 6.1 An important factor to be taken into account in deciding how maintenance funding should be allocated is the levels of public satisfaction with the service. Highway maintenance satisfaction surveys have been carried out in 1999, 2002, 2004 with each of the three Warwickshire Panels. The results for these surveys and the 2010 targets are shown in the table below. It is hoped that a further survey can be undertaken in 2006.

	Net Satisfaction Score (percentage satisfied minus percentage dissatisfied)				Overall Satisfaction Score (ranging from 0-100)			
	1999	2002	2004	Target for 2010	1999	2002	2004	Target for 2010 (% increase from 2002)
Winter Maintenance	+24%	+29%	-3%	42%	53	57	47	63(+10%)
Street Lighting	+66%	+54%	+46%	69%	69	66	64	73(+10%)
Roadworks Planning	-28%	-24%	-20%	20%	37	39	40	58(+50%)
Town Road Surfaces	0%	-3%	+1%	45%	45	45	48	63(+40%)
Rural Road Surfaces	-16%	-31%	-27%	10%	41	36	38	54(+50%)
Pavements/Footways	-18%	-17%	-22%	24%	40	41	40	57(+40%)
Grass Cutting	+15%	+21%	+32%	33%	50	59	58	65(+10%)
Road Signs	+48%	+40%	+38%	54%	62	57	60	63(+10%)
Drainage	+16%	-13%	-4%	20%	50	42	46	59(+40%)
Road Markings	+45%	+33%	+29%	46%	60	58	57	64(+10%)

- 6.2 The main points to note from these surveys are:-

- (i) Satisfaction with winter maintenance decreased substantially in 2004. It is presumed that this was influenced by the problems that occurred throughout the region due to the snow fall in January.
- (ii) Satisfaction with the highest regarded services of street lighting, road signs and road markings have fallen slightly. There were some particular problems in 2003 in reinstating road markings following surface dressing.
- (iii) Satisfaction with Roadworks planning and grass cutting show a slight upward trend.
- (iv) There are no clear satisfaction trends for the other elements of the service with rural road surfaces and footway/pavements continuing to be given low ratings.

- 6.3 Since 2001 there has been a steady improvement in the general maintenance of town centres as recorded by the independently scored Streetscape Appearance Index Values.

## **7. Surface Dressing and Structural Maintenance Treatments**

- 7.1 The surface dressing and structural maintenance allocations are used to fund the following treatments

<b>LENGTHS OF TREATMENTS</b>				
	2002/2003	2003/2004	2004/2005	2005/2006
Principal Roads – Structural Maintenance	5km	6km	5km	2.5km
Principal Roads – Surface Dressing	23.1km	22km	31km	13km
Non Principal Roads – Structural Maintenance	50km	52km	80km	34.8km
Non Principal Roads – Surface Dressing	198km	135km	195km	185km
Footways*	158km	80km	91km	112km

\* Note: Footways include Slurryseal treatment

## **8. Structural Condition of the Network**

- 8.1 This section gives carriageway condition information from road condition surveys. As last year, it is important to emphasise the fact that none of the surveys are able to measure road condition, and year on year changes in road condition, to a high degree of accuracy. This is because some of the surveys use sampling and only measure part of the network each year and others give different results when carried out at different times. The best the surveys can do is to pick up trends in condition over a period of years.
- 8.2 As a result of the problems with road condition surveys research took place nationally to develop machine surveys. In 2004/05 all local authorities were required to commission a machine survey for the surface condition of their principal roads (SCANNER survey). This year the surveys will be extended to B and C roads.
- 8.3 The survey results for the principal (A) roads are given in the following tables. Unfortunately the results do not provide a clear picture of the condition of the Principal road network.
- 8.3.1 In the past the Deflectograph survey has been found to provide the most accurate information about the condition of the principal roads. The Deflectograph results for 2003 indicate a continuing deterioration in the roads surveyed. The Deflectograph results for the 2004 survey are not yet available.
- 8.3.2 The UKPMS National indicators have not been available in a year on year consistent form and the latest SCANNER survey measures new defects, such as skid resistance, which has led to a higher reported figure.

8.3.3 The National Road Maintenance Condition Survey (NRMCS) shows a continuing improvement in the condition over the last five years.

<b>DEFLECTOGRAPH SURVEY RESULTS FOR THE A ROADS</b>						
<b>(Approximate length of A roads in Warwickshire 380km. Approximate length surveyed by deflectograph 366km )</b>						
Date of survey	Percentage of the network falling within the residual life bands					
	0 yr	1-4 yrs	5-9 yrs	10-14 yrs	15-19yrs	20+ yrs
July 1999	<b>8.9</b>	7.3	7.5	8.4	8.4	59.5
July 2000	<b>6.4</b>	6.1	7.1	8.2	8.2	64.0
July 2001	<b>7.8</b>	6.5	6.6	8.3	6.6	64.2
July 2002	<b>9.9</b>	7.8	7.8	9.3	6.5	58.8
July 2003	13.4	10.3	9.4	8.7	7.1	51.1

Figures in bold were reported as the best value performance indicator BVPI 96

<b>UKPMS National Indicators</b>			2000/2001	2001/2002	2002/2003	2003/2004	2004/2005
Percentage length of A road with defects above the threshold	UKPMS	Fixed Merge method	2.10%	3.10%	3.70%	-	-
		Variable Merge method	-	-	9.20%	<b>6.90%</b>	8.0%
	SCANNER		-	-	-	-	<b>27.79%</b>

Figures in bold were reported as the best value performance indicator BVPI 96

<b>NATIONAL ROAD MAINTENANCE CONDITION SURVEY DEFECT INDICES</b>				
PRINCIPAL ROADS				
	Warwickshire			National Average
	Urban	Rural	Average	
1993	30	70	50	106.2
1994	42	53	47	101.0
1995	53	37	45	100.1
1996	60	43	51	105.2
1997	55	39	47	106.4
1998	48	62	55	106.8
1999	43	61	52	109.0
2000	107	51	79	103.7
2001	46	68	57	101.2
2002	71	62	66	93.3
2003	52	65	58	91.8
2004	62	50	56	83.5

Note The lower the value the fewer the surface defects

8.4 The survey results for the non principal roads are given in the following tables. There have been fewer changes in the surveys in recent years which means that the results are easier to interpret than those for the principal roads.

8.4.1 There has been little change in the condition of B and C roads.

8.4.2 There has been a marked improvement in the condition of unclassified roads.

<b>NATIONAL ROAD MAINTENANCE CONDITION SURVEY DEFECT INDICES</b>								
	CLASSIFIED ROADS				UNCLASSIFIED ROADS			
	Warwickshire			National Average	Warwickshire			National Average
	Urban	Rural	Average		Urban	Rural	Average	
1993	73	41	57.0	107.6	67	45	56.0	98.9
1994	65	67	66.0	107.5	60	65	62.5	100.7
1995	58	94	76.0	110.7	53	85	69.0	102.7
1996	51	68	59.5	102.6	71	129	100.0	108.7
1997	52	87	69.5	109.6	59	113	86.0	111.8
1998	45	117	81.0	111.5	104	235	169.5	109.3
1999	104	117	110.5	116.8	109	171	140.0	112.5
2000	70	107	88.5	111.3	121	156	138.5	119.1
2001	84	99	91.5	108.5	91	98	94.5	118.4
2002	88	73	80.5	109.2	86	98	92.0	122.2
2003	92	80	86.0	105.2	92	212	152.0	124.5
2004	69	81	75.0	105.1	101	153	127.0	118.9

Note The lower the value the fewer the surface defects

<b>UKPMS BEST VALUE PERFORMANCE INDICATORS: 2001 to 2005</b>					
		2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005
<b>BVPI 97a</b> – Percentage of Non Principal Classified (B and C) Roads with defects above the threshold. (Approximate total length of B and C roads in Warwickshire = 1293km)	UKPMS Fixed Merge Method	<b>11.4%*</b>	8.91%	-	-
	UKPMS Variable Merge Method	-	<b>17.9%</b>	<b>18.19%</b>	<b>17.72%</b>
<b>BVPI 97b</b> – Percentage of Non Principal Unclassified (D) Roads with defects above the threshold (Approximate total length of D roads in Warwickshire = 1967km)	UKPMS Fixed Merge Method	<b>7.4%*</b>	4.46%	-	-
	UKPMS Variable Merge Method	-	<b>17.1%</b>	<b>18.54%</b>	<b>14.94%</b>
<b>BVPI 187</b> (Footways) **		-	<b>81.9%</b>	<b>75.98%</b>	<b>34.8%</b>

Figures in bold are the best value performance indicators

\* The audit commission had reservations about these 2001/2002 figures.

\*\* The footway indicator is based on town centre roads only

- 8.5 The survey results for town centre footways given in the table above appear to indicate a substantial improvement in their condition. In fact there has been a change in the way in which the indicator has been calculated. It is likely that the reported 2002/03 and 2003/04 figures for Warwickshire were twice what they should have been. The resulting figures still show a steady improvement.

## **9. Maintenance Targets for 2005/06**

- 9.1 Over the years Warwickshire has invested in its principal road network to keep it in a good condition. A comparison of the Warwickshire best value performance indicators with those of other authorities shows that the condition of the principal roads in Warwickshire is better than average.
- 9.2 This year the government suggested that Warwickshire should spend less than in previous years on its principal roads and more on its non principal roads. As a result the target for structural maintenance of the principal roads has been reduced to 2.5km.
- 9.3 In the past 3 years the target for structural work on the non principal roads has been 50km. Last year, with the extra prudential borrowing a total of 80km was achieved. This year, to allow sufficient work on footways and surface dressing, the target has been reduced to 34.8km.

## **10. Surface Dressing**

- 10.1 Roads are surface dressed:-
- (i) to halt surface deterioration;
  - (ii) to improve skid resistance: and
  - (iii) to seal them to prevent water penetrating and softening the foundation.
- 10.2 The highway maintenance policy document suggests that roads should be treated at the following frequencies.
- |         |          |
|---------|----------|
| A Roads | 8 years  |
| B Roads | 10 years |
| C Roads | 12 years |
| D Roads | 15 years |
- 10.3 These frequencies would be achieved if about 47km of A roads and about 244 km of other roads were treated each year, making an allowance for roads which are surfaced, this means that approximately 40km of A roads and 190km of other roads should be surface dressed each year to achieve the policy.
- 10.4 This year it is proposed to surface dress 12.9km of A road and 184km of other roads.

## **11. Street Lighting**

- 11.1 Under the new maintenance contract the performance of the repair service dipped between September 2004 - January 2005 due to Carillion having staff resourcing difficulties and the delay in starting the bulk lamp replacement programme to 16000 units. The backlog of work has now been resolved.
- 11.2 Investments made in the 1980's mean that the overall condition of the street lighting stock in Warwickshire is better than in many counties. However, about 25% of the lighting stock is over 30 years old. The detailed survey of the lighting stock is scheduled to be complete June 2005 with the data being processed in July.
- 11.3 It is currently estimated that Warwickshire should be replacing at least 1000 (2.5%) of its streetlights every year to maintain the overall condition. The past few years funding has allowed just 50%-25% of the required replacements.  
During the past 12 months 6 columns collapsed unexpectedly. Fortunately, no personal injuries were sustained but the potential danger of an ageing stock is clear. To manage the potential risks in the short term it is proposed to increase the programme of testing to determine the maximum "residual" life of the columns.
- 11.4 Lighting upgrading in Town Centres and streetscape painting of columns has continued a rolling programme. In 2004/5 extensive work was carried out in Rugby as part of respective Community Safety and Business Improvement District (BID's) projects.
- 11.5 A substantial part of the street lighting budget is spent on energy. From April 2005 Green Energy was secured for the first time for WCC. In light of the volatile fluctuations in global energy prices a two year contract has been secured with London Electric using ESPO as contract administrators.
- 11.6 In January 2005 Cabinet agreed that WCC should progress the initiative of advertising on Lamp Columns. The project could generate an annual income of some £100,000 to £250,000, subject to gaining planning permissions for the display units.

## **12. Routine Maintenance Activities Area Response Teams**

- 12.1 Routine maintenance of the highway network is divided into five areas coincident with the district council boundaries. 14 Area Response Teams (ART's) have now been established in the five areas. Two teams will concentrate on drainage works and three will deal with category 1 and 2 safety defects identified by the inspection teams within the urban areas. The following improvements will be implemented during the year:-

- (i) Fortnightly management reviews of progress and continuous improvement.
- (ii) A daily diary productivity monitoring system.
- (iii) A review of the ART work ordering and cost code structure.
- (iv) Write ART process procedure for inclusion in Routine Maintenance Operations Manual.

### 13. Customer Service Centre

13.1 The customer service centre has now been fully operational taking all highway and street lighting maintenance calls for Warwickshire since April 2004. In 2004/5 42,967 calls were taken by a team of four dedicated customer service operators. Performance of the customer service centre has been consistently good regularly achieving over 90% of connections.

Date	No of Calls	% Connections	% Hang-ups	% Messages	Longest queue time	Queue > 15 s
Jan 2005	3575	90.8%	6.7%	2.5%	No data	25.5%
Feb 2005	3365	88.6%	5.0%	6.4%	16 min	26.3%
March 2005	3176	89.7%	3.6%	6.7%	100 min	24.4%
April 2005	3269	87.8%	7.4%	4.8%	59 min	32.9%
May 2005	2832	93.4%	4.8%	1.8%	21 min	19.1%

13.2 On the 16th September 2003 a report was made to the Environment and Rural Affairs Overview and Scrutiny Committee on the operation of the customer service centre. A number of service targets were set e.g.,

Description of Target	Target	2003/4 Results	2004/5 Results	% Annual Improvement
Improve number of connections	94%	87%	91.65%	4.65%
Reduce number of hang-ups	3%	7.4%	4.3%	42%
Reduce number of messages	3%	5.2%	3.42%	34%
Reduce queue times	4 min	45 min	37 min	18%
Calls exceeding 15 seconds	20%	33.25%	21.55%	35%

13.3 Although the targets have not been achieved there was improvement in 2004/5 on the overall performance when compared to 2003/4. Further effort will be required to consolidate the improvements already made towards achieving the targets by the end of 2005/6.

### 14. Winter Maintenance

14.1 Following the termination of the Agency arrangements in March 2003 the opportunity was taken to optimise routes for precautionary gritting throughout the county, taking account of recommendations of the Best Value Review. The optimisation of the routes resulted in improvements in the performance of the gritting operations.

14.2 The Winter Maintenance Review undertaken during the summer of 2004, involved the Highways Maintenance Contractor who carries out the gritting operations. This review resulted in:-



- (i) Further optimisation of the routes to improve performance.
  - (ii) Introduction of two 'mini' routes, using compact vehicles, to treat roads over weight restricted bridges, and some other areas of difficulty in urban areas.
  - (iii) Improvements and adaptations of the gritting vehicle fleet to improve the safety for the operators.
  - (iv) Purchase of new hand spreading equipment and setting up procedures for treating high priority footways, footpaths and cycle ways during periods of prolonged frosts or snow.
  - (v) Improvements to web-based information on winter maintenance.
- 14.3 There were 53 full grits completed during the 2004/05 winter season (against the average expected in a year of 40). On the 14 days between 18th February and 6th March there were 11 nights of snow and 18 gritting operations were completed during the period.
- 14.4 The programme for the renewal of the winter gritting vehicle fleet continued during 2004 and will be carried through to the winter season 2005/06, with three replacement vehicles.
- 14.5 A Winter Maintenance Review will again be undertaken during the summer of 2005. This will look at the 2004/05 season and preparations needed for the 2005/06 season, and will include:-
- (i) Further optimisation, revision and changes to the routes to include two routes operating from the Warwick Area Depot at Budbrooke and the introduction of Snow Routes.
  - (ii) The introduction of GPS in gritting vehicles to provide reliable and accurate information on their location.
  - (iii) Further improvements in advising the public about the winter maintenance operations.

## **15. Patching**

- 15.1 Patching work is carried out to keep the roads and pavements in a safe condition. Potholes and other defects are dealt with when they are found during the regular inspections or when they are reported by the public. Patching work is also undertaken prior to carriageway surface dressing or pavement slurry sealing. Revenue resources for patching have been significantly reduced this year and priorities will be strictly focussed on ensuring that the network is safe.
- 15.2 This year it is proposed to increase efficiency by standardising the method of ordering work so that the contractor has the optimum opportunity to plan and organise the work effectively. Other proposed improvements include:-
- (i) Trialling of urban rhino-patch in the Rugby and Warwick areas.
  - (ii) A Lean Construction review of patching to identify wastage and efficiency savings.

- (iii) Write patching process procedure for inclusion in Routine Maintenance Operations Manual.

## **16. Road Markings and Studs**

16.1 In 2004/05 problems were encountered when the lining contractor failed to replace lines following surface dressing in accordance with the times stipulated in the contract. Some surface dressing sites were left without lines for several months. This was largely due to the quantity of road markings being underestimated, resulting in insufficient resources being available to carry out the work. This year all road markings on surface dressed roads have been surveyed to ensure that sufficient marking gangs are available. Other improvements include:-

- (i) Checking of daily record sheets by area teams.
- (ii) Preparation of extrusion programmes.
- (iii) Identification of renewal sites during serviceability inspections.
- (iv) Review road marking procedures within the Routine Maintenance
- (v) Operations Manual.

## **17. Verge and Tree Maintenance**

17.1 In 2004/05 the county policy of cutting grass three times a year was achieved. The problem of overgrown hedges/trees obstructing road signs will be addressed this year by the introduction of regular serviceability inspections by Area Surveyors.

17.2 Operation Ragwort will continue as in previous years, targeting problem areas throughout the County. Japanese knotweed will be dealt with as part of a County wide spraying programme. Other weed related work will include:-

- (i) Application of a growth retardant on the A45 central reserve.
- (ii) Review verge maintenance procedures within the Routine Maintenance Operations Manual.

17.3 A programme of tree inspection in the rural areas and the urban area of Stratford has commenced in conjunction with the Property Services Department. This will enable officers to determine the extent of risk from dangerous highway trees and the amount of funding required to bring this risk to an acceptable level.

## **18. Gully emptying and Drainage**

18.1 Gullies are emptied at a frequency of once a year. In 2004/05 some problems were experienced in completing the programme mainly due to the need for additional traffic management and the incidence of parked cars in urban areas. Under the new contract a Global Position Tracking System (GPS) has been installed on the gully machines. This has helped in the development of a fuller inventory of the gullies and drains on the highway network. However, further development will be carried out this

year jointly by Carillion and WCC so that a review of the frequency of gully emptying can be undertaken to ensure that they are emptied before they become full.

- 18.2 Two Area Response Teams (ARTs) are dedicated to drainage work under the control of the Network Management Team and they will be utilised both to respond to ad hoc drainage problems and to carry out an annual programme of works.

## **19. Signs**

- 19.1 The two main issues with sign maintenance are:-

- (i) The fact that there is a backlog of signs which need to be replaced:  
and
- (ii) The need to check that the signs which have been installed in the past (particularly within urban areas) are still required.

- 19.2 An issue which will need to be dealt with in the next few years is the need to develop an inventory of signs (non illuminated). This is required to ensure better planning of maintenance expenditure.

- 19.3 A pilot study of decluttering town centre signs is planned for Stratford and Leamington Spa.

## **20. Other Issues**

### **Co-ordination of roadworks**

- 20.1 The National Road and Street Works Act (NRSWA) sets out the activities that authorities must undertake to co-ordinate roadworks. Utilities are required to submit details of the works they propose to carry out and authorities can attach conditions to the timing of works. Problems can arise when utility works take longer than planned or when traffic control is not properly set up.
- 20.2 In 2004 a Traffic Manager was appointed to ensure that even more is done to minimise traffic congestion. The Street Works function was transferred to the Performance Management Division. However, inspection of openings remains a County Highways function and the two divisions will work together to minimise congestion and improve the standard of reinstatements.
- 20.3 To improve communication of projects within PTES a new Infrastructure Projects Database has been established.

## **21. Safety**

- 21.1 Much of the maintenance activity is designed to ensure the highway network can be used safely. Patching, winter maintenance, street lighting, drainage, grass cutting etc, all have a role to play in keeping the network safe and the structural maintenance and surface dressing work is designed to keep the network from deteriorating and becoming unsafe. The challenge for County Highways is to identify how maintenance works can be carried out to improve, rather than just maintain, safety.
- 21.2 Following the identification of several possible actions which might improve safety, we will work more closely with the Road Safety Unit to use maintenance spending to reduce accidents.

## **22. Town Centres**

- 22.1 The priority for highway maintenance spending has traditionally been for maintaining safety and for maintaining the structural condition of the road. Maintaining the appearance of the network has generally been considered to be a lesser priority with limited funds.
- 22.2 This is now changing with the recognition that the appearance of an area, as measured for instance by the Streetscape Index, has an important role to play in the economy and regeneration of an area.
- 22.3 Highway maintenance policies are being developed to take account of the need to ensure that town centres are well maintained as a matter of course. A Town Centre Maintenance Policy has been approved by Members. In addition the responsibility for promoting and monitoring the streetscape index in town centres will be taken on by the highway maintenance area surveyors.
- 22.4 Over the past 12 months continued improvements to the level of maintenance to items of public realm in town centres were carried out through the multi disciplinary activities of PTES and district authorities. Extensive Streetscape painting was carried out in Leamington, Stratford and Atherstone. In particular we have worked closely with the Renaissance group in Stratford to remove unnecessary and redundant signs and to improve street lighting in Waterside.
- 22.5 The introduction of an Infrastructure Project Database in April 2005 is aiding cross authority co-ordination and delivery of projects.

## **23. Insurance**

- 23.1 To help minimise highway insurance claims an annual insurance claim review was carried out in March 2005. Quarterly reviews will now be undertaken to assess trends and generate appropriate actions.

## **24. Quality Assurance**

- 24.1 In April 2005 , following an independent audit, County Highways retained its BSI accreditation.

## **25. Sustainability & Asset Management**

- 25.1 In promoting the Department's purpose and the government's strategy for sustainable development, County Highways aims to monitor, maintain and develop the highway asset in as an environmentally friendly manner as possible. The following points give an idea of the work being undertaken towards these aims:-

- (i) Reuse/recycling of secondary aggregates e.g. road planings and surface dressing chippings. Including development of the Leicester Lane Depot as a storage area for recycled materials.
- (ii) Continuous inspection of the County's roads in accordance with national standards.
- (iii) Collection of highway asset data including street lights, illuminated signs and gullies etc.

## **26. Communications**

- 26.1 In order to improve communications within the County (department and within County Highways and Carillion) we will continue to develop our quarterly newsletter and web pages. We will also continue to contribute to the department's e-government requirements.

## **27. 2005/2006 Works Programme**

- 27.1 Lists of schemes have been produced showing the planned maintenance work proposed during the period 1st April 2005 to 31st March 2006. The structural schemes have been selected using a maintenance priority assessment system. Priority is given to sites where the defects in the road might become dangerous or where substantial patching work would be required, if a structural scheme was not undertaken.

- 27.2 The schedule may be subject to change as a result of factors such as:-

- (i) Utility work clashing with the proposed roadworks.
- (ii) More detailed scheme costs being determined.
- (iii) Consultation.

## **28. Five Year Lists of Maintenance Schemes**

- 28.1 A 5 Year List of roads which require a structural maintenance treatment was approved by Members in 2004. The roads included are those which have sufficient defects to justify a structural maintenance treatment. Other roads will be added if they deteriorate from their present condition. This list will be revised for 2006.

- 28.2 The list includes a number of A roads and some footways. There are limited numbers of carriageway sites included in urban areas. This is because most of the roads in urban areas are treated by surface dressing or by resurfacing and do not normally require a strengthening treatment
- 28.3 A separate list of roads where street lighting replacements are required has also been produced.

***INSERT LIST OF STREET LIGHTING WORKS***

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***INSERT LIST OF ROAD WORKS***

## Network Management Five Year Structural Proposals

Rd No	Settlement	SITE			Treatment	Length
		Road	From	To		
NORTH WARWICKSHIRE - CARRIAGEWAYS						
B4114	Ansley	Nuneaton Road	D295 Church End	brook	Resurface	
D180	Atherstone	Welcome Street	Long Street	Cross-roads	Resurface	120
C187	Bentley	Green lane	C6	Tithe Farm		
B4117	Coleshill	High Street	Sumner Road	B4114 Crossroads	Resurface	
B4117	Coleshill	High Street	B4114 - B4117 Crossroads		Resurface antiskid	
D566	Coleshill	Wilmot Avenue	Digby Road	End	Resurface	
D490	Corley	Old House Lane	Middle Section only	Church Lane	Resurface	
C64	Corley	Smorrall Lane	C73 Highfield Lane	Breach Oak Lane	Overlay	600
B4089	Fillongley	Coventry Road	B4089 - B4102 Crossroads		Resurface	
D515	Fillongley	Ousterne Lane	B4102 Meriden Road	B4098 Coventry Road	Resurface	272
D512	Fillongley	Newhall Green Lane	D509	B4102 Meriden Road	Resurface	960
B4102b	Fillongley		C63	D512 Under M6	Resurface	350
B4114	Hartshill	Coleshill Road	School Hill	Victoria Road	Resurface	
E992	Hartshill	Apple Pie Lane	C12	D267	Resurface	580
D510	Maxstoke	Stoney Lane	M6 Overbridge	D507	Resurface	1150
D2	Newton Regis	King's Lane	B5493	Newton Regis Village	Haunch	960
B4114	Over Whitacre	Nuneaton Road	Nr Sandy Lane	Laxes Farm	Resurface	
D530	Packington	Warren Lane	All	End	Resurface	
D51	Polesworth	Potters Lane			Resurface	284
C6	Ridge Lane		C123 Ridge Lane	towards C120	Resurface	1340
B4114	Shustoke	Coleshill Road	Griffin Public House	Watson Petroleum	Resurface	
FOOTWAYS PROVISIONAL						
D153	Atherstone	Gypsy Lane	Sheepy Road	End	Resurface	
D175	Atherstone	Kings Avenue	Queens Road	St Marys Road	Resurface	203
D173	Atherstone	North Street	Long Street	Queens Road	Resurface	98
D169	Atherstone	Holte Road	entire		Resurface	650
D610	Coleshill	Chattel Hill	entire		Resurface	206
D538	Coleshill	Station Road	entire		Resurface	1869
D605	Coleshill	Centurion Close	entire		Resurface	205
D565	Coleshill	Clinton Road	entire		Resurface	119
D566	Coleshill	Wilmot Avenue	entire		Resurface	118
D589	Fillongley	Bourne Brook Close	entire		Resurface	194
D349	Hurley	Coronation Road	entire		Resurface	542
D348	Hurley	Charles Street	entire		Resurface	43
D346	Hurley	Princes Road	entire		Resurface	295
D345	Hurley	Edinburgh Road	entire		Resurface	53
D343	Hurley	Hawthorn Avenue	entire		Resurface	142
D344	Hurley	St Edmonds Road	entire		Resurface	131
D347	Hurley	Beech Close	entire		Resurface	121
C122	Kingsbury	Trinity Road	Pear Tree	Railway Bridge	Resurface	71
D255	Mancetter	Quarry Lane	30mph sign	B4111	Resurface	
D372	Middleton	Hill Lane	entire (reconstruct worst sections)		Resurface	
D8	Newton Regis	St Marys Grove	entire		Resurface	330
B4117	Water Orton	Watton lane	New Rd	Maud Rd	Resurface	
B4117	Water Orton	Watton lane	Openfield Croft	Coleshill Road	Resurface	

North Warwick Area - Locations where Column replacement will soon be required						
Atherstone	Calyon RD	S	58	8mt	Hemcol	
Atherstone	Harpers Lane	S	16	8mt	Hemcol	
Ansley Com	Coleshill RD	S	47	10	Stuart Lloyd	Rusted
	Litchfield RD,Bham RD, Cov RD	SPC	45	8		
Coleshill	Ravenswood Hill Area	C	20	5	Stanton	