

AGENDA MANAGEMENT SHEET

Name of Committee Cabinet

Date of Committee 13th July 2006

Report Title Highway Maintenance Plan 2006/2007 and Five Year List of Structural Maintenance Schemes

Summary The report provides information about the highway maintenance work proposed in 2006/07 and lists other sites where maintenance work will be required in the future. It also includes information about changes to the Capital Programme which require Cabinet approval.

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Would the recommended decision be contrary to the Budget and Policy Framework? Yes/No

Background Papers None

CONSULTATION ALREADY UNDERTAKEN:- *Details to be specified*

- Other Committees All Area Committees – May 2006
- Local Member(s)
(With brief comments, if appropriate)
- Other Elected Members Councillor K Browne } for information
Councillor Mrs E Goode }
Councillor Mrs J Lea }
- Cabinet Member Councillor M Heatley
(Reports to The Cabinet, to be cleared with appropriate Cabinet Member)
- Chief Executive
- Legal

- Finance
- Other Chief Officers
- District Councils
- Health Authority
- Police
- Other Bodies/Individuals

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

SUGGESTED NEXT STEPS :

Details to be specified

- Further consideration by this Committee
- To Council
- To Cabinet
- To an O & S Committee
- To an Area Committee
- Further Consultation

Cabinet - 13th July 2006

Highway Maintenance Plan 2006/2007 and Five Year List of Structural Maintenance Schemes

Report of the Strategic Director for Environment and Economy

Recommendation

That:-

1. Cabinet approves the Highway Maintenance Plan 2006/07.
2. The revised 2006-07 Capital Programme for the Structural Maintenance of Roads, detailed in Table 6.1, is approved.

1. Introduction

- 1.1 The Highways Maintenance Plan 2006/07 is attached as **Appendix A**. This plan was submitted to each of the five Area Committees in May together with lists of proposed schemes for each area (these lists are available on request). **Appendix B** contains comments from the Area Committees.
- 1.2 In previous years the Annual Plan has been reported to the July Area Committees, however, this year it was reported to the May Area Committees. The aim next year is to report to the March Committee before the start of the new financial year. Unfortunately a consequence of this earlier reporting is that the end of year road condition indicators are not available.

2. Highway Maintenance Aims

- 2.1 The main objectives of highway maintenance are:-
 - (i) To keep the network, carriageways and footways, free from dangerous defects.
 - (ii) To maintain and improve the structural condition (asset value) of the network.
 - (ii) To improve public satisfaction with the network.

The highway maintenance policies and work programmes are designed to achieve these objectives.

3. Success of Past Work Programmes

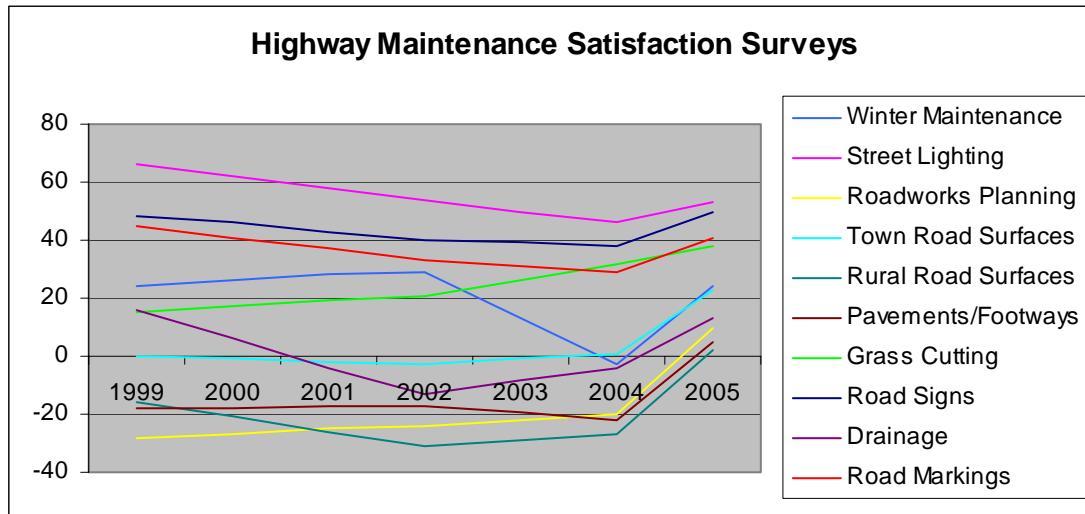
- 3.1 Warwickshire County Council (WCC) and its partners use a number of methods to reduce the number of casualties occurring on the highway including, improvements, inspection, routine maintenance and enforcement.
- 3.2 In the last year casualty figures are down and the number of insurance claims has also fallen (provisional figures indicate by 8%).
- 3.3 The structural condition of the network is measured by the condition surveys. The structural maintenance and surface dressing treatments help ensure that roads are strengthened and sealed to improve condition and to reduce the number of potholes developing in the future.
- 3.4 The 2005/06 survey results were not available when the Area Committee Reports were prepared. They are now available and, as last year, the surveys indicate that the roads in Warwickshire are better than the national average and the condition of minor roads and town centre footways is improving. The analysis of the condition of the carriageway in each District Area is shown in the table below. This shows a slow but steady reduction in the length of roads with defects.

Table 3.4

Carriageways with Defects above the Best Value Performance Indicator Thresholds of the United Kingdom Pavement Management System(UKPMS) Surveys							
		<i>North Warwick</i>	<i>Nuneaton & Bedworth</i>	<i>Rugby</i>	<i>Stratford</i>	<i>Warwick</i>	<i>Total</i>
<i>2003/04</i>	<i>Length (km)</i>	81.2	44.2	99.4	302.9	98.6	626.3
	<i>%age (of surveyed length)</i>	15.2	11.9	16.3	21.2	14.7	17.3
<i>2004/05</i>	<i>Length (km)</i>	82.3	44.5	82.25	261.4	92.9	563.35
	<i>%age (of surveyed length)</i>	15.2	12	13.4	18.3	13.4	15.44
<i>2005/06</i>	<i>Length (km)</i>	68.38	36.13	80.27	239.64	72.82	497.24
	<i>%age (of surveyed length)</i>	12.74	10	13.02	17.06	10.83	13.84

- 3.5 The results of the latest public satisfaction survey are very encouraging. Even taking account of inevitable variations in survey results, it is clear that public satisfaction has improved across a range of activities. The survey trends are shown in the table below. (a coloured copy is attached for Cabinet Members).

Table 3.5



4. 2006/07 Work Programmes – Normal Maintenance Allocations

- 4.1 It can be seen from the table of road condition information that the roads in the Stratford Area are worse than elsewhere in the county. As a result, in recent years, more work has been carried out on the roads in the south of the county than the north. In the last few years this has reduced the differences in the average condition.
- 4.2 It is not possible to ignore roads in poor condition. Such roads are more likely to break out into potholes which require expensive patching and can lead to increases in insurance claims. As a result it is still proposed to carry out a slightly greater proportion of rural carriageway surfacing in Stratford than elsewhere. Allocations for carriageway surfacing in the urban areas of Nuneaton, Rugby, and Warwick are based primarily on length of urban carriageway in each area.
- 4.3 Condition surveys for footways are only carried out on town centre roads. Because the condition of the majority of the footways is not measured by surveys, it is not possible to say whether footway condition varies between areas. As a result footway allocations are based primarily on estimated lengths of footway in each area.
- 4.4 The table below provides information about the lengths of roads which are to be treated in each area of the county during the year.

Table 4.4

	Carriageways						Footways	
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)			Footway Construction (length and percentage of the total network to be treated)	
	05/06	06/07		05/06	06/07		06/07	
	km	km	%	km	Km	%	km	%
North Warwickshire	29	35.3	6.3	0.9	3.7	0.7	31.5	8.2
Nuneaton and Bedworth	24	15.4	4.1	1.5	1.9	0.5	48.4	7.3
Rugby	38	32.3	5.0	0.3	4.8	0.7	67.5	11.3
Warwick	38	36.2	5.1	3.4	7.0	1.0	25.0	3.1
Stratford	69	75.0	5.0	31.2	22.4	1.5	47.8	5.6

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.

5. Highway Maintenance Five Year Plan

- 5.1 As 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. (The lists of sites which were submitted to Area Committees are available on request).

6. Capital Programme for Transport 2006-07

- 6.1 On the 25th May 2006 Cabinet approved the 2006-07 Capital Programme for Transport which included Structural Maintenance of Roads. Since then further assessment and feasibility work has been undertaken resulting in two amendments to the Programme. The first consists of the substitution of the D2303 Brick Yard Lane, Napton, with the A426 Leicester Road Rugby, which has been assessed as having a greater and more urgent maintenance need. The other amendment is the revision of the scheme estimate for A452 Europa Way which has been raised mainly due to imposed working restrictions to avoid traffic disruption which will require night time working.

Table 6.1 gives details of the revised programme for Structural Maintenance of Roads.

Scheme	2005-06 & earlier years (£000)	2006-07 (£000)	2007-08 (£000)	Total (£000)	Estimate category
Expenditure -					
C54 Tysoe Road, Tysoe		155		155	Detailed
C45 Morton Morrell Road, Morton Morrell		105		105	Detailed
B4632 Clifford Lane, Clifford Chambers		160		160	Feasibility
A452 Europa Way, Warwick		228		228	Feasibility
B4029 Bedworth Road Bulkington		115		115	Feasibility
C39 Salters Lane, Bearley		130		130	Feasibility
C36 Welsh Road West, Southam		190		190	Feasibility
A426 Leicester Road Rugby		115		115	Feasibility
Structural Maintenance of Roads 2006-07 (minor schemes costing £100,000 or less)		3291		3291	Block
Structural Maintenance of Footways 2006-07 (minor schemes costing £100,000 or less)		1260		1260	Block
Structural Maintenance of Roads and Footways 2007-08 (unallocated)			5114	5114	
Total Expenditure		5749	5114		
Income					
2006-07 Local Transport Plan (LTP) allocation to Structural Maintenance of Roads		5749			
2007-08 LTP settlement (provisional allocation)			5114		
Total Income		5749	5114		

Table 6.1 – Capital Programme for Transport 2006-07 Structural Maintenance of Roads

8. Road Maintenance Schemes funded from Additional Capital Resources

- 8.1 At the meeting of the County Council on 13th December 2005 additional capital resources were approved with £300,000 allocated to each Area Committee for capital funded maintenance as prioritised by each Area Committee.
- 8.2 Four Area Committees have now approved programmes of work for their £300,000 with discussions continuing in the final area to agree priorities and a final list of work.

9. Conclusion

- 9.1 Cabinet is recommended to approve the Highway Maintenance Plan 2006/07 and the amendment to the Capital Programme for Transport. The views of the Area Committees will be taken into account in the development of future maintenance plans and programmes of work. It is expected that the Five Year

Plan will be updated annually as new surveys identify extra roads and pavements in need of repair.

- 9.2 It is recommended that the revised 2006-07 Capital Programme for the Structural Maintenance of Roads, detailed in Table 6.1, is approved and schemes not already completed progressed and implemented.

JOHN DEEGAN
Strategic Director for Environment and Economy
Shire Hall
Warwick

22nd June 2006

Cabinet - 13th July 2006

Highway Maintenance Plan 2006/07 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 2006/2007. 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 Following the publication of a revised national Code of Practice for Maintenance Management, Warwickshire's revised Highways Maintenance Policy will be submitted to Cabinet for approval during 2006.

3. Maintenance Contract

- 3.1 2006/07 is the third 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 In November of 2005 the Environment Overview and Scrutiny Committee held a 'Select Committee' on the Management of the Highways Maintenance Contract. The Committee recognised the difficulties experienced during the early part of the contract and supports the actions taken by this department to resolve the financial reporting problems. It also supports the action being taken to bring about continuous improvement and drive out waste. The next report on progress will be made in July 2006.

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 are stretched even further by the provisional LTP 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.

Maintenance Allocations (Revenue and Capital)					
	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007
Insurance	£454,529	£665,892	£683,000	£762,000	£779,000
Street Lighting including energy	£2,073,203	£2,188,783 (energy £860,000)	£2,723,000 (energy £965,000) (4)	£3,010,000 (energy £1,258,000)	£3,595,000 (energy £1,385,500)
Winter Maintenance	£1,192,075	£1,341,877	£1,359,000	£1,258,000	£1,567,000
Principal Road Structural and Surface Dressing	£1,461,000	£1,202,705	£1,064,000	£610,000	£762,000
Non Principal Surface Dressing	£1,723,699	£1,623,545 (2)	£1,874,000	£2,082,000	£1,915,000
Non Principal Structural Work including road and footway surfacing, slurry sealing microasphalt, and drainage schemes	£4,169,227 (1)	£3,853,750 (2)	£4,179,000 (3)	£4,528,000	£4,580,000
Other maintenance activities	£4,275,267	£4,324,128	£4,646,000	£4,144,000	£4,570,000
TOTAL	£15,349,000	£15,200,680	£16,528,000 (3)	£16,617,000 (5)	£17,770,000 (6)

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.
- (4) In 2004/05 prices under the new Highway Maintenance Contract changed for some activities compared to the prices under the old contracts.
- (5) Extra £300,000 made available during the year.
- (6) Total excludes extra Area Committee £300,000 budgets

5.2 The following are the main activity changes in 2006/2007 compared to 2005/2006:-

- (i) 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.
- (ii) Street lighting budgets have increased to fund necessary street lighting column replacements.
- (iii) The allocation for 'other' maintenance activity takes account of an increasing cost of tree maintenance. In the past two years the Patching allocation has been 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. A further survey was undertaken in 2005.

	Net Satisfaction Score (percentage satisfied minus percentage dissatisfied)					Overall Satisfaction Score (ranging from 0-100)				
	1999	2002	2004	2005	Target for 2010	1999	2002	2004	2005	Target for 2010 (% increase from 2002)
Winter Maintenance	+24%	+29%	-3%	+24%	42%	53	57	47	55	63(+10%)
Street Lighting	+66%	+54%	+46%	+53%	69%	69	66	64	65	73(+10%)
Roadworks Planning	-28%	-24%	-20%	+10%	20%	37	39	40	51	58(+50%)
Town Road Surfaces	0%	-3%	+1%	+23%	45%	45	45	48	55	63(+40%)
Rural Road Surfaces	-16%	-31%	-27%	+2%	10%	41	36	38	49	54(+50%)
Pavements/Footways	-18%	-17%	-22%	+5%	24%	40	41	40	49	57(+40%)
Grass Cutting	+15%	+21%	+32%	+38%	33%	50	59	58	60	65(+10%)
Road Signs	+48%	+40%	+38%	+50%	54%	62	57	60	66	63(+10%)
Drainage	+16%	-13%	-4%	+13%	20%	50	42	46	52	59(+40%)
Road Markings	+45%	+33%	+29%	+41%	46%	60	58	57	61	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. This now appears to be recovering.
- (ii) Satisfaction with the highest regarded services of street lighting, road signs and road markings appear to have recovered from the problems experienced during 2003/04.
- (iii) Satisfaction with Roadworks planning and grass cutting show an upward trend.
- (iv) Rural road surfaces and footway/pavements continue to show steady improvement.

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:-

	2003/2004	2004/2005	2005/2006	2006/2007
Principal Roads – Structural Maintenance	6km	5km	2.5km	4.2km
Principal Roads – Surface Dressing	22km	31km	13km	21.1km
Non Principal Roads – Structural Maintenance	52km	80km	34.8km	35.6km
Non Principal Roads – Surface Dressing	135km	195km	185km	172.8km
Footways*	80km	91km	112km	220km

* Note 1: Footways include Slurryseal treatment.

Note 2: Carriageways include Microasphalt surfacing.

8. Structural Condition of the Network

- 8.1 This section gives carriageway condition information from road condition surveys. 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. The tables give the 2004 results because the 2005 results are not yet available.
- 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 A, B & C roads (SCANNER survey).
- 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. No further Deflectograph results are 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.

DEFLECTOGRAPH SURVEY RESULTS FOR THE A ROADS

(Approximate length of A roads in Warwickshire 380km. Approximate length surveyed by deflectograph 366km)

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	8.9	7.3	7.5	8.4	8.4	59.5
July 2000	6.4	6.1	7.1	8.2	8.2	64.0
July 2001	7,8	6,5	6.6	8.3	6.6	64.2
July 2002	9.9	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

UKPMS National Indicators			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%	6.90%	8.0%
	SCANNER		-	-	-	-	27.79%

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

NATIONAL ROAD MAINTENANCE CONDITION SURVEY DEFECT INDICES				
	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
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.

NATIONAL ROAD MAINTENANCE CONDITION SURVEY DEFECT INDICES								
	CLASSIFIED ROADS				UNCLASSIFIED ROADS			
	Warwickshire			National Average	Warwickshire			National Average
	Urban	Rural	Average		Urban	Rural	Average	
1993	73	41	57	107.6	67	45	56	98.9
1994	65	67	66	107.5	60	65	62.5	100.7
1995	58	94	76	110.7	53	85	69	102.7
1996	51	68	59.5	102.6	71	129	100	108.7
1997	52	87	69.5	109.6	59	113	86	111.8
1998	45	117	81	111.5	104	235	169.5	109.3
1999	104	117	110.5	116.8	109	171	140	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	122.2
2003	92	80	86	105.2	92	212	152	124.5
2004	69	81	75	105.1	101	153	127	118.9

Note: The lower the value the fewer the surface defects

UKPMS BEST VALUE PERFORMANCE INDICATORS: 2001 to 2005					
		2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005
BVPI 97a – 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	11.4%*	8.91%	-	-
	UKPMS Variable Merge Method	-	17.9%	18.19%	17.72%
BVPI 97b – 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	7.4%*	4.46%	-	-
	UKPMS Variable Merge Method	-	17.1%	18.54%	14.94%
BVPI 187 (Footways) **		-	81.9%	75.98%	34.8%

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 2006/07

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 Last 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. Two years ago, with the extra prudential borrowing a total of 80km was achieved. In the last two years, to allow sufficient work on footways and surface dressing, the target has been reduced to 35km.

10. Surface Dressing

10.1 Roads are surface dressed:-

- (a) To halt surface deterioration.
- (b) To improve skid resistance.
- (c) 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 21.2km of A road and 172.8km of other roads.

11. Street Lighting

11.1 Under the maintenance contract the performance of the repair service dipped in the first year due to Carillion having staffing resource difficulties and the delay in starting the bulk lamp change and clean programme. This issue has now been resolved and has recently resulted in a best ever weekly performance figure of 99.78% lights working Countywide (excluding Regional Electricity Company faults outside our control).

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 but is getting to a stage where the age profile is increasing sharply. Approximately 14,500 lighting columns are over 30 years old which equates to around 30% of the stock.

11.3 It is currently estimated that Warwickshire should be replacing at least 1000 (2.0%) of its streetlights and illuminated traffic signs every year to maintain the overall condition but ideally we should be replacing 1,800 (3.5%) units every year to reduce the age profile. The past few years funding has allowed just 50%-25% of the required replacements. A vastly increased quantity of structural testing was carried out in 2005/06 which with smart direction identified columns

that needed to be removed immediately. As a result there have been no columns that have collapsed due to corrosion in 2005/06 compared with five columns which collapsed in the previous year.

- 11.4 A substantial part of the street lighting budget is spent on energy. There is presently a contract in place with EDF for the purchase of 100% Green Energy until the end of June 2007. With the ever increasing price of electricity we have been prudent to enter into a two year contract for the purchase of electricity but we may be in for a large increase when the contract is re - let in 2007.
- 11.5 In January 2005 Cabinet agreed that WCC should progress the initiative of advertising on Lamp Columns though this was later rejected by the Council.
- 11.6 The Street Lighting Section are pulled in two directions by on one hand people who want improved lighting and on the other hand by people who want to lower electricity consumption. In order to improve lighting it is generally necessary to either install more lights or to install higher Wattage lanterns – both of which use more electricity. The Street Lighting Section are keen to reduce energy consumption and are presently looking at ways of reducing electricity use by, where possible, the use of new technology such as LED Belisha Beacons, LED Refuge Indicators, and LED bollards. Other energy savings are being investigated such as ¼ Watt photocells instead 1 Watt photocells which doesn't sound a lot but over time will build up considerably.

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. In 2006/07 the functions of the 14 Area Response Teams(ART's) will be tailored to deal with a higher percentage of planned work in the five areas. There will be three drainage teams, compared with two gangs in 2005/06, to help address the backlog of drainage works. Two teams will deal with category 1 and 2 safety defects identified by the inspection teams within the urban areas and one signage team. There will be six ART's dealing with emergency and planned maintenance activities.
- 12.2 There will be four road patching gangs that will undertake larger patch repairs to carriageways.

13. Customer Service Centre

- 13.1 During 2005/06 the street lighting queries were diverted to the corporate call centre, this benefited the street lighting team through a reduction of interruptions to general work. As part of the continuous improvement of the street lighting service it is intended that use of the "MAYRISE" will be extended to the central call centre during 2006/07. This will enable staff to directly log faults reported by the public.
- 13.2 During 2006 it is expected that the highway maintenance customer services centre will be merged with the corporate call centre.

14. Winter Service

- 14.1 In line with the recommendations of the Best Value Review reviews of the Winter Service continued during the summer of 2005, involving the Highway Maintenance Contractor. The reviews had resulted in :-
- (i) Further optimisation, revision and changes to the routes to include four routes operating from the newly constructed depot facility for the Warwick Area at Budbrooke.
 - (ii) Optimisation of 'Emergency Routes' to enable response to rapid variations in weather conditions.
 - (iii) Optimisation of the two 'mini' gritting routes in order to improve performance and reduce the amount of 'dead' travel time.
 - (iv) Continuation of the programmed fleet replacement strategy.
- 14.2 During the 2005/06 winter season 53 full grits were completed (against the average expected in a year of 40). 18 of these involved gritting at the higher spread rates.
- 14.3 The purchase of additional vehicles within the strategic fleet replacement programme will facilitated the early retirement of 3 older vehicles that have generated reliability issues, for the 2006/07 winter season.
- 14.4 The replacement vehicles will provided with interchangeable bodies so that their operation efficiency can be improved with summer usage as bulk haul vehicles.
- 14.5 A further Winter Service Review will be undertaken during the summer of 2006 looking at all aspects of the service provided during 2005/06 and the preparations required for 2006/07, and will include:-
- (a) The introduction of a Snow Plan, and when necessary, the operation of a Snow Desk, to enable an improved, planned response to be given to snow conditions.
 - (b) Extension of the GPS into gritting vehicles to aid identification of vehicle locations and activity during gritting operations.
 - (c) Further safety improvements to the gritting fleet.
 - (d) Improved web information.
 - (e) Continued monitoring of the trial using Safecote additive to salt.

Patching

15. Patching

- 15.1 Patching work is carried out to arrest localised deterioration of roads and pavements and 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 remain significantly reduced this year and therefore the number of potholes may increase. 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) A Lean Construction review of patching to identify wastage and efficiency savings continues.
 - (ii) Insitu recycling of defective areas of road will be introduced using the Rhino-Patch system of road repair.
 - (iii) Trials using a 'Bagela' machine that recycles excavated tarmac is taking place at the Wellesbourne depot.
 - (iv) Programming and planning of patching gangs is now based centrally in order to ensure more effective use of resources.

16. Road Markings and Studs

- 16.1 In 2005 few problems were experienced with replacing line markings following surface dressing. Sites had been adequately surveyed and lines were replaced in a timely manner. However, the resources devoted to this by the lining subcontractor meant that other routine work was delayed. In order to get over this it is hoped to provide an additional gang during the 2006 dressing season. This will allow renewal work identified during routine serviceability inspections to be carried out during the summer season.

17. Verge and Tree Maintenance

- 17.1 In 2005/06 the county policy of cutting grass three times a year was achieved. Area Surveyors began addressing the problem of overgrown hedges/trees obstructing road signs by the introduction of regular serviceability inspections.
- 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.

17.3 The programme of tree inspection in the rural areas and the urban area of Stratford continued in conjunction with the Property Services Department (The Forestry Section has now become part of the Countryside Recreation Division of this directorate) . This is enabling 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. Officers are developing a Tree Strategy for all trees within the County for approval by Cabinet later this year. This will include policies specific to highway trees and will align with the recently published national code of practice and County Highways' own Highway Maintenance Policy which will also be revised during 2006.

18. Gully emptying and Drainage

18.1 Gullies are emptied at a frequency of once a year. The new Global Position Tracking System (GPS) installed on the gully machines is helping in the development of a fuller inventory of the gullies and drains on the highway network. Further development is ongoing. One key feature is the identification of blocked or damaged systems and gullies not emptied due to parked vehicles. A proactive approach to returning to remedy these problems is to be developed.

18.2 Three ART's will be dedicated to drainage work under the control of the Network Management Team. They will respond to ad hoc drainage problems and carry out planned drainage projects. In addition, some of the area committee's have allocated funds for specific priority drainage schemes, which will be undertaken by additional construction gangs.

18.3 Following on from 2005/06's countywide approach to reducing the backlog of routine drainage schemes, the target for 2006/07 is to reach and maintain a maximum backlog of 2 months in all areas.

19. Signs

19.1 The two main issues with sign maintenance are:-

- (a) The fact that there is a backlog of signs which need to be replaced.
- (b) 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 The exercise of decluttering town centre signs in Stratford received favourable press and is ongoing in Leamington Spa. A wider countywide regime of decluttering redundant or unnecessary signs and poles will be progressed during 2006/07.

20. Other issues

Co-ordination of roadworks

- 20.1 The recently approved Local Transport Plan for Warwickshire 2006/2011 contains a network Management Duty Strategy which identifies a framework of improvements in the co-ordination of roadworks, that seeks to contribute towards the reduction in inconvenience and disruption to residents, businesses and highway users.
- 20.2 The Traffic Management Act (TMA) 2004 contained a new network management duty for all traffic authorities. With effect from January 2005:

“it is the duty of a local traffic authority to manage their road network with a view to achieving, so far as may be reasonably practicable having regard to their other obligations, policies and objectives, the following objectives:

- (a) securing the expeditious movement of traffic on the authority’s road network; and,
- (b) facilitating the expeditious movement of traffic on road networks for which another authority is the traffic authority.”

The obligation is a whole authority duty: “anything that effects the flow of traffic” and as part of the duty the authority is required to appoint a Traffic Manager who will be the focus of meeting the requirements of the duty.

- 20.3 The New Road and Street Works Act (NRSWA) sets out the formal framework for the co-ordination 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. This authority has developed a database register of its own roadworks for co-ordination purposes. This information is also entered on to a Central Street works Register so that day-to-day conflicts can be resolved and longer term co-ordination carried out.

We will aim to achieve better management and co-ordination of works and events affecting the highway and we will also aim to reduce the time that temporary works are present in the highway by such methods as increased working hours and weekend working.

Through effective planning and control the County Council will aim to minimise the disruption and congestion caused by its own works in the highway.

- 20.4 The provision of information on roadworks to road users and the community in the local area, including contact details and be updated daily is very important. The provision of accurate and timely information about events and incidents on the road network is a valuable source of travel information. We provide roadworks information for Warwickshire via our web site at **www.warwickshire.gov.uk/roadworks**. This information is shown in a map based format is updated daily. This also assist in the co-ordination of roadworks

with adjoining authorities and the Highways Agency who providing similar information.

- 20.5 The County Council will act to avoid, reduce or minimize congestion or disruption so that the road network is used more efficiently, including in particular:

Identifying and addressing the needs of all road users including pedestrians.

Working with neighbouring authorities, the Highways Agency and other stakeholders to ensure that the network as a whole functions efficiently.

Considering planned works and events (both in isolation and their effects on each other), and organizing them to minimize their impact - this would include arrangements for agreeing (or stipulating) their timing to best effect and consideration of their implications for contingency plans.

Keeping the effectiveness of the arrangements under review.

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. County Highways is increasingly involve with other groups within EED to combine maintenance, new works and regeneration projects to improve the safety of local areas and routes.
- 21.2 County Highways is increasingly working in unison with the Road Safety Unit to prioritise additional maintenance spending to see how this may reduce accidents. In 2006/07 the top 10 accident routes in the County will be reviewed and appropriate actions undertaken.

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. The use of Streetscape Appearance Index was developed as part of WCC's regeneration

activities in 2001 and has been cascaded to several Warwickshire town centres. Funds allocated by Members in Spring 2006 in support of Streetpride Activities will help progress the activities developed over the past 4 years.

- 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 EED and district authorities. Extensive Streetscape painting was carried out in Leamington, Stratford and Atherstone in 2005. 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. All the highway resurfacing of the Leamington Parade and project delivery of Alcester Public realm improvements were managed by County Highways.
- 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 Insurance claim data is now reviewed quarterly and an annual meeting will take place to drive forward improvements. Data taken from the quarterly reviews has led to targeting of resources to sections of highway that receive a disproportionately high number of claims. Efforts are being made to streamline the processes involved from the identification to the repair of potential hazards which will minimise the risk of claims.
- 23.2 IN 2006/07 internal seminars will be arranged to cascade best practice in dealing with insurance claims such that the rate of repudiating claims is increased against the growing culture of “no win – no fee” legal services making claims against highway authorities.

24. Quality Assurance

- 24.1 In April 2005 , following an independent audit, County Highways retained its BSI accreditation.
- 24.2 In March 2006 County Highways Depots received ISO14001 accreditation for environmental management.

Sustainability

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 has been. Leicester Lane Depot has had since autumn 2005, all the appropriate “exemptions” from the Waste Management Regulations, to allow the storage and processing of construction waste. This venture is now up and running.
- (ii) Use of more sustainable techniques for routine maintenance will develop during 2006, such as use of “Rhino Patch” and “Bagela” asphalt recyclers.
- (iii) Continuous inspection of the County’s roads in accordance with national standards. Development of the UKPMS system continues.
- (iv) 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. 2006/2007 Works Programme

27.1 Lists of schemes have been produced showing the planned maintenance work proposed during the period 1st April 2006 to 31st March 2007. 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 2007.

- 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 This year it is not yet possible to produce lists of roads where street lighting replacements are required. An extensive programme of testing of columns will determine priorities for immediate and short term replacements viewed in conjunction with the test results from 2005/06 and those whose test certificates have expired.

Cabinet - 13th July 2006

Highway Maintenance Plan 2006/7 and Five Year List of Structural Maintenance Schemes

Comments from Area Committees

Comments from the North Warwickshire Area Committee held on 31st May 2006

- No comments made.

Comments from the Nuneaton and Bedworth Area Committee held on 24th May 2006

- No comments made.

Comments from the Rugby Area Committee held on 10th May 2006

- No comments made.

Comments from the Stratford Area Committee held on 24th May 2006

- Several members commented that there had been recent problems with pothole repairs having to be carried out a number of times on the same site.
- A request was made for road condition information to be circulated when available.
- Requests were made for extra sites to be considered for future maintenance work.
- There was concern about blocked gullies.
- There were views expressed about using verges for parking and having others pay for converting the verges to parking areas.

Comments from the Warwick Area Committee held on 16th May 2006

- A request was made for information to be prepared for each Electoral Division Area showing work planned and required.
- A suggestion was made that it would be useful in future for a seminar to be held prior to the meeting where Members have the opportunity to go through the details and identify particular issues.

- Members commented about problems with poor lines, gullies being blocked and lost, signs needing renewal and potholes, particularly on footways and at road edges.
- Positive comments were made about developing the Global Positioning System and the use of green energy for street lights.