

AGENDA MANAGEMENT SHEET

Name of Committee Warwick Area Committee

Date of Committee 13th March 2007

Report Title Highway Maintenance Plan 2007/08 and Five Year List of Structural Maintenance Schemes

Summary The report provides information about highway maintenance work proposed in 2007/2008 and lists other sites where maintenance work will be required in the future.

For further information please contact Peter Samwell
County Highways Project Manager
Tel. 01926 736530
petersamwell@warwickshire.gov.uk

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
- Local Member(s)
(With brief comments, if appropriate)
- Other Elected Members
- Cabinet Member
(Reports to The Cabinet, to be cleared with appropriate Cabinet Member)
- Chief Executive
- Legal I Marriott
- 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 10th May 2007.
- To an O & S Committee
- To an Area Committee
- Further Consultation

Warwick Area Committee - 13th March 2007

**Highway Maintenance Plan 2007/8 and Five Year List of
Structural Maintenance Schemes**

**Report of the Strategic Director for
Environment and Economy**

Recommendation

That Area Committee is invited to make comments on the Highway Maintenance Plan 2007/2008 and the Five Year List of Maintenance Schemes, so that Cabinet can be informed of Members' views.

1. Introduction

- 1.1 The Highway Maintenance Plan for 2007/2008 is attached as **Appendix A**. This is the sixth 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 The first annual plans were reported to the July Area Committees. This year the report has been brought forward to before the start of the new financial year. Unfortunately, as a consequence of this earlier reporting, the end of year road condition indicators are not available.
- 1.3 The plan deals with the normal revenue and capital funding for the service. Separate discussions will be held with Members with regard to additional £400,000 Area Committee funding for highway maintenance and safety.

2. Highway Maintenance Aims

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

2.2 The highway maintenance policies and work programmes are designed to achieve these objectives which cover the Council's Statutory Duties and support the Corporate Objectives including Developing and Maintaining a vibrant local economy.

3. Success of Policies and Programmes

3.1 **Safety** - The condition of the highway network has a part to play in reducing the number of casualties occurring on the highway. The condition of the network also influences the number of insurance claims made against the Council. The exact relationship between condition and casualties and insurance claims is not straightforward as there are other factors which affect these figures.

3.2 In the past year casualty figures have continued to fall. In 2005/6 Insurance claim numbers had fallen by 20% from their peak in 1999/2000, but unfortunately 2006/7 numbers are expected to rise to be 10% lower than the peak.

3.3 **Asset Value** - The structural condition of the network is measured by the condition surveys. Surfacing treatments help to ensure that roads are strengthened and sealed to improve condition and reduce the numbers of potholes developing in the future.

3.4 The results of the 2006/7 surveys are not yet available but the 2005/06 surveys indicate that the condition of the roads in Warwickshire are better than the national average and that the condition of the non principal (B, C and D) roads and town centre footways is improving. The condition of the carriageways in each District Area for the last three years are shown in the table below. It is expected that the extra maintenance spending in 2006/2007 should ensure that the gradual improvement trend continues.

Carriageways with Defects above the Best Value Performance Indicator Thresholds of the United Kingdom Pavement Management System (UKPMS) Surveys							
		North Warwicks	Nuneaton and Bedworth	Rugby	Stratford	Warwick	Total
2004	Length (km)	81.2	44.2	99.4	302.9	98.6	626.3
	Percentage	15.2	11.9	16.3	21.2	14.7	17.3
2005	Length (km)	82.3	44.5	82.3	261.4	92.9	563.4
	Percentage	15.2	12.0	13.4	18.3	13.4	15.4
2006	Length (km)	68.4	36.1	80.3	239.6	72.8	497.2
	Percentage	12.7	10.0	13.0	17.0	10.8	13.8

3.5 The surveys indicate that the carriageways in Warwick Area are improving although there is still over 10% of the roads which should be considered for treatment. Some of the issues which affect the carriageway condition locally are:-

- (i) The many utility works, particularly in the towns, where old reinstatements are failing and
- (ii) The thin construction layers on many of the old town centre roads.
- (iii) Narrow rural roads which have damaged edges due to present volumes of traffic and increasing size of vehicles.

3.6 **Public satisfaction** - The full Public satisfaction surveys are only carried out every other year. There is therefore no update from last year when it was reported that public satisfaction had improved across a range of activities.

3.7 Since 2001, following decisions made after the Best Value review of the service, greater attention has been paid to the lower rated areas of maintenance, such as pavements/footways, rural road surfaces, roadworks planning and drainage. The following table gives information about the changes in satisfaction between 2000 and 2005.

Net Satisfaction from Household Surveys						
Activity	WARWICKSHIRE			WARWICK AREA		
	2000	2005	Change	2000	2005	Change
Pavements/Footways	-15	5	+20	-16	16	+32
Rural Road Surfaces	-14	2	+12	7	13	+6
Roadworks Planning	-10	10	+20	-12	-4	+8
Drainage	3	13	+10	-4	17	+21
Town Road Surfaces	16	22	+6	27	15	-12
Winter Maintenance	24	24	0	39	33	-6
Rural Road Verges	25	38	+13	24	32	+8
Road Signs	46	50	+4	50	58	+8
Road Markings	47	42	-5	45	47	+2
Street Lighting	55	54	-1	61	56	-5

3.8 The Warwickshire satisfaction levels indicate improvements in satisfaction levels across all the lower rated services.

3.9 Satisfaction levels for Warwick Area show higher levels of satisfaction in 2005 than the county average except for roadworks planning, town road surfaces and rural road verges. The levels of satisfaction with town road surfaces has also fallen over the five years.

4. 2007/2008 Work Programmes – Normal Maintenance Allocation

4.1 The maintenance allocations are distributed across the activities to achieve the maintenance policies and objectives. Structural maintenance allocations to each area are broadly based on lengths of roads and footways but are also influenced by overall road condition.

4.2 The table below provides information about the lengths of roads and footways 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)		
	05/06	06/07	07/08	05/06	06/07	07/08
	km	km	km	km	km	km
North Warwickshire	29	35.3 (6.3%)	32.4 (5.8%)	0.9	3.7 (0.7%)	2.1 (0.4%)
Nuneaton and Bedworth	24	15.4 (4.1%)	19.9 (5.2%)	1.5	1.9 (0.5%)	3.5 (0.9%)
Rugby	38	32.3 (5.0%)	32.0 (5.0%)	0.3	4.8 (0.7%)	4.7 (0.7%)
Warwick	38	36.2 (5.1%)	34.7 (4.9%)	3.4	7.0 (1.0%)	7.5 (1.1%)
Stratford	69	75.0 (5.0%)	71.0 (4.7%)	31.2	22.4 (1.5%)	17.3 (1.2%)

4.3 Routine Maintenance changes proposed in 2007/8 compared to 2006/7 are:-

- (i) More funding for white lines
- (ii) Targeting improvements in drainage operations.
- (iii) Quantity of patching to be increased by over 50%.
- (iv) Quantity of major patching to be increased.

5. Highway Maintenance Five Year Plan

5.1 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 recommended

practice as part of an asset management approach and provides Members, and the public, with information about future maintenance priorities. The roads in the Warwick Area contained in the County list are included as part of the Highway Maintenance Plan.

- 5.2 A separate list of roads where street lighting column replacements are likely to be needed are also provided

6. Conclusion/Issues

- 6.1 Public satisfaction levels and the road condition indicators show a slow but steady improvement over recent years, but there is still much outstanding work as, county wide, over 13% of the network has defects and satisfaction levels, compared to other Council Services, are still relatively low.

- 6.2 Members may wish to comment on priorities for future improvement or on other issues which feature in the plan. Some issues are:-

- (i) The present policy is to improve the maintenance activities with the lowest levels of public satisfaction. Is this policy still supported by Members or are there services, such as street lighting, that Members would like to improve at the expense of the lower rated services?
- (ii) In surveys outside Warwickshire public satisfaction has been found to be heavily influenced by the appearance of the network and local improvements to shopping streets have increased the turnover of shops. The Warwickshire streetscape index has been developed to monitor appearance of the main 18 town centres in the county and every effort is made to find ways to improve the streetscape. Should enhancing the appearance of the network be given greater priority?
- (iii) The edges of quite a number of narrow rural roads are being overrun causing the verges to be worn away. The long term solution is to widen such roads but this is expensive. A few of these roads are selected each year from the Five Year Plan but, in general, this work is given lower priority to allow a greater number of roads to be treated through less expensive resurfacing work. In the past few years edge lines have been placed on some of these roads to help show the road edge. It is proposed to extend this type of lining. Also centreline road markings on narrow country lanes(less than 5.5m wide) will not be replaced in accordance with current guidelines.
- (iv) Tree maintenance is carried out across the network and trees are removed when they are found to be in a dangerous condition. There is presently no budget made available for tree replacements. It is thought that a budget of £10-20,000 per District will sustain tree replacements in the short term.

- (v) It is clear from investigations of contract costs that work planned well in advance can be carried out at lower cost than urgent or emergency work. It is proposed to be more proactive with maintenance issues, rather than reactive, and develop larger forward programmes of minor drainage, footway and patching work. This will ensure more work can be carried out from the budget available but a possible disadvantage is that it may reduce the ability to react quickly to non urgent public complaints.

JOHN DEEGAN
Strategic Director for Environment and Economy
Shire Hall
Warwick

26th February 2007

Warwick Area Committee - 13th March 2007

Highway Maintenance Plan 2007/8 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 annual plan sets out the actions continuing to be taken to improve the service.
- 1.2 Information is provided about the way in which the highways budgets will be spent in 2007/2008. 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
- 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 2007.

3. Maintenance Contract

- 3.1 2007/08 is the fourth 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 the best value for the maintenance spend.
- 3.3 A progress report on the contract was made to the Environment Overview and Scrutiny Committee in September 2006. Members noted progress made and asked for a further report in September 2007 identifying outstanding issues of concern.
- 3.4 To ensure all opportunities are taken to benefit from the contract a further internal report and an external report will be commissioned to advise on and suggest further improvements.

4. Targets

4.1 Members agreed three main targets following the best value review 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 five years are included.

Maintenance Allocations (Revenue and Capital)						
	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008
Insurance	£454,529	£665,892	£683,000	£762,000	£779,000	£827,000
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)	(energy £1,385,500)	£4,030,000 (energy £1,760,000)
Winter Maintenance	£1,192,075	£1,341,877	£1,359,000	£1,258,000	£1,567,000	£1,626,000
Principal Road Structural and Surface Dressing	£1,461,000	£1,202,705	£1,064,000	£610,000	£762,000	£600,000
Non Principal Surface Dressing	£1,723,699	£1,623,545 (2)	£1,874,000	£2,082,000	£1,915,000	£2,000,000
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	£5,057,000
Other maintenance activities	£4,275,267	£4,324,128	£4,646,000	£4,144,000	£4,570,000	£4,726,000
TOTAL	£15,349,000	£15,200,680	£16,528,000 (3)	£16,617,000 (5)	£17,770,000 (6)	£18,866,000 (7)

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.
- (7) Total excludes extra Area Committee £400,000 budgets.

5.2 The following are the main activity changes in 2007/2008 compared to 2006/2007:-

- (i) Street lighting budgets remain higher than 2004/2005 to fund necessary street lighting column replacements.
- (ii) The extra capital allocation will be used for resurfacing sections of the A444 (£200,000) and for dealing with the backlog of structural patching (£300,000).

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 and 2005 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 will be undertaken in 2007.

	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	2007/2008
Principal Roads – Structural Maintenance	6km	5km	2.5km	3.4km	2.9km
Principal Roads – Surface Dressing	22km	31km	13km	21.1km	22.2km
Non Principal Roads – Structural Maintenance	52km	80km	34.8km	29.0km	32.2km
Non Principal Roads – Surface Dressing	135km	195km	185km	172.8km	167.7km
Carriageway Microasphalt				7.2km	16km
Footways**	80km	91km	112km	220km*	145.9km

**Note 1: Footways include Slurryseal treatment

*Note 2: Footways 2006/07 includes Area Committee schemes

8. Structural Condition of the Network

- 8.1 This section gives carriageway condition information from road condition surveys. In general the surveys provide estimates of actual condition. 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 2005 results because the 2006 results are not yet available.
- 8.2 As a result of the problems with road condition surveys, research has taken place nationally to develop machine surveys. Local authorities are now required to commission machine surveys 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 The National Road Maintenance Condition Survey (NRMCS) shows a continuing improvement in the condition over the last five years but the United Kingdom Pavement Management System Coarse Visual Inspection (UKPMS – CVI) survey shows a possible deterioration.
- 8.3.2 The present interpretation of the results is that the condition of the A roads in Warwickshire is substantially above the National average and broadly stable.

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
2005	51	35	43	74.3

Note The lower the value the fewer the surface defects

UKPMS BEST VALUE PERFORMANCE INDICATORS: 2001 to 2006			2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006
Percentage length of A Roads with defects above the threshold	UKPMS – CVI (BV96)	Fixed Merge method	3.1%	3.7%	-	-	-
		Variable Merge method		9.2%	6.9%	8.0%	9.9%
	SCANNER (BV96)					27.79%	-
	SCANNER (BV223)						5%

The figures in bold are the annually reported Best Value Indicator for BV96 and BV223

- 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 Both the NRMCS and the UKPMS – CVI surveys show improvements (reductions) in the length of both classified and unclassified roads with defects.
- 8.4.2 The present interpretation of the results is that the condition of the B, C and D roads in Warwickshire are above the National average and improving.

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
2005	56	66	61	92.9	84	127	105.5	108.8

Note The lower the value the fewer the surface defects

UKPMS BEST VALUE PERFORMANCE INDICATORS: 2001 to 2006		2001/2002	2002/2003	2003/2004	2004/2005	2005/2006
Non Principal Roads (B and C roads)						
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 - CVI Fixed Merge Method	11.4%*	8.91%	-	-	-
	UKPMS - CVI Variable Merge Method	-	17.9%	18.19%	17.72%	15.32%
BVPI number changed to BV224a (coverage as BV97a)	Method of data collection and processing changed to SCANNER.	-	-	-	-	9%
Unclassified Roads (D Roads)						
BVPI 97b – Percentage of Non Principal Unclassified (D) Roads with defects above the threshold (Approximate total length of D roads in Warwickshire = 1967km)	UKPMS - CVI Fixed Merge Method	7.4%*	4.46%	-	-	
	UKPMS - CVI Variable Merge Method	-	17.1%	18.54%	14.94%	14.6%
Footways						
BVPI 187 (Percentage of footways surveyed exceeding the threshold)**	UKPMS DVI survey	-	81.9%	75.98%	34.8%	34.4%

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 2007/08

- 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 the target for structural work on the non principal roads has been 50km. Three 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.
- 9.4 The Area Committee funds have allowed extra work to be carried out in addition to the target quantities.

10. Surface Dressing

- 10.1 Roads are surface dressed:-

- (a) to halt surface deterioration;
- (b) to improve skid resistance: and
- (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
Broads	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 22.2km of A road and 167.7km of other roads.

11. Street Lighting

11.1 General

Street lighting involves the maintenance of some 47,000 lights and some 7,425 illuminated signs which include bollards, vehicle activated signals, and belisha beacons.

There are three main types of lights in the county. About 52% of lights are Low Pressure Sodium which give a monochromatic orange light and have a low energy use compared to other lamp types. Some 40% are High Pressure Sodium which give a golden white light but which use almost twice as much electricity as low pressure sodium lights. About 7.5% of the lights are Mercury lanterns which give a white light with a blue tint. They require the highest amount of energy for the light given out and contain potentially harmful chemicals.

The remaining lights are Metal Halide lights used in some town centres which give the whitest light but are high users of energy and do not give out as much light as equivalently rated High Pressure Sodium lamps.

The vast majority of the lighting stock are standard functional lights but there are a number of historic lights in towns including Stratford (where there are lights from around the world), Coleshill and Warwick (which still has a gas light).

11.2 Performance

In the past two years the contractor has achieved lighting levels substantially better than the contract minimum. The Contract asks for a performance of 98.5% lights working and the level achieved is consistently around the 99.5% lights working level. The present Best Value Performance Indicators for Street Lighting are BVPI 215a which is "The average number of days taken to repair a street lighting fault, which is under the control of the local authority", and BVPI 215b which is "The average time taken to repair a street lighting fault, where response time is under the control of a DNO." (Distribution Network Operator – old Electricity Board) The BVPI's for 2005/06 reported 215a as being 8.48 Calendar Days and 215b as being 100.64 Calendar Days. In general repairs within the control of WCC are carried out much quicker than the 8.48 Calendar Days reported and this average figure is inflated due to a number of lights which have not been repaired for some time which have distorted the figure. The reasons that these odd lights have not been repaired for some time is because they are either situated on a dual carriageway where there are only odd lights out and expensive Traffic Management is required, or where odd lights have failed which have been overgrown by trees which need cutting back before a repair can be actioned. Repairs carried out by the DNO are also done much quicker than reported and this figure is inflated due to poor reporting of fault rectification by the DNO. For the period April to December 2006 both Indicators have improved to 6.76 and 28.26 Calendar Days respectively.

Contract costs reductions of up to £30,000 a year are proposed starting in 2007 by reducing the frequency of lamp changes. This will be possible due to improvements made in recent years in lamp quality. Some extra lamp outages are expected as a result, but gangs will be available to carry out any extra repairs required.

11.3 **Condition and Funding**

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.

The budget for street lighting has been increased in recent years to allow for the replacement of columns which have reached the end of their life. The amount of structural testing increased in 2005/06 to ensure that columns which were unsafe were identified but also to ensure that older columns which were still structurally sound were not replaced unnecessarily. This level of testing continues. The 2007/08 allocation for column replacement is felt to be adequate to keep the lighting stock safe but will need to be increased in the future as the lighting stock ages.

11.4 **Energy**

A large 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. This was a two year contract which was clearly prudent given the increases in the price of energy during 2006. At present the price of energy has fallen from it's peak in 2006 but, given that the present price was fixed nearly two years ago, a substantial allowance has been made for an increase in price when the contract is re-let.

The Environment Overview and Scrutiny Committee considered a report in January 07 suggesting that, to save electricity, street lights could be switched off in the early hours of the morning. Members felt that consideration could be given to a reduction of up to 50% in street lighting levels, when traffic flows are low and in suitable locations, but that extensive consultation would be required first before any decisions or trials could be considered. Given the cautious approach suggested it is not considered that any savings will be possible in 2007/08

The actions being taken by the Street Lighting Section to reduce energy consumption include the use of low wattage LED's in Belisha Beacons, Refuge indicators and Bollards, and replacing 1 watt photocells with ¼ watt photocells.

11.5 **Lighting Improvements**

Street Lighting is installed to improve safety and to reduce crime and fear of crime. The normal maintenance budget only allows for very limited lighting improvements which may be carried out by upgrading lanterns or when column replacements are needed. Last year lighting improvements were undertaken as part of the extra Area Committee funding and improvements have taken place in recent years funded from CCTV and other improvement initiatives.

In general improved lighting increases energy consumption although when Mercury lanterns are replaced the lighting levels can be improved with a very slight saving in energy. The present approach is to take every opportunity to replace the existing mercury lanterns in the county.

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 2007/8 there will be an increase from 14 to 15 Area Response Teams (ART's) will be further tailored to deal with a higher percentage of planned work in the five areas and the associated additional work on detrunked routes. There will be continue to 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.

There will be four road patching gangs that will undertake larger patch repairs to carriageways.

Changes in planning, management and methods should facilitate a substantial increase from some 18000sqm in 2006/7 to some 35,000sqm of patching work. The additional ART team will be multifunctional to reflect the changes in weather. The wet winter of 2006/7 has caused a large amount of drainage work that is adding to the historic backlog of work.

13. Customer Service Centre

- 13.1 In May 2006 the highway maintenance customer services centre was merged with the corporate call centre. Call sata for the period May 2006 to March 2007 suggests an increase in calls of some 11% to 35,900 calls. The Autumn storms, January Gales, February 2007 snow caused notable peaks in calls and associated work. The transfer of call centre has gone well and identified issues have been or are being dealt through meetings.

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 2006, involving the Highway Maintenance Contractor. The reviews had resulted in :-
- (i) Further optimisation, revision and changes to the routes to include minor variations in the network and changes in priorities.
 - (ii) Introduction of optimised 'Emergency Routes' to enable rapid response to variations in weather conditions.
 - (iii) Optimisation of the 'mini' gritting routes, to include a third route covering roads with physical width or weight restrictions in order to improve performance and reduce the amount of 'dead' travel time.
 - (iv) Continuation of the programmed fleet replacement strategy.
 - (v) The preparation of a Snow Plan, with the establishment of the conditions and criteria for the operation of a Snow Desk, which helped in the planned response to snow conditions.

- (vi) Publication to a wider audience of information on the provision of the service.
- 14.2 During the 2006/07 winter season 29 full grits were completed to the end of February (against 48 for the same period in 2006/07, and the average expected in a year of 40). 13 of these involved gritting at the higher spread rates, with 5 of these being treatment following the snowfall on 8 – 9 the February.
- 14.3 The purchase of 2 additional vehicles within the strategic fleet replacement programme will enable the condition of the fleet to be maintained, for the 2007/08 winter season.

The replacement vehicles will again be provided with interchangeable bodies so that the operation efficiency of the fleet can be improved with summer usage as bulk haul vehicles.

In addition a fleet of 7 loading shovels have been purchased to replaced hired in equipment, which it is anticipated will reduce operating costs.

- 14.4 A further Winter Service Review will be undertaken during the summer of 2007 looking at all aspects of the service provided during 2006/07 and the preparations required for 2007/08, and will include:-
- (a) A review of weather monitoring and forecasting provision.
 - (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
 - (c) Improved web information.
 - (d) Continued monitoring of the performance and effectiveness of the Safecote additive to salt.

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 is historically limited such that there is a fluctuation in potholes on the Network, which is greatly influenced by seasonal weather . 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:-
- A Lean Construction review of patching to identify wastage and efficiency savings continues.

- Insitu recycling of defective areas of road will be introduced using the Rhino-Patch system of road repair.
- Trials using a 'Bagela' machine that recycles excavated tarmac took place at the Wellesbourne depot.
- 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 2006 the programme of road markings was greatly improved through "One Team" meetings with representatives from Warwickshire County Highways, Carillion and the specialist subcontractors to address operational concerns in 2005.

17. Verge and Tree Maintenance

- 17.1 In 2006/07 the county policy of cutting grass three times a year was achieved. Area Surveyors will begin addressing the problem of overgrown hedges/trees obstructing road signs by the introduction of regular serviceability inspections.

- 17.2 Operation Ragwort was very successful in 2006 , targeting problem areas throughout the County with a significant reduction in public calls to just 37. (79 calls in 2005 and 146 in 2004)

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. A Tree Strategy for all trees within the County was approved in January 2007. It includes policies specific to highway trees and aligns the recently published national code of practice with County Highways' own revised Highway Maintenance Policy which will be submitted for approval during 2007.

18. Gully emptying and Drainage

- 18.1 Gullies are generally 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. One key feature is the identification of blocked or damaged systems and gully's 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. A fourth drainage team (the extra multifunctional ART team mentioned in section 12.1) will respond to problems associated with the wet winter of 2006 and 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 Use of new GPS tracking systems has facilitated the start of variable frequency cleaning based on "need". The saving of resources has allowed resources to be targeted at identified problem sites. Of the 96,000 gullies on the highway network some 7500 have been identified as being blocked. The savings in variable frequency cleaning has allowed over 1000 gullies to be cleared by extended jetting.
- 18.4 The changes in winter weather poses the challenge to increase drainage resources to ensure the backlog of drainage works does not grow to unacceptable level.

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: and
 - (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 unnecessary sign in town and on routes is continuing as resources allow.

20. Other issues

Co-ordination of roadworks

- 20.1 The Department for Transport (DfT), in the Traffic Management Act 2004 (TMA), looked to reduce congestion by better co-ordination of roadworks and therefore are updating the existing legislation that governs roadworks, the New Roads and Streetworks Act 1991 (NRSWA). The main aim of these changes is to improve co-ordination and management of works and other activities on the highway and give more effective powers and sanctions over utilities' street works. Essentially this will require the registering of all the works that the County Council itself carries out on the highway network on a central register.

A key element within these changes is the demonstration of parity of treatment with the utilities and the measurement of this authority's performance in comparison to utilities, against key performance indicators (KPI) set by the DfT.

Rather than being used as a means of identifying poor performance, it is considered essential that the KPI's encourage a culture of continued improvement by all works promoters within the highway.

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 involved 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 were 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 the Warwick, Stratford and Rugby Area Committees by Members in Spring 2006 in support of Streetpride Activities has helped deliver targeted improvements in Kenilworth and Whitnash, Stratford & Alcester, Rugby and selected routes respectively.
- 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. The improvements have been recognised by Britain in Bloom reports and is reflected in 12 Warwickshire Town's gaining awards. Extensive Streetscape painting was carried out in Kenilworth and Whitnash. Works have been delayed in Wellesbourne and Studley due to the inclement weather.

- 22.5 County Highways works closely with District, Borough, Town and Parish Councils and other local organisations. Notable groups include the North Warwickshire Public Realm Partnership which fostered very strong partnership working practices. All the highway resurfacing of the Leamington Parade and project delivery of Alcester Public realm improvements were managed by County Highways.
- 22.6 The introduction of an Infrastructure Project Database in April 2005 is aiding cross authority co-ordination and delivery of over 1000 projects.

23. Insurance

- 23.1 Insurance claim data is now reviewed quarterly and an annual meeting held 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 in order to minimise the risk of claims.
- 23.2 In 2006/07 internal seminars were arranged to cascade best practice in dealing with insurance claims so that the rate of repudiating claims is increased. There is a 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:-

- 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.
- Use of more sustainable techniques for routine maintenance developed during 2006, such as use of "Rhino Patch" and "Bagela" asphalt recyclers.
- Continuous inspection of the County's roads in accordance with national standards. Development of the UKPMS system continues.
- 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.

26. 2007/2008 Works Programme

26.1 Lists of schemes have been produced showing the planned maintenance work proposed during the period 1st April 2007 to 31st March 2008. 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.

26.2 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.

27. Five Year Lists of Maintenance Schemes

- 27.1 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 has been revised for 2007.
- 27.2 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
- 27.3 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 2006/07 and those whose test certificates have expired.

Warwick Area Committee - 13th March 2007

Network Management Five Year Structural Maintenance Proposals 2007

Rd No	Settlement	SITE			Treatment	Length
		Road	From	To		
CARRIAGEWAY						
A425	Warwick	Birmingham Road	New Church	Victoria Street	Resurface	225
A425	Warwick	Birmingham Road	A425 Roundabout	Warwick Cemetary	Resurface	316
A429	Wasperton	Wellesbourne Road	Oldhams	End of Failure	Resurface	250
A445	Ryton-On-Dunsmore	Leamington Road	Police Colledge	Ryton Pools	Resurface	857
A445	Stoneleigh	Leicester Lane	0405 Sd joint	Fuzon Hill Cottages	Resurface	1000
A452	Kenilworth	Leamington Road	St Johns Gyratory	Thickthorn Island	Resurface	732
C36	Cubbington	Offchurch Road	By Thwaites			0
C37	Warwick	Theatre Street	Linen Street	Barrack Street TL Junction	Resurface	160
C43	Bishops Tachbrook	Harbury Lane	B4087 Tachbrook Road	B4455 Fosse Way	Overlay	3498
C136	Hatton	Pinley Road	C93 Hatton Road	D5093 Station Road	Haunch	750
C136	Pinley Green	Nunhold Road	C25 The Cumsey	Grange Farm	Resurface	500
C92	Lowsonford	Henley Road	C22 Lowsonford	D5243 Preston Bagot turn	Resurface	2455
C92	Lowsonford	Finwood Road	Canal	North For 650m	Resurface	650
D2248	Hunningham	Hill Road	D2246 Main Street	C33	Resurface	500
D4102	Warwick	Millers Road	Cape Rd	Wathen Rd	Reconstruct	531
D4119	Warwick	Guys Cross Park Road	Lakin Rd	A429 Coventry Road	Overlay	441
D4159	Warwick	Wharf Street	A445 Emscote Road	Nelson Lane	Overlay	736
D4384	Leamington	Newbold Terrace East	House no. 58	Fernhill Dr	Reconstruct	166
D4440	Leamington	Buckley Road	Leicester St	Mason Ave	Resurface	1026
D4444	Leamington	Wellington Road	Valley Rd	Buckley Rd	Resurface	571
D4568	Leamington	Bath Place	Spencer St	Smith St	Resurface	145
D4569	Leamington	Regent Place	B4087 Bath Street	D4564 Church Street	Resurface	78
D4570	Leamington	Chapel Street	D4564 Church Street	D4572 George Street	Resurface	42
D4571	Leamington	Packington Place	Chapel St	End Of Road	Resurface	68
D4678	Leamington	Tachbrook Street	B4087 Tachbrook Road	D4645 Alexandra Road	Resurface	560
D4735	Leamington	Sydenham Drive	A425	Gainsborough Dr	Overlay	975
D5060	Wroxall	School Lane	Burial Ground	End Of Road	Resurface	1150
D5062	Haseley	Firs Lane	Nr A4177	D5067	Resurface	2515
D5104	Five Ways	Fletchers lane	D5066 Case Lane	D5658 Quarry Lane	Resurface	750
D5114	Pinley Green	Manor Lane	C136/C25	Manor Farm	Resurface	1600
D5270	North Lindsey	Canada Lane	C93 New Road	Dead End	Resurface	750

Warwick Area Committee - 13th March 2007

Rd No	Settlement	SITE			Treatment	Length
		Road	From	To		
D4307	Leamington	Cloister Crofts	A452 Kenilworth Road	A445 Lillington Road		503
D7130	Kenilworth	Randall Road	B4103 Warwick Road	D7125 Siddeley Avenue	Resurface	366
D7100	Kenilworth	Birches Lane	St Johns Gyratory	Farmer Ward Road	Resurface	0
PROVISIONAL						
C24	Beausale	Rouncil Lane	Ford	Past Fernwood Farm	Haunch	1100
D5076	Beausale	Rouncil Lane	D5076 Red House Farm Lane	Hill Farm/Ash Tree Farm Junction	Haunch	600
C93	Hatton	Snitterfield Lane	Craft Centre	C136	Haunch	1199
D5017	Lapworth	Wharf Lane	A3400	B4439	Haunch	800
B4439	Shrewley Common	Old Warwick Road	C25 West	New Surface	Resurface	550
FOOTWAYS						
D4185	Warwick	Nelson Lane	Coventry Road	Cliffe Way		
C37	Warwick	Theatre Street	entire			
D7093	Kenilworth	Ash Drive	entire			
D7149	Kenilworth	St Johns Street	entire			
D4331	Leamington Spa	Strathearn Road	Beauchamp Hill	Rugby Road		
D4110	Warwick	Wathen Road	Millers Road	Woodville Road		
D4630	Leamington Spa	Grove Place	Shrubland Street	Tachbrook Street		
D4137	Warwick	Greville Road	Beauchamp Road	Chestford Cresent		
D4481	Lillington	Cheviot Rise	entire			
D4109	Warwick	Lyttelton Road	entire			
D7122	Kenilworth	Fishponds Road	Siddeley Avenue	School		
D4135	Kenilworth	Arden Road	entire			
D4108	Warwick	Peel Road	Wedgenock Green	Lyttleton Road		
D4547	Cubbington	North Close	entire			
D7083	Kenilworth	Elmdene Road	entire			
D7125	Kenilworth	Siddeley Avenue	entire			
D7199	Kenilworth	Barrowfield Lane	entire			
D7058	Kenilworth	Finham Road	Villers Road	Dalehouse Lane		
D4441	Lillington	Haddon Road	Wellington Road	Buckley Road		
D4637	Leamington Spa	Shrubland Street	Charles Gardener Road	Brunswick Street		
A429	Warwick	St Johns	Paddock Close	Priory Road		

Warwick Area Committee - 13th March 2007

Rd No	Settlement	SITE			Treatment	Length
		Road	From	To		
D7121	Kenilworth	Greville Road	Siddley Avenue	Margetts Close		
C24	Kenilworth	Rouncil Lane	Warwick Road	Mortimer Road		
D7145	Kenilworth	Oaks Road	Rounds Hill	St Nicholas Avenue		
C15	Burton Green	Hodgetts Lane	Cromwell Lane	End of speed limit		
D4537	Leamington Spa	Clapham Street	Clapham Terrace	End		

2007/08 WARWICK AREA MAINTENANCE SCHEMES					
Electoral Division	Parish/ Settlement	Rd No	SITE		
			Road	From	To
WARWICK AREA CARRIAGEWAY RESURFACING 07/08					
Bishops Tachbrook	Bishops Tachbrook	C43	Harbury Lane	Extents of site TBA	
Leamington Brunswick	Leamington Spa	D4650	Prospect Road	Alexandra Rd/St Margerets Road	Sydenham Drive rail bridge
Leamington Brunswick	Leamington Spa	D4648	The Close	Llewellyn Road	End of road
Leamington Milverton	Leamington Spa	A452	Adelaide Road	Mini Roundabout	
Leamington Willes	Leamington Spa	D4735	Sydenham Drive	A425	St Anthony's School
Leamington Willes	Leamington Spa	A425	Radford Road	Leam Terrace	House No. 138
Leek Wooton	Lapworth	C23	Rising Road	B4439 Old Warwick Road	Chesetts Wood xroads
Leek Wooton	Rowington	D5102	Mill Lane	B4439 Old Warwick Road	C92 Finwood Road
Leek Wooton	Shrewley Common	C22	Back Lane	Change in Surface Above Pitts Farm	Change in Surface Towards L'ford
Leek Wooton	Pinley Green	D5112	High Cross Farm Road	C22 Back Lane	D5109 High Cross Lane
WARWICK AREA CARRIAGEWAY MICROASPHALT SURFACING 07/08					
Leamington North	Leamington Spa	A445	Lillington Avenue	Lillington Rd/Ave Roundabout	
Leamington North	Leamington Spa	A445	Lillington Road	Lillington Road/Cubbington Rd Rdbt	
Leamington North	Leamington Spa	D4286	Wootton Court	A445 Lillington Avenue South	A445 Lillington Avenue North
Leamington North	Leamington Spa	D4392	Holly Walk	C58 Regent Grove Island	End of Road
Leamington North	Leamington Spa	C60	Hamilton Terrace	Parking Area by police station	
Leamington Willes	Leamington Spa	D4412	Thomas Street	Swan Street	Lansdowne Circus
Warwick North	Warwick	D4153	Vicarage Field	All Saints Road	End
Warwick South	Leamington Spa	A452	Europa Way	Queensway Island	
Warwick South	Leamington Spa	A452	Europa Way	Heathcote Lane Island	
Warwick South	Warwick	D4033	Griffin Road	Number 29	End
WARWICK AREA CARRIAGEWAY SURFACE DRESSING 07/08					
Bishops Tachbrook	Norton Lindsey	C39	Ward's Hill	D559 Curlieu Lane	C93 New Road
Bishops Tachbrook	Budbrooke	D5275	Hatton Road	A4189 Gannaway Road	C93 Norton Curlieu Lane
Bishops Tachbrook	Budbrooke	C93	Hatton Road	C93 Norton Curlieu Lane	C136 Pinley Road
Bishops Tachbrook	Hampton Magna	D5288	Fieldbarn Road	C138 Old Budbrooke Road	D5300 Blandford Way
Bishops Tachbrook	Hampton Magna	D5298	Woodway Avenue	D5285 Cherry Lane	D5291 Lloyd Close
Cubbington	Kenilworth	C32	Stoneleigh Road	Dalehose Lane	Coventry Boundary
Cubbington	Cubbington	B4453	Rugby Road	Pinehurst	Wethole Manor Farm
Cubbington	Weston under Weatherly	D4453	Rugby Road	The turn Wappenbury	to boundary
Cubbington	Kenilworth	D2209	Kingshill Lane	Stoneleigh Road	Coventry Boundary
Cubbington	Cubbington	D2211	Coventry Road	Rugby Road	Leicester Lane
Cubbington	Old Milverton	D6012	Church Lane	Old Milverton RD	END
Cubbington & Feldon	Fosse Way	B4115	Fosse way	Radford Semele Junction (A425)	Harbury Lane Junction (C43)
Kenilworth Abbey	Burton Green	C16	Cromwell Lane	Red Lane	Coventry Boundary
Kenilworth Abbey	Kenilworth	D5069	Bockendon Road	Pools Cottages	Coventry Boundary
Kenilworth Abbey	Kenilworth	B4103	Clinton Lane	Castle Road	Birmingham Road
Kenilworth St Johns	Kenilworth	C24	Rouncil Lane	Roundshill	end
Kenilworth St Johns	Kenilworth	D7155	Dudley Road	Beauchamp Road	Mortimer Road

2007/08 WARWICK AREA MAINTENANCE SCHEMES					
Electoral Division	Parish/ Settlement	Rd No	SITE		
			Road	From	To
WARWICK AREA CARRIAGEWAY SURFACE DRESSING 07/08 - Continued					
Kenilworth St Johns	Kenilworth	D7156	Beauchamp Road	Oaks Road	Dudley Road
Kenilworth St Johns	Kenilworth	D7112	Clarendon Road	Warwick Road	end
Kenilworth St Johns	Kenilworth	D7113	Glebe Crescent	Clarendon Road	end
Leamington Milverton	Milverton	D4273	Guys Cliffe Avenue	Beverly Road	End
Leamington Milverton	Leamington Spa	D4268	Acacia Road	Rugby Road	End
Leamington Milverton	Leamington Spa	D4346	Victoria Street	Archery Road	Avenue Road
Leamington Milverton	Leamington Spa	D4267	Highfield Terrace	Rugby Road	Acacia Road
Leamington Milverton	Leamington Spa	D4345	Archery Road	Adelaide Road	END
Leamington Milverton	Leamington Spa	D4330	Victoria Road	Victoria Street	End
Leamington Milverton	Milverton	D4260	Blandford Road	Riversleigh Road	End
Leamington Milverton	Milverton	D4256	Riversleigh Road	Old Milverton Road	Old Milverton Rd
Leamington Milverton	Milverton	D4257	Bankfield Drive	Riversleigh Road	Riversleigh Road
Leamington Milverton	Milverton	D4262	Kingland Drive	Riversleigh Road	End
Leamington Milverton	Milverton	D4259	Birchway Close	Riversleigh Road	End
Leamington North	Leamington Spa	D4391	Brandon Parade	Hamilton Terrace	Willes Road
Leamington North	Leamington Spa	C60	Hamilton Terrace	Parade	Brandon Parade
Leamington North	Leamington Spa	D4362	Dormer Place	Adelaide Road	Parade (works end)
Leamington North	Leamington Spa	D4363	Bedford St	Domer Place	Warwick Street
Leamington North	Lillington	D4528	Dunblane Drive	Beaufort Avenue	Beaufort Avenue
Leamington North	Lillington	D4514	St Andrews Road	Montrose Avenue	Kinross Road
Leamington North	Lillington	D4516	Helmsdale Road	Melton Road	St Andrews Road
Leamington North	Lillington	D4517	Braemar Road	Melton Road	St Andrews Road
Leamington North	Lillington	D4510	Melton Road	Lime Avenue	Helmsdale Road
Leamington North	Lillington	D4527	Beaufort Avenue	Kenilworth Road	to Kelvin Road
Leamington North	Lillington	D4530	Girvan Grove	Dunblane Drive	to Dunblane Drive
Leamington North	Lillington	D4525	Roxbury Croft	Cu-de-sac	all
Leamington North	Leamington Spa	D4315	Derrham Court	Lillington Avenue	End of road
Leamington North	Leamington Spa	D4316	Denville Road	Derrham Court	End of road
Leamington Willes	Leamington Spa	D4560	Leam Terrace	Mill Road	Radford Road
Leamington Willes	Leamington Spa	D4573	New Street	George Street	Farley Street
Leamington Willes	Leamington Spa	D4574	Gordon Street	New Street	Farley Street
Leamington Willes	Leamington Spa	D4575	Russell Terrace	George Street	Willes Road
Leamington Willes	Leamington Spa	D4577	Plymouth Place	Forfield Place	Farley Street
Leamington Willes	Leamington Spa	D4579	Rotherfield close	Farley Street	End of road
Leamington Willes	Leamington Spa	D4578	Forfield Place	Leam Terrace	Radford Road
Leamington Willes	Leamington Spa	D4584	Willes Terrace	St. Mary's Road	Leam Terrace
Leamington Willes	Leamington Spa	D4583	Beaconsfield Street	St. Mary's Road	Leam Terrace
Leamington Willes	Leamington Spa	D4581	Leam Street	St. Mary's Road	Leam Terrace
Leamington Willes	Leamington Spa	D4582	St. Mary's Road	Leam Terrace	Bridge/Canal
Leek Wooton	Rowington	C92	Finwood Road (Mill Lane)	C22 Lapworth Street	s/c near Finwood Farm
Leek Wooton	Rowington	C22	Back Lane	C25 Shrewley Common	S/C near Pitts Farm

2007/08 WARWICK AREA MAINTENANCE SCHEMES					
Electoral Division	Parish/ Settlement	Rd No	SITE		
			Road	From	To
WARWICK AREA CARRIAGEWAY SURFACE DRESSING 07/08 - Continued					
Leek Wooton	Rowington	D5109	High Cross Lane	C25 Shrewley Common	C22 Narrow Lane
Leek Wooton	Rowington	D5110	Peacock Lane	D5112 Holywell Lane	End of road
Leek Wooton	Rowington	D5112	Lye Green Lane	C25 The Cumsey	D5110 Peacock Lane
Leek Wooton	Rowington	D5112	Holywell Road	D5109 High Cross Lane	D5110 Peacock Lane
Leek Wooton	Rowington	D5111	Hobbs Hole Lane	D5112 Lye Green Lane	The Field House
Leek Wooton	Shrewley	C136	Nunhold Road	Grange Farm	D5093 Station Road
Leek Wooton	Beausale	C24	Dirt Lane	D5064 Church Road	C24 Rouncil Lane
Leek Wooton	Hampton Magna	D5287	Daly Avenue	D5298 Woodway Avenue	D5298 Woodway Avenue
Warwick North	Warwick	D4103	Deerpark Drive	Newburgh Cres	Oken Road
Warwick North	Warwick	D4152	Charles Street	Emscote Road	Bridge
Warwick South	Warwick	D4186	Gerard Street	Smith Street	Castle Hill
Warwick South	Warwick	A429	St.Nicholas Church	St.Johns	Castle Hill
Warwick West	Warwick	D4092	Antelope Gardens	St Michaels Road	END
Warwick West	Warwick	A445	Priory Road	Cape Road	St. Johns
Warwick West	Warwick	A425	The Butts	Priory Road	Jury Street
Warwick West	Warwick	D4096	St.Michaels Road	Birmingham Road	Cape Road
Warwick West	Warwick	C37	Theatre Street	Block Paving/Lights	To Island
Warwick West	Warwick	D4179	Chaple Street	Priory Road	To Smith Street
Whitnash	Whitnash	D6036	Heathcote Lane	Europa Way	Surface Change
Whitnash	Whitnash	D4073	Washbourne Road	Morrhill Road	End
Whitnash	Whitnash	D4702	Chandlers Road	Morrhill Road	End
Whitnash	Whitnash	D4685	Burrows Close	Morris Drive	End
Whitnash	Whitnash	D4704	Ashford Road	Landor Road	Tachbrook Road
Whitnash	Whitnash	D4676	Golf Lane	Whitnash Road	Surface Change
Whitnash	Whitnash	C139	Lammas Croft	Heathcote Road	End
2007/08 WARWICK AREA MAINTENANCE SCHEMES					
Electoral Division	Parish/ Settlement	Rd No	SITE		
			Road	From	To
WARWICK AREA FOOTWAY RESURFACING 07/08					
Leamington North	Leamington Spa	D4415	Leicester Street	Landsdowne Street	opp house No 51
Bishops Tachbrook	Warwick	A425	Banbury Road	The Asps	C209
Leamington Brunswick	Leamington Spa	D4594	England Crescent	Bury Road	Bury Road
Leamington Brunswick	Leamington Spa	D4601	Viscount Close	Kingsway	end
Cubbington	Cubbington	C36	Kenilworth Road	Leicester Lane	Balmoral Way
Leamington Brunswick	Leamington Spa	D4648	The Close	Llewellyn Road	End of road

2007/08 WARWICK AREA MAINTENANCE SCHEMES					
Electoral Division	Parish/ Settlement	Rd No	SITE		
			Road	From	To
WARWICK AREA FOOTWAY SLURRY SEALING PROGRAMME 07/08					
Bishops Tachbrook	Barford	D6016	Verdon Place	High Street	end
Cubbington	Cubbington	D4548	Brookfield Road	Ladycroft	North Close
Cubbington	Cubbington	D4547	North Close	Brookfield Rd	end
Cubbington	Cubbington	D4554	New Street	23 New Street	43 New Street
Cubbington	Radford Semele	D4866	St Nicholas Rd	Lewis Rd	Lewis Rd
Cubbington	Radford Semele	D4863	Lewis Rd	Southam Rd	Valley Rd
Cubbington	Stoneleigh	D2218	Stoneleigh Close	Birmingham Rd	End
Cubbington	Baginton	D2200	Frances Road	Coventry Rd West	Coventry Rd
Cubbington	Baginton	D2205	Holly Walk	Coventry Rd	end
Kenilworth Abbey	Kenilworth	D7002	Priorsfield Road	Woodcote Avenue	Woodcote Avenue
Kenilworth Abbey	Kenilworth	D7014	Elizabeth Way	Castle Hill	End
Kenilworth Park Hill	Kenilworth	D7050	Common Lane	Coventry Road	Dalehouse Lane
Kenilworth Park Hill	Kenilworth	D7064	Beech Drive	Keeling Road	Parkfield Drive
Kenilworth Park Hill	Kenilworth	D7065	Keeling Road	Leyes Lane	Parkfield Drive
Kenilworth St Johns	Kenilworth	D7170	Walnut Tree Close	Farmer Ward Road	End
Kenilworth St Johns	Kenilworth	D7112	Clarendon Road	Warwick Road	Glebe Crescent
Kenilworth St Johns	Kenilworth	D7113	Glebe Crescent	Clarendon Crescent	End
Kenilworth St Johns	Kenilworth	D7116	Brookside Avenue	Borrowell Lane	Greville Road
Kenilworth St Johns	Kenilworth	D7125	Siddeley Avenue	Greville Road	Randall Road
Leamington Milverton	Leamington	D4269	Coniston Road	Guys Cliffe Ave	End
Leamington Milverton	Leamington	D4368	Bath Pl	High St	Bath St
Leamington Milverton	Leamington	D4366	Smith St	Bath Pl	Bath St
Leamington Milverton	Leamington	D4367	Abbott St	Bath Pl	Bath St
Leamington Milverton	Leamington	D4271	Fairlawn Close	Rugby Road	End
Leamington Milverton	Leamington	D4331	Strathearn Road	Rugby Road	Beauchamp Hill
Leamington Milverton	Leamington	D4355	Church Hill	Regent Street	Milverton Hill
Leamington Milverton	Milverton	D4256	Riversleigh Road	Old Miverton Lane	Old Milverton Lane
Leamington Milverton	Milverton	D4260	Blandford Road	Riversleigh Road	End
Leamington Milverton	Milverton	D4259	Birchway Close	Riversleigh Road	End
Leamington Milverton	Leamington	D4345	Archery Road	Avenue Road	End
Leamington Milverton	Leamington	D4336	Victoria Street	Victoria Road	End
Leamington Milverton	Leamington	D4330	Victoria Road	Archery Road	End
Leamington North	Cubbington	D4451	Clare / Compton Close	Buckley Road	Wellington Rd
Leamington North	Lillington	D4475	Meadow Close	Epsom Rd	end
Leamington North	Leamington	D4366	Binswood Ave (Wst)	End (Binswood St)	Kenilworth Rd
Leamington North	Leamington	D4366	Binswood Ave (Est)	Kenilworth Rd	Clarendon St
Leamington North	Leamington	D4368	Beauchamp Ave (Wst)	Binswood St	Kenilworth Rd
Leamington North	Leamington	D4368	Beauchamp Ave (Est)	Kenilworth Rd	Clarendon St
Leamington North	Leamington	D4367	Trinity St	Binswood St	Clarendon St
Leamington North	Leamington	D4365	Beauchamp Rd	Binswood Ave	Beauchamp Ave
Leamington North	Leamington	D4370	Arlington Ave	Binswood Ave	Beauchamp Ave

2007/08 WARWICK AREA MAINTENANCE SCHEMES					
Electoral Division	Parish/ Settlement	Rd No	SITE		
			Road	From	To
WARWICK AREA FOOTWAY SLURRY SEALING PROGRAMME 07/08					
Leamington Willes	Leamington	D4572	Geroge St	Church Tr	High St
Leamington Willes	Leamington	D4370	Chapel St	Church St	Geroge St
Leek Wooton	Hockley Heath	B4101	Aylesbury Road	Solihull Boundary - H/Heath	Solihull Boundary - Dorridge
Leek Wooton	Hockley Heath	D5055	Aylesbury Close	Aylesbury Road	End
Warwick North	Warwick	D4017	Harmar Close	D4016 Deansway	End Of Road
Warwick North	Warwick	D4018	Handley Grove	D4017 Harmer Close	End Of Road
Warwick North	Warwick	D4957	Warner Close	D4959 Chanders Road	End Of Road
Warwick North	Warwick North	D4147	Chesford Crescent	D4137 Greville Road	D4137 Greville Road
Warwick North	Warwick	N/A	Tycross Walk	D4016 Deansway	D4006 Primrose Hill
Warwick North	Warwick	N/A	Stanton Walk	Lynton Close	Boswell Grove
Warwick North	Warwick	D4955	Wise Grove	D4976 Hathaway Drive	End Of Road
Warwick North	Warwick	D4959	Chanders Road	D4016 Deansway	D4957warner Close
Warwick North	Warwick	D4030	Ridgeley Close	D4976 Hathaway Drive	End Of Road
Warwick North	Warwick	D4970	Broxall Close	D4245 Wedgenock Lane	End Of Road
Warwick South	Warwick	D4158	Nelson Lane	Wharf St	Coventry Rd
Warwick South	Warwick	D4174	Kemp Close	Maynard Avenue	End
Warwick South	Warwick	D4113	William Tarver Close	Meadow Road	End
Warwick West	Warwick	D4188	Linen Street	Theatre Street	End
Warwick West	Warwick	D4090	Cross Street	Smith Street	Priory Road
Whitnash	Whitnash	D4676	Golf Lane	Whitnash Road	Fieldgate Lane
Whitnash	Whitnash	D4684	Kirton Close	Golf Lane	End
Whitnash	Whitnash	D4685	Burrows Close	Morris Drive	End

2007/08 WARWICK AREA STREET LIGHTING SCHEMES

Replacement of mercury lanterns :

Kenilworth - Areas of Rawnsley Drive and Dencer Drive

Leamington - Sydenham - part complete

Warwick - Woodloes - part complete

Warwick - Lakin Road / Coventry Road - Route for hospital workers/visitors/patients to train station - £12,000