

Executive 17 February 2014

Report from the Strategic Director of Environment and Neighbourhoods

For Action Wards Affected: ALL

Highways Asset Management Plan and Capital Scheme Programme 2014-16

1.0 SUMMARY

- 1.1 In 2013-14 approximately £4.2 million will be spent improving the condition of Brent's highways, including resurfacing of 8.4 miles of road and 5.6 miles of footway. This investment includes £3.5 million of Brent capital and £724k of TfL capital funding for principal (A road) maintenance.
- 1.2 During 2014/15 it is proposed to allocate £3.55 million of Brent capital to maintain the highway network, subject to approval of the Executive and the Budget and Council Tax report on 17th February 2013 and; full Council approval on 3rd March 2013.
- 1.3 In addition to £3.55 million of Brent capital, a potential £1.131 million of Principal Road (A-road) improvements may be funded by TfL. This is a significant increase in the 2013/14 Principal road programme value and follows on from the DfT's 2012 Autumn Statement, which allocated additional principal road funding this year to all Boroughs. The total value of the programme has therefore increased to £1,131,000, a one-off budget increase of nearly 25%.
- 1.4 This report sets out recommendations for how Brent's £3.55 million capital budget should be allocated during 2014/15 and 2015/16 through a prioritised programme of:
 - Major and minor pavement upgrades;
 - Major Road resurfacing;
 - Preventative maintenance; and
 - Improvements to the public realm.
- 1.5 This programme will be delivered using a new Highway Asset Management Planning (HAMP) approach for Brent, which will provide a systematic long term methodology for maintaining the borough's highways. The HAMP approach will deliver better value for money through adoption of a sensible and forward thinking maintenance plan. Our customers will see more miles of road maintained each year and have

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greater visibility as to the relative status of their roads. We will deliver more on the ground and help to meet many of our corporate and strategic transport objectives by doing so.

2.0 RECOMMENDATIONS

- 2.1 That the Executive approves investment of £3.55 million of Brent capital funding as summarised in Section 6.0.
- 2.2 That the Executive approves the proposed highways maintenance programme for 2014-15 and the provisional programme for 2015-16 as detailed in Appendix B.
- 2.3 That the Executive approves the highways asset management strategy for Brent as described in Section 4.0 and appended as background papers to this report.
- 2.4 That the Executive approves the proposed division of maintenance investment for carriageway resurfacing of 70% for major resurfacing and 30% for preventative maintenance.
- 2.5 That the Executive approves the proposed prioritisation process and criteria for programme development described in Section 4.9

3.0 HIGHWAYS INVESTMENT DURING 2013/14

- 3.1 Brent's annual transportation investment programme consists of; Brent capital funding, which is used to fund the roads maintenance programme for local roads; capital funding provided by Transport for London, which is used to deliver principal (strategic) road maintenance and; a programme of highway improvement schemes and sustainable transport projects delivered through the LIP (TFL funded Local Implementation Plan programme).
- 3.2 By 31 March 2014, approximately £4.2 million will have been spent on maintaining Brent's highway infrastructure funded through £3.5 million of Brent capital and £724k of principal road maintenance investment. Appendix A provides details of the works delivered, which will result in:
 - 8.4 miles of roads being resurfaced; and
 - 5.6 miles of footways being resurfaced and improved.
- 3.3 Members will recall that Brent entered into a new 8 year contract on 1st April 2013 to provide a range of highway services, including planned and reactive maintenance works. Our new provider was procured through the London Highways Alliance Contract (LoHAC).
- 3.4 As a direct result of the competitive LoHAC rates that we now enjoy, and through close partnership working with our new provider, we have this year delivered our entire carriageway resurfacing scheme programme plus our entire 2013/14 reserve scheme programme. This has meant that we have resurfaced over 1.5 more miles of Borough roads than was envisaged at the beginning of the year.

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- 3.5 Through the 2013/14 LIP programme (and combined with Section 106 developer contributions), an additional £6.7 million is being invested in improving Brent's roads, footways and transport infrastructure. This includes:
 - £5.9 million of Local Implementation Plan LIP funding; and
 - £0.8 million S106 developer contributions.
- 3.6 LIP and S106 funding was allocated to progress the Harlesden Town Centre major scheme, which will be completed during 2014/15, and this year we have delivered major public realm and accessibility improvements to Engineers Way.
- 3.7 In addition the Council is on target to deliver a wide range of infrastructure and initiatives in line with TfL expectations. To date we have delivered, or are in the process of delivering, the following infrastructure on Brent's streets as part of a range of schemes and initiatives:
 - 16km of roads will be improved with collision reduction measures, including lower speed limits;
 - 76 areas are being provided with new waiting and loading restrictions to reduce congestion and improve safety;
 - 7 crossings have been improved to provide facilities for disabled people;
 - 130 on and off-street cycle parking spaces have been provided;
 - 384 children and 90 adults have received cycle training;
 - 2km of new cycle routes have been delivered;
 - 15 junctions have been improved to help cyclists;
 - 13 new pedestrian crossings have been provided;
 - 75 road safety education events have been held;
 - 63 bus stops are being improved to make boarding easier and passenger waiting facilities better; and
 - 16 new street trees have been planted.

4.0 MANAGING HIGHWAYS ASSETS

- 4.1 Highway infrastructure is the most visible, well-used and valuable physical asset owned by the Council. Brent's highways assets include:
 - 504 km (315 miles) of roads:
 - 847 km (529 miles) of pavements;
 - 53 bridges and structures;
 - 24,500 road gullies;
 - 10,000 street trees; and
 - 32,000 street lights and other illuminated street furniture.

The value of this asset is estimated at just over £1bn.

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4.2 The table below sets out the condition of Brent's roads by indicating the percentage of each length of road type where maintenance should be considered.

	% of roads where m	aintenance should l	oe considered
Year	A class roads	B and C class roads	Unclassified roads
2008/2009	8%	9%	23%
2009/2010	11%	9%	23%
2010/2011	9%	7%	27%
2011/2012	9%	6%	26%
2012/2013	8%	9%	20%
2013/2014	13%	tba*	21%

*information not available until late February 2014

- 4.3 Currently a fifth of Brent's unclassified roads and around a quarter of the most used pavements are in need of substantial maintenance. Unclassified roads make up 80% of all borough roads. Classified roads are in slightly better condition, but around one tenth of them still require structural maintenance.
- 4.4 As time goes on roads that are currently in good condition will deteriorate, just like any physical asset such as a house or a vehicle. To keep on top of the deterioration of our asset we must invest continually in maintenance.
- 4.5 Brent currently adopts a "worst-first" approach to highways asset management. We identify the worst condition roads and develop a one year programme of road resurfacing and reconstruction. Our current approach assumes that over 20% of our unclassified network and nearly 10% of our classified network will remain in need of repair; we are effectively treading water to maintain our current position.
- 4.6 To better manage the way we maintain our highways it is proposed to adopt the draft Highway Asset Management Plan (HAMP) shown in Appendix E. The HAMP sets out a strategy based on the need to repair our assets on a regular basis, before they fail, so as to extend their lifespans and reduce long term repair costs.
- 4.7 The strategy will initially involve introducing a programme of major resurfacing works along with preventative maintenance, which will take the form of regular thin surface repairs to water seal roads and improve their anti-skid properties. Thin surfacing is less than a third of the cost of major resurfacing works but can extend the life of a road considerably, meaning that you can treat 3kms for the price of 1km of major resurfacing.
- 4.8 A 2 year work programme of both major resurfacing and preventative maintenance has therefore been developed from 2014/15 onwards. This will be the first step towards long-term programme development. To maximise the benefits, a 10 year programme period is recommended. This is an aspiration that we will work towards.
- 4.9 A key question is how we will decide which roads should have preventative maintenance treatment and which we need to undertake major resurfacing works on.

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- 4.10 During 2014/15 we will assess the network to determine the current condition and estimated lifespans of individual roads. We will then take account of a range of factors to define relative priorities for maintenance. For the 2015/16 programme and beyond it is proposed to adopt a scoring system to identify roads suitable for major resurfacing or preventative maintenance that will assess the following:
 - Condition and estimated lifespan based on outcomes of annual condition surveys and inspection programmes;
 - Road hierarchy and traffic usage, including proximity of local schools / colleges;
 - Level of risk in terms of numbers of accident claims, historic pothole repair records and/or collision history; and
 - The cost effectiveness of preserving roads that have not yet fully deteriorated and fixing those which have.
- 4.11 We will continue to take account of councillor nominations for road maintenance and, where a number of schemes attract the same or similar scores, we will prioritise councillor nominated schemes earlier in our proposed maintenance programmes. We may also deviate from priority order where, for instance, a section of road in relatively good condition may be resurfaced if it is on a street where the rest of the road needs maintenance and it would be illogical, or impractical, not to resurface the whole street.
- 4.12 The optimum level of investment when starting to adopt preventative maintenance has been identified through consultation with authorities that have implemented HAMP principles. Investment of approximately 30% of carriageway resurfacing budgets is considered to be optimum when beginning to introduce preventative maintenance programmes.
- 4.13 It is therefore proposed to invest around 30% of the carriageway resurfacing budget in preventative maintenance over the next two to three years, and 70% on major resurfacing works. If there is any reduction or increase in funding over coming years, it is proposed that this 70/30 percentage split be applied to revised budgets.
- 4.14 The draft 2015/2016 programme will be reviewed and amended at the end of 2015 in light of condition survey data available at that time, and following application of more detailed prioritisation criteria and life cycle planning for individual roads and road sections.

5.0 HIGHWAYS INVESTMENT DURING 2014/15

5.1 Carriageway Resurfacing

- 5.1.1 The 2014/15 carriageway maintenance programme and a provisional 2015/16 programme are shown in Appendix B, and in map form in Appendix C. Appendix D illustrates the location of principal and other classified roads within Brent for information. Roads have been prioritised from the results of an independent network condition survey, with input from local engineering staff, who assess a wide range of factors including:
 - Information received from Councillors, MPs, residents, road users and other stakeholders;

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- Levels and locations of accident claims (e.g. Claims for trip hazards);
- Structural integrity of the road or footway and the associated safety implications;
- Amount of pedestrian and vehicular usage; and
- Proximity to schools.
- 5.1.2 From 2015/16 onwards, in line with the adoption of asset management practices, we will assess the condition of all of our roads to determine how much the road condition has deteriorated from when it was first built. We will also take account of a range of factors other than age and road condition in our decision making, such as corporate priorities, road safety records, bus routes, proximity to schools & colleges, traffic levels and footfall.
- 5.1.3 For this reason the proposed programme for 2015-16 has been presented as a provisional plan. It will be amended as necessary and submitted for final approval by the Executive in 2014-15.
- 5.1.4 In summary the proposed carriageway resurfacing programme of £1.71 million includes:
 - £1.4 million to improve the condition of the unclassified network divided between major resurfacing and preventative maintenance schemes (see Appendix B for list of streets that have been selected):
 - £150k to resurface B and C class roads; and
 - £150k to resurface short sections of road (300m or less) that have deteriorated and are in need of resurfacing, but where the whole street is generally in good repair;
- 5.1.5 Each year Brent is provided with a provisional allocation from TfL to renew principal (A class) roads in the Borough. This programme of works is developed through analyses of carriageway condition surveys provided by, and reviewed by, TfL. A draft programme for principal road renewals is contained in Appendix B.
- 5.1.6 As a result of the DfT's 2012 Autumn Statement additional "A" road funding of £219k has been allocated to Brent. Our original indicative allocation was £912k; therefore the total value of the programme has increased to £1,131,000, a one-off budget increase of nearly 25%.
- 5.1.7 TfL requests that Boroughs include an additional 25% to their provisional allocation to enable them to put forward one or more reserve schemes. This provides an opportunity for additional schemes to be delivered each year if additional funding becomes available. This "reserve" bid adds a further £278k to the provisional programme value to make a total A Road bid value of £1,409,000. Members should note that reserve scheme funding relies on TfL funding availability and is not quaranteed.
- 5.1.8 It is proposed to utilise up to £10k of capital funding for carriageway resurfacing to undertake asset condition surveys during 2014/15. These surveys will assist to prepare a long term asset management programme and confirm the 2015/16 capital programme.

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5.2 Footway Repairs

5.2.1 The table below sets out the condition of the busiest footways in the borough (prestige areas in town centres and busy urban shopping areas). High usage footways form approximately 10% of the footway network.

Year	% of the high usage footways where maintenance should be considered
2008/2009	20%
2009/2010	17%
2010/2011	27%
2011/2012	12%
2012/2013	15%
2013/2014	27%

- 5.2.2 The condition of the high use footway network improved considerably during 2011/12 through the introduction of a more frequent inspection regime and delivery of an extensive programme of improvements.
- 5.2.3 However, there has been continuing and increasing numbers of requests for footway repairs and responsive maintenance during the current financial year. Given this and the worsening of the condition of the high usage footway network, it is recommended that £1.565 million, approximately 44% of this year's overall budget, be assigned to improving the condition of footways in the Borough. Appendix B contains details of the footways which have been prioritised for improvement.
- 5.2.4 Similarly to the issues with short sections of road that are in poor condition, short lengths of footway that are in poor condition can cost a significant amount in reactive maintenance repairs, as well as being a cause of accident claims. It is therefore proposed to invest £150k of this year's overall budget to resurface short sections of footway.
- 5.2.5 It is proposed to utilise up to £40k of capital funding for footway improvements to undertake asset condition surveys during 2014/15. These surveys will be used to confirm the 2015/16 capital programme.

5.3 Reducing the risk of flooding in Brent

- 5.3.1 There are approximately 24,500 road gullies in the borough. These are being cleaned as part of a cyclic maintenance programme procured through the new London Highways Alliance Contract (LoHAC). The cleaning cycle includes:
 - High-priority (regularly blocking) gullies cleaned every six months;
 - 1,300 medium-priority gullies cleaned each year; and
 - 14,100 gullies cleaned every eighteen months as part of a rolling programme.
- 5.3.2 There are occasions where cleaning will not resolve surface water flooding problems as gullies and drainage pipes require replacement.

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5.3.3 We are anticipating similar funding from Defra for flood risk management as was received in 2013/14 (£216k). This will be used for alleviating flooding in the borough and for improvements/upgrades to existing highway drainage as per the following proposed works programme:

Flood management Scheme	Proposed works	Cost Estimate
Roe Green Pk, Kingsbury Rd		£20K
Chamberlayne Road, NW10		£20K
Silver Jubilee Park, The Mall		£10K
Vale Farm, Sudbury Avenue	Installation of land drainage	£15K
Northwick Park, Kenton		£10K
Leybourne Road, Open Space, NW 9		£15K
10 to 26 Woodcock Hill, Kenton	Replace highway drainage system	£20K
Silk Stream (Barnet agreement)	Trash screen cleaning	£20K
Tramway Ditch, Stag Ln, NW 9	Inspect and clear watercourses	£5K
Northwick Park, Kenton	inspect and clear watercourses	£5K
London Road Ditch	Inapact and clear if required	-
Fryent Way ditch	Inspect and clear - if required	-
Various works undertaken through maintenance programme	Repair gullies, replace missing covers	£75K
LoDEG	Bridge Engineering Group Subscription	£1k
	Total	£216K

Note: Some of the above schemes have been carried forward from 2013/14. Cost estimates may vary and schemes may be re-prioritised in-year to reflect budget.

5.4 Investing in Public Realm

- 5.4.1 The Public Realm programme involves three areas of highways capital programme investment:
 - a. Works to strengthen footways and soft verges;
 - b. Works to improve areas of "marginal" land that are part of the public highway but are not footways, verges or carriageways; and
 - c. Works to maintain, upgrade, rationalise or replace directional and regulatory highway signs.

It is proposed to allocate £125k (3%) of the 2013/14 capital budget to these areas of work.

5.5 Improving Brent's bridges and structures

- 5.5.1 The Council are responsible for 53 highway structures, including 38 bridges and; 15 culverts. The majority of bridges are small structures spanning brooks. Funding for bridge maintenance is allocated by Transport for London on a regional priority basis. The London Bridge Engineering Group is currently reviewing the pan-London programme and funding will be confirmed in February 2014.
- 5.5.2 Although funding has not been confirmed, the Bridge Strengthening Programme 2014/15 Bid Grand Total is £355k, made up for bids for six schemes

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- a. Allendale Road Stabilisation of clay embankment to LUL bridge
- b. Mead Platt Over Mitchell Brook Strengthening of concrete box culvert
- c. North End Road West Review of old design
- d. The Rise Stabilisation of clay embankment to LUL bridge
- e. Twybridge Way (1) Over Canal Feeder Lining of structure to strengthen carriageway and replacement of parapets.
- f. Twybridge Way (2) Over Canal Feeder Lining of structure to strengthen carriageway and replacement of parapets.

6.0 FINANCIAL IMPLICATIONS

6.1 The table below summarises the proposed allocation of Brent capital funding for highways maintenance during 2014-15:

Schemes	% of capital Budget	Amount (£ 000's)
BRENT CAPITAL – Footways		
Major footway upgrade	44.08%	1,565
Footway upgrades – short sections	4.23%	150
Improvements to the public realm	3.52%	125
Sub-total	51.83%	1,840
BRENT CAPITAL – Carriageways		
Major resurfacing unclassified roads	27.89%	990
Preventative maintenance unclassified roads*	11.83%*	420
Major resurfacing of B&C roads	4.23%	150
Road resurfacing – short sections	4.23%	150
Sub-total	48.17%	1,710
Sub Total Brent Capital	-	3,550
TfL Funding for Principal Roads**	-	1,131
TOTAL HIGHWAY MAINTENANCE PROGRAMME	-	4,681

^{*}around 30% of value of £1.71m carriageway resurfacing programme **value could increase if TfL agree to deliver reserve schemes.

- 6.2 The provisional allocation for 2015/16 assumes the same division of funding. The final programme for 2015/16 and beyond will be confirmed and reported to the Executive for approval during 2014/15.
- 6.3 It is proposed to utilise up to £10k of carriageway maintenance funding and £40k of footway funding to undertake condition surveys during 2014/5. These surveys will assist preparation of a long term asset management programme and confirm the 2015/16 programme.
- 6.4 The proposed Highways Asset Management Plan assumes that a £3.55m Brent capital programme will be approved for 2014/15 and 2015/16, subject to Executive and full Council approval as part of the Budget Setting Report process.
- 6.5 The proposed approach to major road resurfacing and preventative maintenance assumes an approximate percentage split of funding of 70% and 30% respectively.

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Should there be any reduction or increase in the value of the Brent capital programme in future years, it is proposed to apply these approximate percentage splits to revised budgets.

6.6 Any costs associated with implementation of the Highways Asset Management Plan will therefore be contained within existing budgets and any cost savings realised will be used to deliver more on the ground.

7.0 LEGAL IMPLICATIONS

7.1 The Highways Act 1980 places a duty on the council to maintain the public highway under section 41. Breach of this duty can render the council liable to pay compensation if anyone is injured as a result of failure to maintain it. There is also a general power under section 62 to improve highways.

8.0 DIVERSITY IMPLICATIONS

- 8.1 The proposals in this report have been subject to screening there are considered to be no diversity implications that require partial or full assessment. The works proposed under the highways main programme do not have different outcomes for people in terms of race, gender, age, sexuality or belief.
- 8.2 In addition, the design criteria used in all highway work does take note of the special requirements of various disabilities. These will take the form of levels and grades associated with wheelchair users, for example road crossing points, and for partially sighted / blind persons at crossing facilities. The highway standards employed are nationally recognised by such bodies as the Department for Transport. This programme of works continues the upgrade of disabled crossing facilities at junctions which were not constructed to modern day standards. All new junctions are designed to be compliant at the time of construction.
- 8.3 Strengthened areas of footway are far less susceptible to damage and will therefore aid the movement of pedestrians that may find it difficult to walk on uneven pavements.

BACKGROUND PAPERS

Draft Highways Asset Management Plan V4

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APPENDIX A
Unclassified Roads Resurfaced during 2013/14

Road Name	Ward	Length Metres
Napier Road	KGN	141
Grove Way	TOK	310
The Grove	FRY	234
Kingsley Road	KIL	163
Scudamore Lane	QBY	124
Shelly Gardens	NPK	198
Longfield Avenue	PRE	150
Bruce Road	STN	243
Lewis Crescent	STN	161
Brook Road (NCR to Crest Road)	DOL	409
Bowrons Avenue	WEM	464
Carlyon Road	ALP	706
Preston Hill	BAR/KEN	745
College Road	BPK	368
Blenheim Gardens	MAP	445
Alderton Close	WHP	157
Charterhouse Avenue	SUD	610
Abercorn Gardens	KEN	150
Chevening Road (Chamberlayne Road to Keslake Road)	QPK	425
Dryburgh Gardens	QBY	320
Avenue Road	KGN	151
Belton Road	WLG	250
Harlesden Gardens (Crownhill Road to Park Parade)	HAR	268
Cairnfield Avenue	DLN	550
Thirlmere Gardens	PRE	554
Thinners Sardens	1112	001
Reserve schemes completed during 2013/14		
Mount Road	DOL	180
Cranhurst Road	ALP	289
Dorothy Avenue	MAP	315
Bowater Close	FRY	100
Oakleigh Court	QBY	140
Pebworth Road	NPK	387
Kenmere Gardens	ALP	215
Sandhurst Road	QBY	628
Holycroft Avenue	PRE	166
Short sections of carriageway surfacing		
Dollis Hill Lane (Dudden Hill Lane to o/s 9 Dollis Hill Lane)	DLN	70
Dollis Hill Lane (Randall Avenue to o/s 118 Dollis Hill Lane)	DOL	290
· ·	BPK	225
Leighton Gardens (All Souls Avenue to College Road)		
Coles Green Road (Crest Road to Eyhurst Close)	DOL	120
Kinch Grove (between lamp column no. 1 and house no. 3)	BAR	20
Barnhill Road (The Close to Poplar Grove)	BAR	108
Burton Road (Kilburn High Road to o/s no 4 Burton Road)	KIL	40

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Total length of resurfaced roads	11.59km (7.20 Miles)

Non-Principal Classified B&C Roads Resurfaced during 2013/14

Road Name	Ward	Length Metres
Brondesbury Park (High Road to Sidmouth Road) Chamberlayne Road (sections from All Souls Avenue to	BPK	280
Leighton Gardens)	BPK	270
Total length of resurfaced B and C roads		0.55km
		(0.34 Miles)

Principal A Roads Resurfaced during 2013/14

Road Name	Ward	Length Metres
A404 Harrow Road (Furness Road to Scrubs Lane) A4006 Kingsbury Road (Valley Drive to Roe Green) – plus	KGN	185
560m of footway A4006 Kenton Road (Gayton Road to Hawthorn Road) –	FRY	600
plus 355m of footway A4088 East Lane (Peel Road to Pembroke Road)	KEN	420
A4000 Last Lane (1 eer Noad to 1 embloke Noad)	PRE	270
Total length of resurfaced principal A roads		1.475km (0.90 Miles)

Footway Resurfacing completed in 2013/14

Road Name	Ward	Length Metres
Kempe Road	QPK	900
Lea Gardens	TOK	630
Cecil Avenue	WEM	830
Northwick Avenue	NPK	1200
Greenhill Park	HAR	430
Alverstone Road	BAR	510
Chatsworth Road (Mapesbury Road to Christchurch Ave)	BPK	720
Denzil Road	DNL	590
Verney Street	WHP	560
Sherrick Green Road	DNL	840
Beaumont Avenue	SUD	380
Springfield Mount	FRY	800
Total length of resurfaced footways		8.39km
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APPENDIX B

Proposed Highways Maintenance Programme 2014 to 2016

<u>Unclassified Borough Roads - Major and preventative maintenance programmes</u>

Major resurfacing programme 2014/15	Length (m)	Estimated Cost (£k)	Ward
Heather Park Drive (Highcroft Avenue to The Grange)	425	58	ALP
Mount Road	170	26	DOL
Links Road	220	28	DOL
Milton Avenue (Windrush to end north west)	253	52	STN
The Circle	345	51	DNL
Brenthurst Road	245	31	DNL
Denzil Road	503	65	DNL
Bolton Road	140	18	HAR
Briar Road (Kenyngton Place to Upton Gardens)	210	21	KEN
Northwick Circle	541	71	KEN
Claremont Avenue	200	14	KEN
Clarence Road	109	15	KIL
Exeter Road (Shootup Hill to Mapesbury Road)	473	60	MAP
Meredith Avenue	90	11	MAP
Byron Road (East Lane to Ada Road)	200	20	NPK
Carlton Avenue East (Preston Road to Windermere Avenue)	757	98	PRE
Logan Road	368	36	PRE
Compton Road	245	31	QPK
Tiverton Road (Roundabout at the junction of Wrentham Ave)	60	14	QPK
Twybridge Way	382	38	STN
Conduit Way	589	59	STN
Homefield Road	288	30	SUD
St Michaels Avenue (Vivian Avenue to Harrow Road)	240	37	TOK
Chalfont Avenue (Oakington Manor Drive to Vivian Avenue)	260	27	TOK
Clifton Avenue	240	32	WEM
Jesmond Avenue	280	37	WEM
Totals	7.83	980	
(miles)	(4.86)		
Preventative Maintenance Programme 2014-15	Length (m)	Estimated Cost (£k)	Ward
Mount Pleasant (Ealing Road to Woodstock Road)	390	35	ALP
Barn Way	625	34	BAR
Alverstone Road	247	24	BPK
Hanover Road (Sidmouth Rd to o/s property numbers 170/172)	53	4	BPK
Randall Avenue (NCR toTanfield Avenue)	400	36	DOL
Cobbold Road (Franklin Road to Roundwood Road)	252	20	DNL
Crundale Avenue	483	32	FRY
Harlesden Road (Longstone Avenue to Robson Avenue)	480	43	KGN/ WLG

Draycott Avenue (Wellacre Road to Woodcock Dell Avenue)	873	61	KEN
The Ridgeway (Draycott Avenue (west) to end)	45	4	KEN
Cedar Road	180	14	MAP
St.Michaels Road	189	14	MAP
Oldborough Road	465	24	NPK
Melrose Gardens	315	15	QBK
Wyborne Way (NCR to Sunny Crescent)	327	17	STN
Repton Avenue	201	11	SUD
Parkfields Avenue	156	11	WHP
The Rise	217	10	WHP
St.James Gardens (Ealing Road to corner No 7)	75	4	WEM
Glebe Road	128	7	WLG
Totals	6.10	420	
(miles)	(3.79)		

Non-Principal B & C Roads - Major maintenance programme 2014/15

Carriageway Resurfacing B & C Roads	Length (m)	Estimated Cost (£k)	Ward
Sidmouth Road (Mount Pleasant to Chamberlayne Road)	295	50	BPK
Pound Lane (exit from bus depot to Harlesden Road)	328	47	WLG
Wrentham Avenue	366	53	QPK
Totals	0.99	150	
(miles)	(0.61)		

Major resurfacing of short sections 2014/15

Short Sections of Carriageway Resurfacing	Length (m)	Budget (£k)	Ward
Sites to be prioritised during financial year	TBD	150	-

Principal (A Road) Maintenance Programme 2014/15 - funded by TfL

Principal (A Road) Maintenance Programme 2014/15	Length (m)	Estimated Cost (£k)	Ward
A407 High Road Willesden (Dudden Hill Lane to Church Rd)	752	236	WLG/DNL
A4088 Forty Avenue (East Lane to Talisman Way)	296	92	PRE
A404 Craven Park Road (Tunley Road to St.Marys Road)	247	98	HAR
A4089 Ealing Road (Bowrons Avenue to Douglas Avenue)	217	85	WEM/ ALP
A404 Hillside (Sunny Cresent to Brentfield Road) with associated footway upgrade on Hillside of 1.19km (0.73miles)	824	620	STN
Totals	2.33	1,131	
(miles)	(1.45)		
Reserve schemes (if additional TfL funding provided)			
A4003 Willesden Lane (Dyne Road to Kilburn High Road)	698	203	KIL
A404 High Road Wembley (Park Lane to Cecil Avenue)	188	75	WEM

Note: programme identified through the results of a London-wide SCANNER survey and to be funded by TfL. All schemes are subject to co-ordination with internal and external agencies.

Footway Improvements to be funded by Brent Capital Budget in 2014/15

Footway resurfacing 2014/15	Length (m)	Estimated Cost (£k)	Ward
*Garden Way	385	138	STN
*Donnington Road	870	221	KEN
*Chapter Road (Balmoral Road to Deacon Road)	896	241	WLG
*Elmstead Avenue (Preston Road to Princess Avenue)	521	132	PRE
*Odessa Road	300	89	KGN
*Hampton Rise	120	32	KEN
*Cedar Road	338	85	MAP
*Dalmeny Close	300	47	SUD
*Thurlby Road	772	192	WEM
Salusbury Road (Harvist Road to Windermere Avenue)	734	280	QPK
Kinch Grove	378	68	BAR
Totals	5.61km	1525	
(miles)	(3.49)		

^{*} reserve scheme from 2013/14 programme

All schemes subject to co-ordination with internal and external agencies.

Other footway improvements 2014/15

Footway Short-section Improvements	Length (m)	Budget (£k)	Ward
Sites to be prioritised in-year	TBD	150	-

Public Realm improvements 2014/15

Public Realm Improvements	Length (m)	Budget (£k)	Ward
Sites to be prioritised in-year	TBD	125	-

Provisional Highways Maintenance Programme 2015/16

<u>Unclassified Borough Roads - Major and preventative maintenance programmes</u>

Major resurfacing programme 2015/16	Length (m)	Estimated Cost (£k)	Ward
Colwyn Road	54	10	DOL
Dawpool Road (Heather Road to Brook Road)	231	29	DOL
Hardinge Road	490	64	BPK
Mapesbury Road (Willesden Lane to bridge)	373	55	BPK
Lydford Road	895	128	BPK
Garnet Road	165	22	HAR
Upton Gardens (Briar Road to Northwick Circle)	245	29	KEN
Donnington Road	438	59	KEN
Cranleigh Gardens	330	43	KEN
Victoria Road	700	95	KIL
James Avenue	103	14	MAP
Grosvenor Gardens	180	24	MAP
Shelley Gardens	210	25	NPK
Kingsway	385	51	PRE
Holmstall Avenue	420	57	QBY
Wimborne Drive	223	29	QBY
Limesdale Gardens	345	44	QBY
Girton Avenue	515	67	QBY
Capitol Way	763	107	QBY
Crouch Road	220	28	STN
Totals	7.28	980	
Reserve Schemes 2015/16			
Park Chase	410	42	TOK
Fourth Way	380	53	TOK
Vivian Avenue (Chalfont Avenue to Monks Park)	228	30	TOK
Verney Street	305	39	WHP
Elspeth Road	95	11	WEM
Totals	1.73	215	
Totals (not including reserve schemes)	7.28km	980	
(miles)	(4.52)		
Preventative Maintenance Programme 2015-16	Length (m)	Estimated Cost (£k)	Ward
Barn Rise	703	42	BAR
Belvedere Way	420	31	BAR
Kingsmere Park	307	17	BAR
Christchurch Avenue (Willesden Lane to Brondesbury Park)	215	20	BRO
Rosecroft Gardens	105	6	DOL
Bush Grove	493	36	FRY
Old Kenton Lane	540	30	FRY
Summit Close	140	8	FRY

Wakemans Hill Avenue	608	58	FRY
Longstone Avenue (Drayton Road to Harlesden Road)	378	35	KGN/WL G
Southwell Road	96	7	KEN
Mapesbury Road (Teignmouth Road to Shoot Up Hill)	196	19	MAP
Montpelier Rise	420	22	PRE
Barretts Green Road (Central Way to Disraeli Road)	215	20	STN
The Croft	260	15	SUD
Village Way	420	25	WHP
Napier Road	227	16	WEM
Chaplin Road (Belton Road [north] to Villiers Road)	171	13	WLG
Totals	5.91	420	
Reserve schemes 2015-16			
Grendon Gardens	375	18	BAR
Kinch Grove	125	9	BAR
Lewgars Avenue	250	19	FRY
Totals	0.75	46	
Totals (not including reserve schemes)	5.91km	420	
(miles)	(3.67)		

Non-Principal B & C Roads - Major maintenance programme 2015/16

Carriageway Resurfacing	Length (m)	Estimated Cost (£k)	Ward
Sites to be prioritised based on survey results in 2014/15	TBD	150	-

Major resurfacing of short sections 2015/16

Short Sections of Carriageway Resurfacing	Length (m)	Estimated Budget (£k)	Ward
Sites to be prioritised during 2015/16	TBD	150	-

Principal (A Road) Maintenance Programme 2015/16 - funded by TfL

2015/16 Schemes will be identified by the results of a London-Wide Scanner Survey and to be funded by TfL. All schemes are subject to co-ordination with internal and external agencies.

Footway Improvements to be funded by Brent Capital Budget in 2015/16

Footway resurfacing 2015/16	Length (m)	Estimated Cost (£k)	Ward
Wembley Hill Road (Wembley Hill Road to Beechcroft Gardens)	610	181	PRE
Roe Green	840	247	FRY
Grasmere Avenue (College Road to Preston Road)	926	252	PRE
Cranleigh Gardens	600	152	KEN
Hardinge Road	966	242	BPK
Harrowdene Road (East Lane to Barley Close)	616	180	SUD
Riffel Road	724	197	DNL
Robson Avenue (West side only)	320	74	WLG
		1525	
Reserve schemes			
Regal Way (Westward Way to Shaftesbury Avenue)	958	264	KEN
Chandos Road	460	126	DNL
		390	
Totals (not including reserve schemes)	5.60km	1525	
(miles)	(3.48)		

Other footway improvements 2015/16

Footway Improvements	Length (m)	Estimated Cost (£k)	Ward
Sites to be prioritised during 2014/15	TBD	150	-

Public Realm improvements 2015/16

Public Realm Improvements	Length (m)	Estimated Budget (£k)	Ward
Sites to be prioritised during 2014/15	TBD	150	TBD

WARD ABBREVIATIONS

WARD	ABBREVIATION
- ALPERTON	ALP
- BARNHILL	BAR
- BRONDESBURY PARK	BPK
- DOLLIS HILL	DOL
- DUDDEN HILL	DNL
- FRYENT	FRY
- HARLESDEN	HAR
- KENSAL GREEN	KGN
- KENTON	KEN
- KILBURN	KIL
- MAPESBURY	MAP
- NORTHWICK PARK	NPK
- PRESTON	PRE
- QUEENS PARK	QPK
- QUEENSBURY	QBY
- STONEBRIDGE	STN
- SUDBURY	SUD
- TOKYNGTON	TOK
- WEMBLEY CENTRAL	WEM
- WELSH HARP	WHP
WILLESDEN GREEN	WLG

APPENDIX C

MAP OF PROPOSED CARRIAGEWAY AND FOOTWAY RESURFACING PROGRAMME 2014-16

APPENDIX D

MAP OF PRINCIPAL AND OTHER CLASSIFIED ROAD NETWORK IN BRENT

APPENDIX E

DRAFT HIGHWAYS ASSET MANAGEMENT PLAN