

Appendix 3 Inventory, Data, Costs and Valuations

QUANTITIES & INVENTORY DATA			31/03/2016
ASSET TYPE & GROUP	QUANTITY		COMMENTS/ASSUMPTIONS/STORAGE
CARRIAGEWAYS			
	Length (km)	Width (m)	
Principal Urban	156.3	8.9	High accuracy/completeness. Road widths are measured at 10 metre cross sections as part of PMS and mean figures used for WGA calculations. Principal and Classified road lengths are taken from the PMS network. Unclassified road lengths are taken from the NSG network, but the rural/urban split is based on the proportions of the rural/urban split in PMS for unclassified roads. This gives us the most accurate figure for road length in the different environments. Condition is also held in PMS
Principal Rural	414.9	7.9	
Classified 'B' Urban	103.3	7.8	
Classified 'B' Rural	302.6	6.6	
Classified 'C' Urban	261.6	7.2	
Classified 'C' Rural	1294.4	5.3	
Unclassified Urban	1272	6.7	
Unclassified Rural	1622.0	4.2	
FOOTWAYS AND CYCLETRACKS			
High Category Footways	116.8 km		High accuracy/completeness for high category footways.
Other Footways	3518 km		This figure is an estimate, but FNS data has been collected on most of the network. Class 6 roads (which are generally alleys or estate footpaths) have been included in this figure.
Segregated Cycletracks	312 km		Estimated figures based on information currently held locally
DRAINAGE			
Gullies	115000 no.		Estimated figures, for grips/manholes, based on information currently held in EXOR (from survey in 1990s). The Gully information has been recently (2015) collected by the drainage Contractors EEG on behalf of Amey.
Balancing Pond	24 no.		
Catchpit	1 no.		
Counterfort Drain	400 m		
Culvert	2603 m		
Filter Drain	12004 m		
Grip	121856 m		
Manhole	93363 no.		
Piped Grip	5181 m		
STRUCTURES			
Bridges (Span > 1.5m)	788 no.		High accuracy/completeness. Information stored in CONFIRM.
Culverts (1.0m < Span < 1.5m)	118 no.		
Pedestrian Subways	16 no.		
Footbridges	55 no.		
Non Highway Bridges	16 no.		Location and some dimensional information held in CONFIRM, but not a comprehensive register
Retaining Walls (Height >1.5m)	308 no		
HIGHWAY LIGHTING			
Lighting Columns up to 6m	41740 no.		High accuracy/completeness. Information stored in Mayrise.
Lighting Columns up to 8m	4205 no.		
Lighting Columns up to 10m	6488 no.		
Lighting Columns up to 12m	738 no.		
Other units (e.g.bracketed)	7388 no.		
Subway Units	148 no.		
Heritage Columns	601 no.		
High Mast Columns	16 no.		
Low level lighting units	61 no.		
Feeder Pillars (small)	500 no.		
Feeder Pillars (Medium)	250 no.		

Centre refuge lighting units	45	
Illuminated Bollards	1939 no.	
Illuminated Signs	4177 no.	
Bollards (other)	1010 no.	
STREET FURNITURE & Other Assets		
Non-illuminated Signs	106286 no.	<p>CIPFA street furniture model for Hertfordshire used to generate figures for signs. Bollards and Grit bin data needs to be reviewed for next year.</p> <p>Figures for Safety fencing and guard rail information updated in 2015 following survey and combining with previously held inventory data. Cattle grid data added in 2016. All held in Confirm.</p> <p>Figures for bus stops and shelters provided by Integrated Transport Unit. (Weather system included here)</p>
PROW signs (on street)	9392 no.	
Non-illuminated Bollards	-	
Safety Fencing	58838 m	
Pedestrian Guardrail	36931 m	
Bus Shelters	111 no.	
Bus Stops	6716 no.	
Trees	29983 no.	
Cattle Grids	86	
Grit Bins	-	
Weather Station system	1	
TRAFFIC MANAGEMENT SYSTEMS		
Traffic Signals	180 locations 623 approaches	<p>High accuracy/completeness. Information stored in Fault Management System and various Excel spreadsheets.</p>
Pedestrian Signals	62 no.	
Pelican Crossings	100 no.	
Toucan Crossings	35 no.	
Pegasus Crossings	1 no.	
Zebra Crossings	231 locations	
School crossings (signed)	230 locations	
Vehicle Activated Signs	161 no.	
Wig Wag signs	4 no.	
Car Park / Variable Message Signs	6 no.	
Carpark Monitoring systems	8 no.	
VMS instation	1 no.	
UTC system	1 no.	
CCTV Cameras	48 no.	
ANPR Cameras	9 no.	
Pay & Display machines		
Rising Bollards/Bus Gates	2 no.	
Real Time Passenger Information (includes system, displays and remote comms)	1 system	
ANCILLARY ASSETS		
PROW Network (Footpaths, Bridleways and other rights of way)	5646km	High accuracy/completeness for PROW network and assets. Information held in CONFIRM.
PROW Signposts	10070 no	
PROW Gates	11009 no.	
PROW Stiles	9395 no.	
PROW Flights of Steps	1099 no.	
PROW Boardwalks	76 no.	
PROW Bridges	2525 no.	Includes privately owned bridges
LAND		
Highway Verges (Urban)	2169772m ²	<p>Verge area calculated using default rates in HAMFIG Toolkit,(Urban width 1.21m, Rural width 1.61m)</p>
Highway Verges (Rural)	5850740m ²	
Carriageway Land (Urban)	18838317m ²	
Carriageway Land (Rural)	21522810m ²	

GROSS REPLACEMENT COST (GRC) VALUATION used for Whole of Government Accounts

ASSET TYPE & GROUP	QUANTITY	UNIT COST	GRC	COMMENTS
CARRIAGEWAYS				
Principal Urban	1,391,070 m ²	CIPFA rates	£219,028,000	These values include the inflation factor and the regional factor provided by CIPFA in the 2015/16 HAMFIG toolkit. The values for linear items (kerbing, lining etc.) are generated within the toolkit.
Principal Rural	3,277,710 m ²		£408,687,000	
Classified 'B' Urban	805,740 m ²		£118,305,000	
Classified 'B' Rural	1,997,160 m ²		£231,521,000	
Classified 'C' Urban	1,883,520 m ²		£228,245,000	
Classified 'C' Rural	6,860,320 m ²		£634,576,000	
Unclassified Urban	8,522,400 m ²		£953,734,000	
Unclassified Rural	6,812,820 m ²		£590,362,000	
Reduction for drainage (see below)			-£245,456,476	
TOTAL			£4,907,148,524	
FOOTWAYS AND CYCLETRACKS				
High Category Footways	116.8 km	CIPFA rates	£32,541,000	These figures come from the 2015/16 CIPFA Carriageways Toolkit
Other Footways	3518 km		£578,492,000	
Segregated Cycletracks	312 km		£37,257,000	
TOTAL			£648,290,000	
DRAINAGE SYSTEMS				
Gullies	115000 no.	£650	£74,750,000	For WGA purposes, drainage is included in the carriageway rate. For the purposes of this calculation, estimated unit rates are provided by the Drainage & Construction Team (locally determined)
Balancing Pond	24 no.	£10000	£240,000	
Catchpit	1 no.	£662.40	£662	
Counterfort Drain	400 m	£100/m	£40,000	
Culvert	2603 m	£225/m	£585,675	
Filter Drain	12004 m	£100/m	£1,200,400	
Grip	121856 m	£0.56/m	£68,239	
Manhole	93363 no.	£1800	£168,053,400	
Piped Grip	5181 m	£100/m	£518,100	
TOTAL			£245,456,476	
STRUCTURES				
Bridges (Span > 1.5m)	807 no.	CIPFA rates	£507,369,180	These figures are based on the CIPFA rates issued with the Structures Toolkit for the 2015/16 WGA return..
Culverts (1.0m < Span > 1.5m)	103 no.		£14,272,015	
Footbridges	55 no.		£14,611,066	
Pedestrian Subways	16 no.		£5,653,287	
Non Highway Bridges	16 no.		n/a	
Retaining Walls (Height >1.5m)	-		£16,362,788	
TOTAL			£558,268,376	
HIGHWAY LIGHTING				
Lighting Columns up to 6m	41740 no.	£1054.34	£44,008,151	Accurate 2015/16 local rates used, provided by Street Lighting team.
Lighting Columns up to 8m	4205 no.	£1150.97	£4,839,829	
Lighting Columns up to 10m	6488 no.	£1267.75	£8,225,162	
Lighting Columns up to 12m	738 no.	1369	£1,010,322	
Other units (e.g.bracketed)	7388 no.	546.8	£4,039,758	
Subway Units	148 no.	1006.83	£149,010	
Heritage Columns	601 no.	1693.26	£1,017,649	
High Mast Columns	16 no.	20000	£320,000	
Low level lighting units	61 no.	1054.34	£64,315	
Feeder Pillars (small)	500 no.	818.13	£409,065	
Feeder Pillars (Medium)	250 no.	918.13	£229,532	
Centre refuge lighting units	45	660.17	£29,708	

Illuminated Bollards	1939 no.	578.92	£1,122,526	
Illuminated Signs	4177 no.	986.27	£4,119,650	
Bollards (other)	1010 no.	289.27	£292,163	
TOTAL			£69,876,840	
STREET FURNITURE & Other ASSETS				
Non-illuminated Signs	106286 no.	£150.0	£15,942,900	Rates provided from current contract rates. Trees not included in asset valuation, as not covered by HNA Code (6.6.8.7)
PROW signs (on street)	9392 no.	£var	£650,573	
Non-illuminated Bollards	-	-	-	
Safety Fencing	58838 m	£var	£14,022,720	
Pedestrian Guardrail	36931 m	£var	£3,962,518	
Bus Shelters	111 no.	£12000	£1,332,000	
Bus Stops	6716 no.	£125.0	839,500	
Trees	29983 no.	-	-	
Cattle Grids	86	£3,000	£258,000	
Grit Bins	-	-	-	
Weather Station system	1		180000	
TOTAL			£37,188,211	
TRAFFIC MANAGEMENT SYSTEMS				
Traffic Signals	180 locations 623 approaches	£35000/ approach	£21,805,000	For WGA purposes, the CIPFA toolkit is used, junctions are valued on a locally determined rate per approach, rather than by component. System costs are based on system purchase price.
Puffin Crossings	62 no.	£55000	£3,410,000	
Pelican Crossings	100 no.	£45000	£4,500,000	
Toucan Crossings	35 no.	£55000	£1,925,000	
Pegasus Crossings	1 no.	£75000	£75,000	
Zebra Crossings	231 locations	£1,119.22	£258,539	
School crossings (signed)	230 locations	£1,426.62	£328,122	
Vehicle Activated Signs	161 no.	£5000	£805,000	
Wig Wag sites	4 no.	£40,000	£160,000	
CarPark/Variable Message Signs	6 no.	£25000	£150,000	
Carpark Monitoring systems	8 no.	£5000	£40,000	
VMS instation	1 no.	£5000	£5,000	
UTC system	1 no.	£130000	£130,000	
CCTV Cameras	48 no.	£25000	£1,200,000	
ANPR Cameras	9 no.	£8000	£72,000	
Pay & Display machines	198 no.	£3500	£693,000	
Rising Bollards/Bus Gates	2 no.	£12000	£24,000	
Real Time Passenger Information (includes system, displays and remote comms)	1 system		£1,070,000	
TOTAL			£37,090,661	
ANCILLARY ASSETS				
PROW Network (Footpaths, Bridleways and other rights of way)	5646km	£20/m	£11,292,000	For the purposes of this calculation, an assumption is made that 15% of PROW footways are surfaced; rates used are estimated. This figure is not used for WGA, but is included in the figure below.
PROW Signposts	10070 no	£50	£503,500	
PROW Gates	11009 no.	£100	£1,100,900	
PROW Stiles	9395 no.	£100	£939,500	
PROW Flights of Steps	1099 no.	£100	£109,900	
PROW Boardwalks	76 no.	£200	£15,200	
PROW Bridges	2525 no.	£1000	£2,525,000	
TOTAL			£16,486,000	

LAND				
Highway Verges (Urban)	2169772m ²	£110/m ²	£238,674,920,	Values calculated using CIPFA default regional rates and HAMFIG toolkit
Highway Verges (Rural)	5850740m ²	£2.10/ m ²	£12,286,554	
Carriageway Land (Urban)	18838317m ²	£110/m ²	£2,072,214,870	
Carriageway Land (Rural)	21522810m ²	£2.10/ m ²	£45,197,901	
TOTAL			£2,368,374,245	
GROSS REPLACEMENT COST				
TOTAL		£6,519,805,088	Total including PROW but not Land	
WGA Total		£8,871,693,333	Total excl PROW, including Land	

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DEPRECIATED REPLACEMENT COST (DRC) VALUATION		WGA return 31/3/2016
ASSET TYPE & GROUP	DRC	IN YEAR DEPRECIATION
CARRIAGEWAYS		
The DRC for carriageways is calculated within the UKPMS system. The linear items (drainage, white lining, etc) are not considered to depreciate (in financial terms only) in line with the HNA Code of Practice	£4,902,942,000	
FOOTWAYS AND CYCLETRACKS		
The DRC for footways and cycletracks is calculated using the HAMFIG toolkit, and condition results from the most recent FNS surveys. The lifecycle for footways is considered over a 40 year period, and treatment costs are based on average scheme costs – in line with HNA Code of Practice	£505,400,160	£15,761,180
DRAINAGE SYSTEMS		
Included in Carriageways	-	-
STRUCTURES		
The DRC for structures is calculated using the HAMFIG Structures Toolkit, by inputting the element by element condition for each structure, based on its most recent inspection. As we don't inspect retaining walls on a proactive, element by element basis, we apply the average depreciation for other structures to get a total figure.	£375,129,818	£6,699,858
HIGHWAY LIGHTING		
The DRC for street lighting is calculated using the HAMFIG toolkit. Average lifespans and average stock ages for each lighting type, are used.	£30,526,500	£2,584,880
STREET FURNITURE & Other ASSETS		
The DRC for street furniture is calculated using the HAMFIG toolkit. Estimated average lifespans and stock ages are used for each asset	£13,300,000	£870,000
TRAFFIC MANAGEMENT SYSTEMS		
The DRC for traffic management systems is calculated using the HAMFIG toolkit. Estimated average lifespans and stock ages are used for each asset	£9,270,700	£2,231,560
ANCILLARY ASSETS		
These assets are not included in the DRC calculation	-	-
LAND		
These assets are not included in the DRC calculation	-	-
DEPRECIATED REPLACEMENT COST	£5,836,569,178	
TOTAL IN YEAR DEPRECIATION		£28,147,478

Accruals and additions in year		increase	reduction
Carriageway	13744m2	£15,849,000	
Footway	1937m2	£381,000	
Cycleway	1369m2		
Structures	1 no.	£253,000	
Disposals in year			
Structures (filled in/removed)	1 no.		£579,000

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