Powys County Council

Highways Asset Management Plan

Annex 9 - Background Data

June 2019

CSSW Risk Based Approach to Highway Management.
Rationale Behind the Approach.

3. Risk Data Review

Narative

As part of the development process CSSW recommend a 2 year review. A high level "Risk Data Summary" is included in the CSSW docmentation. This Data Summary has been populated for Powys.

Risk Data Summary

		Enter Relevant Data							Consider what it may mean	Record Observation on risks
Asset	Category	Data	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	Trend	Interpretation	Observations
Carriageways	Safety	Number of Cat 1 Defects	522	606	501	553	tbc	Stable within bounds	2018/2019 data needed to see if there is a recent upward trend or if values fluctuating within reasonable limits.	Average 553, fluctuating by 10% around average.
		% of A Roads in poor condition (red, scanner)	3.3%	2.8%	3.5%	3.9%	3.9%	Deteriorating condition	Stable in last two years. Levels still respectable.	Condition held over last two years.
		% of B Roads in poor condition (red, scanner)	6.0%	5.2%	5.5%	5.7%	5.3%	Improvement in last year, returning to previous levels	as above	Condition holding due to capital nvestment in recent years
		% of C Roads in poor condition (red, scanner)	27.1%	25.1%	24.4%	23.0%	21.6%	Improving condition	as above	Improving condition due to capital investment in recent years but need to monitor as data collected on rolling basis so could be subject to signifiant in-year variation.
		% of U Roads in poor condition (red, scanner) and or visual	Data Not Collected					N/A	No cuurent data. Perception that condition no better than C roads.	Survey c2,100km approx £55k, £11k p.a. based on 5 year cycle. Looking to introduce coarse visual assessment as part of inspectons.
		KSI (where road condition was a contributory factor)	46	57	52	53	40	Significant improvement last year	Too early to say if last years figures represent a downward trend.	Consistent until last year
	Maintenance	Number of Cat 2 defects recorded	5,092	5,218	4,659	4,549	tbc	Consistent in last two years of available data	Numbers consistent over last two years. Await latest data to see if continuing.	Pleasing trend if latest figures are similar. Need to consider if harder line being taken on recording.
		Number of Cat 2 defects not repaired (repair backlog)	67	105	399	983	tbc	Significantly increasing trend		Need to consider if increaing trend or if data not being entered correctly.
		(% of roads to be considered for maintenance A roads (red and amber)	30.3%	29.6%	32.0%	33.7%	32.6%	Steady		Going forward Wales data will be reported at this level enabling better comparisin of perfrmance against Welsh average and peers.
		(% of roads to be considered for maintenance B roads (red and amber)	35.6%	34.6%	36.1%	36.9%	34.8%	Steady		
		(% of roads to be considered for maintenance C roads (red and amber)	68.6%	67.2%	67.7%	67.2%	66.3%	Nominal improvement		
		(% of roads to be considered for maintenance U roads (red and amber)	Data Not Collected					N/A	No cuurent data. Perception that condition no better than C roads.	Survey c2,100km approx £55k, £11k p.a. based on 5 year cycle. Looking to introduce coarse visual assessment as part of inspectons.
	Financial Loss	Value of payout of 3rd party claims	79,858	45,889	32,884	26,529	18,704	Reducing settlement value		
		Number of claims received	113	109	74	107	168	Increing claims		
		Number of claims lost due to not adhering to inspection regime	8	18	1	0	0	Consistent	Number dropped-off signifiantly since 14/15.	
		Number of claims lost for other reasons	12	19	21	36	39	Improved last year in % terms	Potential lag in submitting and settling claims may render comparison of recent years invalid at this time.	
				34%	30%	34%	23%			

CSSW Risk Based Approach to Highway Management
Rationale Behind the Approach
4. Establishing an Inspection Regime - Baseline Inspection Frequency

Narative						2016 Wales (PCC amended)	2016 Powys	2017 Wales	2017 Powys
As part of the development process CSSW recommed a 2 year review. A high level "Risk Data Summary" is included in the CSSW docmentation. This Data Summary has been populated for Powys.	2016 Wales exp document								
	4,921	A			A	4,921	207	4,556	201
	2,257	B			B	2,257	Individual data		
	208	C			C	208			
	9.2%	D = C / B			D = C / A	4.2%			
	454	E = A x D			E = A x D	208	9	<< pro-rata >>	9
	18,200,000,000	F			F	18,200,000,000	777,231,000	17,910,000,000	780,500,000
	40,131,579	G = F / E	cle km travelled		G = F / E	87,500,000	86,359,000	93,004,058.47	86,722,222
				Surfaced roads km		34,684	5,070	34,796	5,071
				Accidents per 100km		14	4	13	4

Comparator Rates - Accidents, Road Length, Traffic Volume			2014	2015	2016	2017	2018	Average last 5 years
Accidents and Road Length								
	X =	X	1,000	1,000	1,000	1,000	1,000	1,000
Injury Accidents - KSI per "X" km surfaced road								
Wales - Trunk Roads incl Motorway		=AC/B	132	137	121	123	92	121
Wales - excl Trunk Roads		=AE/C	27	24	23	22	18	23
Powys - excl Trunk Roads		=AG/K	10	9	10	11	10	10
Powys as % of Wales (excl. Trunk Roads)			37%	39%	45%	50%	56%	45%
Injury Accidents - Excluding KSI per "X" km of surfaced road								
Wales - Trunk Roads incl Motorway		=AD/B	490	439	384	353	256	384
Wales - excl Trunk Roads		=AF/C	120	114	100	91	58	97
Powys - excl Trunk Roads		=AH/K	31	35	30	29	20	29
Powys as % of Wales (excl. Trunk Roads)			26%	30%	30%	32%	34%	30%
Injury Accidents - All classes per "X" km surfaced road								
Wales - Trunk Roads incl Motorway		=(AC+AD)/B	622	576	505	476	348	505
Wales - excl Trunk Roads		=(AE+AF)/C	147	138	123	113	76	119
Powys - excl Trunk Roads		=(AG+AH)/K	41	44	41	40	30	39
Powys as % of Wales (excl. Trunk Roads)			28%	32%	33%	35%	39%	33%

Comparator Rates - Accidents, Road Length, Traffic Volume

		2014	2015	2016	2017	2018	Average last 5 years

Accidents and Traffic Volume / Road Length

Injury Accidents - KSI by traffic volume and surfaced road length

		2014	2015	2016	2017	2018	Average last 5 years
Wales - Trunk Roads incl Motorway	=(AC*1000)/BA	37	38	32	32	24	33
Wales - excl Trunk Roads	=(AE*1000)/BB	1,636	1,476	1,394	1,328	1,073	1,381
Powys - excl Trunk Roads	=(AG*1000)/BC	168	158	168	173	157	165
Powys as % of Wales (excl. Trunk Roads)		10%	11%	12%	13%	15%	12%

Injury Accidents - Excluding KSI by traffic volume and surfaced road length

		2014	2015	2016	2017	2018	Average last 5 years
Wales - Trunk Roads incl Motorway	=(AD*1000)/BA	138	121	102	92	67	103
Wales - excl Trunk Roads	=(AF*1000)/BB	7,365	6,957	5,972	5,569	3,572	5,883
Powys - excl Trunk Roads	=(AH*1000)/BC	532	579	489	460	321	475
Powys as % of Wales (excl. Trunk Roads)		7%	8%	8%	8%	9%	8%

Injury Accidents - All accidents by traffic volume and surfaced road length

		2014	2015	2016	2017	2018	Average last 5 years
Wales - Trunk Roads incl Motorway		175	159	134	125	91	136
Wales - excl Trunk Roads		9,001	8,433	7,366	6,897	4,645	7,264
Powys - excl Trunk Roads		700	737	658	633	478	640
Powys as % of Wales (excl. Trunk Roads)		8%	9%	9%	9%	10%	9%

Traffic Volume - Base data

Traffic Volume by surfaced road length

$$= \frac{\text{Volume of traffic per } \mathbf{Y} \text{ vehicle kilometres}}{\text{Surfaced Road Length}}$$

		2014	2015	2016	2017	2018	Average last 5 years
Y =		1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Wales - Trunk Roads incl Motorway	BA=AJ/B	6,061.28	6,195.84	6,441.57	6,534.99	6,534.99	6,353.74
Wales - excl Trunk Roads	BB=AK/C	534.70	540.64	550.76	541.43	541.43	541.80
Powys - excl Trunk Roads	BC=AL/K	297.06	303.75	314.77	317.29	317.88	310.15
Powys as % of Wales (excl. Trunk Roads)		56%	56%	57%	59%	59%	57%

Comparator Rates - Accidents, Road Length, Traffic Volume		2014	2015	2016	2017	2018	Average last 5 years

Road Length - Base Data

Surfaced Road Length km   **Assumed**

Wales (km)		2014-15	2015-16	2016-17	2017-18	2018-19	5 Yr Avg
Wales Total (km)	A	**34,498**	**34,644**	**34,684**	**34,796**	**34,796**	34,683
Trunk (M + A)	B	1,709	1,709	1,709	1,709	1,709	1,709
County (A + B + C + U)	C	32,789	32,935	32,975	33,086	33,086	32,974
Motorway (km)	D	133	133	133	133	133	133
A Trunk (km)	E	1,576	1,576	1,576	1,576	1,576	1,576
A County (km)	F	2,751	2,753	2,760	2,763	2,763	2,758
B road (km)	G	3,017	3,021	3,023	3,022	3,022	3,021
C road (km)	H	9,800	9,815	9,821	9,832	9,832	9,820
Minor surfaced roads (km)	I	17,221	17,347	17,371	17,469	17,469	17,375

                                                                                           Assumed

Powys (km)		2014-15	2015-16	2016-17	2017-18	2018-19	5 Yr Avg
Powys Total incl Trunk (km)	J	5,500	5,501	5,501	5,502	5,502	5,501
Powys Total excl Trunk(km)	K	5,070	5,070	5,070	5,071	5,071	5,070
Motorway (km)	L	-	-	-	-	-	-
A Trunk (km)	M	431	431	431	431	431	431
A County (km)	N	238	238	238	238	238	238
B road (km)	O	604	604	604	604	604	604
C road (km)	P	2,102	2,102	2,102	2,102	2,102	2,102
Minor surfaced roads (km)	Q	2,125	2,126	2,126	2,127	2,127	2,126

Surfaced Road Length %

Wales % by Road Type		2014-15	2015-16	2016-17	2017-18
Wales Total (%)		100%	100%	100%	100%
Motorway (%)		0.39%	0.38%	0.38%	0.38%
A Trunk (%)		4.57%	4.55%	4.54%	4.53%
A County (%)		7.97%	7.95%	7.96%	7.94%
B road (%)		8.74%	8.72%	8.71%	8.69%
C road (%)		28.41%	28.33%	28.32%	28.26%
Minor surfaced roads (%)		49.92%	50.07%	50.08%	50.21%

Comparator Rates - Accidents, Road Length, Traffic Volume		2014	2015	2016	2017	2018	Average last 5 years

Powys % by Road Type		2014-15	2015-16	2016-17	2017-18
Powys Total (%)		100%	100%	100%	100%
Motorway (%)		0.00%	0.00%	0.00%	0.00%
A Trunk (%)		7.83%	7.83%	7.83%	7.83%
A County (%)		4.33%	4.33%	4.33%	4.33%
B road (%)		10.98%	10.98%	10.98%	10.98%
C road (%)		38.22%	38.21%	38.21%	38.21%
Minor surfaced roads (%)		38.64%	38.65%	38.65%	38.66%

Powys Road as % of Wales		2014-15	2015-16	2016-17	2017-18
Motorway (%)		0.00%	0.00%	0.00%	0.00%
A Trunk (%)		27.32%	27.32%	27.32%	27.32%
A County (%)		8.66%	8.65%	8.63%	8.62%
B road (%)		20.03%	20.00%	19.99%	19.99%
C road (%)		21.45%	21.42%	21.40%	21.38%
Minor surfaced roads (%)		12.34%	12.25%	12.24%	12.17%

Comparator Rates - Accidents, Road Length, Traffic Volume		2014	2015	2016	2017	2018	Average last 5 years

Injury Accidents - Base Data

Inury Accidents Year >>>		2014	2015	2016	2017	2018	5 Yr Avg
Wales Total (Trunk and County)		5,876	5,544	4,921	4,548	3,109	4,800
Wales KSI	AA	1,101	1,032	975	930	738	955
Wales Other	AB	4,775	4,512	3,946	3,618	2,371	3,844
Wales Total (Trunk M+A)		1,063	985	864	814	594	864
Wales KSI	AC	226	234	207	211	157	207
Wales Other	AD	837	751	657	603	437	657
Wales Local Authority Roads Total (County)		4,813	4,559	4,057	3,734	2,515	3,936
County KSI	AE	875	798	768	719	581	748
County Other	AF	3,938	3,761	3,289	3,015	1,934	3,187
Powys Local Authority Total (County)		208	224	207	201	152	198
Powys KSI	AG	50	48	53	55	50	51
Powys Other	AH	158	176	154	146	102	147

KSI = Killed or Seriously Injured (Fatal + Serious)

Other = Slight

Traffic Volume per Year (All Roads: M,A,B,C,U) >>>		2014	2015	2016	2017	2018	
Volume of traffic per billion vehicle kilometres						Assumed	5 Yr Avg
Wales	AI	27.89	28.40	29.17	29.08	29.08	28.73
Wales - Trunk Roads (M+A)	AJ	10.36	10.59	11.01	11.17	11.17	10.86
Wales - Non Trunk Roads (excl M+A)	AK	17.53	17.81	18.16	17.91	17.91	17.87
Powys (Incl. Trunk Roads)	AL	1.51	1.54	1.60	1.61	1.61	1.57

Local Environemnt System Data Analysis

Year(s)	Number of Reports by Group and Detection Method (All Categories)					
2011 to 2018 inclusive	**Internal Inspection**	**Internal Adhoc**	**Internal Total**	**External Report**		**Total**
Road	**19,263**	**4,030**	**23,293**	**15,029**		**38,322**
Pothole	9,194	1,805	10,999	3,455		14,454
General Condition	5,808	1,292	7,100	6,255		13,355
Patching	1,961	461	2,422	434		2,856
Blank	29	15	44	2,687		2,731
Uneven Surface	1,458	167	1,625	619		2,244
Obstruction	310	47	357	964		1,321
Improvement / New	301	173	474	482		956
M/C Patching	152	51	203	95		298
Haunch	50	19	69	38		107
Drainage	**1,292**	**1,870**	**3,162**	**6,060**		**9,222**
Blocked	696	1,084	1,780	3,921		5,701
Broken	298	384	682	523		1,205
Blank	3	9	12	873		885
Improvement / New	152	175	327	444		771
Ditching	127	181	308	223		531
Missing	16	37	53	76		129
Hedges Trees & Verges	**218**	**377**	**595**	**5,480**		**6,075**
Gritting / Winter Maintenance	**23**	**127**	**150**	**4,878**		**5,028**
Salt Heaps and bins	20	106	126	1,965		2,091
(blank)				1,110		1,110
Service Request		10	10	888		898
Carriageway		4	4	586		590
Complaint / Report	3	6	9	273		282
Footway		1	1	33		34
Information				23		23
Footway	**825**	**639**	**1,464**	**1,369**		**2,833**
General Condition	476	371	847	762		1,609
Uneven Surface	263	180	443	220		663
Improvement / New	26	51	77	79		156
(blank)		2	2	147		149
Obstruction	19	12	31	110		141
Pothole	41	23	64	51		115
Flooding	**12**	**145**	**157**	**1,839**		**1,996**
Road	9	138	147	888		1,035
(blank)				595		595
Property	3	7	10	356		366
Road Traffic Accidents / Emergencies		**7**	**7**	**1,923**		**1,930**

Local Environemnt System Data Analysis

Grass Cutting (Highways)	11	10	21		1,190		1,211
Request	4	7	11		862		873
Safety	7	3	10		174		184
(blank)					154		154
Obstructions	6	11	17		1,394		1,411
(blank)		1	1		824		825
Road	3	2	5		390		395
Footway	1	3	4		105		109
Verge	2	5	7		75		82
Road Spillages	3	9	12		1,045		1,057
Grass Cutting (Non Highways)	1	47	48		784		832
PCC Property		11	11		581		592
Private Property	1	26	27		79		106
(blank)					90		90
Schools		10	10		34		44
Weed Control	69	46	115		288		403
Other	56	37	93		200		293
Injurious	12	9	21		48		69
(blank)	1		1		40		41
Bridges	17	42	59		271		330
Fences and Barriers	48	68	116		204		320
Damaged	41	57	98		143		241
Improvement / New	6	11	17		25		42
(blank)	1		1		36		37
Street Furniture - Highways	72	99	171		105		276
Report Damage	48	38	86		49		135
New Request	24	61	85		49		134
(blank)					7		7
Walls & Structures	52	47	99		141		240
Road Works - Planned	12	68	80		23		103
Road Works Active		48	48		34		82
Complaint / Report		36	36		22		58
Service Request		12	12		2		14
Information					6		6
(blank)					4		4
Fly Posting & Graffiti		7	7		60		67
Grand Total	21,924	7,697	29,621		42,117		71,738
	31%	11%	41%		59%		100%

Local Environment System Data Analysis

Number of Reports flagged "Urgent"	2011	2012	2013	2014	2015	2016	2017	2018
Urgent	1,137	2,251	1,827	1,453	1,253	1,003	1,017	694
Urgent %	14%	20%	15%	14%	14%	11%	12%	7%
Not Urgent	6,939	8,834	10,707	8,914	7,700	8,130	7,703	9,399
Total	8,076	11,085	12,534	10,367	8,953	9,133	8,720	10,093

Number of Reports by Priorirty	2011	2012	2013	2014	2015	2016	2017	2018
Within 24 Hours	1,107	1,660	1,236	729	509	604	505	518
Outside 24 Hours (Schedule)	5,021	6,551	7,033	5,572	5,137	5,063	4,210	4,585
Planned	462	332	209	53	30	9	30	1
No Action	1,484	2,507	3,992	3,914	3,165	3,041	2,799	2,060
(blank)	2	35	64	99	112	416	1,176	2,929
Total	8,076	11,085	12,534	10,367	8,953	9,133	8,720	10,093

Number of Reports by Category	2011	2012	2013	2014	2015	2016	2017	2018
Road	3,846	4,510	5,375	5,140	4,521	4,798	4,429	5,703
Drainage	976	1,615	1,357	1,274	1,030	1,119	768	1,083
Hedges Trees & Verges	607	854	835	949	716	757	746	611
Gritting / Winter Maintenance	265	380	1,465	203	382	306	934	1,093
Street Cleaning and Sweeping	518	834	744	614	447	489	533	424
Footway	487	492	509	345	276	329	225	170
Flooding	163	575	313	299	212	192	97	145
Road Traffic Accidents / Emergencies	213	322	374	267	312	194	167	81
Obstructions	131	194	283	183	168	127	178	147
Dog Fouling	33	315	262	152	175	161	125	150
Grass Cutting (Highways)	101	141	156	187	174	214	128	110
Road Spillages	97	159	148	146	152	142	129	84
Grass Cutting (Non Highways)	100	170	144	122	54	93	68	81
Abandoned Vehicles	116	106	108	112	46	2		
Weed Control	40	47	66	62	61	52	34	41
Public Toilets - Cleaning	30	35	135	107	42	6	5	18
Bridges	44	53	37	28	33	35	41	59
Fences and Barriers	31	51	53	37	31	25	47	45
Street Furniture - Highways	87	60	47	22	21	21	15	3
Walls & Structures	28	39	41	33	23	28	22	26
Licensing	6	30	18	44	30	15	2	1
Road Works - Planned	55	31	1	7	7	2		
Markets (info & stall rental)	12	12	15	12	14	12	13	2
Grave Digging	36	38	13					
Road Works Active	42	11	7	3	16	1	1	1
Fly Posting & Graffiti	8	7	21	10	4	5	4	8
No Dog Fouling Sign	2	4	7	9	6	8	9	7
Damages & Personal Injury	2							
Total	8,076	11,085	12,534	10,367	8,953	9,133	8,720	10,093

Local Environemnt System Data Analysis

Year(s) 2011 to 2018 inclusive

	A	B	C	U	Not stated	Total
			Number of Reports by Road Class			
Reports per "X" km where X =	100					
Total Number of Reports	8,508	10,123	17,610	26,950	8,547	71,738
Road length km(surfaced and unsurfaced)	243	606	2,102	2,863		5,814
Average reports per "X" km of Road per annum	438	209	105	118		154
Road	**4,023**	**6,048**	**10,281**	**15,415**	**2,555**	**38,322**
Average reports per "X" km of Road per annum	207	125	61	67		82
General Condition	2,030	1,926	3,829	5,504	66	13,355
Haunch	3	17	46	41	-	107
Improvement / New	169	246	218	297	26	956
M/C Patching	23	45	50	180	-	298
Obstruction	258	242	296	441	84	1,321
Patching	210	424	824	1,397	1	2,856
Pothole	1,096	2,721	4,353	6,282	2	14,454
Uneven Surface	174	381	569	1,120	-	2,244
(blank)	60	46	96	153	2,376	2,731
Drainage	**959**	**1,299**	**2,888**	**3,240**	**836**	**9,222**
Average reports per "X" km of Road per annum	49	27	17	14		20
Blocked	617	843	1,932	2,218	91	5,701
Broken	164	232	392	416	1	1,205
Ditching	25	44	230	222	10	531
Improvement / New	126	139	238	268	-	771
Missing	7	24	37	61	-	129
(blank)	20	17	59	55	734	885
Hedges Trees & Verges	**868**	**777**	**1,159**	**2,259**	**1,012**	**6,075**
Average reports per "X" km of Road per annum	45	16	7	10		13
					-	
Gritting / Winter Maintenance	**181**	**281**	**1,329**	**2,198**	**1,039**	**5,028**
Average reports per "X" km of Road per annum	9	6	8	10		11
Average reports per "X" km of Road per annum (excl. Salt Heaps and Bins)	6	4	4	4		6
Carriageway	25	38	233	294	-	590
Complaint / Report	45	37	97	103	-	282
Footway	3	6	3	22	-	34
Information	4	3	6	10	-	23
Salt Heaps and bins	63	111	594	1,323	-	2,091
Service Request	37	78	368	415	-	898
(blank)	4	8	28	31	1,039	1,110
Footway	**327**	**559**	**489**	**1,350**	**108**	**2,833**
Average reports per "X" km of Road per annum	17	12	3	6		6
General Condition	213	289	301	806	-	1,609
Improvement / New	20	31	26	79	-	156
Obstruction	31	31	14	65	-	141
Pothole	13	21	13	68	-	115
Uneven Surface	44	185	129	305	-	663
(blank)	6	2	6	27	108	149

Local Environemnt System Data Analysis

Year(s) 2011 to 2018 inclusive	Number of Reports by Road Class					
	A	**B**	**C**	**U**	**Not stated**	**Total**
Reports per "X" km where X =	100					
Flooding	**374**	**247**	**400**	**423**	**552**	**1,996**
Average reports per "X" km of Road per annum	19	5	2	2		4
Property	70	66	98	131	1	366
Road	280	177	293	285	-	1,035
(blank)	24	4	9	7	551	595
Road Traffic Accidents / Emergencies	**592**	**193**	**126**	**90**	**929**	**1,930**
Average reports per "X" km of Road per annum	30.5	4.0	0.7	0.4		4.1
Obstructions	**207**	**123**	**145**	**190**	**746**	**1,411**
Average reports per "X" km of Road per annum	10.6	2.5	0.9	0.8		3.0
Footway	29	19	15	46	-	109
Road	126	72	89	108	-	395
Verge	27	16	20	19	-	82
(blank)	25	16	21	17	746	825
Grass Cutting (Highways)	**296**	**128**	**244**	**424**	**119**	**1,211**
Average reports per "X" km of Road per annum	15.2	2.6	1.5	1.9		2.6
Request	209	90	205	369	-	873
Safety	81	34	31	38	-	184
(blank)	6	4	8	17	119	154
Road Spillages	**319**	**118**	**73**	**112**	**435**	**1,057**
Average reports per "X" km of Road per annum	16.4	2.4	0.4	0.5		2.3
Grass Cutting (Non Highways)	**63**	**71**	**86**	**534**	**78**	**832**
Average reports per "X" km of Road per annum	3.2	1.5	0.5	2.3		1.8
PCC Property	42	46	53	440	11	592
Private Property	13	16	19	58	-	106
Schools	4	8	11	19	2	44
(blank)	4	1	3	17	65	90
Weed Control	**68**	**27**	**57**	**218**	**33**	**403**
Average reports per "X" km of Road per annum	3.5	0.6	0.3	1.0		0.9
Injurious	17	5	19	28	-	69
Other	50	20	36	187	-	293
(blank)	1	2	2	3	33	41
Bridges	**57**	**52**	**91**	**82**	**48**	**330**
Average reports per "X" km of Road per annum	2.9	1.1	0.5	0.4		0.7
Fences and Barriers	**47**	**45**	**78**	**122**	**28**	**320**
Average reports per "X" km of Road per annum	2.4	0.9	0.5	0.5		0.7
Damaged	36	36	65	103	1	241
Improvement / New	9	8	10	15	-	42
(blank)	2	1	3	4	27	37

Local Environemnt System Data Analysis

Year(s) 2011 to 2018 inclusive	Number of Reports by Road Class					
	A	**B**	**C**	**U**	**Not stated**	**Total**
Reports per "X" km where X =	100					
Street Furniture - Highways	**53**	**72**	**47**	**100**	**4**	**276**
Average reports per "X" km of Road per annum	2.7	1.5	0.3	0.4		0.6
New Request	26	31	28	49	-	134
Report Damage	27	41	19	48	-	135
(blank)				3	4	7
Walls & Structures	**30**	**37**	**61**	**92**	**20**	**240**
Average reports per "X" km of Road per annum	1.5	0.8	0.4	0.4		0.5
Road Works - Planned	**6**	**15**	**31**	**48**	**3**	**103**
Average reports per "X" km of Road per annum	0.3	0.3	0.2	0.2		0.2
Road Works Active	**15**	**14**	**14**	**38**	**1**	**82**
Average reports per "X" km of Road per annum	0.8	0.3	0.1	0.2		0.2
Complaint / Report	12	9	11	26	-	58
Information	3	1	1	1	-	6
Service Request		1	2	11	-	14
(blank)		3			1	4
Fly Posting & Graffiti	**23**	**17**	**11**	**15**	**1**	**67**
Average reports per "X" km of Road per annum	1.2	0.4	0.1	0.1		0.1

Local Environemnt System Data Analysis

Years 2011 to 2018 inclusive

Priority	Number and % of Reports by Priority and Detection						
	Number of Reports					**%**	
	External	**Internal**	**Total**	**%**		**External**	**Internal**
Within 24 Hours	4,775	2,093	6,868	9%		70%	30%
Outside 24 Hours (Schedule)	17,209	25,963	43,172	55%		40%	60%
Planned	129	997	1,126	1%		11%	89%
(blank)	4,444	389	4,833	6%		92%	8%
No Action	21,563	1,399	22,962	29%		94%	6%
TOTAL	48,120	30,841	78,961			61%	39%
	61%	39%					

Years 2011 to 2018 inclusive
Road Class = All (A, B, C, U)
Priority = Within 24 Hours

Category	Number of Reports				%	
	External	**Internal**	**Total**		**External**	**Internal**
Road	981	1,412	2,393		41%	59%
Drainage	443	257	700		63%	37%
Flooding	557	70	627		89%	11%
Hedges Trees & Verges	484	87	571		85%	15%
Road Traffic Accidents / Emergencies	537	7	544		99%	1%
Gritting / Winter Maintenance	456	17	473		96%	4%
Street Cleaning and Sweeping	423	50	473		89%	11%
Road Spillages	309	11	320		97%	3%
Obstructions	218	5	223		98%	2%
Footway	96	125	221		43%	57%
Dog Fouling	113	1	114		99%	1%
Public Toilets - Cleaning	46	3	49		94%	6%
Grass Cutting (Highways)	35	4	39		90%	10%
Bridges	16	8	24		67%	33%
Street Furniture - Highways	11	8	19		58%	42%
Fences and Barriers	12	6	18		67%	33%
Licensing	6	9	15		40%	60%
Walls & Structures	5	5	10		50%	50%
Weed Control	6	3	9		67%	33%
Fly Posting & Graffiti	4	2	6		67%	33%
Grass Cutting (Non Highways)	5		5		100%	0%
Markets (info & stall rental)	5		5		100%	0%
Abandoned Vehicles	4		4		100%	0%
Road Works - Planned	2	2	4		50%	50%
Road Works Active	1	1	2		50%	50%
Total	4,775	2,093	6,868		70%	30%
	70%	30%				

Local Environemnt System Data Analysis

Years 2011 to 2018 inclusive
Road Class = A (Class 1)
Priority = Within 24 Hours

Category	Number of Reports				%	
	External	Internal	Total		External	Internal
Road	326	278	604		54%	46%
Road Traffic Accidents / Emergencies	363	5	368		99%	1%
Flooding	174	18	192		91%	9%
Road Spillages	187	4	191		98%	2%
Hedges Trees & Verges	131	22	153		86%	14%
Street Cleaning and Sweeping	112	5	117		96%	4%
Drainage	82	31	113		73%	27%
Obstructions	93	3	96		97%	3%
Gritting / Winter Maintenance	45		45		100%	0%
Footway	12	9	21		57%	43%
Dog Fouling	19	1	20		95%	5%
Grass Cutting (Highways)	17	3	20		85%	15%
Public Toilets - Cleaning	13		13		100%	0%
Bridges	7	1	8		88%	13%
Fences and Barriers	3	2	5		60%	40%
Markets (info & stall rental)	4		4		100%	0%
Fly Posting & Graffiti	3		3		100%	0%
Licensing	3		3		100%	0%
Street Furniture - Highways	3		3		100%	0%
Abandoned Vehicles	2		2		100%	0%
Weed Control	1	1	2		50%	50%
Road Works - Planned	1		1		100%	0%
Walls & Structures	1		1		100%	0%
Total	1,602	383	1,985		81%	19%
	81%	19%				

Local Environemnt System Data Analysis

Years 2011 to 2018 inclusive
Road Class = B (Class 2)
Priority = Within 24 Hours

Category	Number of Reports				%	
	External	Internal	Total		External	Internal
Road	175	276	451		39%	61%
Hedges Trees & Verges	100	20	120		83%	17%
Flooding	104	9	113		92%	8%
Drainage	77	33	110		70%	30%
Road Traffic Accidents / Emergencies	99	1	100		99%	1%
Street Cleaning and Sweeping	74	7	81		91%	9%
Footway	20	48	68		29%	71%
Road Spillages	61	2	63		97%	3%
Obstructions	42		42		100%	0%
Gritting / Winter Maintenance	36	1	37		97%	3%
Public Toilets - Cleaning	17	2	19		89%	11%
Dog Fouling	8		8		100%	0%
Grass Cutting (Highways)	5		5		100%	0%
Street Furniture - Highways	4	1	5		80%	20%
Bridges	4		4		100%	0%
Fences and Barriers	2		2		100%	0%
Licensing	-	2	2		0%	100%
Fly Posting & Graffiti	-	1	1		0%	100%
Markets (info & stall rental)	1		1		100%	0%
Walls & Structures	-	1	1		0%	100%
Weed Control	1		1		100%	0%
Total	830	404	1,234		67%	33%
	67%	33%				

Local Environemnt System Data Analysis

Years 2011 to 2018 inclusive
Road Class = C (Class 3)
Priority = Within 24 Hours

Category	Number of Reports				%	
	External	**Internal**	**Total**		**External**	**Internal**
Road	187	385	572		33%	67%
Drainage	146	87	233		63%	37%
Gritting / Winter Maintenance	180	6	186		97%	3%
Hedges Trees & Verges	130	31	161		81%	19%
Flooding	136	23	159		86%	14%
Street Cleaning and Sweeping	61	19	80		76%	24%
Road Traffic Accidents / Emergencies	50	1	51		98%	2%
Footway	14	32	46		30%	70%
Obstructions	45	1	46		98%	2%
Road Spillages	27	3	30		90%	10%
Dog Fouling	15		15		100%	0%
Walls & Structures	3	4	7		43%	57%
Public Toilets - Cleaning	5		5		100%	0%
Street Furniture - Highways	2	3	5		40%	60%
Bridges	1	3	4		25%	75%
Fences and Barriers	2	2	4		50%	50%
Grass Cutting (Highways)	3	1	4		75%	25%
Licensing	2	2	4		50%	50%
Road Works - Planned	1	2	3		33%	67%
Weed Control	1	1	2		50%	50%
Total	1,011	606	1,617			
	63%	37%				

Local Environemnt System Data Analysis

Years 2011 to 2018 inclusive
Road Class = U (Unclassified)
Priority = Within 24 Hours

Category	Number of Reports				%	
	External	**Internal**	**Total**		**External**	**Internal**
Road	293	473	766		38%	62%
Drainage	138	106	244		57%	43%
Gritting / Winter Maintenance	195	10	205		95%	5%
Street Cleaning and Sweeping	176	19	195		90%	10%
Flooding	143	20	163		88%	12%
Hedges Trees & Verges	123	14	137		90%	10%
Footway	50	36	86		58%	42%
Dog Fouling	70		70		100%	0%
Obstructions	38	1	39		97%	3%
Road Spillages	34	2	36		94%	6%
Road Traffic Accidents / Emergencies	25		25		100%	0%
Grass Cutting (Highways)	10		10		100%	0%
Public Toilets - Cleaning	9	1	10		90%	10%
Bridges	4	4	8		50%	50%
Fences and Barriers	5	2	7		71%	29%
Licensing	1	5	6		17%	83%
Street Furniture - Highways	2	4	6		33%	67%
Grass Cutting (Non Highways)	5		5		100%	0%
Weed Control	3	1	4		75%	25%
Abandoned Vehicles	2		2		100%	0%
Fly Posting & Graffiti	1	1	2		50%	50%
Road Works Active	1	1	2		50%	50%
Walls & Structures	1		1		100%	0%
Total	1,329	700	2,029			
	66%	34%				

Unit spend £/m Capital and Revenue	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	10 year average
Neath Port Talbot	20.66	21.27	41.29	61.76	69.22	31.87	26.18	17.37	17.71	15.54	32.24
Rhondda Cynon Taf	28.95	40.24	32.63	17.39	21.03	13.78	11.00	12.96	17.17	16.95	21.12
Cardiff	23.09	24.97	25.14	26.12	24.66	22.65	19.12	13.82	13.86	15.39	20.84
Blaenau Gwent	19.03	17.89	19.29	19.15	48.70	38.64	19.50	11.10	8.30	7.63	20.63
Newport	25.63	26.22	34.19	18.68	16.78	20.65	14.10	8.40	8.61	10.40	18.32
Swansea	17.98	13.95	14.67	16.58	15.13	18.62	19.02	14.22	15.60	13.36	15.91
Caerphilly	23.37	18.70	18.23	21.43	15.86	13.45	12.88	12.09	7.89	12.12	15.54
Torfaen	11.63	13.60	12.12	15.81	15.47	19.18	13.90	12.77	17.01	15.14	14.68
Flintshire	9.98	13.63	12.99	10.86	13.45	14.16	13.91	12.23	11.70	15.10	12.82
Merthyr Tydfil	8.73	10.71	12.55	10.48	11.41	10.75	17.48	11.65	15.84	15.70	12.56
Bridgend	11.74	11.76	13.48	10.09	10.41	10.45	10.88	10.46	8.83	10.06	10.81
Wrexham	8.36	10.16	11.89	19.51	14.76	8.73	7.37	6.73	7.88	5.31	10.06
Denbighshire	10.96	12.66	11.49	11.02	10.64	8.86	8.89	7.85	6.65	8.06	9.71
Average	**10.88**	**10.59**	**11.08**	**10.65**	**11.54**	**9.64**	**8.80**	**7.12**	**7.36**	**7.81**	**9.54**
Vale of Glamorgan	9.15	8.34	7.95	7.93	11.24	9.27	9.71	7.30	9.14	11.03	9.11
Isle of Anglesey	7.32	6.83	6.26	5.51	7.46	7.28	6.36	7.41	10.99	8.92	7.44
Gwynedd	10.38	7.58	7.47	7.12	8.93	7.36	7.87	5.41	4.87	4.68	7.17
Ceredigion	15.37	8.26	6.08	5.67	5.78	6.12	5.72	5.71	5.03	5.17	6.89
Monmouthshire	6.86	7.44	10.43	8.14	7.05	5.56	5.77	4.99	4.90	5.94	6.70
Pembrokeshire	6.36	6.09	7.14	6.35	6.25	6.13	7.97	5.50	4.44	5.08	6.13
Carmarthenshire	5.70	5.87	6.19	5.20	6.24	5.80	5.36	4.98	6.07	5.55	5.69
Conwy	6.09	6.23	6.58	5.26	6.21	5.38	5.45	3.34	4.28	4.31	5.33
Powys	3.97	3.32	3.12	3.36	4.42	3.96	3.09	2.23	2.18	3.78	3.34

Includes Expenditure on:

   Revenue - Structural Maintenanace

   Revenue - Environmental, Safety, Routine

   Revenue - Winter

   Revenue - Traffic and Road Safety

   Capital - Transport: Roads, street lighting, road safety

10 year average £/m
2008/2009 to 2017/2018
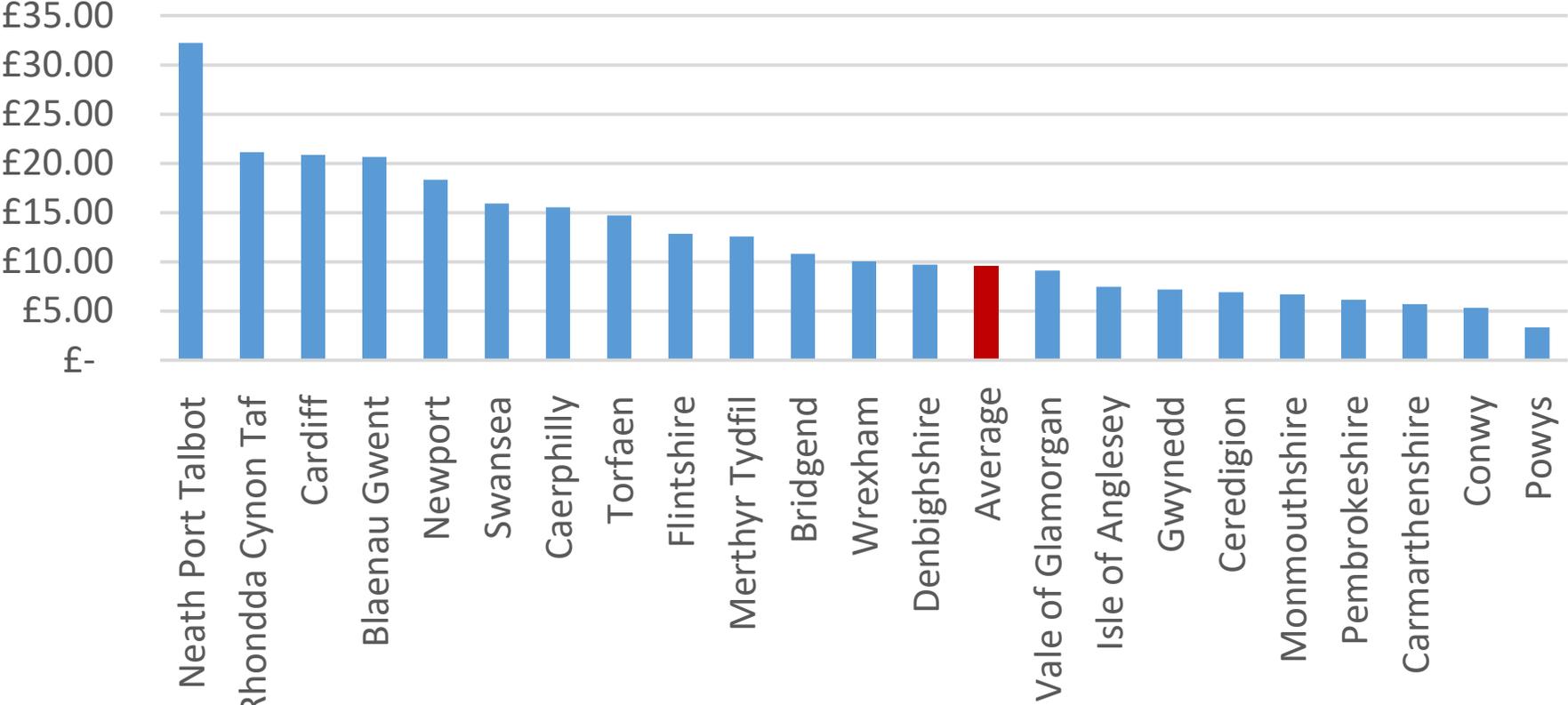
Highway Expenditure Profile by Year & Category

Actual / Budget | Projected

Indicative Only
Awaiting Budget Review

Legend:
- Winter Service
- Environment, safety & routine maintenance
- Street lighting
- Traffic management
- Capital - Roads, street lighting and road safety
- Structural maintenance (Capitalised from 14/15 0n)
- Grant Capital - Roads, street lighting and road safety

Years: 2009-10, 2010-11, 2011-12, 2012-13, 2013-14, 2014-15, 2015-16, 2016-17, 2017-18, 2018-19, 2019-20, 2020-21, 2021-22, 2022-23, 2023-24