

Benchmark CAZ D. Summary of costs, adjusted for inflation and risk

Measure	Capital expenditure	Operating expenditure over 10 years	Total
1 CAZ D Boundary Signs	£901,176	£0	£901,176
2 CAZ D Boundary ANPR	£11,329,624	£0	£11,329,624
3 CAZ D Advanced Signing Local Network	£1,304,193	£0	£1,304,193
4 CAZ D Advanced Signing HE Network (Including Gantries)	£5,161,286	£0	£5,161,286
5 CAZ D Internal ANPR and Signing	£5,724,198	£0	£5,724,198
6 Back Office Cost for Monitoring, Data Processing and Charging	£3,512,679	£42,705,804	£46,218,483
7 Maintenance	£5,473,604	£11,764,684	£17,238,289
8 Communications, Engagement and Consultation	£0	£2,394,113	£2,394,113
9 Monitoring and Evaluation	£190,906	£1,000,302	£1,191,208
10 Decommissioning Costs	£0	£2,027,010	£2,027,010
11 Sinking Fund	£2,979,150	£0	£2,979,150
Total	£36,576,817	£59,891,914	£96,468,731

Benchmark CAZ D. Summary of costs, adjusted for inflation and risk (£000s)

Measure	Capital expenditure	Operating expenditure over 10 years	Total
1 CAZ D Boundary Signs	901	-	901
2 CAZ D Boundary ANPR	11,330	-	11,330
3 CAZ D Advanced Signing Local Network	1,304	-	1,304
4 CAZ D Advanced Signing HE Network (Including Gantries)	5,161	-	5,161
5 CAZ D Internal ANPR and Signing	5,724	-	5,724
6 Back Office Cost for Monitoring, Data Processing and Charging	3,513	42,706	46,218
7 Maintenance	5,474	11,765	17,238
8 Communications, Engagement and Consultation	-	2,394	2,394
9 Monitoring and Evaluation	191	1,000	1,191
10 Decommissioning Costs	-	2,027	2,027
11 Sinking Fund	2,979	-	2,979
Total	36,577	59,892	96,469

Benchmark CAZ D. cashflow profile adjusted for inflation and risk

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Capital costs	£	£	£ 18,969,763	£ 9,154,299	£	£	£ 5,473,604	£	£	£	£	£	£ 2,979,150
Operating costs	£	£	£ 72,896	£ 5,196,770	£ 5,316,295	£ 5,438,570	£ 5,665,771	£ 5,691,621	£ 5,822,529	£ 5,956,447	£ 6,093,445	£ 6,233,594	£ 8,403,977
Revenue	£	£	£ 40,921,688	£ 37,173,350	£ 33,425,012	£ 29,676,673	£ 24,730,561	£ 19,784,449	£ 14,838,337	£ 9,892,224	£ 4,946,112	£	£
Net cashflow	£	£	£ 19,042,659	£ 26,570,620	£ 31,857,055	£ 27,986,441	£ 24,010,902	£ 13,565,335	£ 13,961,920	£ 8,881,890	£ 3,798,779	£ 1,287,482	£ 11,383,127

Costs are presented as positive values and revenues are presented as negative values as per DfT's Public Accounts table

Benchmark CAZ D. cashflow profile adjusted for inflation and risk (£000s)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Capital costs	-	-	18,970	9,154	-	-	-	5,474	-	-	-	-	2,979
Operating costs	-	-	73	5,197	5,316	5,439	5,666	5,692	5,823	5,956	6,093	6,234	8,404
Revenue	-	-	40,922	37,173	33,425	29,677	24,731	19,784	14,838	9,892	4,946	-	-
Net cashflow	-	-	19,043	26,571	31,857	27,986	24,011	13,565	13,962	8,882	3,799	1,287	11,383

Costs are presented as positive values and revenues are presented as negative values as per DfT's Public Accounts table

Capital Costs Cash Flow Profile (2020 prices)

Header	Heading	Item	Final cost	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total	
1	CAZ D Boundary Signs	Sign Cost	558,625.00			250,389	134,238										693,625	
2	CAZ D Boundary ANPR	ANPR Cost	£7,374,375.00			£5,162,063	£2,212,313										£7,374,375	
3	CAZ D Advanced Signage Local Network	Environmental (Vegetation Clearance, Tree Removal)	£11,500.00			£11,500											£11,500	
4	CAZ D Advanced Signage Local Network	Traffic Management (Boundary Installation)	£176,446.94			£176,446											£176,446	
5	CAZ D Advanced Signage Local Network	Local Signs	£627,466.75			£278,875	£348,594										£976,469	
6	CAZ D Advanced Signage Local Network	Traffic Management (Local Signs)	£31,265.63			£13,895	£17,370										£31,266	
7	CAZ D Advanced Signage HE Network (Including Gantries)	AGU and AGU Signs	£3,495,000.00			£664,444	£330,556										£4,490,000	
8	CAZ D Advanced Signage HE Network (Including Gantries)	Alternative Gantry Signs	£1,796,875.00			£798,611	£998,264										£1,796,875	
9	CAZ D Advanced Signage HE Network (Including Gantries)	Traffic Management for Signs (HE)	£42,406.25			£18,847	£23,559										£64,406	
10	CAZ D Advanced Signage HE Network (Including Gantries)	Traffic Management for Gantries (HE)	£8,301.56			£3,660	£4,641										£8,302	
11	CAZ D Internal ANPR and Signage	ANPR within CAZ D at 25 locations (50 ANPR Cameras)	£3,725,841.88			£2,698,089	£1,117,753										£3,725,842	
12	Back Office Cost for Monitoring, Data Processing and Charging	Setting up back office / Upgrade to systems	£2,300,000.00			£2,300,000											£2,300,000	
13	Maintenance	Five year camera replacement costs	£3,208,635.00								£3,208,635.00						£3,208,635	
14	Monitoring and Evaluation	Traffic Monitoring Site Installation Costs	£125,000.00														£125,000	
15	Sinking Fund	Sinking Fund	£1,558,695.00														£1,558,695	
16	Total Capital Cost 2020 values			£ -	£ -	£12,430,960	£5,877,255	£0	£0	£0	£3,208,635	£0	£0	£0	£0	£0	£1,558,695	£20,986,455

Capital Costs Cash Flow Profile adjusted for inflation

Header	Heading	Item	Final cost	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total	
1	CAZ D Boundary Signs	Sign Cost	£558,625.00	£ -	£ -	£ 269,341	£ 142,018	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£811,159	
2	CAZ D Boundary ANPR	ANPR Cost	£7,374,375.00	£ -	£ -	£ 5,164,105	£ 2,344,265	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£7,378,651	
3	CAZ D Advanced Signage Local Network	Environmental (Vegetation Clearance, Tree Removal)	£11,500.00	£ -	£ -	£ 11,950	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£11,950	
4	CAZ D Advanced Signage Local Network	Traffic Management (Boundary Installation)	£176,446.94	£ -	£ -	£ 183,362	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£183,363	
5	CAZ D Advanced Signage Local Network	Local Signs	£627,466.75	£ -	£ -	£ 289,700	£ 369,431	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£999,271	
6	CAZ D Advanced Signage Local Network	Traffic Management (Local Signs)	£31,265.63	£ -	£ -	£ 14,440	£ 18,908	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£32,848	
7	CAZ D Advanced Signage HE Network (Including Gantries)	AGU and AGU Signs	£3,495,000.00	£ -	£ -	£ 2,883,451	£ 880,203	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£4,470,653	
8	CAZ D Advanced Signage HE Network (Including Gantries)	Alternative Gantry Signs	£1,796,875.00	£ -	£ -	£ 809,855	£ 1,057,026	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£1,807,800	
9	CAZ D Advanced Signage HE Network (Including Gantries)	Traffic Management for Signs (HE)	£42,406.25	£ -	£ -	£ 19,585	£ 24,817	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£64,552	
10	CAZ D Advanced Signage HE Network (Including Gantries)	Traffic Management for Gantries (HE)	£8,301.56	£ -	£ -	£ 3,834	£ 4,888	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£8,722	
11	CAZ D Internal ANPR and Signage	ANPR within CAZ D at 25 locations (50 ANPR Cameras)	£3,725,841.88	£ -	£ -	£ 2,710,170	£ 1,184,667	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£3,894,739	
12	Back Office Cost for Monitoring, Data Processing and Charging	Setting up back office / Upgrade to systems	£2,300,000.00	£ -	£ -	£ 2,300,022	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£2,300,022	
13	Maintenance	Five year camera replacement costs	£3,208,635.00	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ 3,724,231	£ -	£ -	£ -	£ -	£ -	£3,724,231	
14	Monitoring and Evaluation	Traffic Monitoring Site Installation Costs	£125,000.00	£ -	£ -	£ 129,802	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£129,802	
15	Sinking Fund	Sinking Fund	£1,558,695.00	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£2,027,010	
16	Total Capital Cost			£ -	£ -	£12,907,001	£9,228,073	£0	£0	£0	£3,724,231	£0	£0	£0	£0	£0	£2,027,010	£24,886,817
	Risk																£1,690,000	
	Capital costs total																£24,888,817	

Capital Costs Cash Flow Profile adjusted for inflation and risk

Header	Heading	Item	Final cost	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total	
1	CAZ D Boundary Signs	Sign Cost	£558,625.00	£ -	£ -	£ 269,152	£ 142,024	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£811,178	
2	CAZ D Boundary ANPR	ANPR Cost	£7,374,375.00	£ -	£ -	£ 5,163,788	£ 2,344,855	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£11,329,624	
3	CAZ D Advanced Signage Local Network	Environmental (Vegetation Clearance, Tree Removal)	£11,500.00	£ -	£ -	£ 17,563	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£17,563	
4	CAZ D Advanced Signage Local Network	Traffic Management (Boundary Installation)	£176,446.94	£ -	£ -	£ 209,477	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£209,477	
5	CAZ D Advanced Signage Local Network	Local Signs	£627,466.75	£ -	£ -	£ 292,912	£ 342,963	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£969,875	
6	CAZ D Advanced Signage Local Network	Traffic Management (Local Signs)	£31,265.63	£ -	£ -	£ 15,222	£ 27,655	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£48,277	
7	CAZ D Advanced Signage HE Network (Including Gantries)	AGU and AGU Signs	£3,495,000.00	£ -	£ -	£ 2,814,274	£ 1,203,667	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£4,222,457	
8	CAZ D Advanced Signage HE Network (Including Gantries)	Alternative Gantry Signs	£1,796,875.00	£ -	£ -	£ 1,215,680	£ 1,554,877	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£2,770,557	
9	CAZ D Advanced Signage HE Network (Including Gantries)	Traffic Management for Signs (HE)	£42,406.25	£ -	£ -	£ 28,284	£ 36,695	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£65,480	
10	CAZ D Advanced Signage HE Network (Including Gantries)	Traffic Management for Gantries (HE)	£8,301.56	£ -	£ -	£ 5,855	£ 7,194	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£12,819	
11	CAZ D Internal ANPR and Signage	ANPR within CAZ D at 25 locations (50 ANPR Cameras)	£3,725,841.88	£ -	£ -	£ 3,883,209	£ 1,740,090	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£5,724,198	
12	Back Office Cost for Monitoring, Data Processing and Charging	Setting up back office / Upgrade to systems	£2,300,000.00	£ -	£ -	£ 3,512,679	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£3,512,679	
13	Maintenance	Five year camera replacement costs	£3,208,635.00	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ 4,473,804	£ -	£ -	£ -	£ -	£ -	£4,473,804	
14	Monitoring and Evaluation	Traffic Monitoring Site Installation Costs	£125,000.00	£ -	£ -	£ 190,805	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£190,805	
15	Sinking Fund	Sinking Fund	£1,558,695.00	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£2,879,150	
16	Total Capital Cost			£ -	£ -	£18,980,763	£9,154,299	£0	£0	£0	£4,473,804	£0	£0	£0	£0	£0	£1,979,150	£26,678,817

Operating Costs cash flow profits 2020 prices																	
Header	Heading	Item	2020 (Base Costs)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
6	Back Office Cost for Monitoring, Data Processing and Charging	Project Management costs	230,000	-	-	-	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	230,000	2,300,000
6	Back Office Cost for Monitoring, Data Processing and Charging	Processing	800,000	-	-	-	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	800,000	8,000,000
6	Back Office Cost for Monitoring, Data Processing and Charging	Staffing (Internal)	2,600,000	-	-	-	2,600,000	2,600,000	2,600,000	2,600,000	2,600,000	2,600,000	2,600,000	2,600,000	2,600,000	2,600,000	26,000,000
7	Maintenance	Maintenance	1,000,000	-	-	-	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	10,000,000
8	Communications, Equipment and Consultation	Communications	100,000	-	-	-	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,000,000
9	Monitoring and Evaluation	Air Quality Monitoring	54,150	-	-	54,150	54,150	54,150	54,150	54,150	54,150	54,150	54,150	54,150	54,150	54,150	536,650
9	Monitoring and Evaluation	Annual Monitoring Costs	16,000	-	-	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000	178,000
9	Monitoring and Evaluation	Traffic Data Collection for Monitoring in 2020	90,888	-	-	-	-	-	-	-	-	-	-	-	-	-	90,888
10	Decommissioning Costs	Decommissioning - Removal	1,558,695	-	-	-	-	-	-	-	-	-	-	-	-	-	1,558,695
		Operating Cost Cash Flow				70,150	4,900,850	4,900,850	4,900,850	4,900,850	4,900,850	4,900,850	4,900,850	4,900,850	4,900,850	4,900,850	49,008,500

Operating Costs cash flow profits adjusted for inflation																	
Header	Heading	Item	2020 (Base Costs)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
6	Back Office Cost for Monitoring, Data Processing and Charging	Project Management costs	230,000	-	-	-	243,748	249,355	255,000	260,967	266,959	273,099	279,380	285,808	292,379	299,104	2,705,877
6	Back Office Cost for Monitoring, Data Processing and Charging	Processing	800,000	-	-	-	847,821	897,281	947,850	997,876	1,045,523	1,090,900	1,134,127	1,175,208	1,214,045	1,250,744	9,411,748
6	Back Office Cost for Monitoring, Data Processing and Charging	Staffing (Internal)	2,600,000	-	-	-	2,756,417	2,818,792	2,883,624	2,949,947	3,017,736	3,087,005	3,156,811	3,228,160	3,300,099	3,372,638	30,588,179
7	Maintenance	Maintenance	1,000,000	-	-	-	1,059,776	1,121,514	1,184,886	1,249,905	1,316,584	1,384,929	1,454,956	1,526,681	1,599,114	1,672,264	13,749,845
8	Communications, Equipment and Consultation	Communications	54,150	-	-	-	57,872	61,815	65,989	70,397	75,046	79,939	85,081	90,480	96,141	102,069	833,707
9	Monitoring and Evaluation	Air Quality Monitoring	54,150	-	-	56,269	57,987	59,707	61,438	63,181	64,937	66,706	68,488	70,283	72,092	73,916	693,707
9	Monitoring and Evaluation	Annual Monitoring Costs	16,000	-	-	16,626	16,956	17,346	17,745	18,154	18,571	18,998	19,435	19,882	20,339	20,807	178,000
9	Monitoring and Evaluation	Traffic Data Collection for Monitoring in 2020	90,888	-	-	-	-	-	-	-	-	-	-	-	-	-	90,888
10	Decommissioning Costs	Decommissioning - Removal	1,558,695	-	-	-	-	-	-	-	-	-	-	-	-	-	1,558,695
		Operating Cost Cash Flow				72,896	5,196,770	5,316,295	5,438,679	5,565,771	5,691,621	5,822,629	5,956,447	6,093,445	6,233,934	6,383,977	59,891,814

Operating Costs cash flow profits adjusted for inflation and risk																	
Header	Heading	Item	2020 (Base Costs)	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
6	Back Office Cost for Monitoring, Data Processing and Charging	Project Management costs	230,000	-	-	-	243,748	249,355	255,000	260,967	266,959	273,099	279,380	285,808	292,379	299,104	2,705,877
6	Back Office Cost for Monitoring, Data Processing and Charging	Processing	800,000	-	-	-	847,821	897,281	947,850	997,876	1,045,523	1,090,900	1,134,127	1,175,208	1,214,045	1,250,744	9,411,748
6	Back Office Cost for Monitoring, Data Processing and Charging	Staffing (Internal)	2,600,000	-	-	-	2,756,417	2,818,792	2,883,624	2,949,947	3,017,736	3,087,005	3,156,811	3,228,160	3,300,099	3,372,638	30,588,179
7	Maintenance	Maintenance	1,000,000	-	-	-	1,059,776	1,121,514	1,184,886	1,249,905	1,316,584	1,384,929	1,454,956	1,526,681	1,599,114	1,672,264	13,749,845
8	Communications, Equipment and Consultation	Communications	54,150	-	-	-	57,872	61,815	65,989	70,397	75,046	79,939	85,081	90,480	96,141	102,069	833,707
9	Monitoring and Evaluation	Air Quality Monitoring	54,150	-	-	56,269	57,987	59,707	61,438	63,181	64,937	66,706	68,488	70,283	72,092	73,916	693,707
9	Monitoring and Evaluation	Annual Monitoring Costs	16,000	-	-	16,626	16,956	17,346	17,745	18,154	18,571	18,998	19,435	19,882	20,339	20,807	178,000
9	Monitoring and Evaluation	Traffic Data Collection for Monitoring in 2020	90,888	-	-	-	-	-	-	-	-	-	-	-	-	-	90,888
10	Decommissioning Costs	Decommissioning - Removal	1,558,695	-	-	-	-	-	-	-	-	-	-	-	-	-	1,558,695
		Operating Cost Cash Flow				72,896	5,196,770	5,316,295	5,438,679	5,565,771	5,691,621	5,822,629	5,956,447	6,093,445	6,233,934	6,383,977	59,891,814

