

Appendix B: Comparison of Transport Metrics for UK Core Cities

Population:

Core City:	2011 Population	2021 Population	Change in Population	Change Rank	Population Rank
Bristol	428,234	472,462	10%	1	7
Manchester	503,127	551,943	10%	2	5
Leeds	751,485	811,950	8%	3	2
Newcastle	280,177	300,131	7%	4	11
Glasgow	593,295	633,100	7%	5	3
Birmingham	1,073,045	1,144,916	7%	6	1
Nottingham	305,680	323,627	6%	7	10
Cardiff	346,090	362,301	5%	8	8
Liverpool	466,415	486,093	4%	9	6
Belfast	333,871	345,418	3%	10	9
Sheffield	552,698	556,519	1%	11	4

Comment: Cardiff's population is comparatively low amongst the Core Cities.

Data Source: 2011/2021 Census - <https://www.nomisweb.co.uk/sources/census>

Households:

Core City:	2011 Households	2021 Households	Change in Households	Change Rank	Households Rank
Belfast	120,595	149,208	24%	1	8
Leeds	320,596	341,466	7%	2	2
Bristol	182,747	191,640	5%	3	7
Newcastle	117,153	122,795	5%	4	11
Manchester	204,969	214,732	5%	5	5
Glasgow	285,924	298,847	5%	6	3
Cardiff	142,557	147,333	3%	7	9
Birmingham	410,736	423,456	3%	8	1
Sheffield	229,928	231,950	1%	9	4
Liverpool	206,515	207,491	0%	10	6
Nottingham	126,131	124,745	-1%	11	10

Comment: Cardiff has a comparatively low number of households amongst the Core Cities.

Data Source: 2011/2021 Census - <https://www.nomisweb.co.uk/sources/census>

Car Ownership:

Core City:	2011 HH Without a Car	2021 HH Without a Car	Change in Car Ownership	Change Rank	Cars Owned Rank
Cardiff	29%	26%	-3%	10	1
Bristol	29%	26%	-3%	11	2
Leeds	32%	29%	-3%	9	3
Sheffield	33%	29%	-4%	8	4
Birmingham	36%	32%	-4%	7	5
Belfast	40%	34%	-6%	1	6
Newcastle	42%	37%	-5%	5	7
Nottingham	44%	38%	-6%	2	8
Manchester	45%	39%	-6%	3	9
Liverpool	46%	40%	-6%	4	10
Glasgow	51%	46%	-5%	6	11

Comment: Cardiff has the least number of households without access to a car.

Data Source: 2011/2021 Census - <https://www.nomisweb.co.uk/sources/census>

Commuting (2011):

Core City:	Sustainable Modes	Sustainables Rank	Distance Travelled (km)	Distance Rank
Glasgow	52%	1	-	-
Manchester	49%	2	12.4	8
Nottingham	47%	3	13.6	3
Newcastle	45%	4	15.3	1
Liverpool	44%	5	13.1	5
Bristol	43%	6	12	10
Belfast	40%	7	13.09	6
Birmingham	37%	8	12.3	9
Sheffield	37%	8	14	2
Cardiff	36%	10	12.7	7
Leeds	35%	11	13.2	4

Comment: Cardiff had the 2nd lowest proportion of people travelling to work by sustainable modes.

Data Source: 2011 Census - https://www.nomisweb.co.uk/sources/census_2011

Traffic Volume:

Core City:	2019 Traffic (MVkm)	2021 Traffic (MVkm)	Change in Traffic	Change Rank	Traffic Volume Rank
Leeds	6988	6090	-13%	7	1
Birmingham	6024	5175	-14%	9	2
Glasgow	3623	3215	-11%	3	3
Cardiff	3210	2794	-13%	8	4
Sheffield	2846	2520	-11%	4	5
Manchester	2721	2391	-12%	5	6
Bristol	2405	2101	-13%	6	7
Liverpool	2228	2025	-9%	1	8
Nottingham	1702	1519	-11%	2	9
Newcastle	1783	1518	-15%	10	10
Belfast	-	-	-	-	-

Comment: Cardiff has the 4th highest traffic volume amongst the Core Cities.

Data Source: DfT - [Road traffic statistics \(TRA\) - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/statistics/road-traffic-statistics)

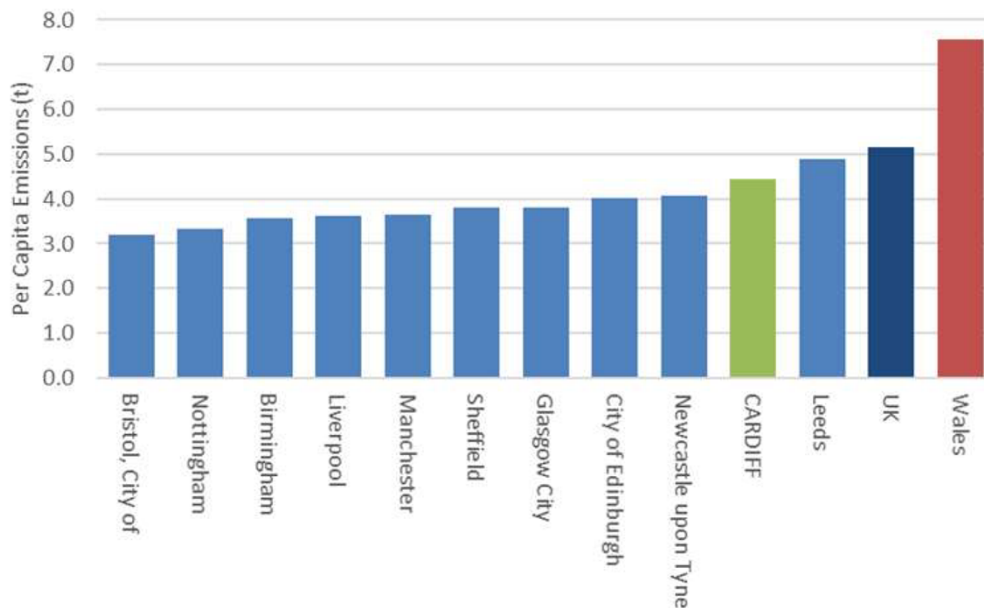
Congestion:

Core City:	2019 Annual Delay (Hrs)	2022 Annual Delay (Hrs)	Change in Delay	INRIX Global Rank	Relative Rank
Bristol	103	91	-12%	25	1
Manchester	92	84	-9%	31	2
Birmingham	80	73	-9%	41	3
Belfast	112	72	-36%	50	4
Nottingham	78	71	-9%	52	5
Leeds	66	60	-9%	64	6
Cardiff	87	61	-30%	75	7
Sheffield	-	54	-	89	8
Liverpool	52	50	-4%	104	9
Newcastle	57	40	-30%	186	10
Glasgow	43	31	-28%	230	11

Comment: Cardiff is ranked the 75th most congested city globally, and 7th of the Core Cities.

Data Source: INRIX Global Traffic Scorecard - <https://inrix.com/scorecard/>

CO2e Emissions per Capita:



Comment: Cardiff is ranked second worst of the Core Cities in terms of CO2e (carbon dioxide equivalent) emissions [note: in units of kilo tonnes]. **Data Source:** Department for Business, Energy & Industrial Strategy (BEIS) reported in the 2022 Cardiff Assessment of Local Well-being by the Cardiff Public Services Board - <https://www.cardiffpartnership.co.uk/cardiff-local-wba-2022/>

Road Safety:

Core City:	2012-2016 Casualties	2017-2021 Casualties	Change in Casualties	Change Rank	Casualties Rank
Newcastle	3,230	1,082	-67%	1	10
Cardiff	3,907	2,180	-44%	2	9
Liverpool	6,848	3,907	-43%	3	4
Birmingham	12,381	7,160	-42%	4	1
Manchester	4,836	2,812	-42%	5	8
Glasgow	6,109	3,723	-39%	6	5
Sheffield	6,050	4,146	-31%	7	3
Leeds	8,732	6,427	-26%	8	2
Bristol	3,994	3,091	-23%	9	7
Nottingham	4,119	3,237	-21%	10	6
Belfast	-	-	-	-	-

Comment: Cardiff has seen the 2nd largest reduction in road user casualties.

Data Source: STATS 19 - <https://www.crashmap.co.uk/>

Targets:

Core City:	Net Zero	Mode-Shift	Increase in Cycling	Increase in Bus Use
Belfast	2050	-	-	-
Birmingham	2030	-	-	-
Bristol	2030	15%	-	-
Cardiff	2030	25%	100%	100%
Glasgow	2030	5%	200%	-
Leeds	2030	20%	400%	130%
Liverpool	2030	17%	-	-
Manchester	2038	17%	-	-
Newcastle	2030	9%	-	-
Nottingham	2028	-	-	-
Sheffield	2030	-	570%	-

Comment: Cardiff has the most ambitious target for mode-shift of 25% (from 51% to 76% by 2030).

Data Source: Transport Strategies