Supplemental Information to “Do sport utility vehicles (SUVs) cause more severe injuries to pedestrians and cyclists than passenger cars in the case of a crash? Findings from Great Britain, 2004-2023”

Table S1: Numbers of casualties in the analysis, by travel mode, age, injury severity and striking vehicle type

		Hit by a passenger car			Hit by an SUV			Total
		Slight (row %)	Serious (row %)	Fatal (row %)	Slight (row %)	Serious (row %)	Fatal (row %)	
Pedestrians	Adults, 19+ years	75,527 (71%)	28,442 (27%)	3,052 (2.9%)	8,345 (70%)	3,243 (27%)	369 (3.1%)	118,978
	Children, 0-18 years	65,386 (78%)	18,269 (22%)	385 (0.5%)	5,700 (74%)	1,979 (26%)	50 (0.6%)	91,769
	Children, 0-9 years	23,096 (79%)	6,197 (21%)	103 (0.4%)	2,019 (73%)	740 (27%)	23 (0.8%)	32,178
Cyclists	Adults, 19+ years	81,228 (81%)	18,323 (18%)	539 (0.5%)	9,622 (76%)	2,929 (23%)	73 (0.6%)	112,714
	Children, 0-18 years	27,587 (85%)	4,681 (14%)	110 (0.3%)	2,583 (82%)	567 (18%)	14 (0.4%)	35,542
	Children, 0-9 years	5,024 (88%)	676 (12%)	11 (0.2%)	360 (83%)	72 (17%)	3 (0.7%)	6,146

Percentages are row percentages for casualty severity, within the striking vehicle type (i.e. separately for passenger car versus SUV).

Table S2: The association between injury severity to pedestrians and cyclists and being hit by an SUV versus a passenger car: results from urban roads in Great Britain, 2004-2023

Outcome	**Casualty age**	**No. casualties**	**Odds ratio (95% CI) for being hit by an SUV vs passenger car**		**Population Attributable Fraction, as of 2023 $**
			Minimally-adjusted	**Fully- adjusted**	
Fatal vs non-fatal	Adults, 19+ years	194,694	0.99 (0.86, 1.13)	1.15 (1.00, 1.33)*	4%
	Children, 0-18 years	110,677	1.11 (0.77, 1.61)	1.44 (0.98, 2.11)†	10%
	Children, 0-9 years	33,924	2.31 (1.38, 3.84)***	2.82 (1.65, 4.82)***	31%
KSI vs slight	Adults, 19+ years: pedestrians	103,518	0.93 (0.88, 0.97)***	1.00 (0.95, 1.05)	[not calculated]
	Adults, 19+ years: cyclists	91,176	1.07 (1.01, 1.13)*	1.10 (1.04, 1.16)***	2%
	Children, 0-18 years	110,677	1.09 (1.03, 1.15)**	1.15 (1.09, 1.22)***	4%
	Children, 0-9 years	33,924	1.23 (1.12, 1.35)***	1.29 (1.17, 1.42)***	7%

†p≤0.10, *p≤0.05, **p≤0.01, ***p≤0.001. CI = confidence interval, KSI = killed and seriously injured. Minimally-adjusted analyses adjust for travel mode, region of Great Britain and the year of the crash (in two-year bands). The fully-adjusted analyses adjust for all the 'casualty characteristics', 'striking vehicle characteristics', and 'crash location and conditions' variables shown in Table 1 of the main text, as categorical variables (but using two-year not five-year age bands). This table is equivalent to Table 2 in the main text, but restricted to urban roads only. We present results restricted to urban areas, despite finding no evidence for interaction by urban/rural status, as we believe that at present it is cities in the UK that are most actively exploring the potential to introduce measures to discourage oversized vehicles. $ Population attributable fractions calculated using the formula "(P * (OR - 1)) / (1 + P * (OR - 1))", where OR is the fully-adjusted odds ratio, and P is 25% which was the prevalence of SUVs among car crashes on urban roads in 2023. We only calculated these fractions where the odds ratio in question was statistically significant.

Table S3: The association between injury severity to pedestrians and cyclists and the dimensions of the striking car: results from urban roads in Great Britain, 2004-2023

Outcome	**Casualty age**	**Fully-adjusted odds ratio (95% CI) for the effect of striking vehicle kerb weight‡**				**Fully-adjusted odds ratio (95% CI) for the effect of striking vehicle height**				**Fully-adjusted odds ratio (95% CI) for the effect of striking vehicle length**			
		N	**<1550 kg**	**1550-2049kg**	**≥2050kg**	**N**	**<1575 mm**	**1575-1749mm**	**≥1750mm**	**N**	**<4600 mm**	**4600-4899mm**	**≥4900mm**
Fatal vs non-fatal	Adults, 19+ years	191,908	1	1.29 (1.13, 1.47)***	1.45 (1.10, 1.92)**	180,640	1	1.02 (0.86, 1.21)	1.58 (1.23, 2.03)***	180,823	1	1.19 (1.06, 1.34)**	1.34 (1.01, 1.77)*
	Children, 0-18 years	108,602	1	1.65 (1.16, 2.33)**	1.65 (0.72, 3.78)	99,496	1	1.20 (0.75, 1.93)	1.38 (0.64, 2.97)	99,643	1	1.23 (0.89, 1.71)	0.93 (0.34, 2.53)
	Children, 0-9 years	33,287	1	2.20 (1.26, 3.83)**	3.59 (1.28, 10.07)*	30,387	1	1.96 (1.00, 3.85)†	3.30 (1.31, 8.33)*	30,440	1	1.37 (0.79, 2.40)	1.31 (0.31, 5.53)
KSI vs slight	Adults, 19+ years: pedestrians	101,629	1	1.07 (1.02, 1.12)**	1.07 (0.97, 1.19)	94,827	1	0.98 (0.93, 1.04)	1.02 (0.92, 1.13)	94,932	1	1.02 (0.98, 1.07)	1.07 (0.96, 1.18)
	Adults, 19+ years: cyclists	90,279	1	1.04 (0.99, 1.10)	1.02 (0.90, 1.17)	85,813	1	1.06 (0.99, 1.13)†	1.15 (1.01, 1.30)*	85,891	1	1.00 (0.95, 1.05)	0.93 (0.82, 1.05)
	Children, 0-18 years	108,602	1	1.10 (1.04, 1.17)***	1.27 (1.12, 1.44)***	99,496	1	1.14 (1.08, 1.22)***	1.29 (1.15, 1.44)***	99,643	1	1.02 (0.97, 1.07)	1.03 (0.90, 1.18)
	Children, 0-9 years	33,287	1	1.18 (1.07, 1.31)***	1.50 (1.20, 1.88)***	30,387	1	1.21 (1.08, 1.35)***	1.48 (1.22, 1.79)***	30,440	1	1.12 (1.02, 1.22)*	0.99 (0.77, 1.27)

†p≤0.10, *p≤0.05, **p≤0.01, ***p≤0.001. All analyses in this table adjust for the 'casualty characteristics', 'striking vehicle characteristics', and 'crash location and conditions' variables shown in Table 1 of the main text, as categorical variables (but using two-year not five-year age bands). This table is equivalent to Table 3 in the main text, but restricted to urban roads only. We present results restricted to urban areas, despite finding no evidence for interaction by urban/rural status, as we believe that at present it is cities in the UK that are most actively exploring the potential to introduce measures to discourage oversized vehicles.

Table S4: The association between injury severity to pedestrians and cyclists and the adjusted weight of the striking car: results from Great Britain, 2004-2023

Outcome	**Casualty age**	**Fully-adjusted odds ratio (95% CI) for the effect of striking vehicle's adjusted weight**			
		N	**<1525kg**	**1525-1924kg**	**≥1925kg**
Fatal vs non-fatal	Adults, 19+ years	228,360	1	1.17 (1.05, 1.30)**	1.49 (1.23, 1.79)***
	Children, 0-18 years	124,896	1	1.52 (1.16, 2.00)**	1.63 (0.94, 2.84)†
	Children, 0-9 years	37,584	1	2.00 (1.20, 3.33)**	3.20 (1.37, 7.48)**
KSI vs slight	Adults, 19+ years: pedestrians	116,741	1	1.04 (1.00, 1.09)†	1.02 (0.94, 1.11)
	Adults, 19+ years: cyclists	111,619	1	1.05 (1.00, 1.10)†	1.15 (1.05, 1.26)**
	Children, 0-18 years	124,896	1	1.11 (1.05, 1.16)***	1.33 (1.21, 1.47)***
	Children, 0-9 years	37,584	1	1.21 (1.11, 1.33)***	1.48 (1.23, 1.78)***

†p≤0.10, *p≤0.05, **p≤0.01, ***p≤0.001. All analyses in this table adjust for the 'casualty characteristics', 'striking vehicle characteristics', and 'crash location and conditions' variables shown in Table 1 of the main text, as categorical variables (but using two-year not five-year age bands). This table is equivalent to Table 3 in the main text, but has as the exposure 'adjusted weight' rather than 'kerb weight'. This measure of adjusted weight was calculated by us by taking the standard kerb weight and then subtracting 400kg for a battery electric vehicle and subtracts 200kg for a plug-in hybrid electric vehicle. This adjustment captures the potential to use weight as a metric while applying higher thresholds to electric vehicles, which is the approach typically adopted to date by cities when applying weight-based parking surcharges.