Traffic accidents in Berlin

Where and when did they happen?

How are they related with the traffic?

Data source 1: Traffic Accidents

The dataset contains information on accidents that occurred in Berlin during 2021.

	OBJECTID	BEZ	UJAHR	UMONAT	USTUNDE	UWOCHENTAG	UKATEGORIE	UART	UTYP1	ULICHTVERH	IstRad	...	IstGkfz	IstSonstige	USTRZUSTAND	XGCSWGS84	YGCSWGS84	BETEILIGT
0	219249	Pankow	2021	11	18	Monday	with lightly injured	0	crossing	darkness	0		0	0	wet	13.426895	52.533940	PKW-Krad
1	219248	Tempelhof-Schöneberg	2021	12	19	Saturday	with lightly injured	6	turning	darkness	0		0	0	wet	13.392090	52.439951	PKW-Fuss
2	219247	Charlottenburg-Wilmersdorf	2021	12	17	Wednesday	with lightly injured	5	turning	darkness	0		0	0	dry	13.326242	52.538028	PKW
3	219246	Charlottenburg-Wilmersdorf	2021	12	15	Saturday	with lightly injured	5	turning	dawn	0		0	0	wet	13.316521	52.499534	PKW-Krad
4	219243	Lichtenberg	2021	12	9	Thursday	with lightly injured	3	in longitudinal traffic	daylight	0		0	1	iced	13.525752	52.493867	PKW-Sonstige

Data source 2: Traffic sensor data

This data source contains information on the average speed and number of cars and trucks at different locations in Berlin.

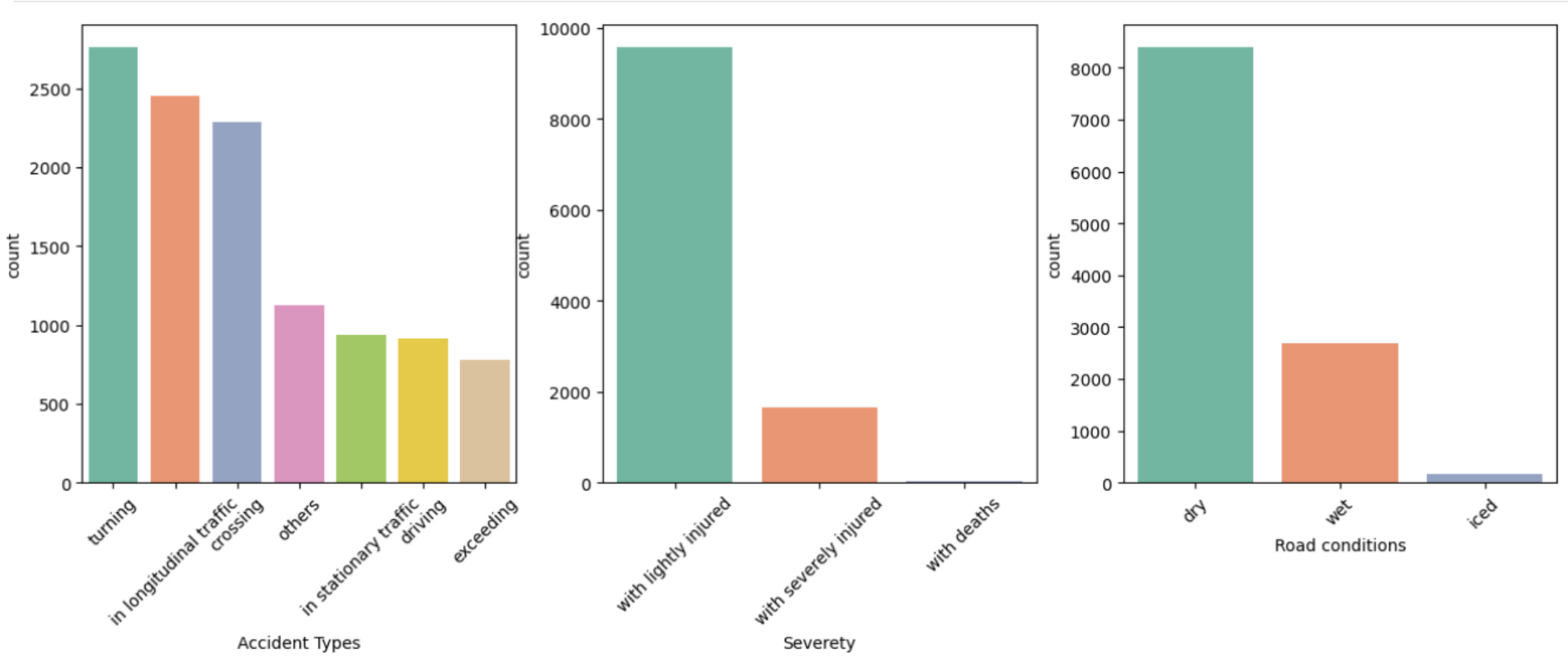
detid_15	tag	stunde	qualitaet	q_kfz_det_hr	v_kfz_det_hr	q_pkw_det_hr	v_pkw_det_hr	q_lkw_det_hr	v_lkw_det_hr
100101010001076	01.06.2021	0	0.83	24	42	17	42	7	42
100101010001076	01.06.2021	2	0.75	21	41	20	40	1	61
100101010001076	01.06.2021	3	0.92	15	51	10	46	5	62

DET_ID15	STRASSE	POSITION	POS_DETAIL	RICHTUNG	SPUR	annotation	LÄNGE (WGS84)	BREITE (WGS84)	INBETRIEBNAHME
100101010000167	A115	AS Spanische Allee – Brücke	AK Zehlendorf	Südwest	HF_R	Hauptfahrbahn rechte Spur	13.192578	52.433868	2003-02-18
100101010000268	A115	AS Spanische Allee – Brücke	AK Zehlendorf	Südwest	HF_2vR	Hauptfahrbahn, 2. Spur von rechts	13.192578	52.433868	2003-02-18
100101010000369	A115	AS Spanische Allee – Brücke	AD Funkturm	Nordost	HF_R	Hauptfahrbahn rechte Spur	13.192747	52.433813	2003-02-18

Because of the huge amount of sensor-data the dataset had to be reduced by 1) only looking at one month at a time and 2) aggregating the data to daily averages for every sensor

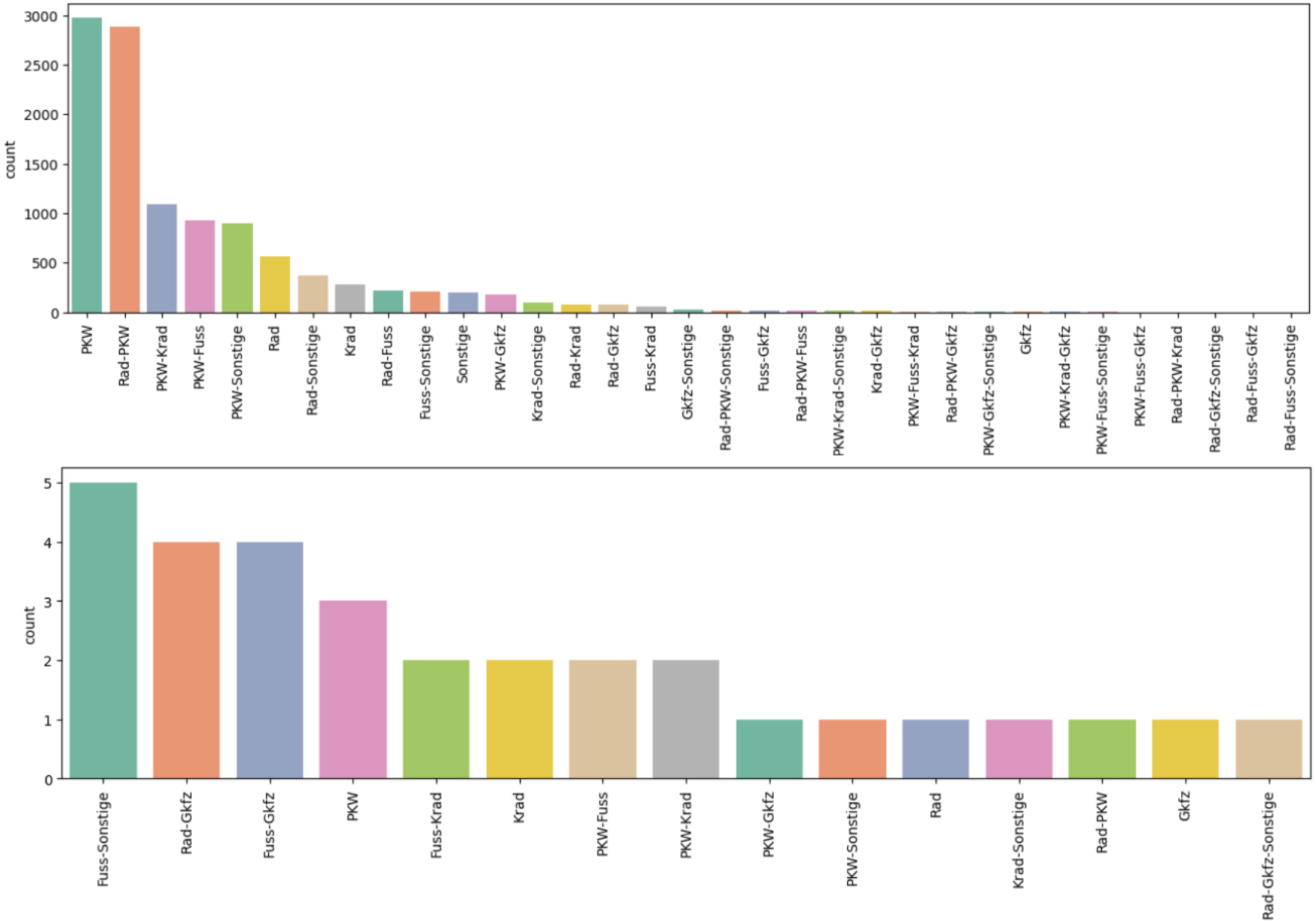
Findings

Many accidents happened while turning, crossing or changing lanes. Fortunately, only a few accidents are serious and hardly any were deadly.



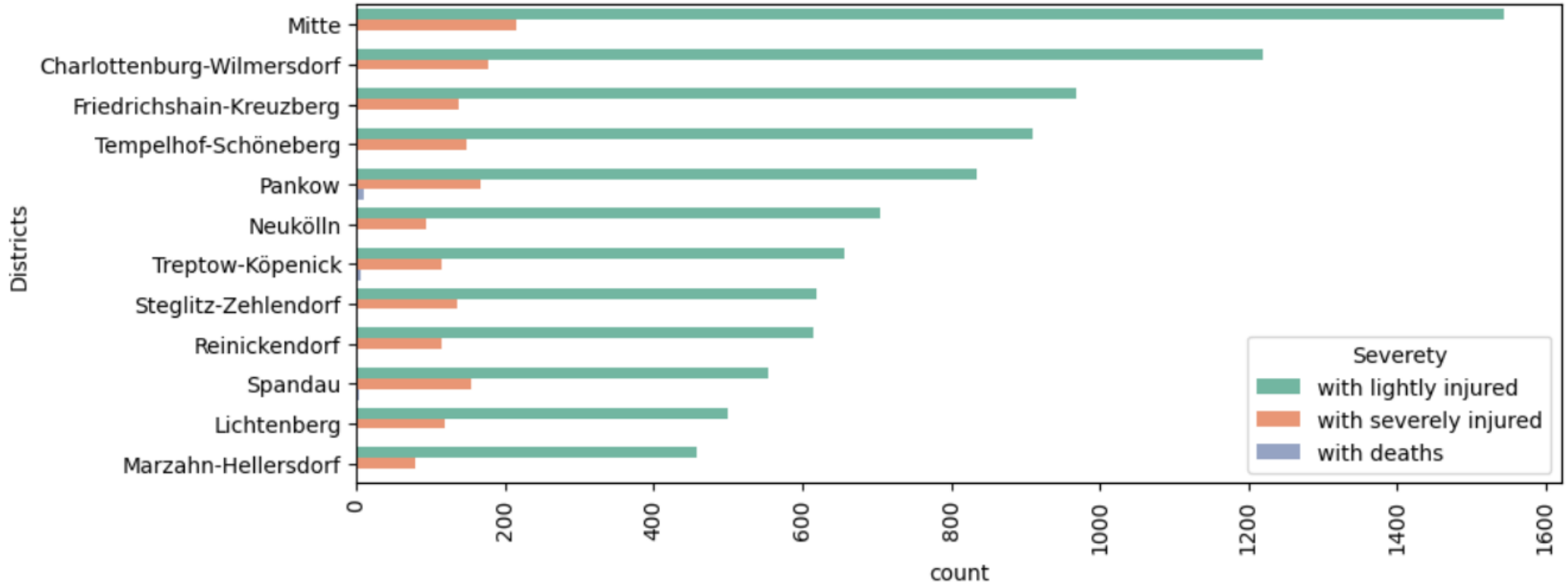
Findings

In many accidents there were cars involved.
Deadly accidents happened often between pedestrians or bikers and big vehicles.



Findings

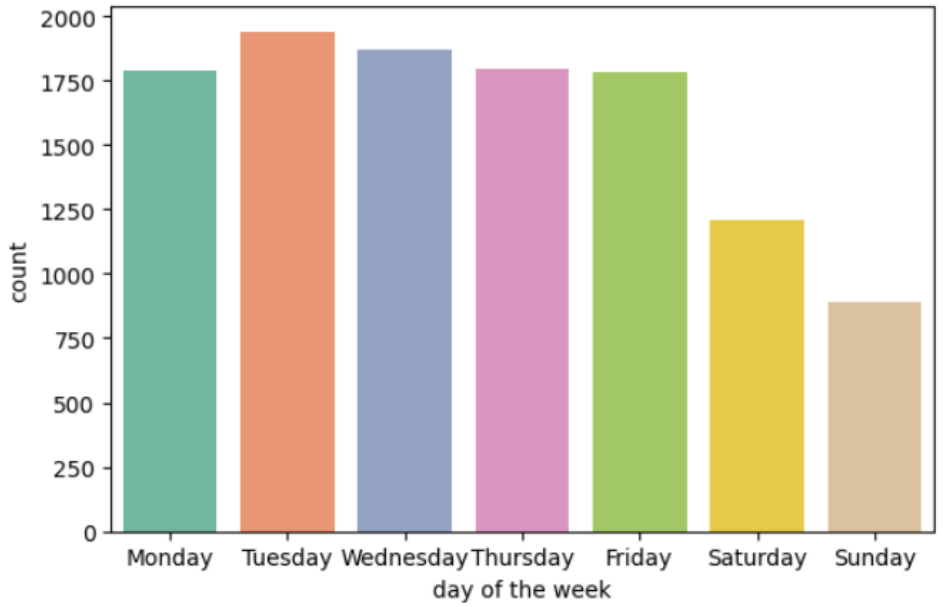
Apparently, more accidents happen in the central districts, but they are comparatively rarely serious or fatal.

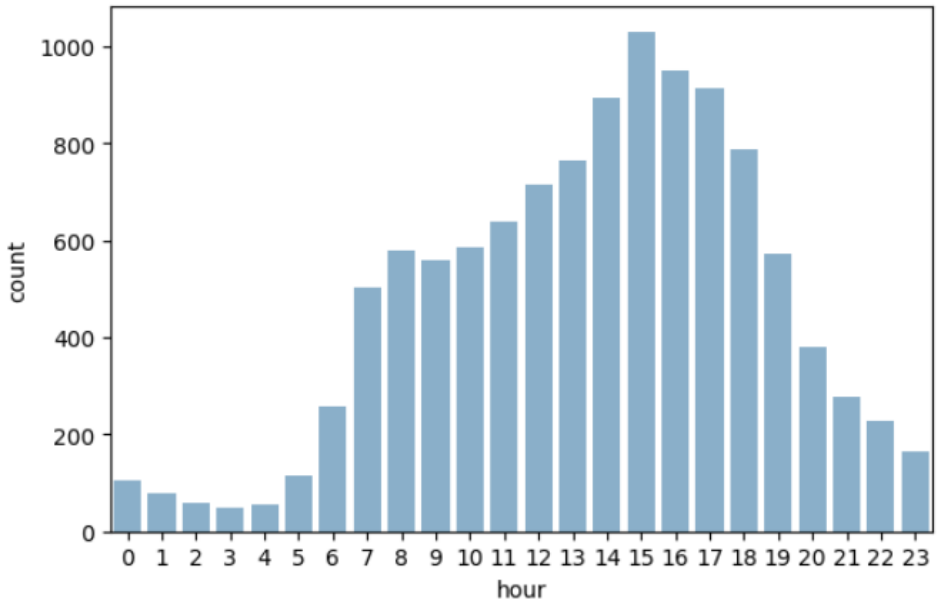


Findings

More accidents happened during summer, weekdays and during rush hour.

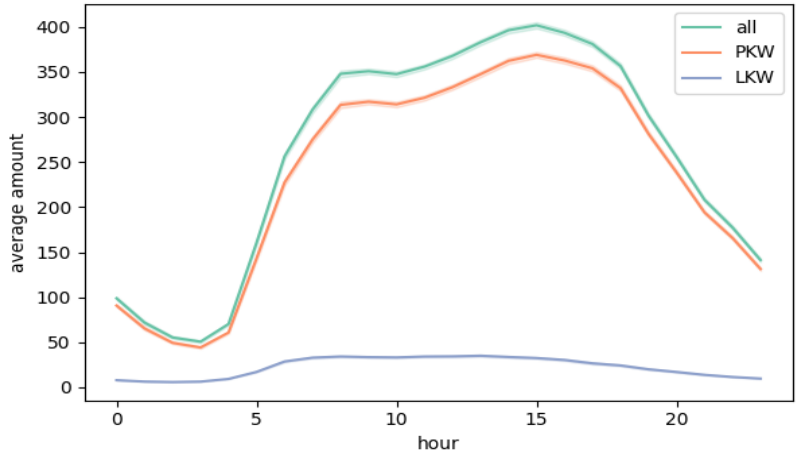
UMONAT	
1	481
2	436
3	765
4	720
5	991
6	1314
7	1053
8	1274
9	1300
10	1130
11	1007
12	796

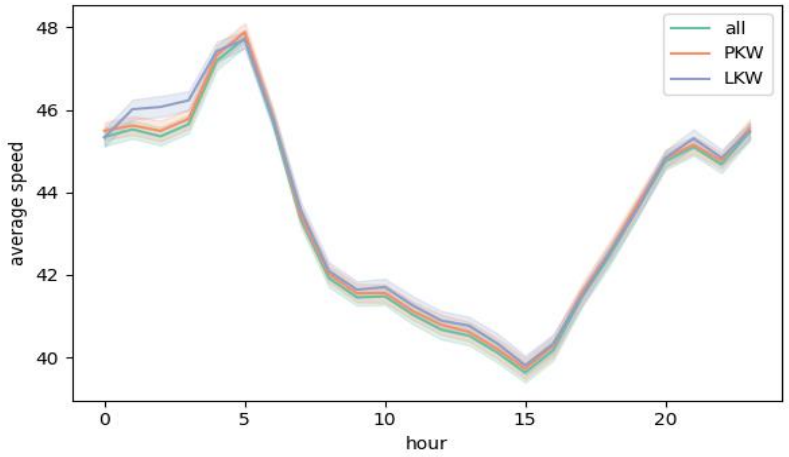


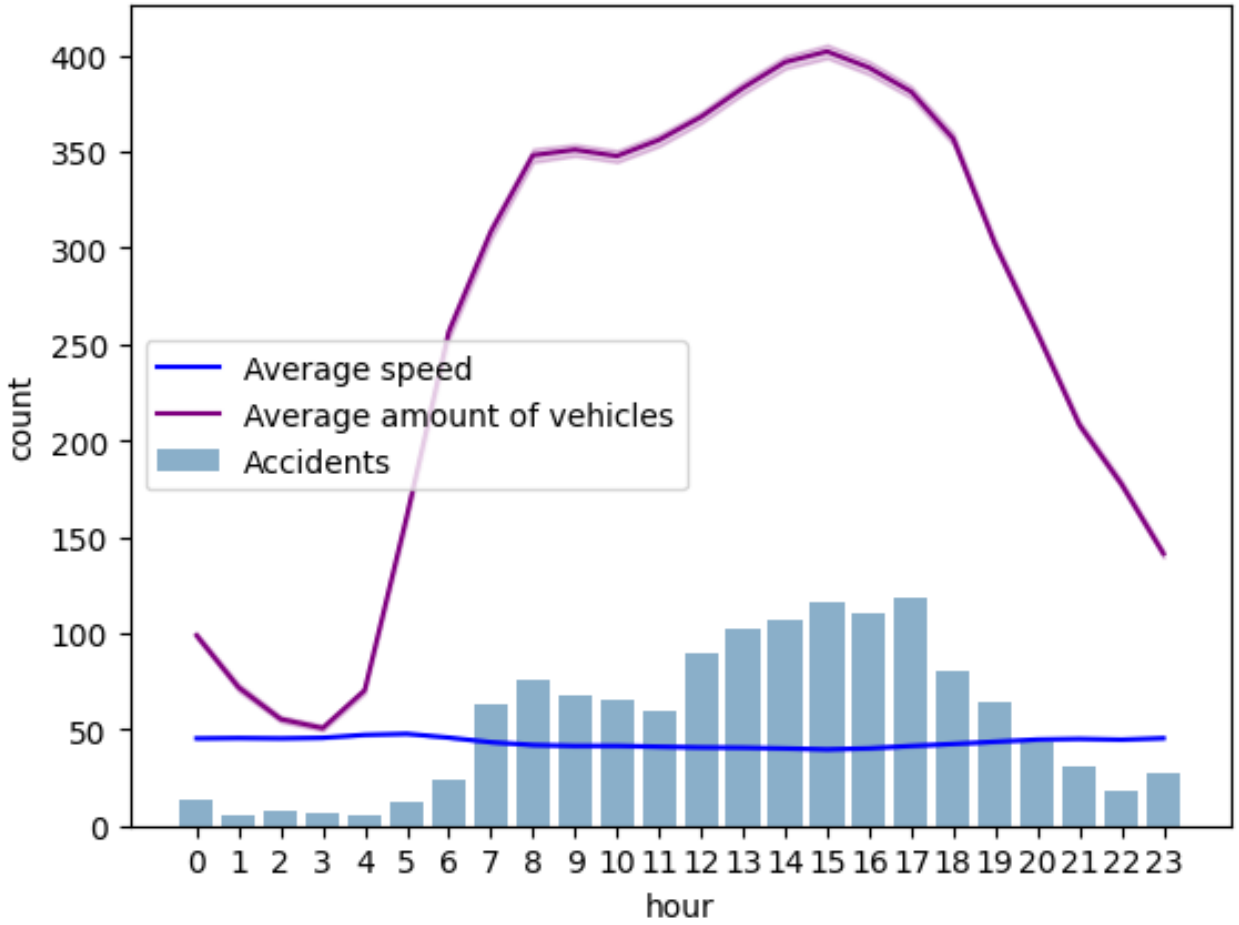


Findings

In June the number of accidents increased with the amount of traffic during the day.

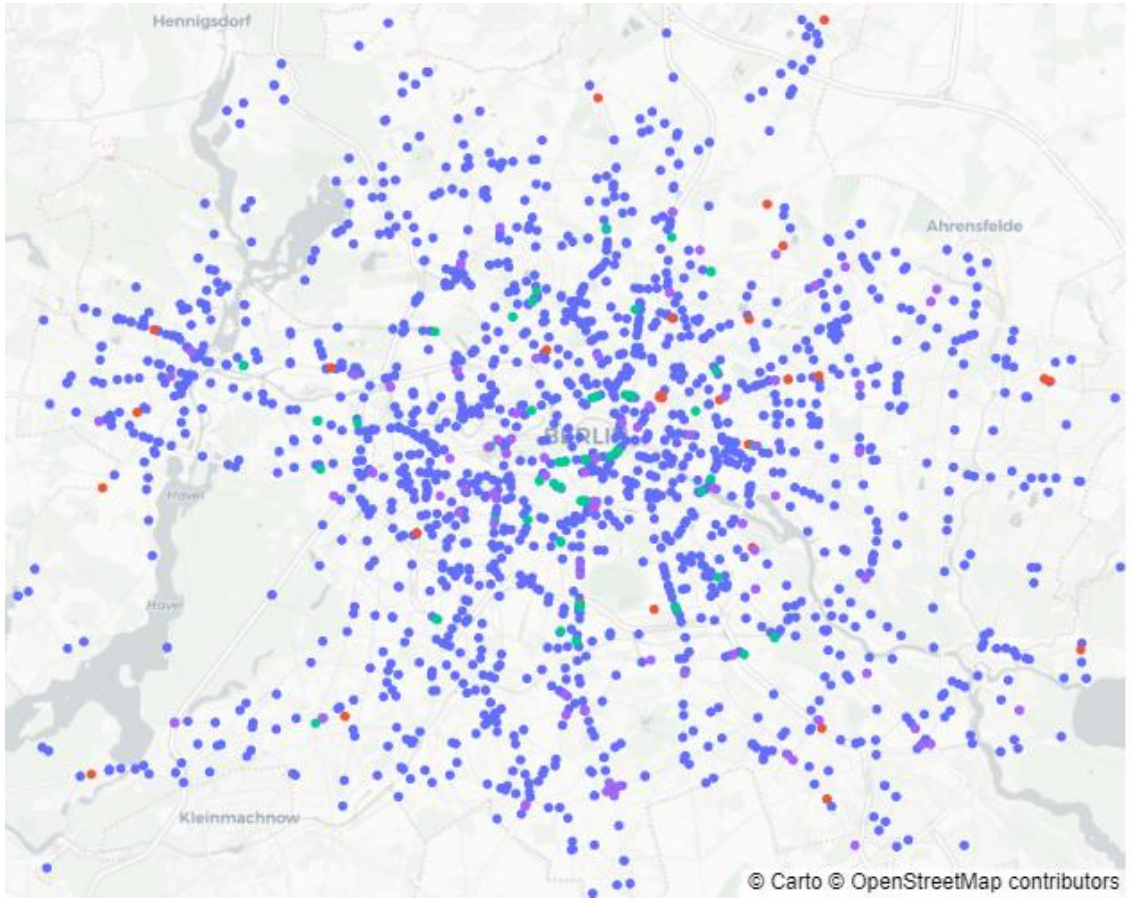






Findings

The places with the highest traffic volume are concentrated a little more in the center. Also, there are few severe accidents in the center.



label
- with severely injured
- with deaths
- high quantity
- high velocity