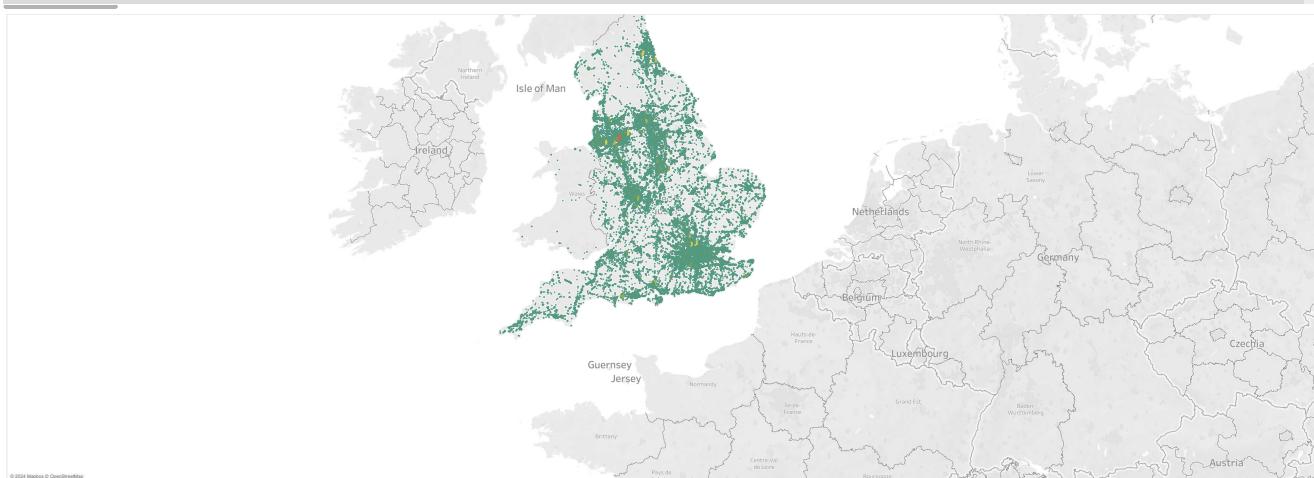


Story

Our map here looks like it's sprinkled with a bunch of dots, each one marking where a car accident has happened in the UK. It's kind of like a treasure map, but instead of treasure, it shows us spots where drivers have to be extra careful. See those areas where the dots are all bunched up? Those are the places where accidents happen a lot, like around the Isle of Man. It's like these spots are trying to tell us something important. Maybe the roads there are tricky, or the signs aren't clear enough. Whatever the reason, this map is like a heads up, saying, "Hey, we might need to be a little more careful at these places."

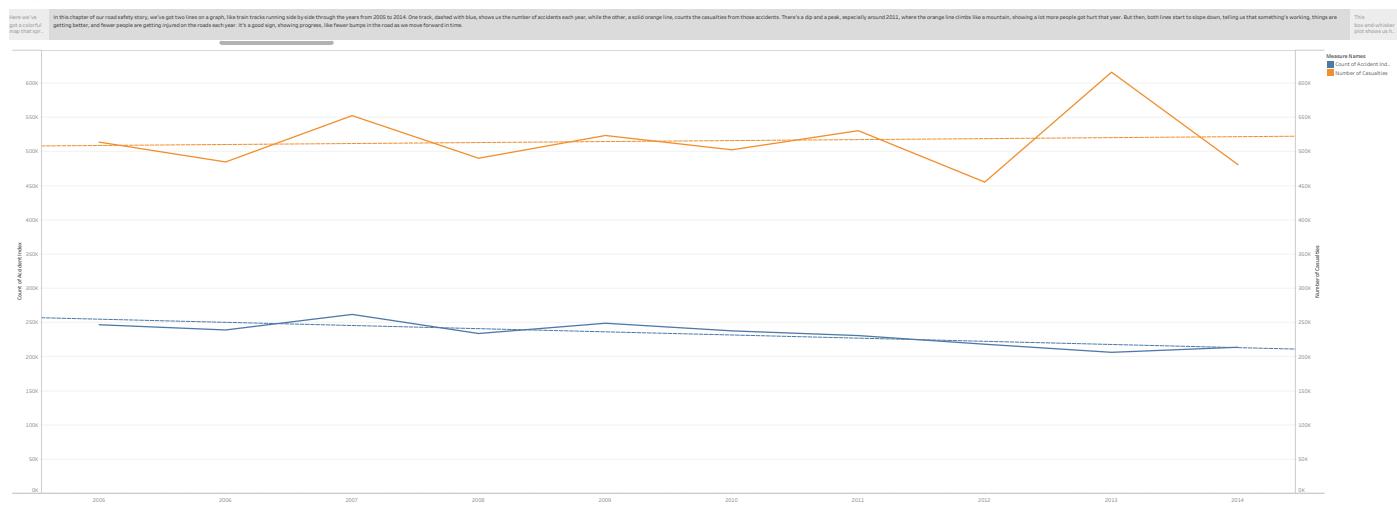
Here we've got a colorful map showing the count of accident index across the UK. The dots are green and red all over the UK, but it's not all



Story



Story



Story

In this
chapter of our
road safety s...
T
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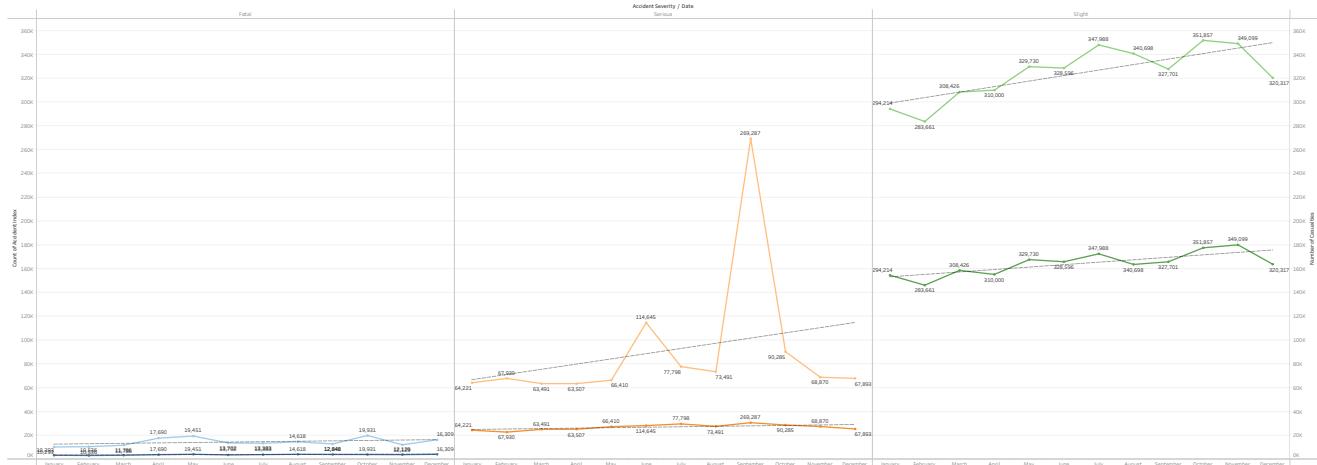
This data was analyzed and showed the greatest number of road deaths in the first three months, when the roads were the most crowded and there was more traffic. These areas had the highest number of deaths, which were caused by either pedestrian or vehicle accidents. The roads in the other quarter were safer because they remained less crowded during the year.

Story

This section and below sections will show us how the data looks.

This chart is a straightforward look at the number of road accidents month by month. Some months have fewer accidents, suggesting safer conditions or perhaps less traffic. Then there are spikes in other months where accidents shoot up: January starts off relatively low, with slight accidents peaking at around 25,000 and serious accidents hovering around 3,200. As we move through the months, we see fluctuations in the numbers, with eight accidents remaining consistently higher than various and fatal ones. However, in March, serious accidents spike to nearly 4,000, indicating a significant increase in road safety concerns. The trend continues through the summer months, with slight accidents reaching their peak in July, surpassing 30,000 incidents. Fatal accidents, thankfully, remain relatively low throughout the year, but there is a notable uptick in October, serving as a reminder of the importance of continued vigilance on the roads, especially during peak times of the year. This pattern over the months can help identify safer times and potentially lead to strategies for improving road safety.

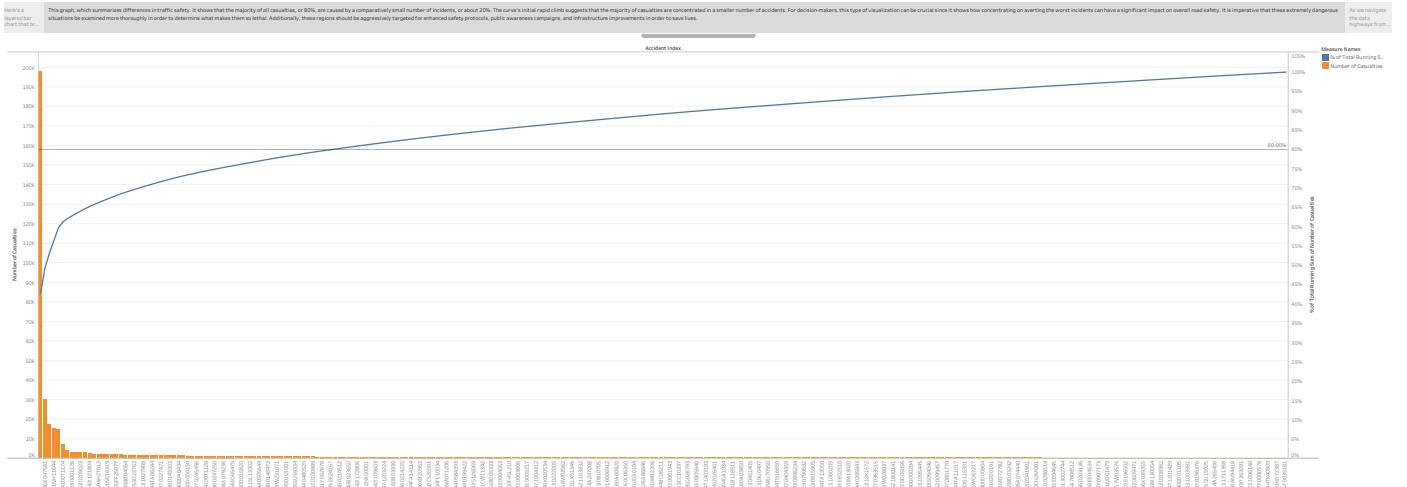
Here's a layered version of the chart to make it easier to read.



Story



Story



Story

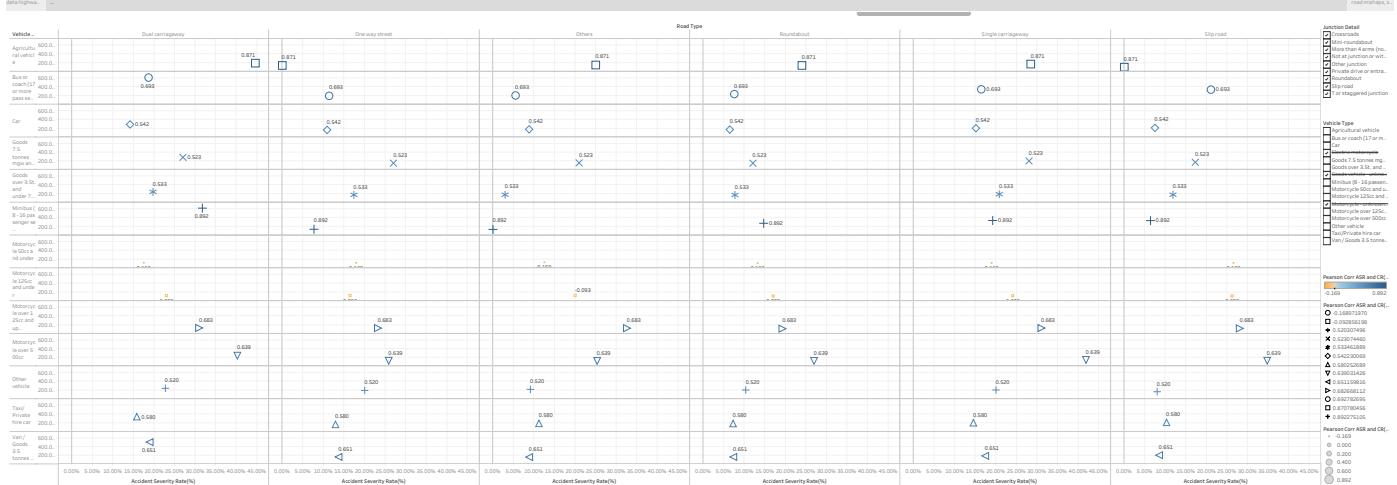
This graph tracks the fluctuation of road safety KPIs from 2005 to 2014. The Accident Severity Rate (ASR) and Casualty Rate (CR) are the primary metrics. The ASR, like a cautious traveler, hovered mostly between 15% and 17%, with 2013 marking a noticeable peak at 17.03%—a year that demands a closer look. Meanwhile, the CR, akin to a daring racer, often exceeded 200%, hitting an alarming 298.38% in the same year before taking a sharp decline to 224.79% in 2014, signaling a potential improvement in road safety conditions or safety measures. These rates, illustrated by peaks and troughs, provide crucial insights for policy changes and preventions to ensure safer travels on the road.



Story

As we
navigate the
data highwa...

We have looked at the **number** of different kinds of vehicles as well as the **percentage** of vehicles that had an accident. For example, proportionately more vans seem to have been involved in accidents than cars.



Story

When we look at the numbers, we can see that there's a clear pattern: cars are more likely to be involved in accidents than other vehicles. This means that we need to focus on making roads safer for everyone, not just drivers.

Imagine we're in charge of road safety. What would we decide to do?

Accident Severity	Vehicle Type	Road Type				
		Dual carriageway	One way street	Roundabout	Single carriageway	Slip road
Fatal	Agricultural vehicle	1,234	94	17	8,763	
	Bus or coach (17+ more)	2,381	545	850	84,836	476
	Car	9,815	49	52	3,130	48
	Goods 7.5 tonnes gross weight	5,815	49	52	3,130	48
	Goods over 3.5t and under 7.5t	580	5	17	944	10
	Minibus (9-16 passenger)	100	1	1	451	1
	Motorcycle 50cc and under	18	17	2	280	1
	Motorcycle 125cc and under	58	17	7	739	3
	Motorcycle over 125cc and	91		10	569	1
	Motorcycle over 1000cc	12	40	43	6,007	22
	Other vehicle	285	1	1	214	
	Taxi/Private hire car	2,008	4	10	1,114	9
	Van/Goods 3.5 tonnes m.	3,623	16	89	4,692	26
Serious	Agricultural vehicle	107		12	414	
	Bus or coach (17+ more)	38,895	303	722	46,382	460
	Car	20,005	5,000	1,000	47,500	4,400
	Goods 7.5 tonnes gross weight	54,119	69	296	7,727	163
	Goods over 3.5t and under 7.5t	1,421	47	49	2,319	26
	Minibus (9-16 passenger)	3,425	7	180	2,462	5
	Motorcycle 50cc and under	311	81	281	4,949	22
	Motorcycle 125cc and under	247	279	429	2,026	20
	Motorcycle over 125cc and	774	92	282	5,140	37
	Motorcycle over 1000cc	14,687	233	1,729	26,130	263
	Other vehicle	481	46	72	1,175	2
	Taxi/Private hire car	7,901	382	322	10,464	72
	Van/Goods 3.5 tonnes m.	1,401	403	154	2,443	202
Light	Agricultural vehicle	120	7	23	1,560	1
	Bus or coach (17+ more)	17,632	3,687	4,587	77,881	265
	Car	70,947	35,405	132,913	2,276,006	48,446
	Goods 7.5 tonnes gross weight	26,031	315	3,402	22,747	992
	Goods over 3.5t and under 7.5t	3,208	38	917	1,188	22
	Minibus (9-16 passenger)	3,249	82	540	8,174	162
	Motorcycle 50cc and under	1,421	456	1,847	16,555	53
	Motorcycle 125cc and under	3,514	793	2,967	32,794	165
	Motorcycle over 125cc and	1,664	234	2,246	10,758	109
	Motorcycle over 1000cc	1,643	443	4,426	37,644	571
	Other vehicle	1,640	98	477	1,368	38
	Taxi/Private hire car	13,819	2,417	4,175	56,274	668
	Van/Goods 3.5 tonnes m.	40,749	1,858	7,917	107,281	2,773

Number of casualties

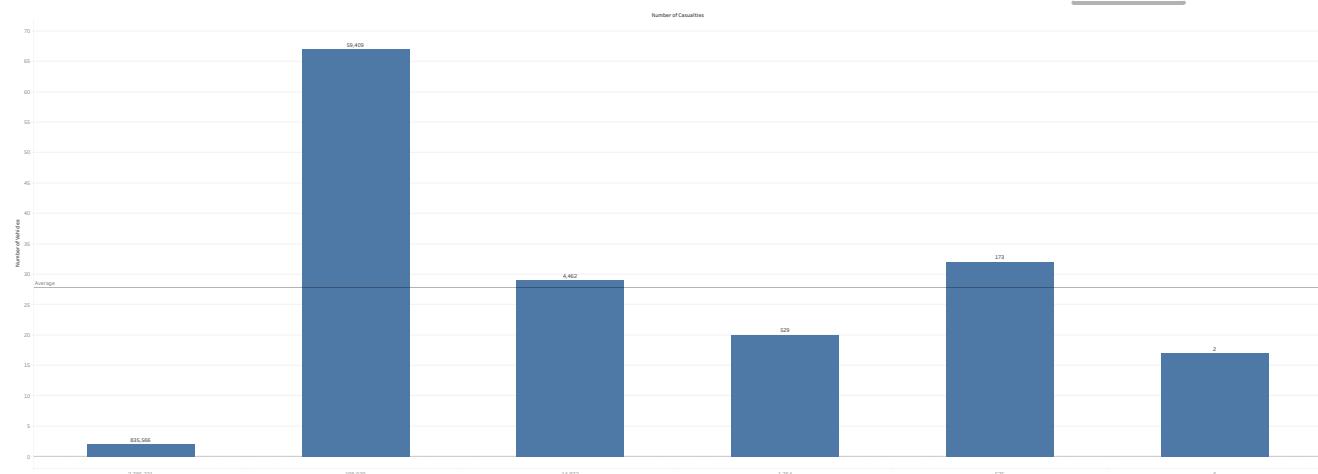
1 2,276,006

Story

Our chart
shows how
fewer vehicles
lead to fewer
casualties.

Imagine we're in a world where we decide to take a bold step: reducing the number of vehicles on the road by a whopping 70%. This isn't just a daydream; the chart you're looking at plays out this scenario. With such a dramatic drop, the number of casualties from road accidents plummets, from over 800,000 to figures as low as just a few hundred. Reducing traffic by 70% translates to fewer emergency incidents, less hospital congestion, and decreased road fatalities. This serves as a catalyst for discussions on sustainable transportation, encouraging investments in public transit, cycling, and pedestrian infrastructure. These changes aim to create safer and more manageable urban environments, fostering innovation in policies and transportation systems. By prioritizing alternatives to car reliance, communities can enhance mobility while reducing the environmental and social impacts of excessive traffic.

Map of the UK
showing the locations of
the locations in...



Story

Map of the UK indicates the locations and times of car accidents, represented by dots and colours. It's similar to a map that shows us the locations and severity of the most frequent accidents. Certain sections of the chart show more brightness than others, indicating high accident rates. Examining the evolution of the situation over time reveals that, despite a few years of high-profile incidents, things are gradually improving. The number of cars on the road might be reduced, which could improve traveler safety by reducing accidents. This look into the future emphasizes the need of proactively preventing accidents. It emphasizes the human effect of every journey and the possibility of unexpected endings, going beyond simple numbers. Through the use of this map data, we are able to prioritize safety and make sure that everyone is travels more smoothly.

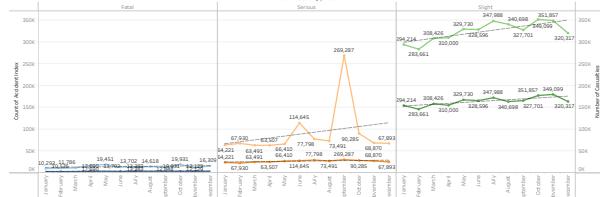
python code and
datasources

Casualty Locations

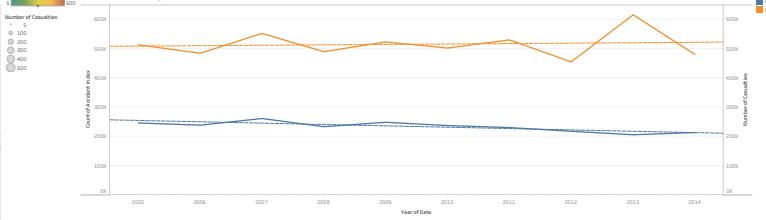


©2014 Mapbox © OpenStreetMap

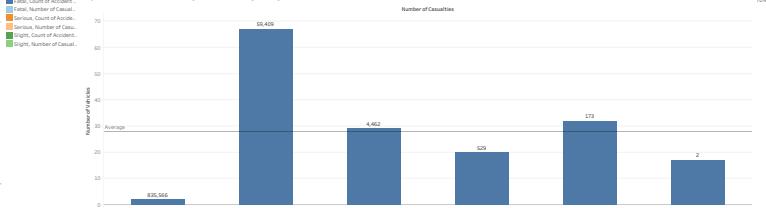
Number of Casualties by Month and Severity Type



Number of Casualties By Year



Impact of Vehicle Reduction on Adjusted Casualties (What-if)



Story

Map of the UK that indicates the locations and times of car accidents, represented by dots as...

Python code and libraries

```

Pearson Corr AGR and CR(Python):
SCRIPT_44 = """
# Calculate the Pearson correlation coefficient between two arrays
correlation = np.corrcoef(Aggr1, Aggr2)[0, 1]

return correlation

# (Assuming Aggr1 is a placeholder for Engine Capacity ('CC'))
# If Comment the heavily array has to be left uncommented
result = (np.array(Aggr1) * 7.3) / 1000
"""

# Now return a list which is JSON serializable
return result

def Aggr4(Engine Capacity)(CC):
    """

```