

A blue-tinted photograph of a busy New York City street. The image shows a line of cars in traffic, with a white car in the foreground on the right and a dark car on the left. The background is slightly blurred, showing more cars and city buildings. The overall mood is urban and busy.

# NEW YORK CITY TRAFFIC COLLISIONS

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An aerial photograph of a city street with several cars, including yellow taxis and a white sedan. The image is overlaid with a semi-transparent blue filter. On the right side, there are several white diagonal lines. The text 'PROBLEM STATEMENT' is written in large, white, sans-serif capital letters on the left side.

# PROBLEM STATEMENT

Motor vehicle collisions reported by the New York City Police Department from January 2021 to April 2023. Each record represents an individual collision, including the date, time, and location of the accident (borough, zip code, street name, latitude/longitude), vehicles and victims involved, and contributing factors.



Vehicles in  
Accidents

95608

3939

2027

2519



# NYC Traffic Collisions



Pedestrians Injured

18877

Motorists Injured

81428

Cyclists Injured

10932

Total Accidents

116861

Deaths during Accident



92%

Others

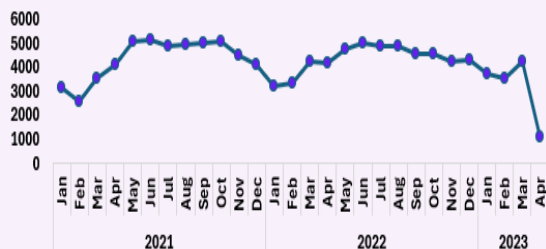


55%

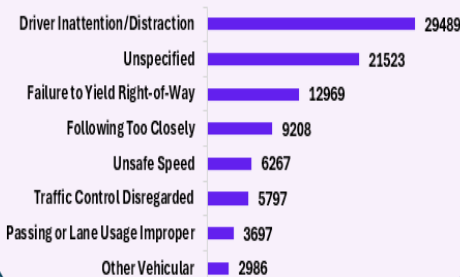
Others



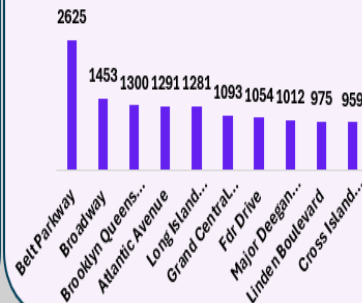
Accidents



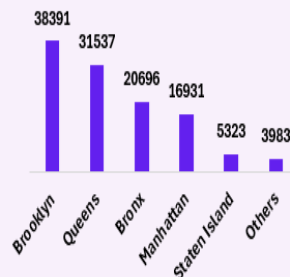
Contributing Factors



Street's



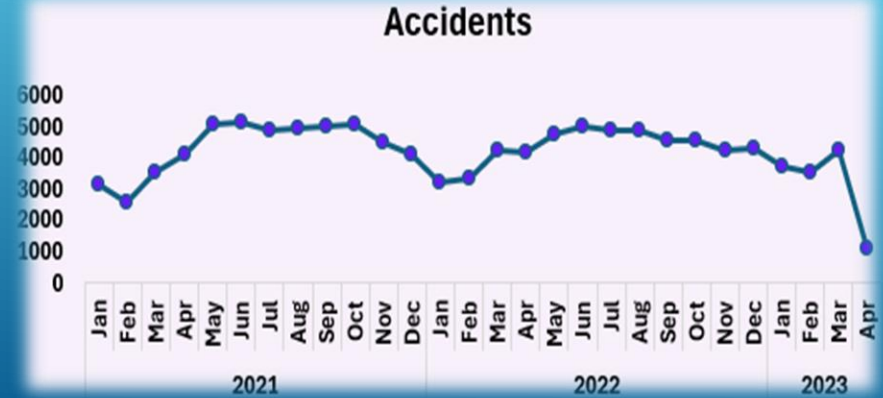
Borough's



	12 AM	1 AM	2 AM	3 AM	4 AM	5 AM	6 AM	7 AM	8 AM	9 AM	10 AM	11 AM	12 PM	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM	7 PM	8 PM	9 PM	10 PM	11 PM
Sunday	2035	1377	1171	1127	1279	901	783	668	850	926	1057	1245	1363	1430	1659	1608	1683	1651	1599	1507	1412	1395	1296	1179
Monday	1495	753	573	465	563	700	999	1397	1949	1706	1572	1614	1645	1690	2004	2094	2150	2130	1875	1551	1301	1177	1015	915
Tuesday	1236	483	369	347	305	543	957	1341	2154	1803	1620	1661	1768	1850	2040	2253	2253	2277	2061	1664	1344	1183	1145	999
Wednesday	1231	533	433	358	364	532	1022	1376	2019	1690	1628	1668	1765	1802	2143	2253	2379	2261	2039	1701	1421	1227	1191	1017
Thursday	1346	603	433	387	425	556	943	1325	2045	1736	1676	1703	1762	1778	2124	2215	2314	2341	2101	1756	1487	1270	1221	1098
Friday	1532	717	594	511	534	580	993	1324	1957	1710	1588	1741	1982	1923	2164	2386	2447	2463	2216	1893	1625	1571	1534	1511
Saturday	1883	1270	1118	1115	1097	869	775	779	1072	1111	1357	1452	1625	1637	1789	1768	1839	1815	1782	1620	1704	1523	1502	1535

# INSIGHTS

The line chart shows us that the number of accident during period of 2021&2022 were stable **around 5k** which got reduced in 2023 first quarter



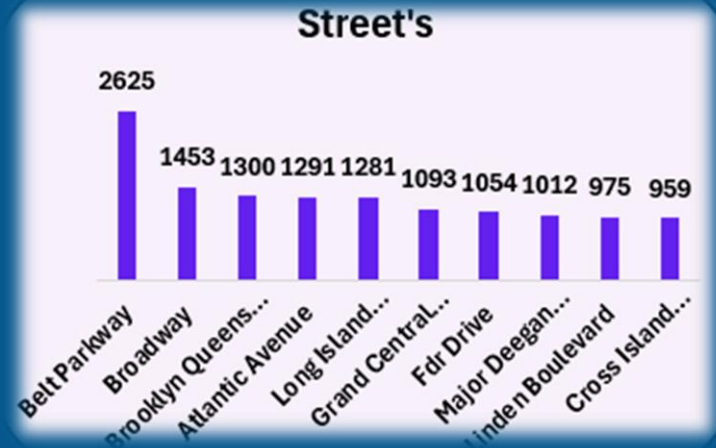
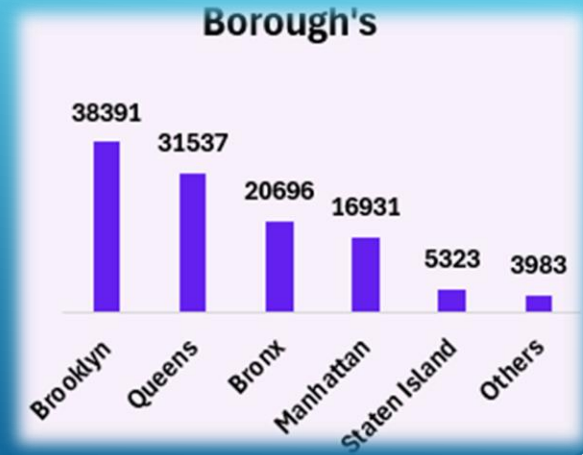
## Contributing Factors



The main contributing factor for causing accidents in NYC is the Distraction or Driver Inattention while driving that is **around 29k** in numbers

# INSIGHTS

Brooklyn and Queens are the Borough's with most number of accidents reported with around **38k**.



Considering Brooklyn as the main location with highest number of accident, It has Belt Parkway Street as the highest contributor in terms of accident with 2.5k accidents combined.



# INSIGHTS

The highest number of accidents occur on **Fridays, followed by Thursdays and Wednesdays.**

Peak accident hours are typically between **3 PM and 6 PM.**  
There were **116,861** total accidents recorded.

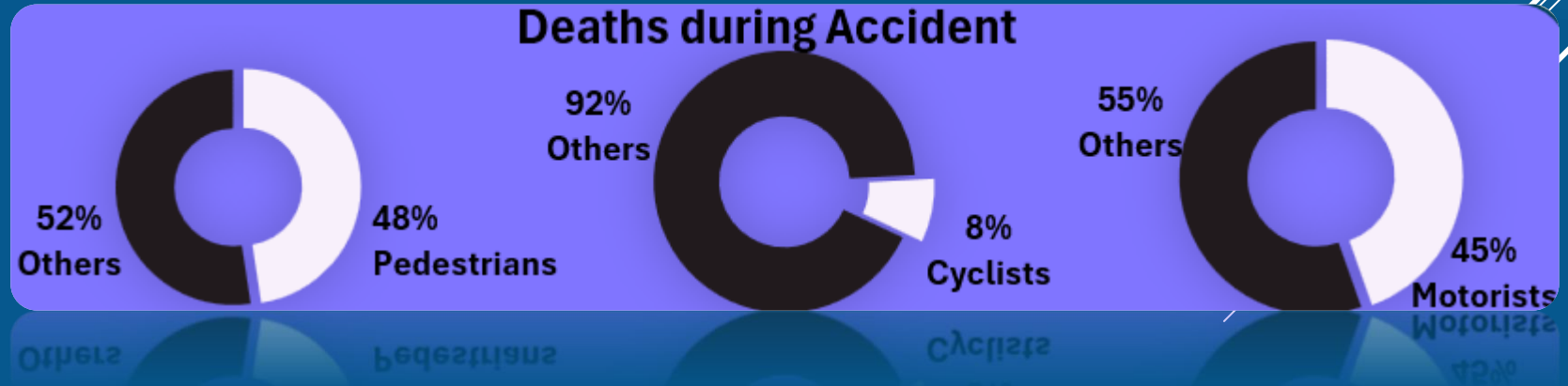
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# INSIGHTS

Pedestrians account for **48%** of deaths, despite being involved in fewer accidents overall.

Cyclists represent **8%** of fatalities, which is disproportionately high given their lower involvement rate.

Motorists, despite being the most numerous group in accidents, account for **45%** of fatalities.



# RECOMMENDATIONS



Implement more pedestrian-friendly infrastructure like protected crosswalks and longer crossing times, especially in high-risk areas.



Expand dedicated bike lane networks, particularly in Brooklyn and Queens where accident rates are highest.



Increase traffic enforcement during peak accident hours (3 PM to 6 PM) and on high-risk days (especially Fridays).



Develop tailored safety plans for Brooklyn and Queens, given their higher accident rates. Analyze what makes Manhattan relatively safer despite its density, and apply lessons to other boroughs.





Thank You

