N.Y.C COLLISIONS ANALYSIS

Collisions by Time of Day

64K

57K

Night

51K

Evening

68K

Afternoon

Total Collisions

Total Fatalities

Total Injuries

116K



Month

All

 \vee

Borough

Vehicle Type

Time of Day

All

Contributing **Factor**

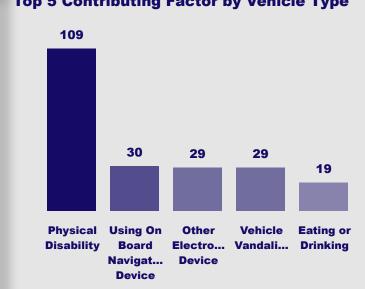
All \vee

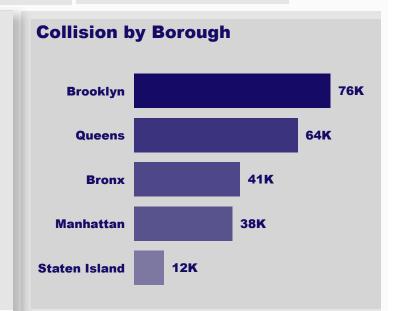




635

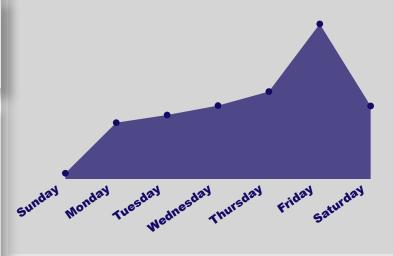




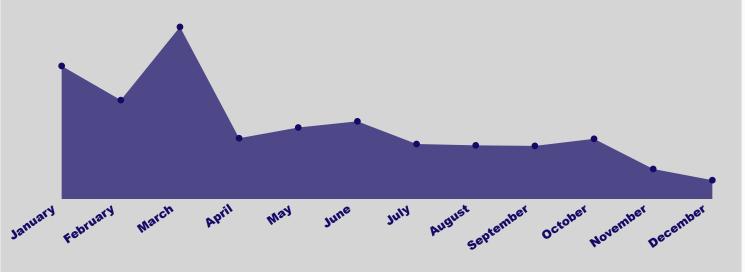




Morning







N.Y.C COLLISIONS ANALYSIS

Total Fatalities Breakdown

Total Collisions

238K

Total Fatalities

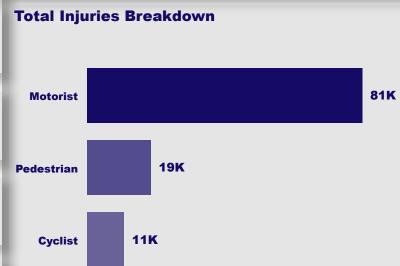
635

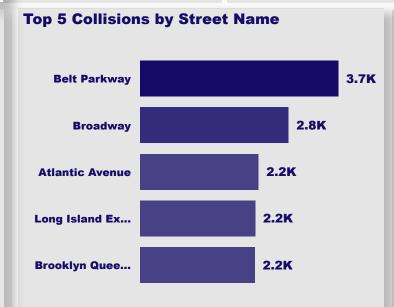
116K

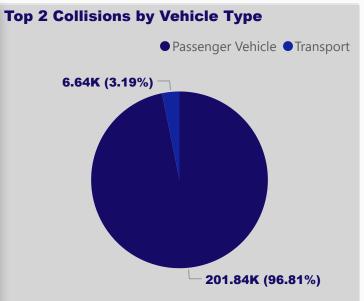
Total Injuries











Contributing

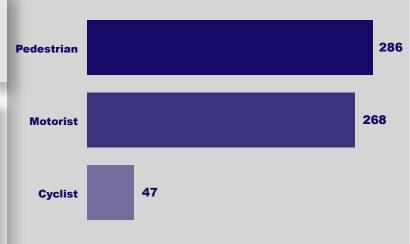
Factor

Time of Day

All

All





Street Name	Collisions Per Street	% Collisions Per Street	
Belt Parkway	3728		1.56%
Broadway	2794		1.17%
Atlantic Avenue	2230		0.94%
Long Island Expressway	2165		0.91%
Brooklyn Queens Expressway	2159		0.91%
Fdr Drive	1899		0.80%
3 Avenue	1732		0.73%
Grand Central Pkwy	1639		0.69%
Cross Island Parkway	1579		0.66%
Major Deegan Expressway	1566		0.66%
Flatbush Avenue	1543		0.65%
Total	238421		100.00%

N.Y.C COLLISIONS ANALYSIS

Total Collisions

238K

Total Fatalities

635

Total Injuries

116K



Month

All

Borough

All

All

Time of Day

ΑII

Contributing Factor

All



INSIGHTS

1. Monthly Trends Show a Drop in Accidents

Sharp decline in collisions between March and April, likely due to COVID-19 lockdowns. March had the highest percentage of collisions, December had the lowest.

Collisions rise early in the year, peak around March, and decline toward year-end.

2. Time of day

Most accidents occurred in the Afternoon(68k) and Morning(64k) (peak accident periods), likely due to rush hours, school runs, and work commutes. Accidents reduce progressively toward the evening, suggesting less road congestion or Vehicle Type reduced activity.

Night collisions(57k) are still significant, possibly due to visibility issues or fatigued drivina.

3.Day of the week

Friday had the highest collision frequency which reflects increased commuting, social activities, or end-of-week fatigue.

Sunday had the least.

4.Most Accident-Prone Street

Belt Parkway had the most accidents (3.7K)

This represents around 1.56% of all reported accidents — highest for a single street.

5.Most Common Contributing Factor (Vehicle 1) and Fatal Accidents Physical Disability was the top contributing factor reported for vehicle 1(109) incidents) in non-fatal cases, followed by Using Navigation Device, other electronic device, vehicle vandalism and Eating/Drinking.

For fatalities **motorists** and **pedestrians** were highly affected.

6. Vehicle type

Passenger vehicles were involved in the vast majority of collisions (96.81%), indicating high usage on NYC roads, possibly more individual trips than commercial transport. Transport vehicles was over (3%).

7.Borough Breakdown

Brooklyn had the highest number of collisions(76k), possibly due to higher population density, more road networks or traffic congestion. Staten Island reports the fewest (12k).

RECOMMENDATIONS

1. Targeted Awareness Campaigns

Educate drivers on the dangers of distractions (especially mobile navigation and devices).

Promote cyclist and pedestrian safety, especially in high-risk areas.

2.Street-Level Interventions

Investigate Belt Parkway and Broadway for engineering redesigns, better signage, and stricter enforcement.

Introduce **smart traffic systems** or speed control on high-incident streets.

3. Time-Specific Patrols

Increase traffic monitoring during morning and afternoon peaks, and especially on Fridays.

4. Vehicle-Specific Measures

Require better safety compliance for passenger vehicles, given their overwhelming involvement in accidents.

5.Data-Driven Urban Planning

Use the trends to redesign road usage policies, improve pedestrian pathways and add bike lanes in high-collision zones.

CONCLUSION

This NYC collision data analysis reveals clear patterns in timing, location, and type of road users affected. By using data to target specific times, streets, and behaviors, city authorities can reduce both injuries and fatalities. Data-driven traffic policy is essential for creating safer urban mobility systems.