

# NYC Crashes and EMS Dispatch Analysis - Overview

Overview

Crashes Analysis

Crashes Factors

EMS Analysis

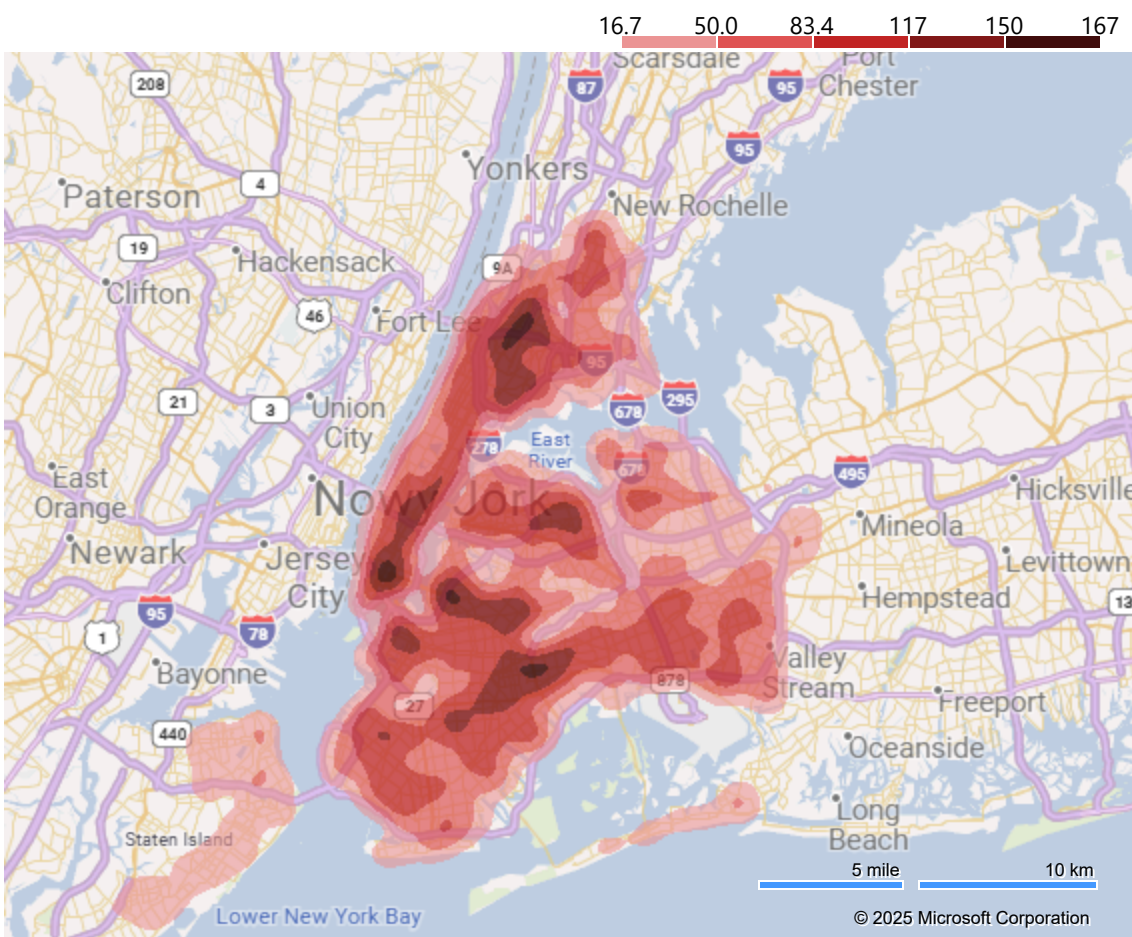
EMS Effectiveness

Borough Analysis

This dashboard presents an analytical overview of motor vehicle crashes and emergency medical service (EMS) dispatches in New York City throughout the year 2020.

By analyzing crash and EMS data, this report highlights trends and response patterns to improve safety and reduce traffic-related harm in NYC.

## Crashes Distribution



44K

Total Crash Count

20K

Total People Injured

726K

Total EMS Dispatch Interventions

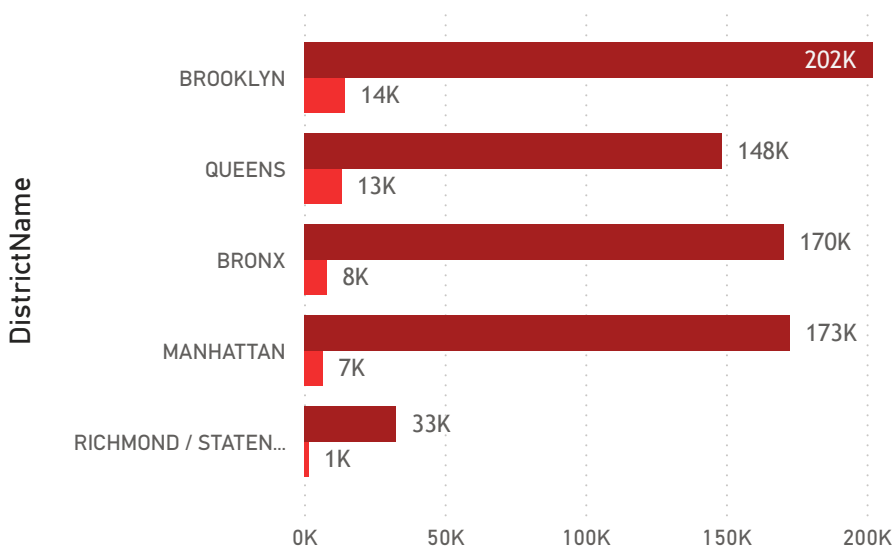
70.84%

FastResponsePercentage

## Crashes and EMS Distribution

by District

● Total Crash Count ● Total EMS Dispatch Interventions



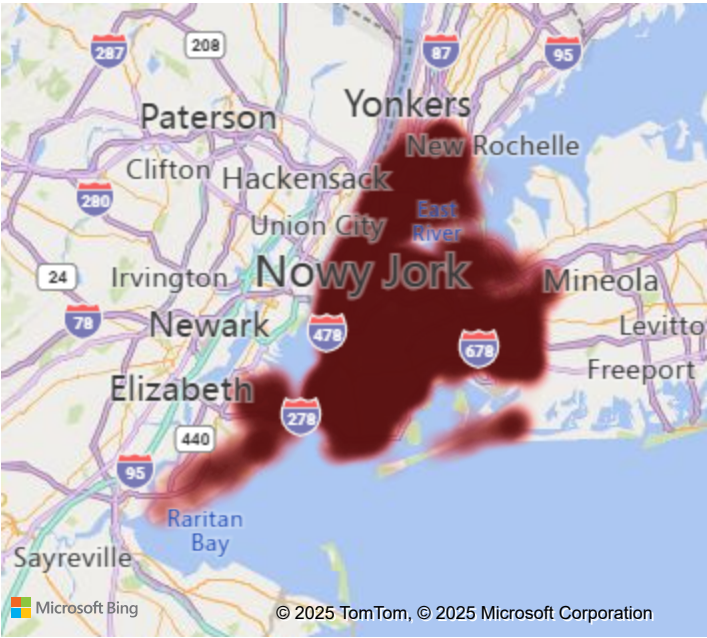
# Crashes Analysis

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- Crashes Factors
- EMS Analysis
- EMS Effectiveness
- Borough Analysis

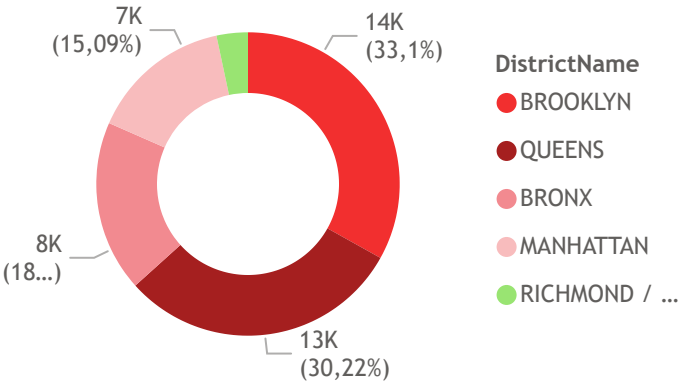
Select borough  
All

Select crash date  
2020-01-01  
2020-12-31

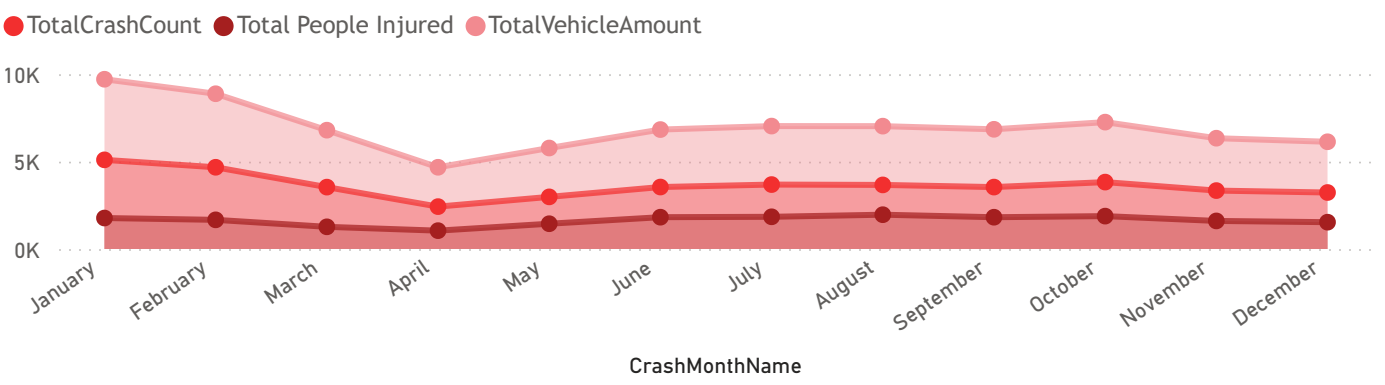
## Crashes Distribution



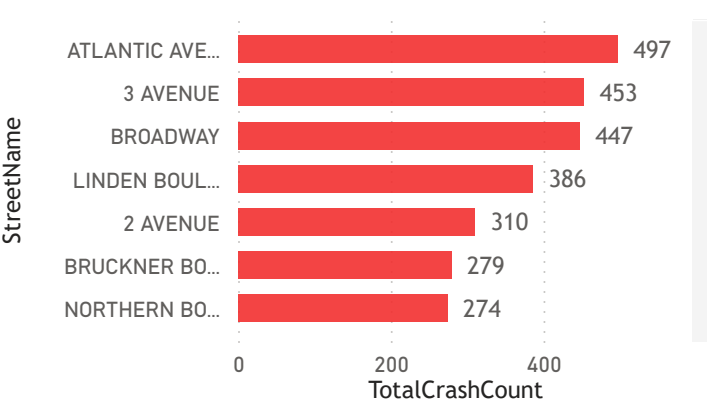
## Number of crashes per borough



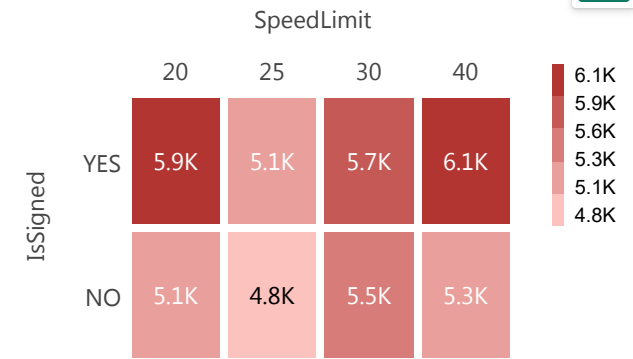
## Number of crashes by date



## Streets with most crashes



## Crashes by Sign Presence and Speed



DistrictName	TotalCrashCount	Total People Injured	Total People Killed
QUEENS	13156	5683	42
BROOKLYN	14412	7008	41
BRONX	7947	3653	20
MANHATTAN	6569	2575	19
RICHMOND / STATEN ISLAND	1453	737	8
Total	43537	19656	130

# Crashes Contributing Factors Analysis

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Select borough

All

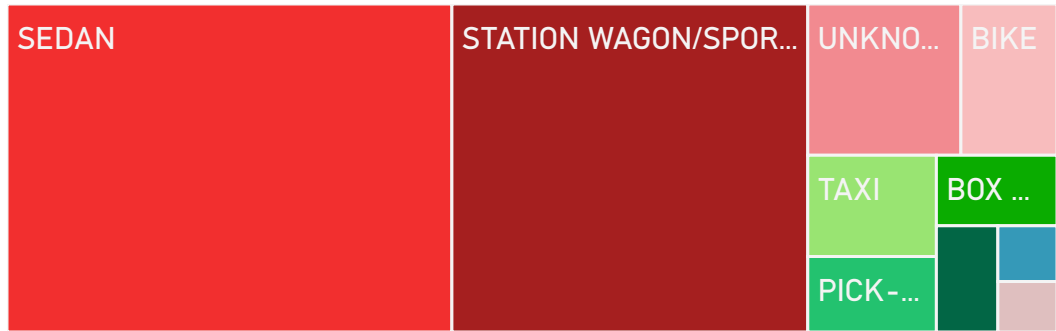
Select crash date

2020-01-01

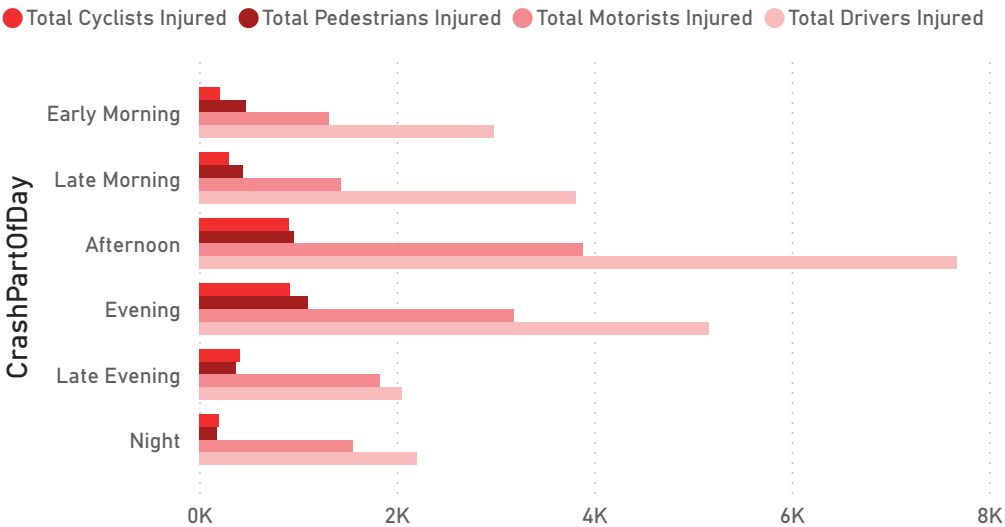
2020-12-31

CrashHour	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Total
0	272	219	219	210	243	251	262	1676
1	145	112	93	99	109	110	162	830
2	135	65	53	81	77	86	129	626
3	104	61	52	56	67	66	107	513
4	96	63	75	56	63	49	87	489
5	96	76	78	80	81	78	93	582
6	103	160	161	141	154	161	106	986
7	133	185	211	208	250	207	130	1324
8	206	312	346	301	354	338	228	2085
9	204	282	305	282	296	337	206	1912
10	243	311	274	286	294	298	238	1944
11	261	313	322	307	341	321	268	2133
12	266	359	295	324	347	379	321	2291
13	326	379	354	351	374	361	345	2490
14	334	388	409	460	418	454	390	2853
15	318	434	399	351	381	434	343	2660
16	390	421	475	462	472	499	401	3120
17	364	441	490	485	470	462	402	3114
18	352	373	436	464	407	436	380	2848
19	278	326	324	357	378	368	319	2350
20	283	267	285	277	335	319	287	2053
21	242	211	210	279	251	262	259	1714
22	239	170	232	246	222	262	249	1620
23	181	147	186	173	207	210	220	1324
Total	5571	6075	6284	6336	6591	6748	5932	43537

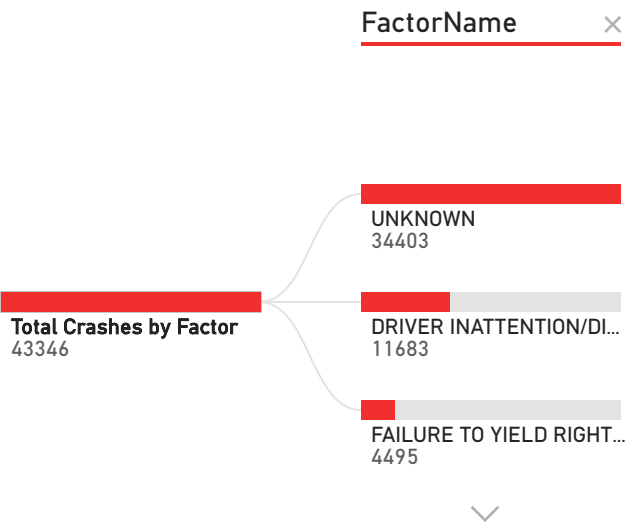
## Total Crashes by Vehicle Type



## Distribution of Victims by Time of Day



## Decomposition of Contributing Factors



# EMS Dispatch Analysis - Reaction Time and Effectiveness

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Select borough

All

Select date

2020-01-01

2020-12-31

726K

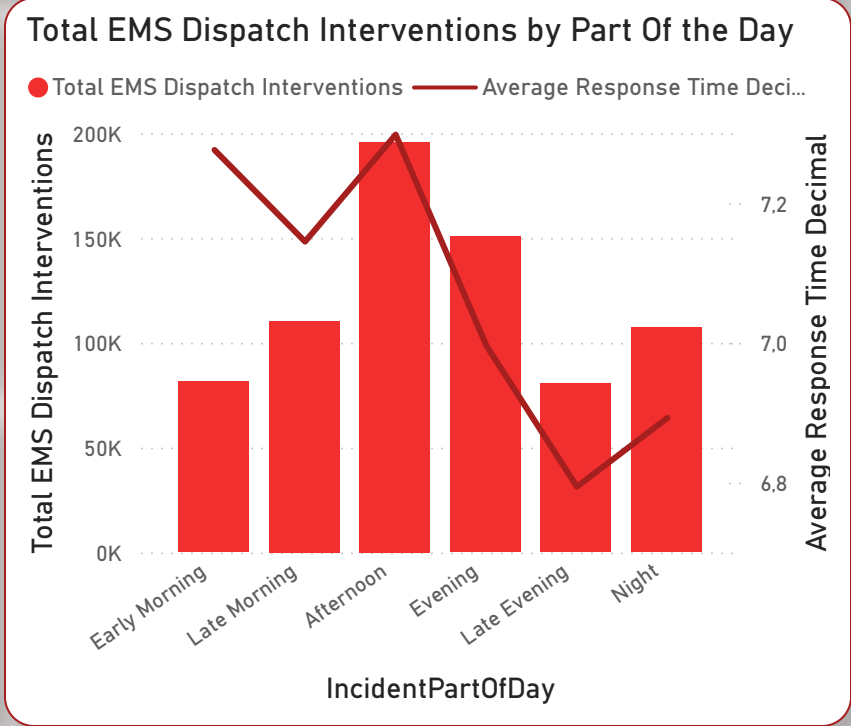
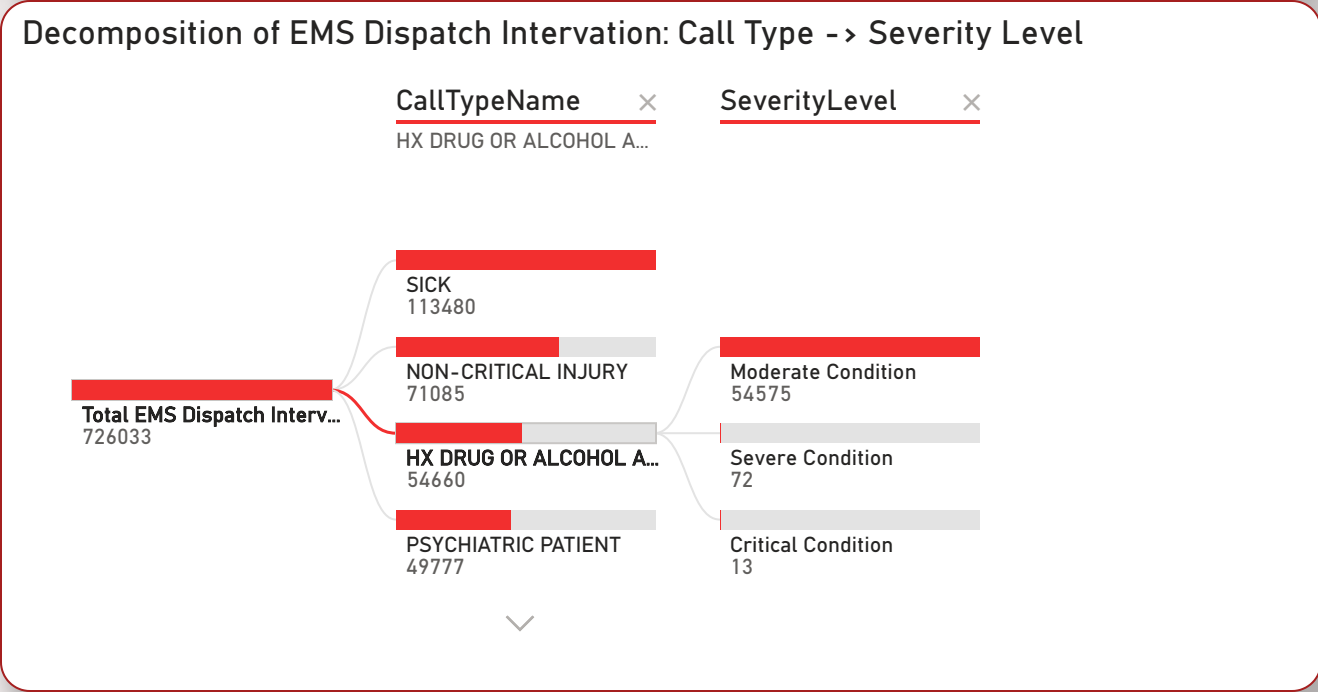
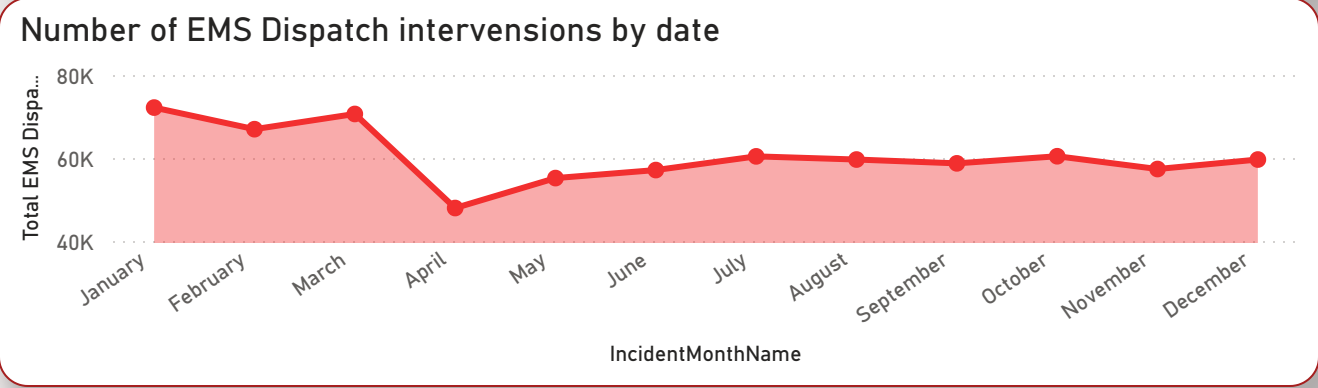
Total EMS Dispatch Interventions

77 min 29 s

Average Intervention Duration

7 min 6 s

Average Response Time



SeverityLevel	Average Response Time
Critical Condition	5 min 58 s
Immediate Life Threat	4 min 56 s
Informational Call	9 min 51 s
Minor Condition	7 min 15 s
Moderate Condition	7 min 1 s
Non Urgent	7 min 56 s
Severe Condition	6 min 10 s

# EMS Dispatch Analysis - Reaction Time and Effectiveness

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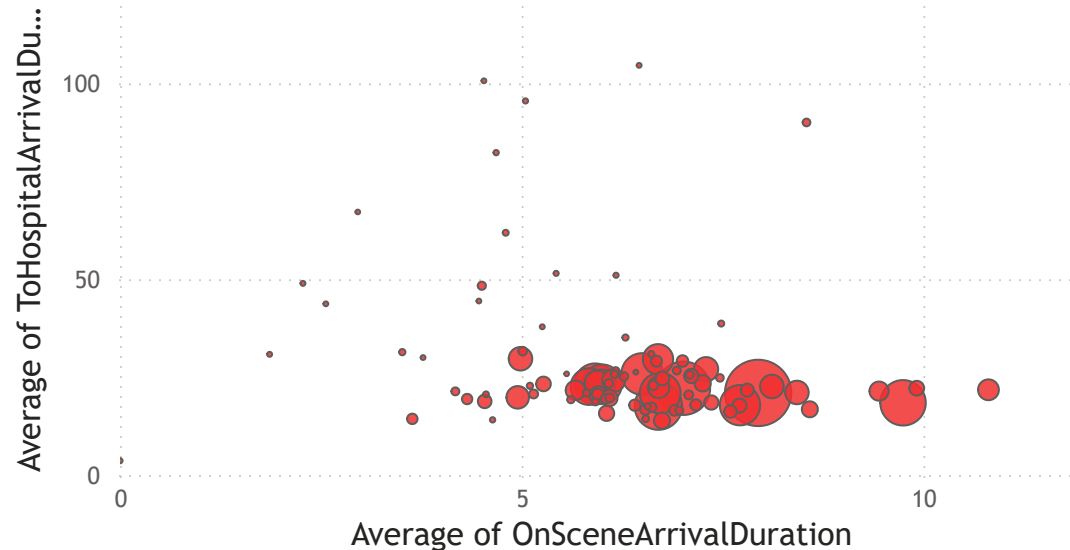
All

Select date

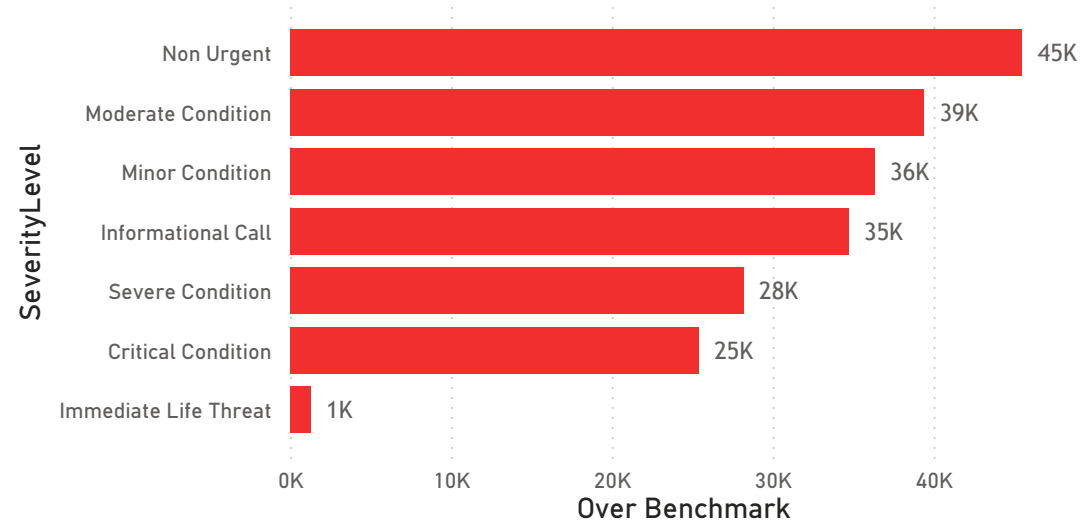
2020-01-01

2020-12-31

Dispatch and Transport Times vs. Call Type

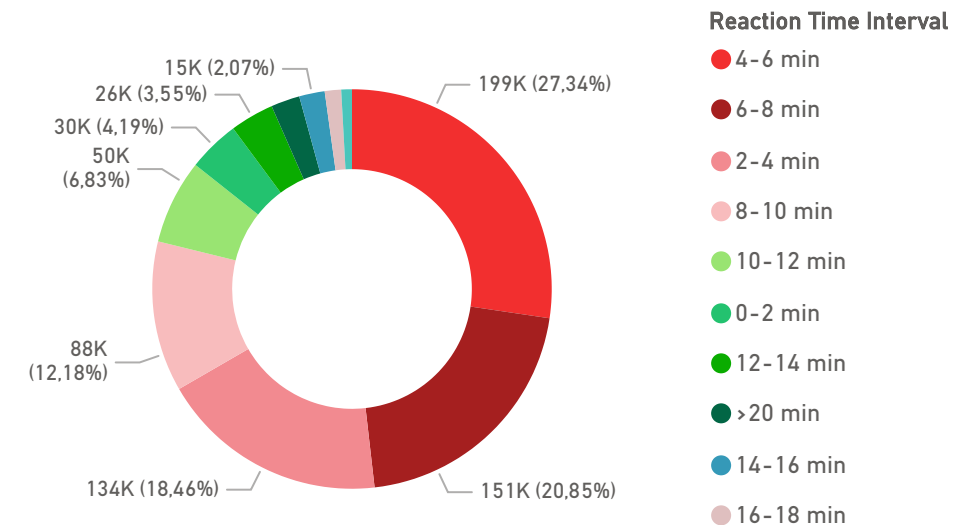


Interventions with >8 min response time by Severity Level

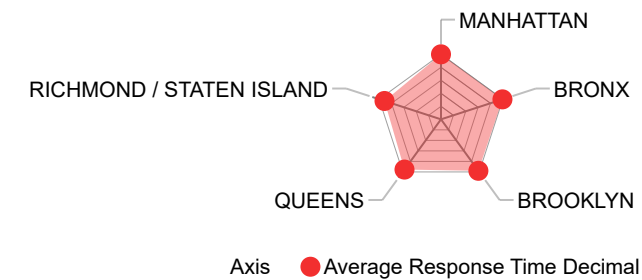


Response time is a key indicator of operational effectiveness. Medical standards require emergency teams to arrive within 8 minutes. This metric directly impacts survival rates and the overall effectiveness of interventions.

Dispatch Interventions Intervals Distribution



Average Response Time by borough



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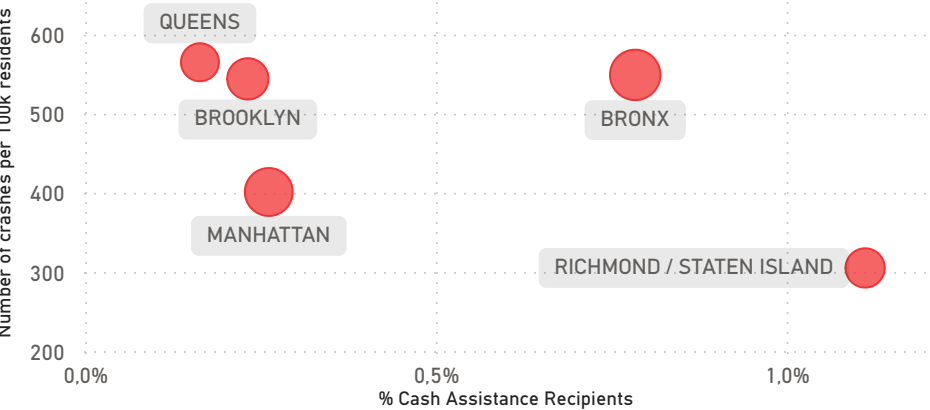
Borough Analysis

## Crashes and EMS Dispatch by borough

DistrictName	Sum of Population	% Cash Assistance Recipients	% Medicaid Recipients	% SNAP Recipients	Number of crashes per 100k residents	Number of EMS per 100k residents
BRONX	1446788	0.78%	2.24%	2.63%	549	11779
BROOKLYN	2648452	0.23%	1.11%	1.20%	544	7628
MANHATTAN	1638281	0.26%	1.09%	1.16%	401	10533
QUEENS	2330295	0.16%	1.03%	0.92%	565	6369
RICHMOND / STATEN ISLAND	476143	1.11%	4.57%	4.44%	305	6854
Total	8539959	0.36%	1.47%	1.54%	510	8502

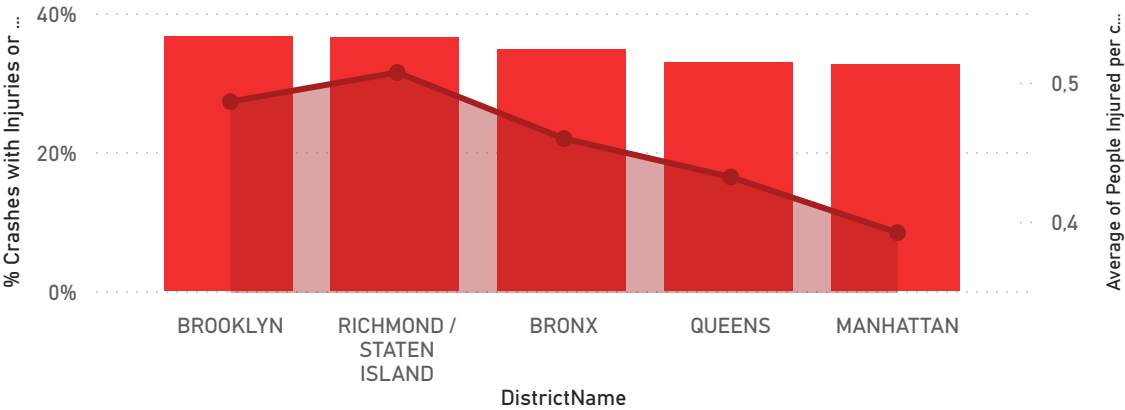
### Accidents and Emergency Calls vs Social Support Rate

bubble size - number of EMS dispatch interventions per 100k residents



### Crash Outcomes: Injury Rates and Average Victims per Crash by Borough

● % Crashes with Injuries or Fatalities ● Average of People Injured per crash



### Total EMS Dispatch Interventions by DistrictName and SeverityLevel

