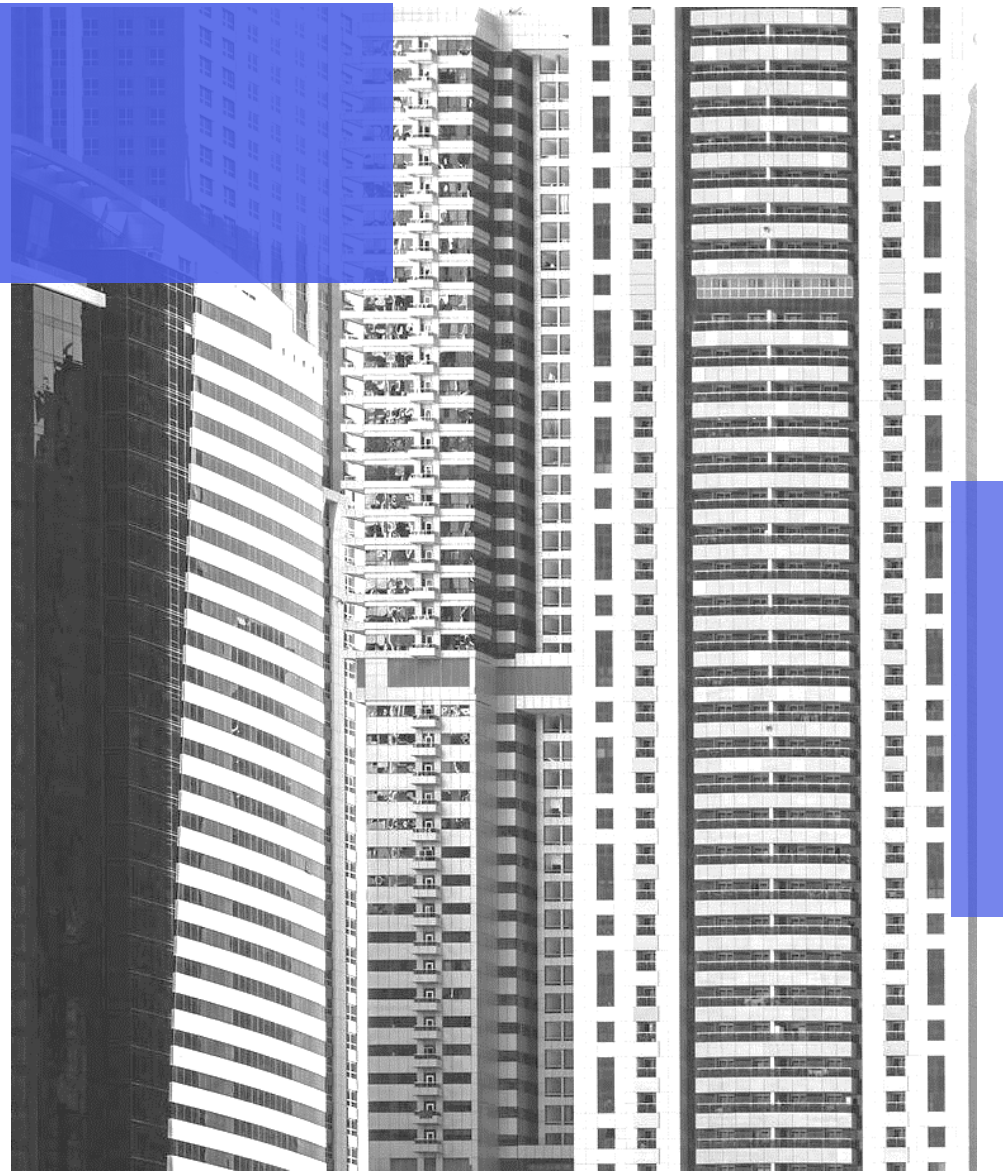
BY JUSTIN WONG

DO KNICK GAMES IMPACT CRIME RATES IN SURROUNDING AREAS?



AGENDA

INTRODUCTION

EXPLORATORY DATA ANALYSIS

IMPLICATIONS FOR STAKEHOLDERS

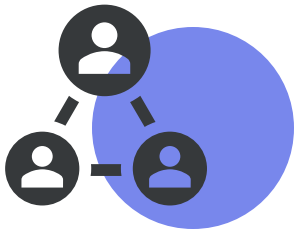
ETHICAL, LEGAL, SOCIETAL IMPLICATIONS

CONCLUSION

INTRO

As a sports fan, I'm really intrigued by what happens after sporting events. After seeing the chaos unfold on social media following games, I wanted to investigate this phenomenon further.

HOW WE GET THERE



TRACTABLE DATA

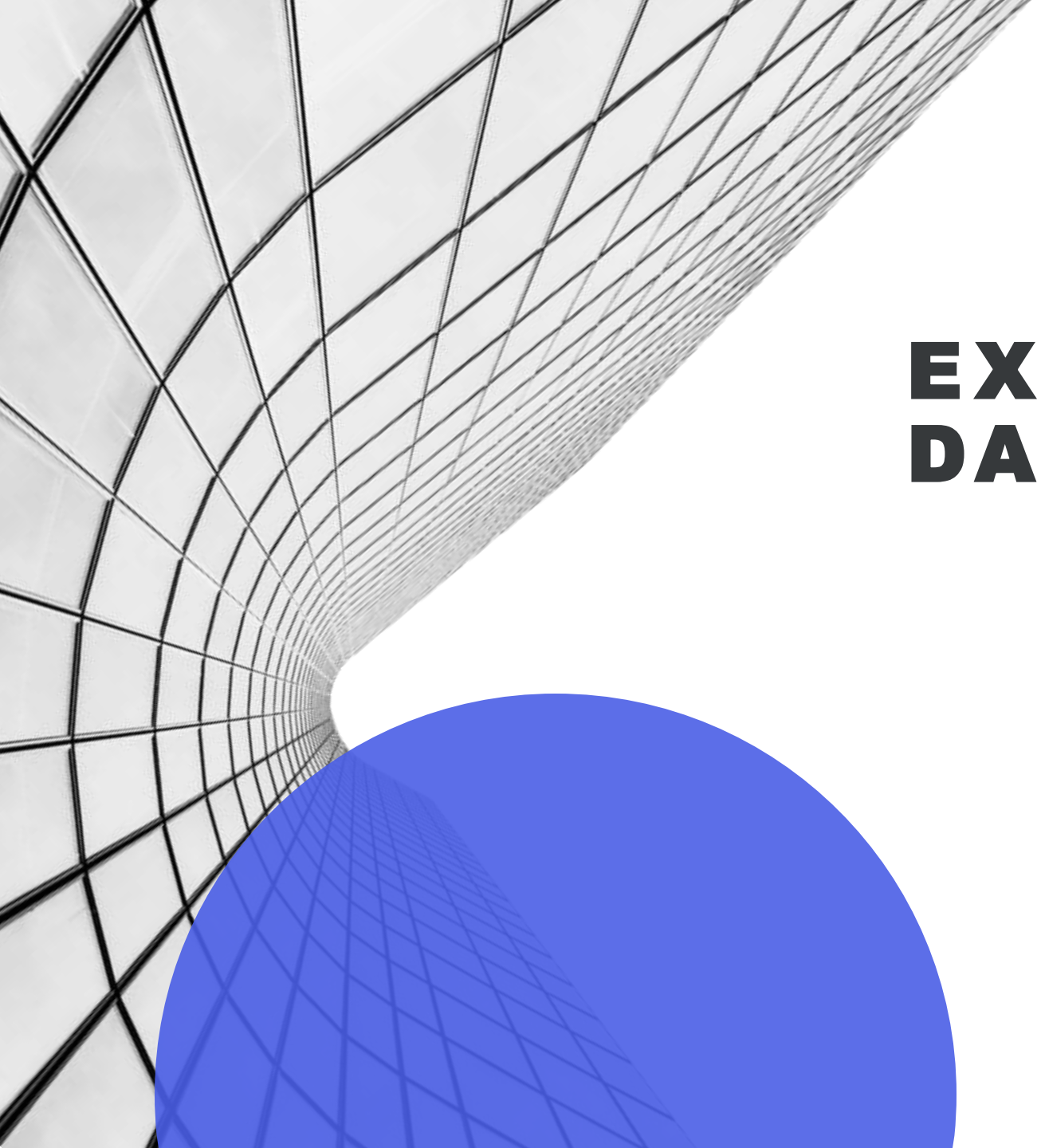
- The crime data from NYPD CompStat and game data from sources like ESPN are publicly available
- The dataset includes comprehensive crime statistics and detailed game information

DATA RETRIEVAL

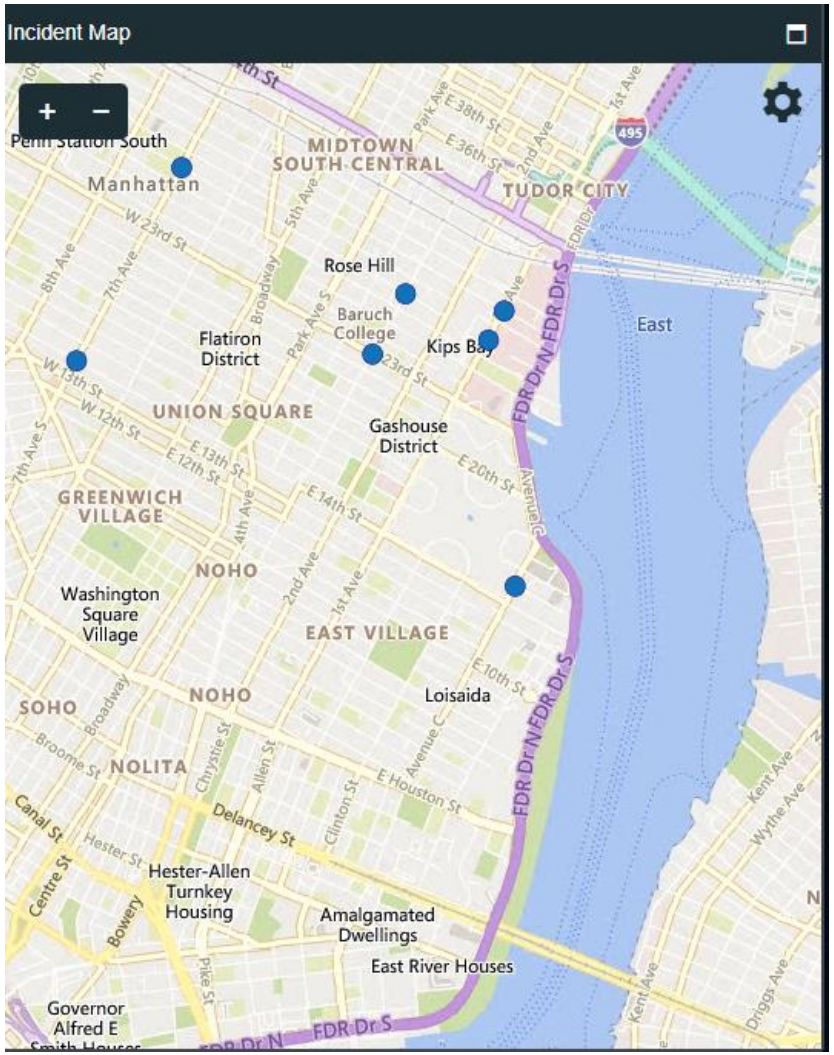
- In order to get GameDay data I utilized Selenium to web scrape ESPN for the 2023-2024 season
- In order to access crime data I was able to find an API posted by the NYPD filing crime data in 2024

MERGING DATASETS

- To Merge the two different datasets, I performed an inner merge
- Any game day without an arrest will be dropped from the final dataset.



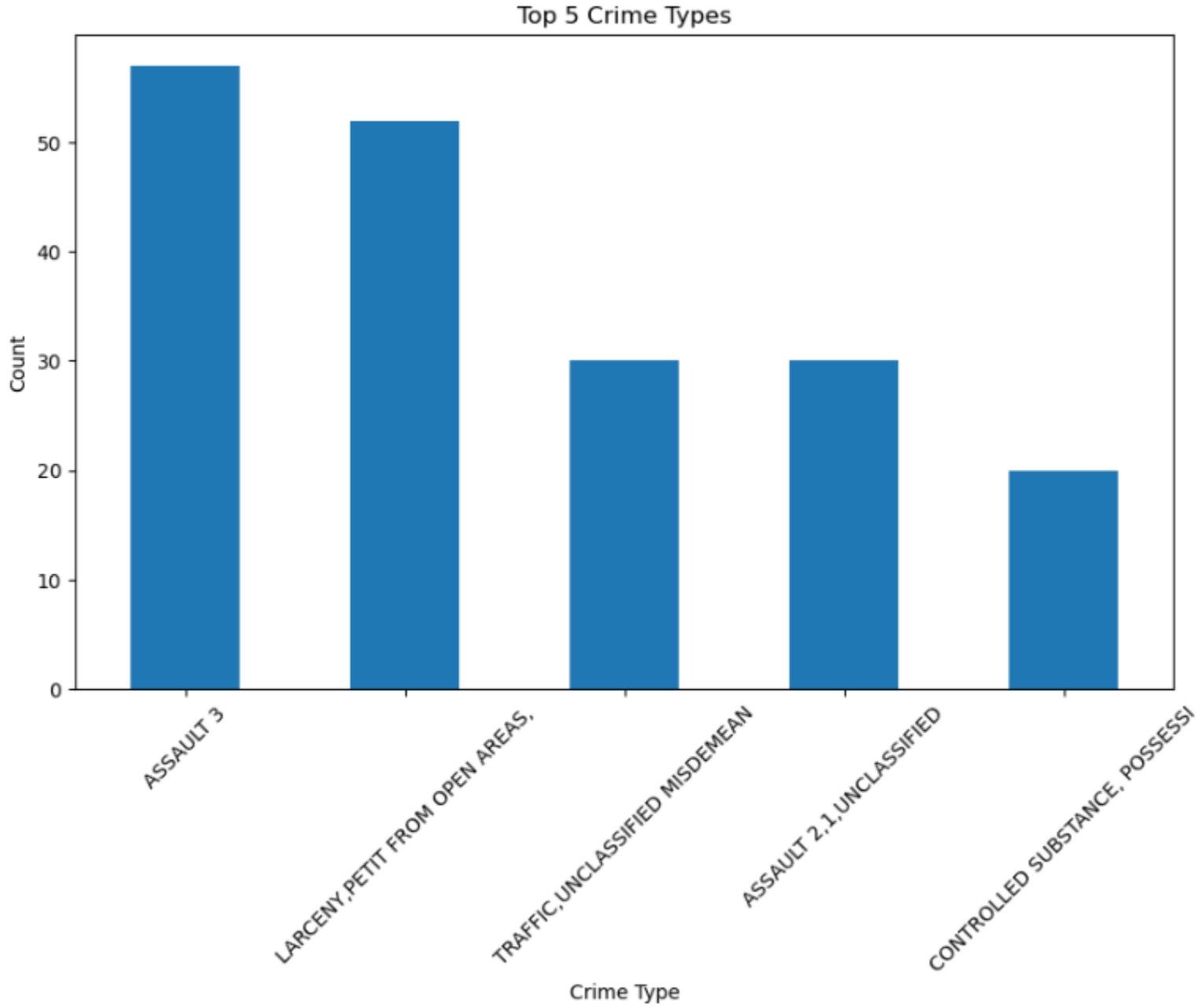
EXPLORATORY DATA ANALYSIS



2025 Attendance	Home				Road			Overall		
RK	TEAM	GMS	TOTAL	AVG	PCT	GMS	AVG	PCT	GMS	AVG	PCT
1	Mavericks	28	562,353	**20,084**	--	28	18,217	--	56	19,167	--
2	76ers	27	535,260	**19,824**	--	27	17,798	2669.7	54	18,811	5643.4
3	NY Knicks	29	574,548	**19,812**	--	25	18,545	--	54	19,225	--
4	Bulls	29	573,474	**19,774**	--	26	18,001	2600.2	55	18,936	5786.2
5	Nuggets	27	533,546	**19,760**	--	28	18,117	2818.3	55	18,924	5782.5
6	Heat	23	453,444	**19,714**	--	30	18,074	3012.5	53	18,786	5531.6
7	Cavaliers	29	563,528	**19,432**	--	25	18,496	--	54	18,998	--

pd_desc	
ASSAULT 3	57
LARCENY,PETIT FROM OPEN AREAS,	52
TRAFFIC,UNCLASSIFIED MISDEMEAN	30
ASSAULT 2,1,UNCLASSIFIED	30
CONTROLLED SUBSTANCE, POSSESSI	20
PUBLIC ADMINISTRATION,UNCLASSI	16
THEFT OF SERVICES, UNCLASSIFIE	12
ROBBERY,OPEN AREA UNCLASSIFIED	11
LARCENY,GRAND FROM OPEN AREAS, UNATTENDED	10
CONTROLLED SUBSTANCE,INTENT TO	10

pd_desc	
LARCENY,PETIT FROM OPEN AREAS,	31
ASSAULT 3	25
LARCENY,GRAND FROM OPEN AREAS, UNATTENDED	14
ASSAULT 2,1,UNCLASSIFIED	12
CONTROLLED SUBSTANCE, POSSESSI	10



OLS Regression Results

Dep. Variable:	Crime_Count	R-squared:	0.035
Model:	OLS	Adj. R-squared:	0.028
Method:	Least Squares	F-statistic:	5.285
Date:	Mon, 17 Feb 2025	Prob (F-statistic):	0.00137
Time:	20:52:08	Log-Likelihood:	-1227.5
No. Observations:	440	AIC:	2463.
Df Residuals:	436	BIC:	2479.
Df Model:	3		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[0.025	0.975]
const	9.3836	0.406	23.099	0.000	8.585	10.182
Attendance	-3.803e-15	2.76e-15	-1.378	0.169	-9.23e-15	1.62e-15
Home/Away_Home	0.8507	0.390	2.180	0.030	0.084	1.618
Win/Loss_Win	1.0926	0.402	2.715	0.007	0.302	1.883
OT_Yes	-1.3779	1.301	-1.059	0.290	-3.936	1.180

Omnibus:	39.953	Durbin-Watson:	0.192
Prob(Omnibus):	0.000	Jarque-Bera (JB):	50.399
Skew:	0.718	Prob(JB):	1.14e-11
Kurtosis:	3.829	Cond. No.	9.47e+17

AREAS OF FOCUS

IMPLICATIONS FOR STAKEHOLDERS

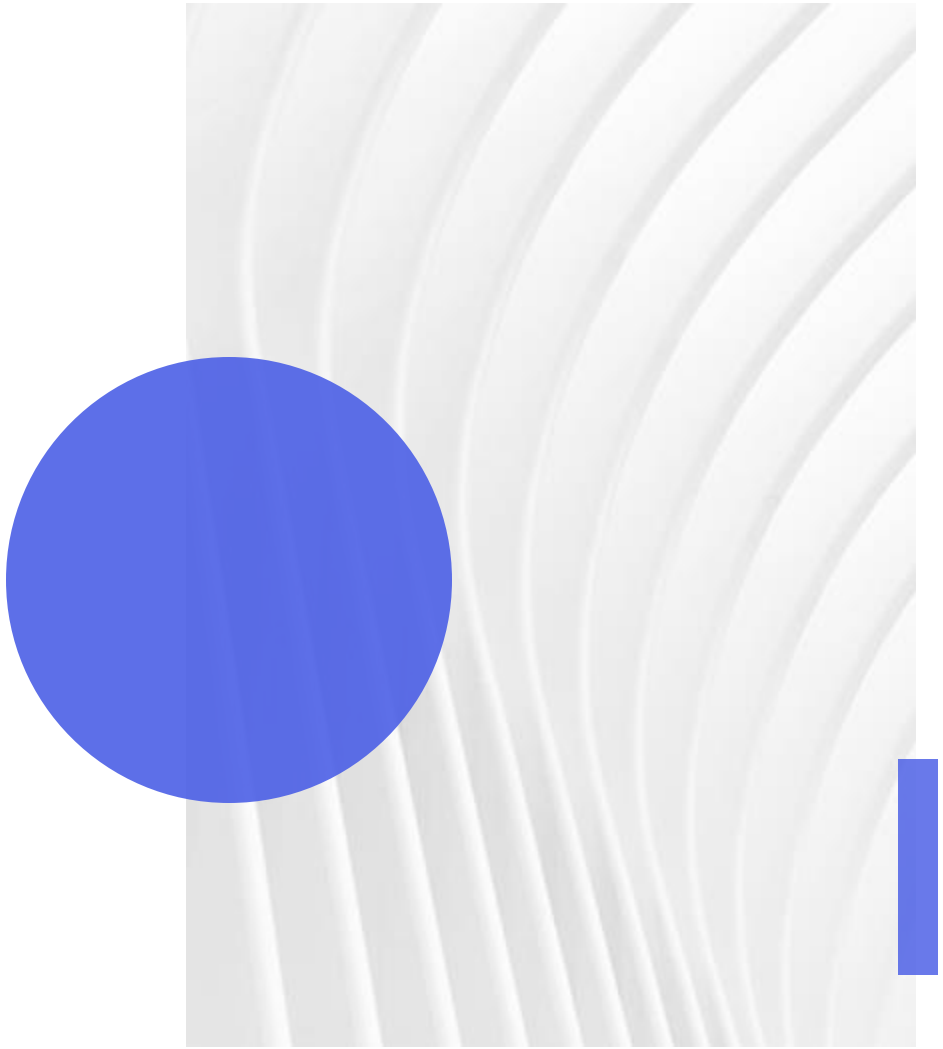
•Increased crime following major events may require law enforcement to allocate more resources to manage post-game situations, affecting staffing and budgeting priorities.

ETHICAL, LEGAL, SOCIETAL IMPLICATIONS

•Analyzing crime data could raise concerns about profiling, biases in data collection, and how it might influence policy decisions or public perceptions of specific communities.

CONCLUSION

- The results of the analysis are inconclusive at this stage, indicating the need for further data retrieval
- This analysis serves as a good start for recommendations on policy updates aimed at mitigating the potential impact of sporting events on crime rates




THANK YOU