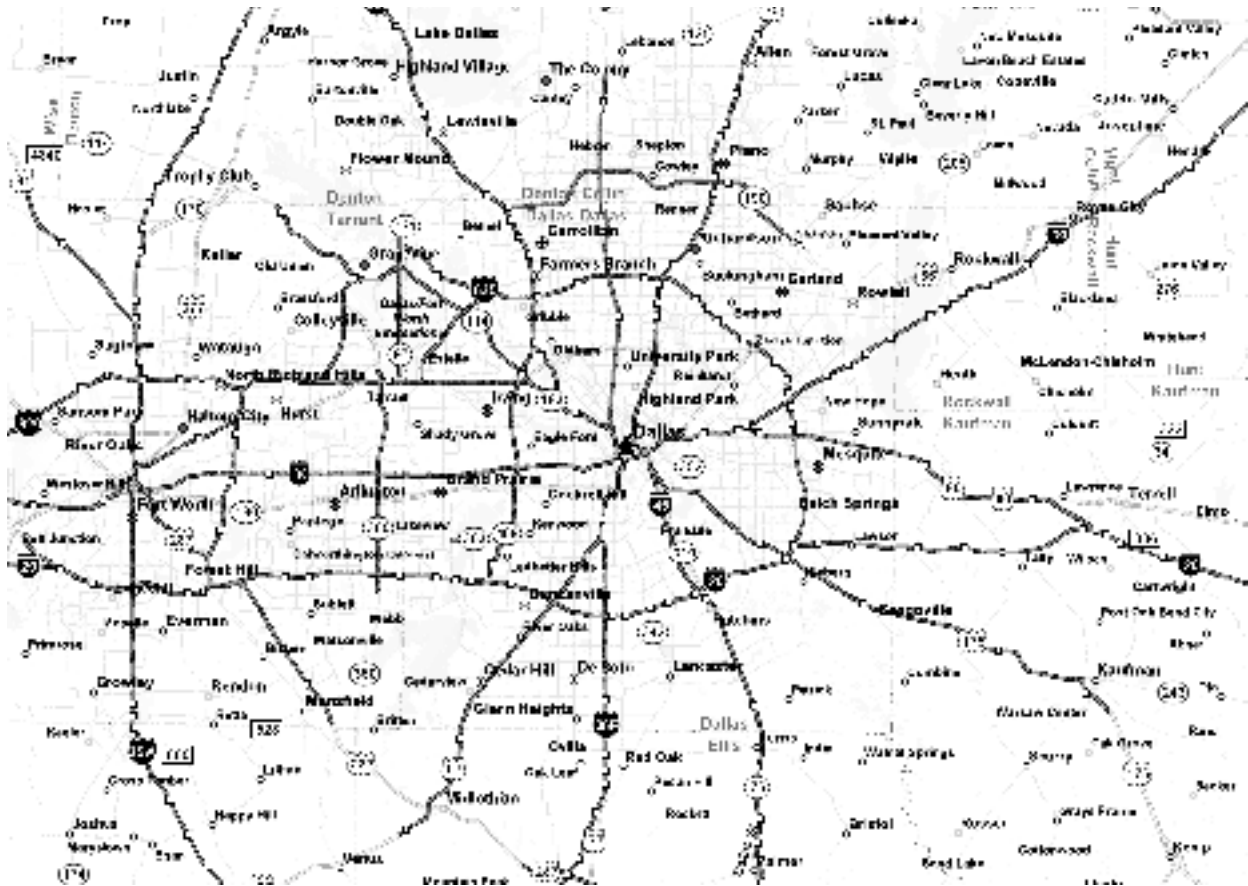


FRISCO ISD SCHOOL CRIME MAPPING

Does location have an influence on where types of school violations occur?



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INDEPENDENT STUDY & MENTORSHIP II

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INTRODUCTION

Crime mapping is a technique, used by law enforcement agencies across the globe, that compiles valuable information and data about recent crime activity. Crime mapping is meant to reduce and prevent crime through analysis of crime patterns. By mapping where and when crime takes place in a region, analysts can identify crime hotspots and respond to those hotspots with actions such as patrolling. Nowadays, crime mapping is used to reduce crimes and prevent crimes before they happen rather than responding to crimes that have already taken place or are in progression. Crime mapping is based on the fact that geography influences crime greatly due to various factors, such as amount of foot traffic, open spaces, number of alleys, and location of bars. This technique has been effective in reducing criminal activity in many cities. That being said, crime happens everywhere including high schools. School Resource Officers are school based law enforcement officers that write and submit numerous reports of school crimes throughout the year. School Resource Officers, commonly know as SROs, protect school communities and help create a safe environment for learning. While SROs enforce state and national law in schools, they also enforce school rules. Essentially, SROs deal with school crimes such as class disturbances, traffic stops, thefts, assault, paraphernalia, and criminal trespass. Such crimes and more occur on a daily basis across high school campuses nationwide. Though some schools have lower crime rates than others, no location is free from it. Even safe schools such as Frisco ISD schools have crime.

PURPOSE

The purpose of this study is to identify and learn about crime patterns present in a Frisco Independent School District's high school. Though it is already evident that crimes occur in high schools, this study will determine whether or not high school crimes have patterns in location. Essentially, it will discern whether or not location influences the type and frequency of crimes. By plotting and analyzing the data, methods of reducing school crimes can be found. For example, based on the patterns found, potential solutions such as more monitoring in a specific area can be suggested. Once these patterns have been recognized action can be taken to effectively respond to them. This way schools can work towards an even safer learning environment for students. According to a survey conducted by the U.S. Department of Education, an average Texan student generally spends approximately one hundred eighty days in school and an average of seven point one seven hours a day. If calculated, that means students in Texas spend approximately one thousand two hundred ninety point six hours in school per year. Evidently, one thousand two hundred ninety point six hours is a significant chunk of time and is why it is important to ensure the security of students.

KEY QUESTIONS

1. Does location have an influence on where types of school violations occur?
2. Does location influence the frequency of crime in a given area?
3. What measures can be taken to effectively reduce school crimes?
4. Are areas with significant foot traffic likely to have more crimes than areas with less foot traffic?
5. What type of crime occurs most often and is common in Liberty High School?

HYPOTHESIS

Areas in Liberty High School with high foot traffic and large amounts of students, such as the cafeteria, will have the highest frequency of a variety of crime. Additionally, locations where there is not a high number of students, such as classrooms, will have little to no crimes. Furthermore, places in schools where there is minimal adult supervision, such as locker rooms, will commonly have thefts and disorderly conduct.

MATERIALS

1. Liberty High School Crime Statistics
2. Liberty High School Crime Locations
3. Liberty High School Campus Map
4. Laptop
5. DocHub PDF Editor

PROCEDURE

1. Start by researching and learning about the various components of crime mapping. Understanding what it is and why it is beneficial to law enforcement agencies is important.
2. Gather data from a Fisd school resource officer. No personal information, such as names of violators and grade levels, would be necessary. The data that would be relevant would be the violation type and location the crime took place on campus. For this study, crime statistics are being pulled from Liberty High School. This school was chosen because it has a full school with students in every grade level. Additionally, Liberty gets a higher number of crimes than some of the other schools so there is more data to analyze.
3. Enter the collected data into tables organized by type of violation. There should be a column for location and a column for the number of offenses.
4. Each offense would then be assigned a color. Then the data would be plotted onto a map of the school campus. By collecting data from three schools, it will be easier to discern a pattern.
5. Analyze the results. Based on the analysis solutions can be proposed in the conclusion to reduce and prevent crime.

INFORMATION COLLECTION METHOD

The following data has been directly collected from Liberty High School's School Resource Officer, Officer Glen Hubbard from the Frisco Police Department. The data is from January 2016 to November 2016. School ended in June and began in August. The data is not from a complete school year. It is important to note that not all crimes are reported to the SRO by students and teachers. Another important factor to keep in mind is that the locations are not exact. Though a location is given, such as the practice Gym, the exact location where the crime occurred in the gym is not recorded. Unfortunately, the crime locations for Centennial and Frisco High School were not accessible to Officer Hubbard. Originally, Frisco and Centennial High School were to be crime mapped as well. However, since Officer Hubbard, Officer Jones of Centennial, and Officer Arizpe of Frisco were unable to provide the information needed, only Liberty will be crime mapped. The SROs for the other two schools were contacted. The data statistics from Liberty were received via email in a document.

DATA

LIBERTY HIGH SCHOOL JANUARY 2016 - NOVEMBER 2016		
Offense Type	Location	Number
Traffic Stops	Rolater Road	46

LIBERTY HIGH SCHOOL JANUARY 2016 - NOVEMBER 2016		
Offense Type	Location	Number
Theft	Cafeteria	5
Theft	Boys PE Locker Room	5
Theft	Football Coaches' Office	1
Theft	Girls PE Locker Room	1
Theft	Main Gym	2
Theft	Hallway (near C121)	1

LIBERTY HIGH SCHOOL JANUARY 2016 - NOVEMBER 2016		
Offense Type	Location	Number
Domestic	Front Parking Lot	1

LIBERTY HIGH SCHOOL JANUARY 2016 - NOVEMBER 2016		
Offense Type	Location	Number
Harassment/Threats	Cafeteria	3
Harassment/Threats	Main Gym	2
Harassment/Threats	Classroom (C229)	1
Harassment/Threats	Front Steps	1

LIBERTY HIGH SCHOOL JANUARY 2016 - NOVEMBER 2016		
Offense Type	Location	Number
Juvenile Problem	Student Parking Lot	5

LIBERTY HIGH SCHOOL JANUARY 2016 - NOVEMBER 2016		
Offense Type	Location	Number
Disturbance	Cafeteria	3
Disturbance	Front Office	2
Disturbance	Main Gym	1
Disturbance	Classroom (F107)	1

LIBERTY HIGH SCHOOL JANUARY 2016 - NOVEMBER 2016		
Offense Type	Location	Number
Drugs/Paraphernalia	Student Parking Lot	4
Drugs/Paraphernalia	Cafeteria	2
Drugs/Paraphernalia	AP Offices	2

LIBERTY HIGH SCHOOL JANUARY 2016 - NOVEMBER 2016		
Offense Type	Location	Number
Assault	Cafeteria	2

LIBERTY HIGH SCHOOL JANUARY 2016 - NOVEMBER 2016		
Offense Type	Location	Number
Burglary of a Vehicle	Student Parking Lot	1

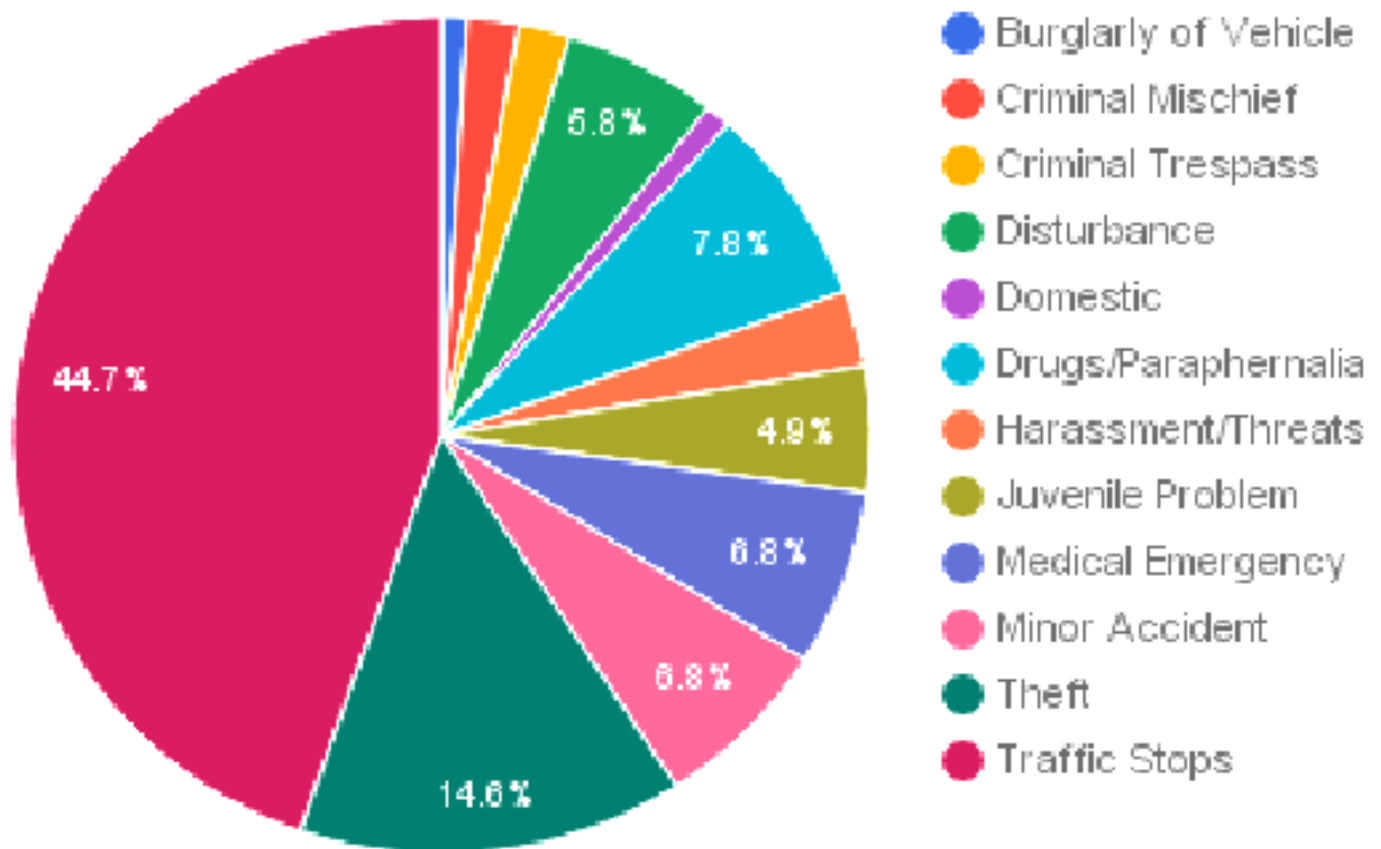
LIBERTY HIGH SCHOOL JANUARY 2016 - NOVEMBER 2016		
Offense Type	Location	Number
Minor Accidents	Student Parking Lot	6
Minor Accidents	Front Parking Lot	1

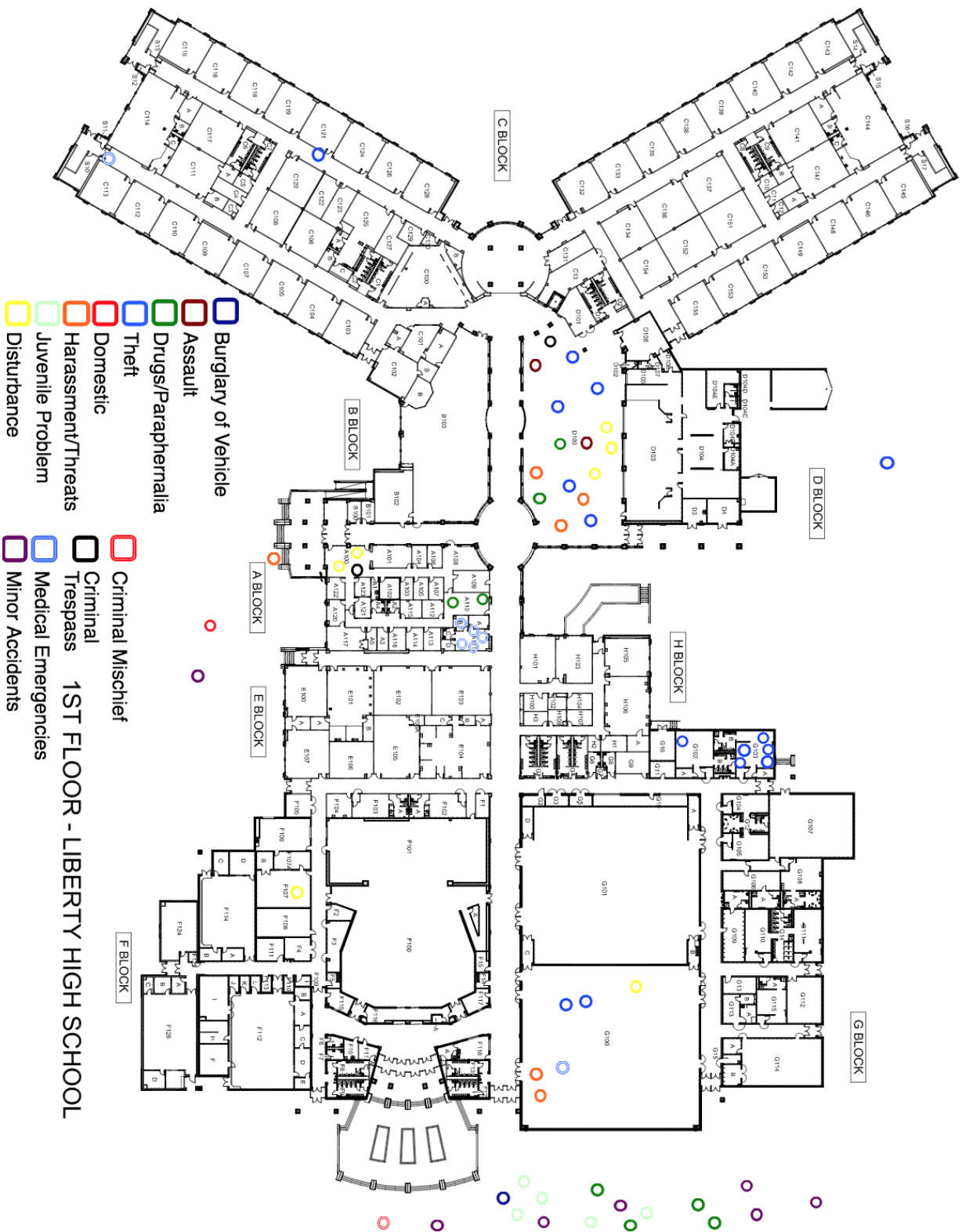
LIBERTY HIGH SCHOOL JANUARY 2016 - NOVEMBER 2016		
Offense Type	Location	Number
Medical Emergencies	Stairwell (near C113)	1
Medical Emergencies	Main Gym	1
Medical Emergencies	Nurse's Office	5

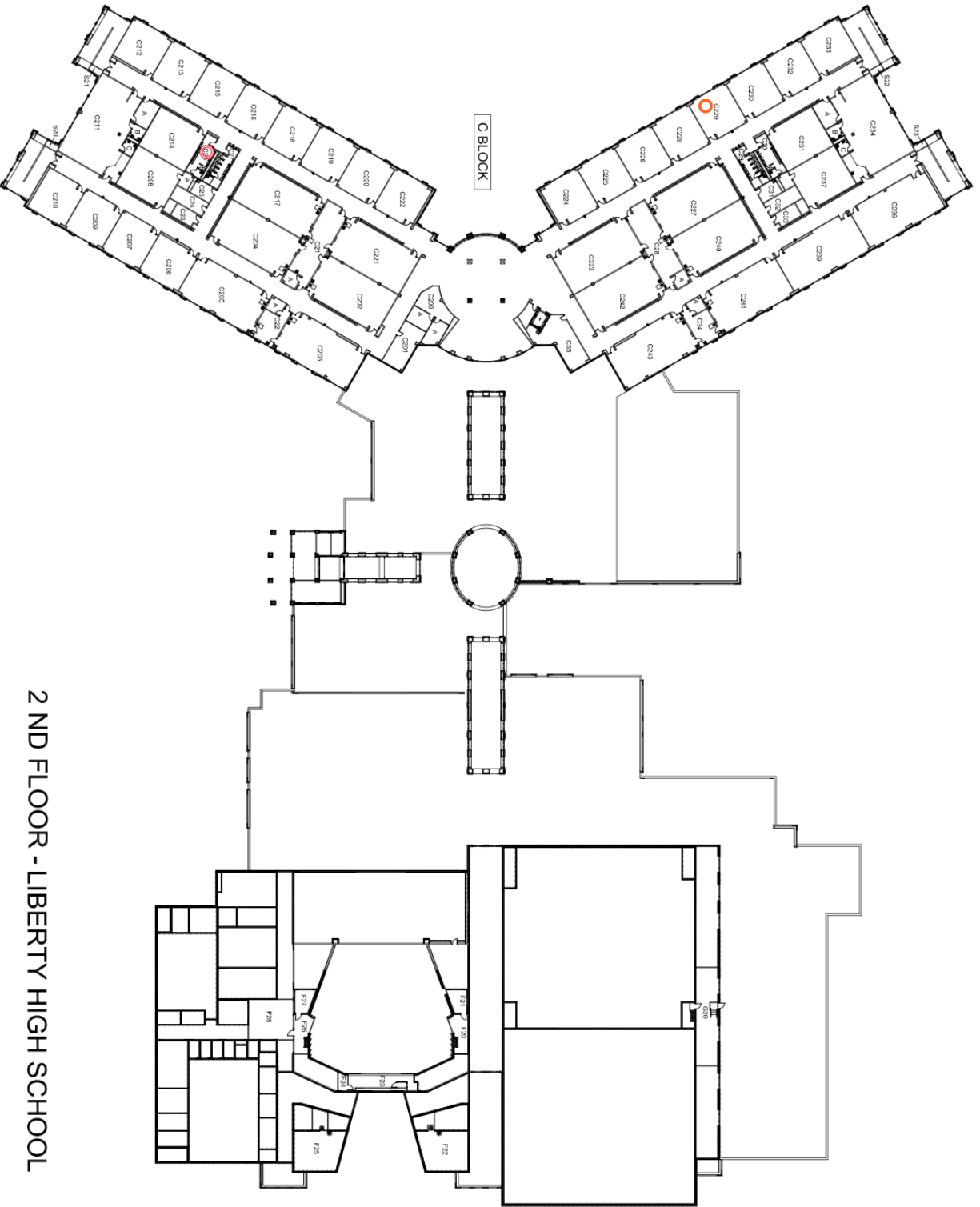
LIBERTY HIGH SCHOOL JANUARY 2016 - NOVEMBER 2016		
Offense Type	Location	Number
Criminal Trespass	Front Office	1
Criminal Trespass	Cafeteria	1

LIBERTY HIGH SCHOOL JANUARY 2016 - NOVEMBER 2016		
Offense Type	Location	Number
Criminal Mischief	Student Parking Lot	1
Criminal Mischief	Boys Bathroom (near C206)	1

Liberty Crime Statistics January - November 2016 Pie Chart







2 ND FLOOR - LIBERTY HIGH SCHOOL

ANALYSIS

As mentioned previously, the hypothesis was that areas with high foot traffic and large amounts of students, such as cafeteria, would have the highest frequency of crime. That locations where there are not a high number of students, such as classrooms, would have little to no crimes and that places in schools where there is minimal adult supervision, such as locker rooms, would have more thefts and disorderly conduct. It is important to note that traffic stops were not included on the crime map due to the restrictions of location on the crime and high number of occurrences. Traffic stops only happen on Rolater which made plotting all forty six stops unnecessary. Also, not all crimes are reported. The following is an analysis of the crime data that was mapped.

1. The hypothesis that areas in Liberty High School with a high amount of foot traffic and student concentration would have the highest frequency of crime was accurate. After mapping all the data, it was evident that a pattern was present. The cafeteria, main gym, and student parking lot all have a significant foot traffic and a large amounts of students in it. Logically, where there are more people and a high turnover rate, there is a high crime rate. Theft was the highest in the cafeteria but still occurred in both the main gym and student parking lot. Drugs and paraphernalia were found in the possession of students the most in the student parking lot and a few were found in the cafeteria. This makes sense because high schoolers are likely to hide illegal drugs/paraphernalia in their cars and likely to take it out in the a tightly packed cafeteria when among friends. Out of the three, the cafeteria had the most reported crime overall.

2. The second part of the hypothesis that locations where there are not a large number of students, such as classrooms, would have little to no crimes was mostly true. A total of two crimes (one classroom disturbance and one harassment/threat) occurred in regular classrooms. The low number of offenses in classrooms was normal because there is often a low student to teacher ratio in Frisco ISD classrooms. As a result, teachers usually have control over their students and classroom environment.
3. The third part of the hypothesis that places in schools where there is minimal adult supervision, such as locker rooms, would have more thefts and disorderly conduct was correct. A sum of seven crimes (six thefts and one criminal mischief) occurred in locker rooms and bathrooms. All six thefts happened in locker rooms, five of them in the PE boys locker room and two in the PE girls locker room. This was expected because locker rooms have valuables and little to no supervision. Additionally, cameras are not present to deter crimes. The one criminal mischief in an upstairs boys bathroom is also understandable due to a lack of adult/teacher supervision and lack of cameras.
4. However, that being said, there were still some findings that were surprising. For example, there were numerous crimes that took place outside the school not in the student parking lot that were still on school property. This makes sense because like other locations, if there are little to no deterrence factors, such as teachers or cameras, crime is more likely to happen. While this is logical, it was not considered or predicted when creating the hypothesis.
5. Lastly, there were many unusual outliers on the crime maps. For example, in the time period of January 1, 2016 to November 30, 2016, a theft was reported to have occurred in the football coaches' office. This was unusual because it was a high risk location with a likelihood of many

adults being present or passing through. Due to that fact, the chance of getting caught and severity of offense would have been higher. However, the theft in such a risky location can be accounted for not having a tremendously large amount of data spanning years and different high schools. Additional data would have been able to discern if there was a pattern or if it was a legitimate outlier.

CONCLUSION

In the end, crime occurs everywhere in a school. It is important to remain vigilant at all times. That being said, it can be extremely beneficial to know where high risk locations are. For example, a student may be more careful with his or her belongings in the cafeteria than in the classroom because they know that classrooms are relatively secure. On that note, it is important to remember that schools are meant to be safe environments. Liberty High School has done a stellar job in ensuring the security and welfare of its students. With the analysis portion over, the key questions can be answered. Does location have an influence on where types of school violations occur? Yes, most definitely. Does location influence the frequency of crime in a given area? Yes. Are areas with significant foot traffic likely to have more crimes than areas with less foot traffic? Yes, because more students means more people present to commit crimes. What measures can be taken to effectively reduce school crimes? Teachers can supervise areas that currently have little supervision to deter crimes from happening. Though there would be lots of logistics, such as how much time and resources would have to be dedicated to execute the idea, it is a simple solution that can be further developed. Adding cameras wouldn't be as acceptable because some of the areas lacking cameras are sensitive areas, such as bathrooms. Additionally, it would be expensive and consume resources that could be better spent on educational needs.. Furthermore, it would raise the question of if the School Resource Officer could review all the footage accumulated by the additional video cameras. The purpose of crime mapping is to reduce and prevent crime through analysis of crime patterns. By identifying patterns, we are one step closer to enacting measures in order to stop crimes before they happen. It's better to act beforehand than react after the fact.

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