

Gun Violence - Team 3



Team Members:

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Project Motivation



**Recent uptick in gun
possession among youth
in Boston's District 4**

**Need to understand the
drivers of gun violence in
the district and the city as
a whole.**

**Inform policies that can
improve the district and
reduce the incidence of
gun violence.**

Project Goal



To understand the drivers of gun violence in Boston's District 4 and the city as a whole, with a focus on identifying the variables associated with increases or decreases in gun violence.

Project Background



To understand the project, it would be helpful to have knowledge of the factors that contribute to gun violence, such as poverty, access to firearms, mental health, and social dynamics.

Familiarity with the existing programs designed to address gun violence, their effectiveness, and their limitations would also be useful.

Project Extension Proposal



Rationale:

- To highlight potential important environmental trends which can pave the way for approvals for redesigning areas of Boston

Hypothesis:

- Greener environments have less violence than desolate urban settings.
- More gun violence incidents closer to community centers.



Datasets used/to be used

- City Council Dataset
- Shots Fired
- Shootings
- Community Centers
- Parks

Progress so far

Explored the Community Centers dataset

Focused on Community Centers dataset to create mappings to City Council Districts

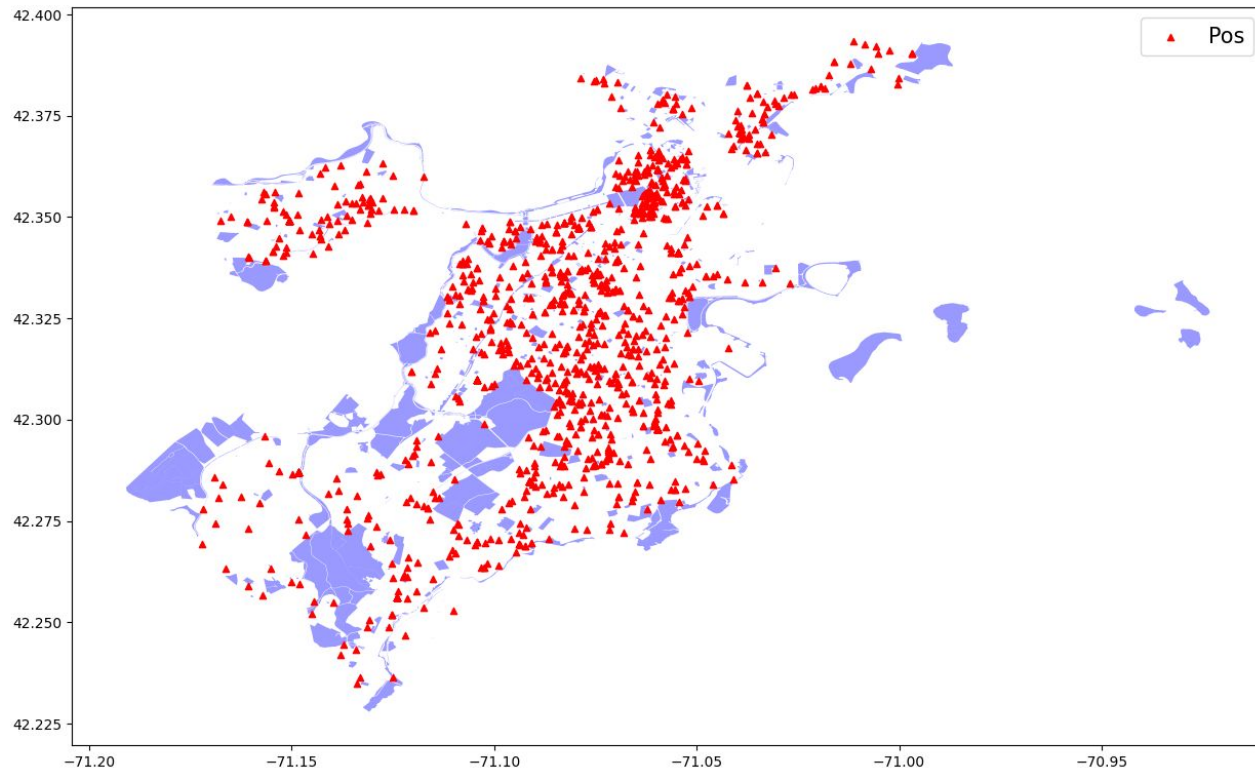
No concrete analysis derived from parks dataset

Parks Gun Violence Map



Key Findings:

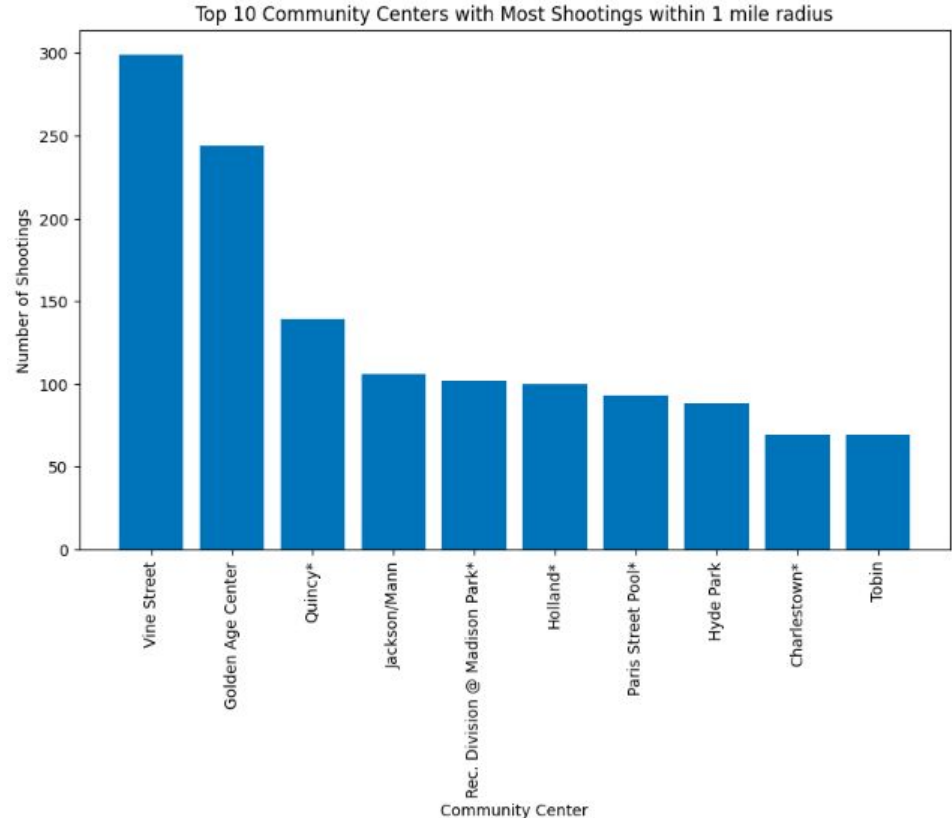
- Most gun violence does not happen in parks
- Boston has a high park area ratio to city its hard to say if shootings happen near parks with this bias



Top 10 Community Centers with Most Shootings

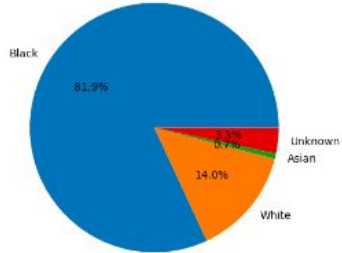
Key Findings:

- More shootings near Community Centers seem to happen in City Council 1 and 7, with 3 Community Centers each in the top 10 list.
- There are only one Community Centers from City Councils 4, 2, 9 and 5 in the top 10 list.

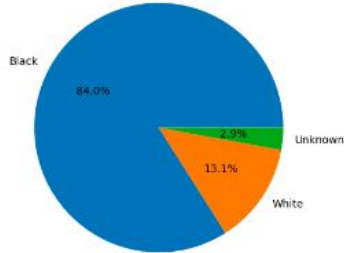


Race Segmentation for Community Centers

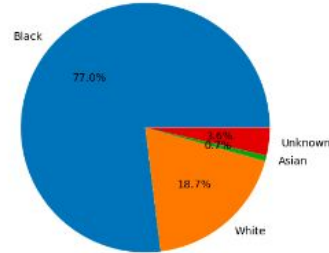
Vine Street, City Council 7



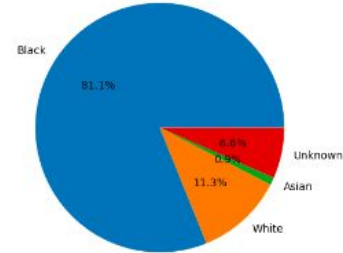
Golden Age Center, City Council 1



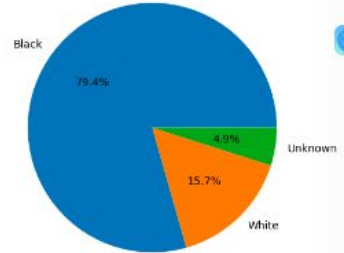
Quincy*, City Council 2



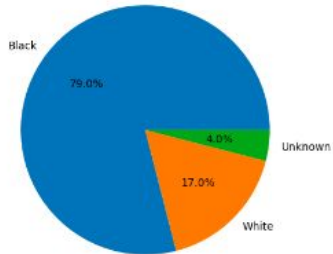
Jackson/Mann, City Council 9



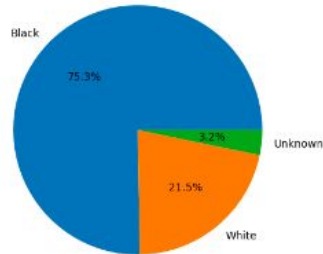
Rec. Division @ Madison Park*, City Council 7



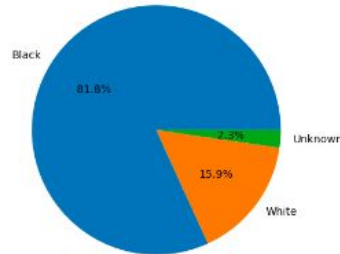
Holland*, City Council 4



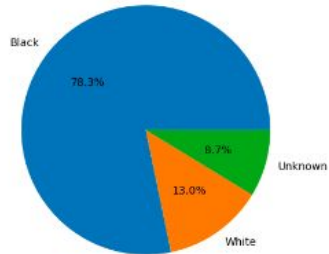
Paris Street Pool*, City Council 1



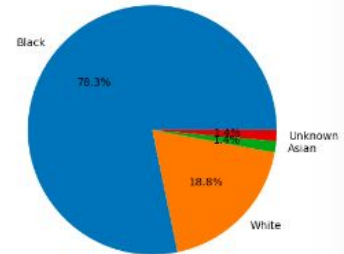
Hyde Park, City Council 5



Charlestown*, City Council 1



Tobin, City Council 8



Race Segmentation for Community Centers Key Findings

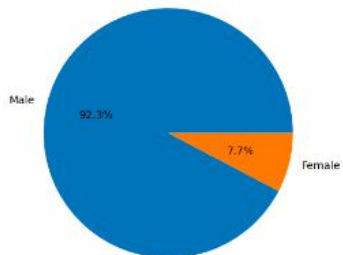


Key Findings:

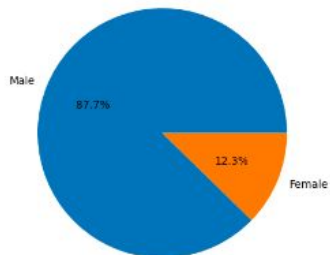
- In every Community Center on the top 10 list, more than 75% of the victims are Black.
- The Community Center at Holland (City Council 4) has the highest number of White and Asian victims out of the Community Centers in the top 10 list at 19.5% and 1.1 % respectively.

Gender Segmentation for Community Centers

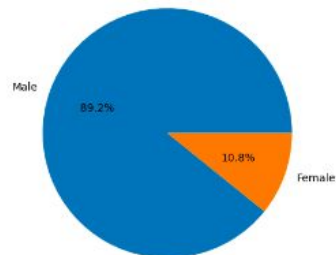
Vine Street, City Council 7



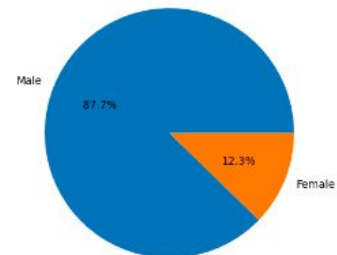
Golden Age Center, City Council 1



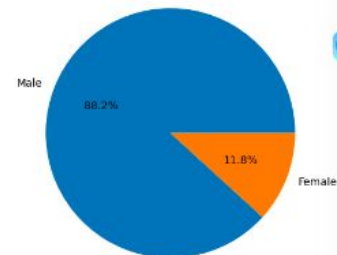
Quincy*, City Council 2



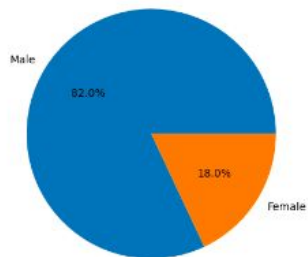
Jackson/Mann, City Council 9



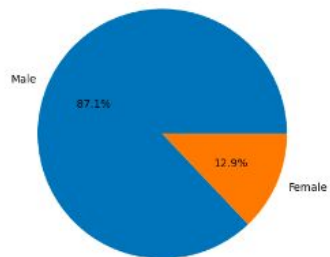
Rec. Division @ Madison Park*, City Council 7



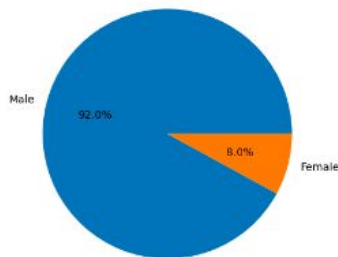
Holland*, City Council 4



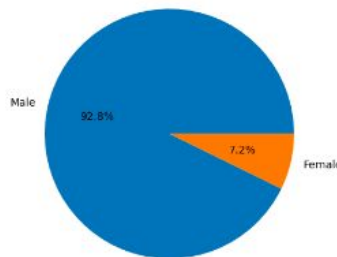
Paris Street Pool*, City Council 1



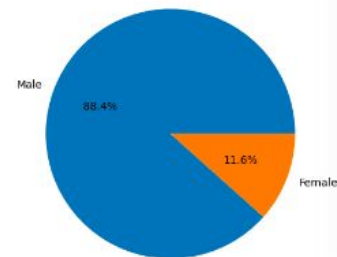
Hyde Park, City Council 5



Charlestown*, City Council 1



Tobin, City Council 8



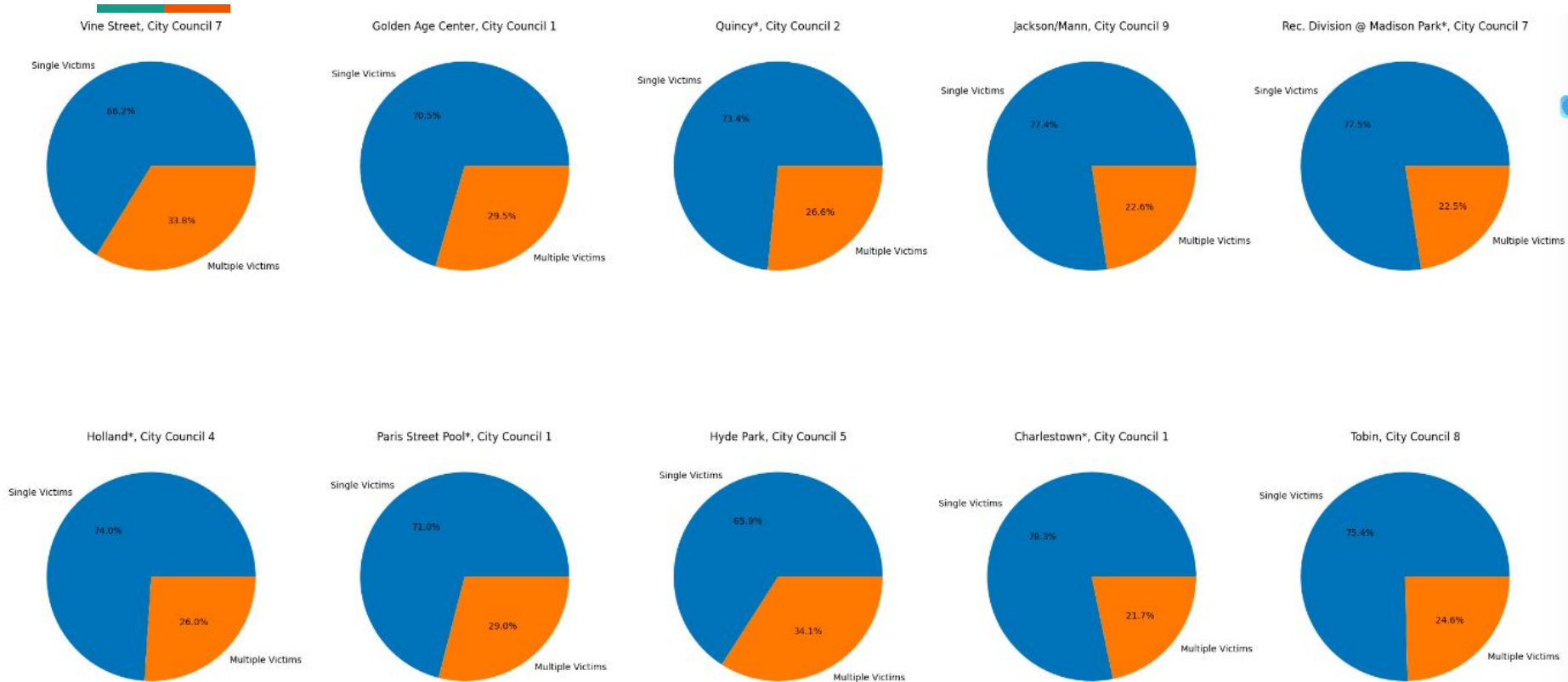
Gender Segmentation for Community Centers Key Findings



Key Findings:

- In all the Community Centers in the top 10 list, there are always more male victims than female victims (more than 80% of the victims are males in every case vs more than 7% for females).
- Charlestown in City Council 1 has the highest percentage of male victims at 92.8%, whereas for females, it is at Holland in City Council 4, with 18%.

Single Victim vs Multiple Victims for Community Centers



Single Victim vs Multiple Victims for Community Centers

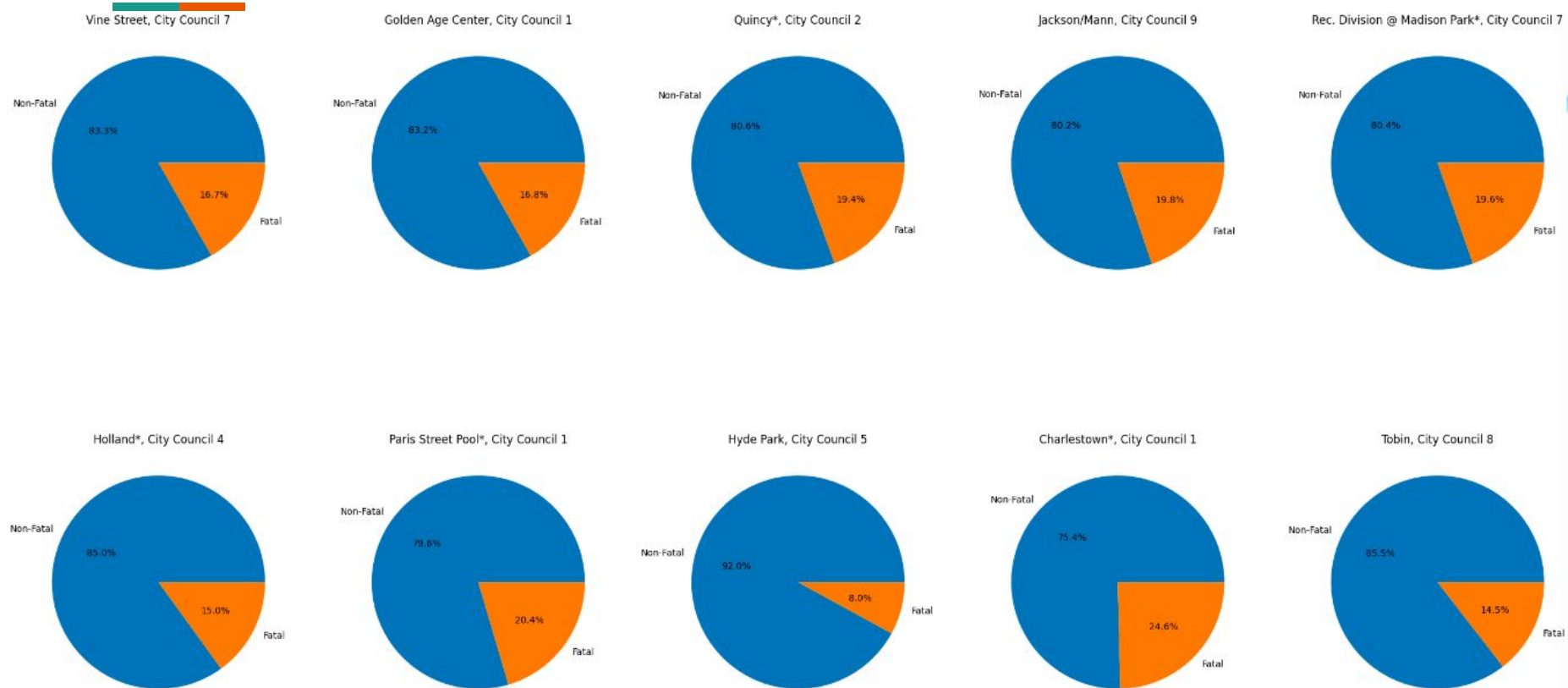
Key Findings



Key Findings:

- In all the Community Centers in the top 10 list, there are always more incidents with single victims than multiple victims (more than 60% of the incidents have a single victim in every case vs more than 21% for multiple victims).
- Charlestown in City Council 1 has the highest percentage of incidents with a single victim at 78.3%, whereas for multiple victims, it is at Vine Street in City Council 7, with 33.8%.

Fatal vs Nonfatal Shootings for Community Centers



Fatal vs Nonfatal Shootings for Community Centers Key Findings



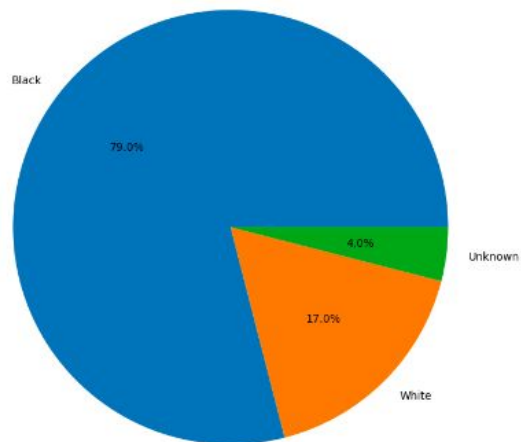
Key Findings:

- In all the Community Centers in the top 10 list, there are always more non-fatal than fatal incidents (more than 75% of the incidents are non-fatal in every case vs more than 14% for fatal ones).
- Hyde Park in City Council 5 has the highest percentage of male victims at 92%, whereas for fatal ones, it is at Charlestown in City Council 1, with 24.6%.

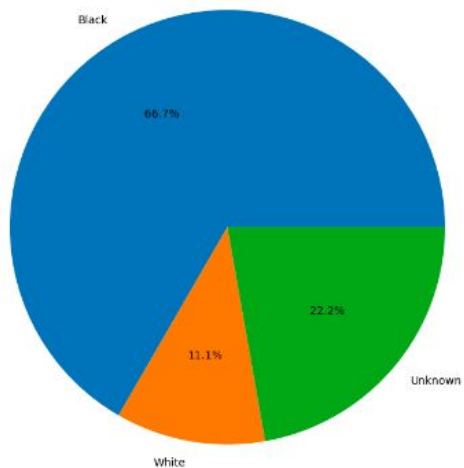
Race Segmentation for D4 Community Centers



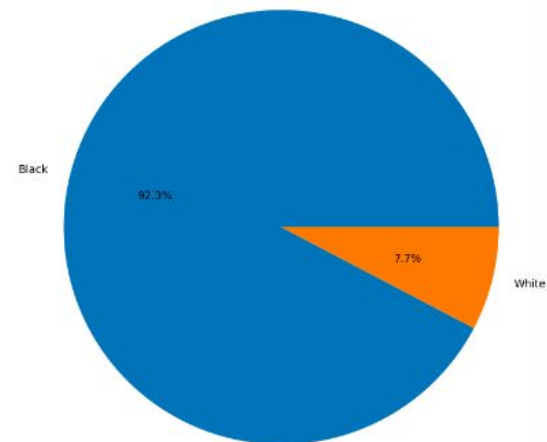
Holland*, City Council 4



Perkins*, City Council 4



Gallivan, City Council 4



Race Segmentation for D4 Community Centers Key Findings



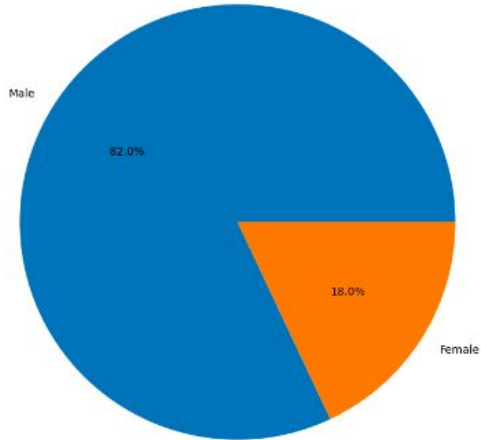
Key Findings

- For the top 3 community centers in D4 We see that the majority race that is affected are black
- White and the rest of unknown races combined at most have 1/3 the amount of gun violence incidents while the rest is black
- These community centers are located in predominantly black neighborhoods so our graphs represent those biases

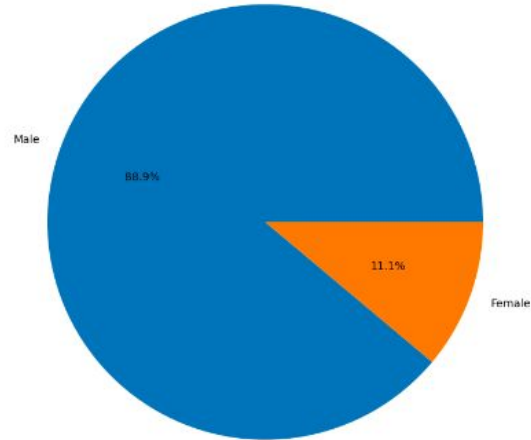
Gender Segmentation for D4 Community Centers



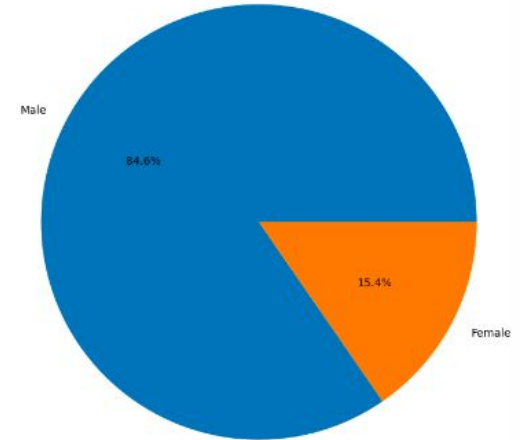
Holland*, City Council 4



Perkins*, City Council 4



Gallivan, City Council 4



Gender Segmentation for D4 Community Centers Key Findings



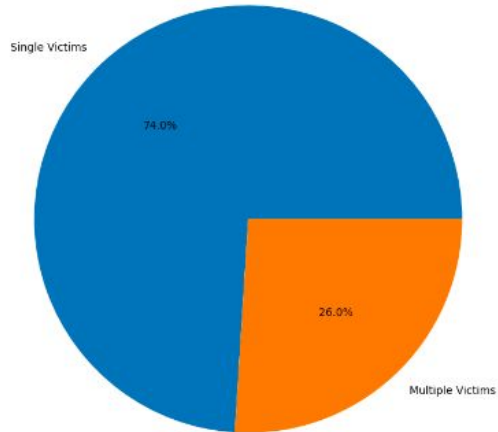
Key Findings

- For the top 3 community centers in D4 We see that male victims outnumber female victims by 4 to 1.
- Generally, it's considered that men perpetrate more gun violence than women (due to sociological properties) so seeing men victims also high is interesting

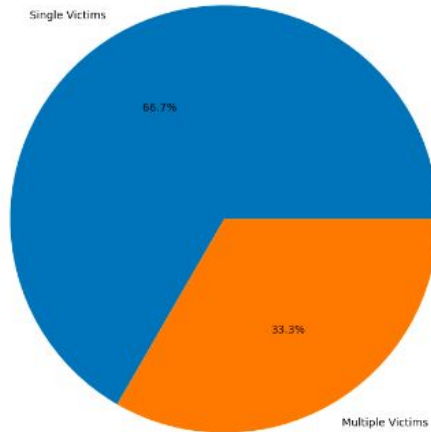
Single vs Multiple Victims for D4 Community Centers



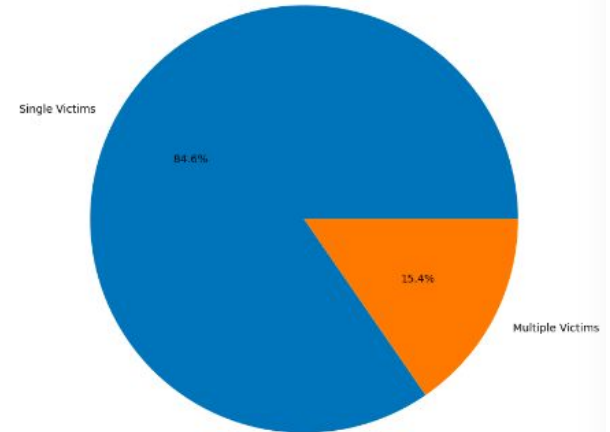
Holland*, City Council 4



Perkins*, City Council 4



Gallivan, City Council 4



Single vs Multiple Victims for D4 Community Centers Key Findings

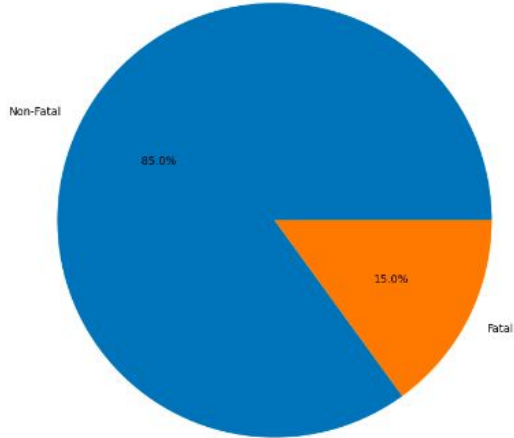
Key Findings

- For the top 3 community centers in D4 Single Victims outnumber Multiple Victims almost 4 to 1
- Community centers are a public place with lots of people so its interesting that multiple victims are less than single. This could highlight a bias in our data where we get a range of incidents near the community center within one mile

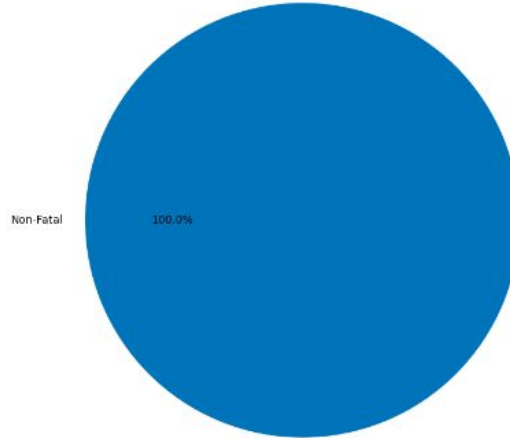
Fatal vs Nonfatal Shootings for D4 Community Centers



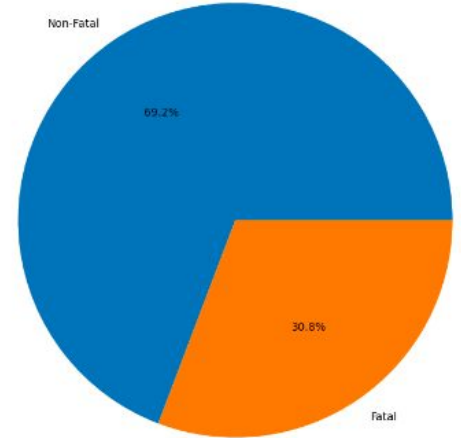
Holland*, City Council 4



Perkins*, City Council 4



Gallivan, City Council 4



Fatal vs Nonfatal Shootings for D4 Community Centers Key Findings

Key Findings

- For the top 3 community centers in D4 Non fatal incidents happen on average 85% and fatal incidents happen 15%
- On average most shootings have more non-fatal vs fatal but its still interesting to note the same trend happening on a local level



Next steps

Wrap up the report and final analysis.

Questions/Obstacles

We ain't got none for now!



Questions?