

# THE TRAUMA DESERT

Mapping Gun Violence Burden Against Trauma System Capacity in Philadelphia

**17,383**  
Shootings  
(2015-2025)

**18**  
Trauma Desert

**99.6%**  
Within 20 min  
of Level I

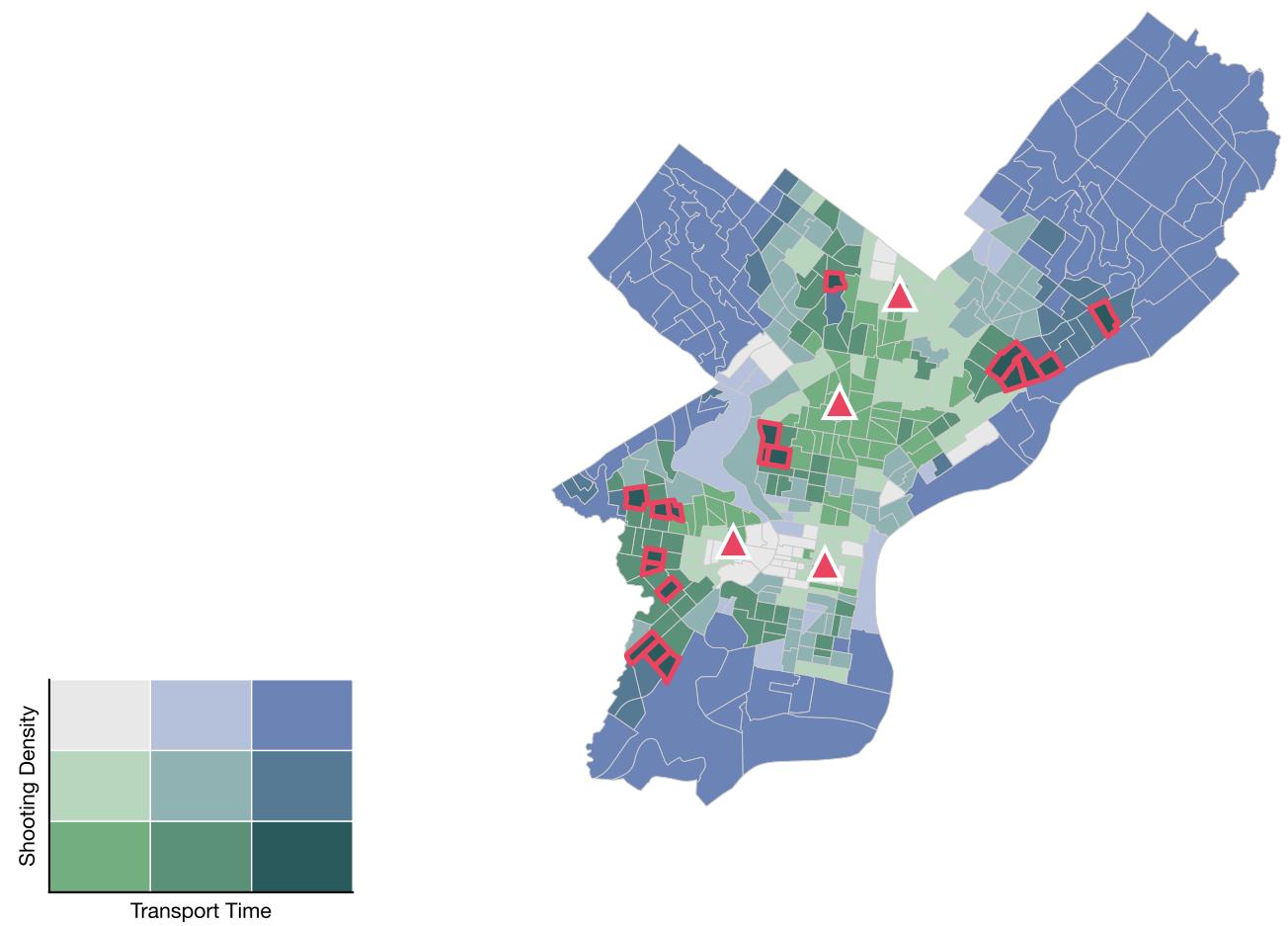
**54.9%**  
Handled by  
Temple hospital  
(Temple handles 55% of all shootings)

**68.5%**  
Disparity  
line  
(COVID spike  
2020-2021)

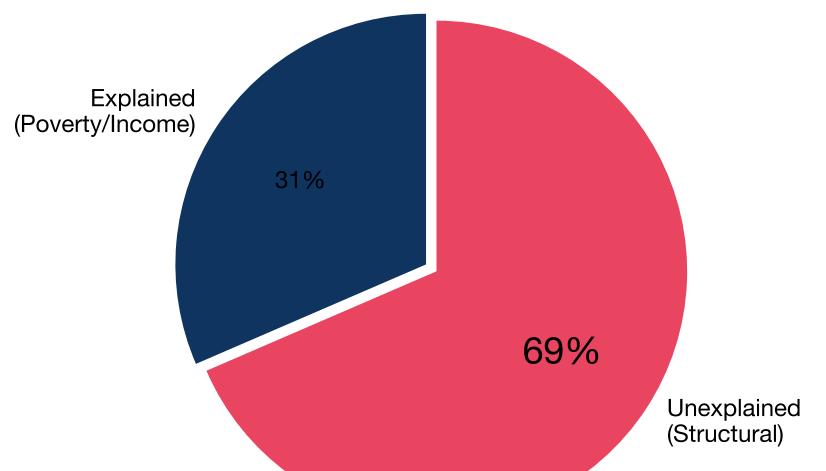
A. Bivariate Classification  
Shooting Density vs Transport Time

B. Hospital Burden Distribution  
(Temple handles 55% of all shootings)

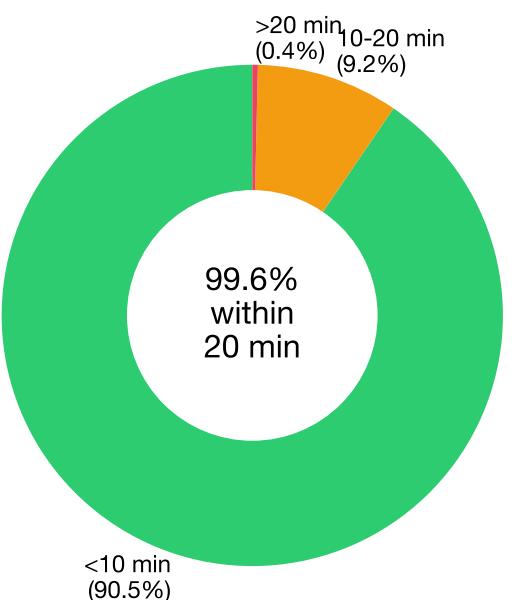
C. Temporal Trends  
(COVID spike  
2020-2021)



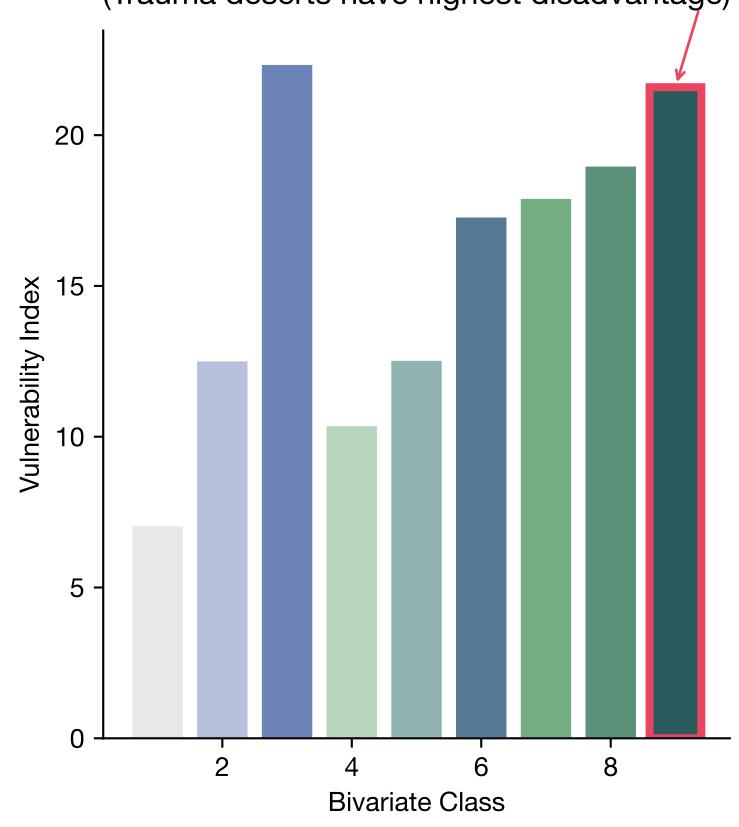
D. Racial Disparity Decomposition  
(Black tracts have 4.4x higher shooting density)



E. Golden Hour Coverage  
(Excellent geographic access)



F. Vulnerability by Classification  
(Trauma deserts have highest disadvantage)



G. Summary

## KEY FINDINGS

1. THE DISPARITY IS VIOLENCE, NOT ACCESS  
Black neighborhoods are actually 3.2 min CLOSER to trauma centers, but experience 4.4x higher shooting rates.
2. TEMPLE IS THE FRONTLINE  
Temple University Hospital handles more than half of all shooting victims in Philadelphia (54.9%).
3. STRUCTURAL FACTORS DOMINATE  
68.5% of the racial disparity in violence cannot be explained by poverty or income. Historical/systemic factors are at play.
4. COVID DOUBLED VIOLENCE  
Shootings peaked at 2,338 in 2021, nearly double pre-pandemic levels. Now declining.
5. COMPOUND DISADVANTAGE  
All 18 trauma deserts are also in the top quartile of overall neighborhood vulnerability.