

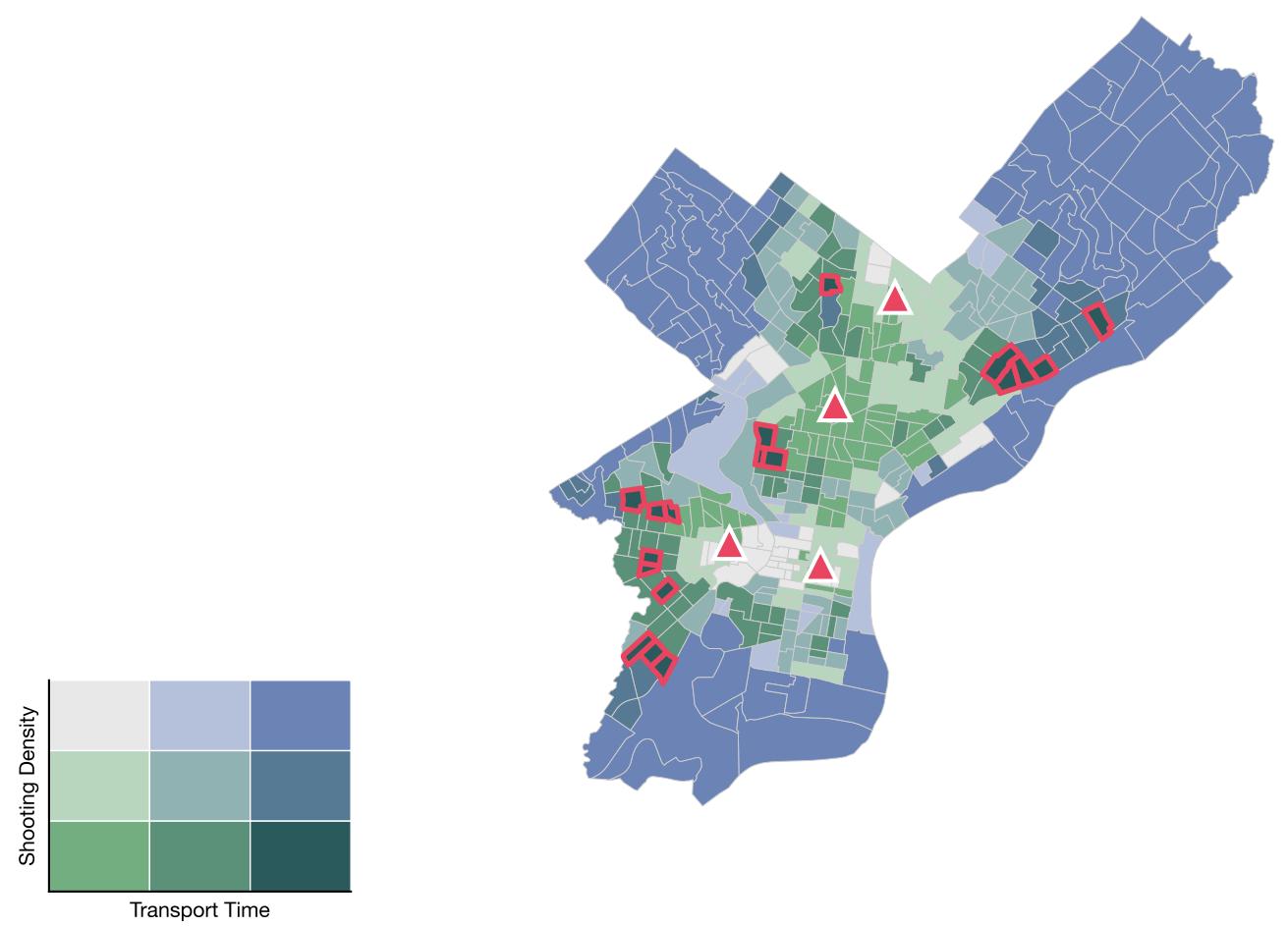
THE TRAUMA DESERT

Mapping Gun Violence Burden Against Trauma System Capacity in Philadelphia

17,383
Shootings
(2015-2025)

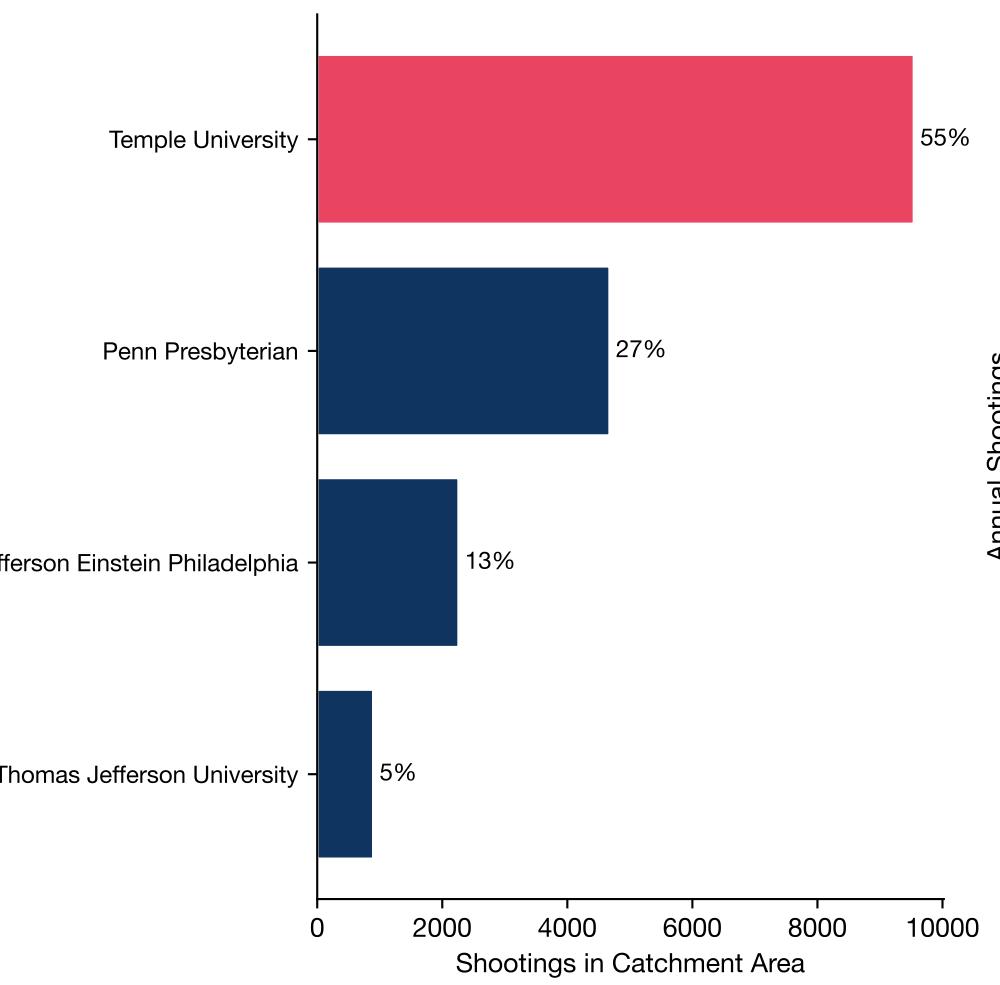
18
Trauma Desert

A. Bivariate Classification
Shooting Density vs Transport Time

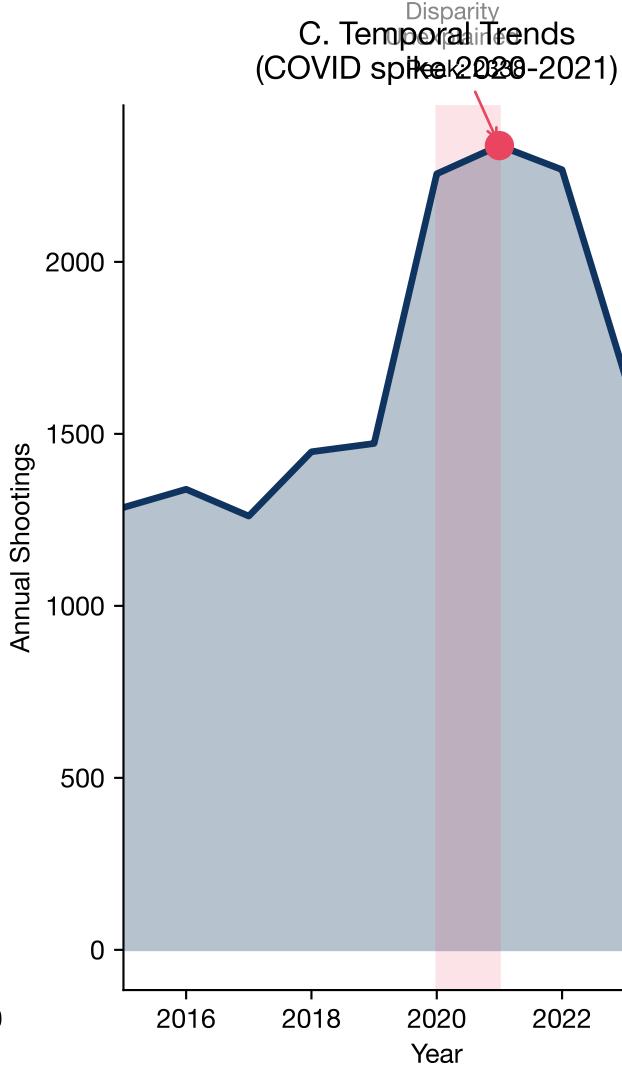


99.6%
Within 20 min
of Level I

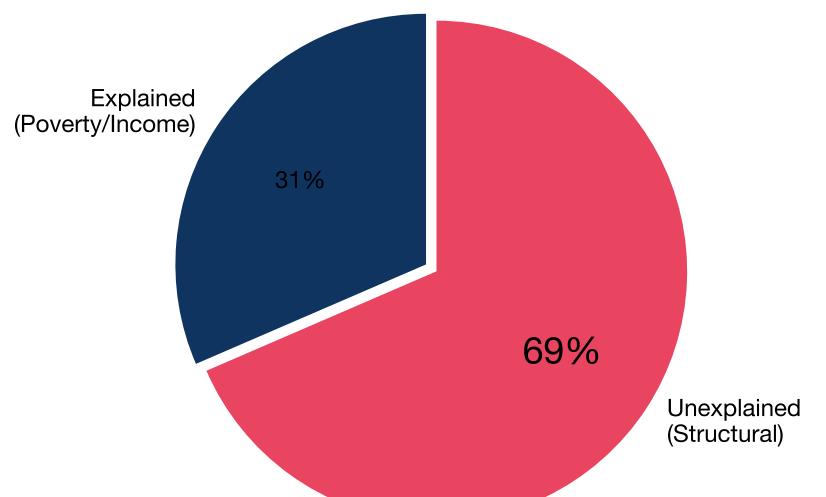
54.9%
Handled by
Temple Hospital
(Temple handles 55% of all shootings)



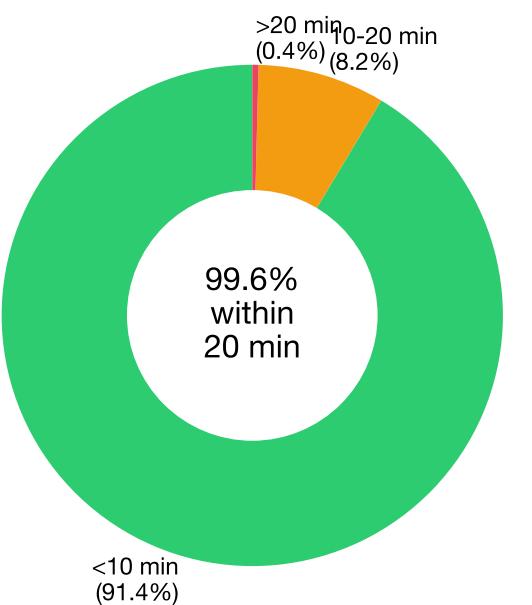
68.5%
Disparity
Time 2020-2021



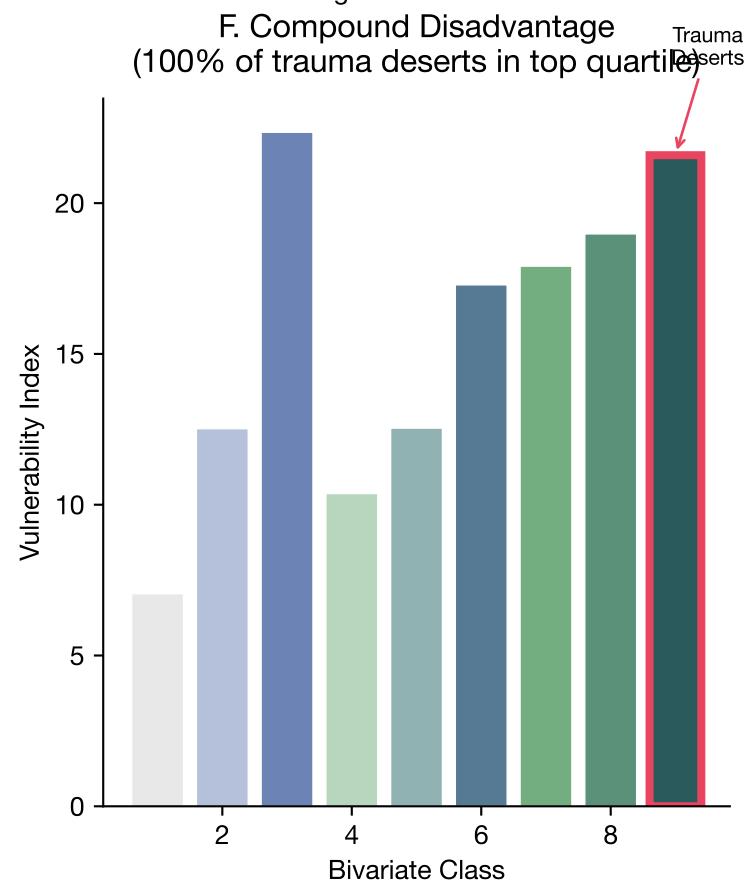
D. Racial Disparity Decomposition
(Black tracts have 4.4x higher shooting density)



E. Golden Hour Coverage
(Excellent geographic access)



F. Compound Disadvantage
(100% of trauma deserts in top quartile)



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.