Understanding Human Trafficking and Sexually Oriented Businesses

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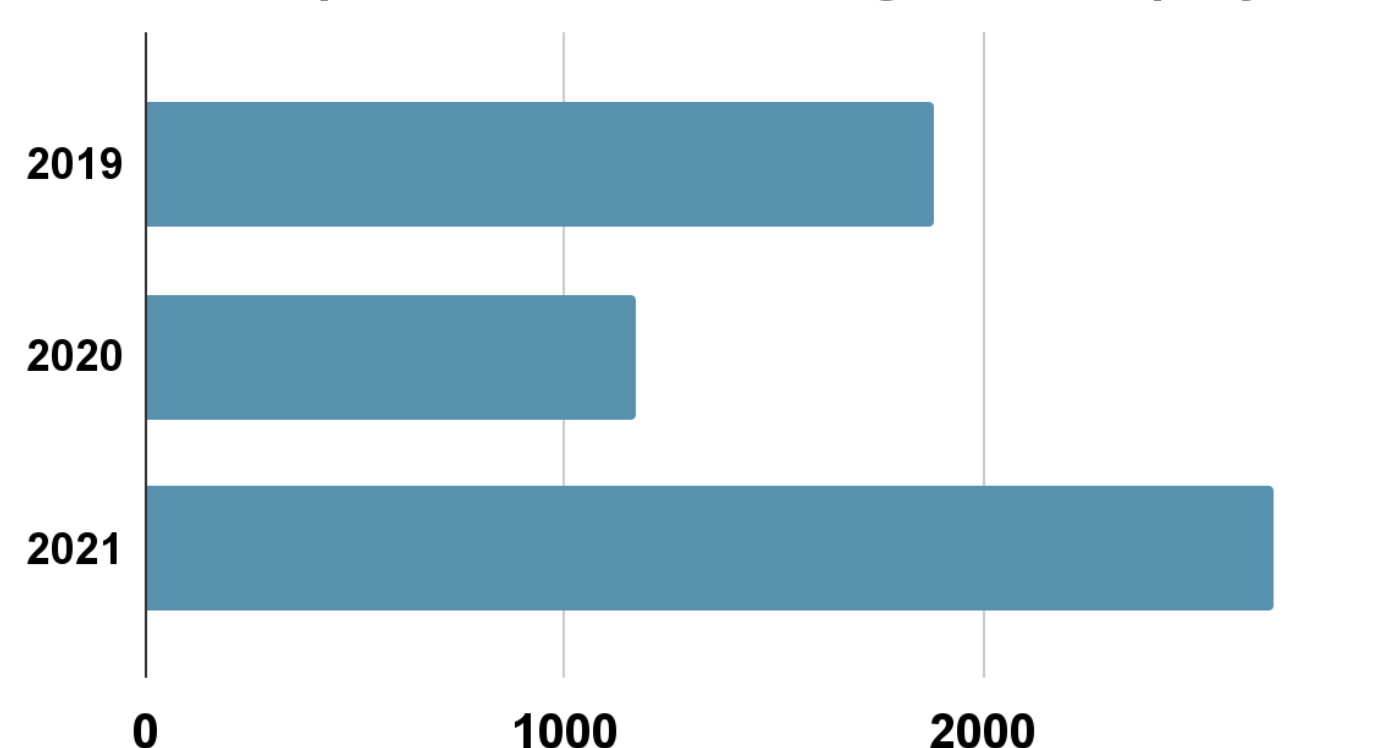University of Tenn. Chattanooga and Boston College

RESEARCH QUESTION

Do SOB's, airports, highways, casinos, or demography geospatially correlate with higher rates of human trafficking incidents reported by law enforcement in the United States?

BACKGROUND

- Numerical human trafficking data is often "guesstimates" because **"accurate data on the extent of trafficking in human beings does not exist."[3]** The goal of the Human Trafficking Data Warehouse at SMU is to create a resource for law enforcement and researchers to better estimate and combat human trafficking.
- Human trafficking: **the use of force, fraud, or coercion to obtain some type of labor or commercial sex act**.[4]
- **Sexually oriented businesses (SOB's):** strip clubs, retail stores, and theaters providing adult content.
- Recent literature has suggested that there is geographic patterning to sex trafficking.[2]

NIBRS Reported Human Trafficking Incidents, per year

METHODS

BJS NIBRS Data (2019-2021)

- Incidents were matched by reporting agency to nearest municipality, then grouped by county.
- States where over 90% of the population is covered by actively reporting agencies were included in analysis.

Yelp Application Programming Interface (API)

for cities >100,000 people in states identified in NIBRS data

- Search terms:
  - 'Adult entertainment' and 'City, State'
  - 'Casinos' and 'City, State'

American Community Survey 5-Year

- Poverty level
- Population density

Data cleaning

- Number of airports and highways also included
- **n = 212 reporting agencies in 26 states**
- Attributed all data collected to counties
- Conducted:
  - Ordinary Least Squares (OLS) Regression Analysis
  - Pearson Correlation Matrix

City of Dallas [1]

Airports
Sexually Oriented Businesses

Roadways
— Interstate
— Major Freeways and Expressways

Human Trafficking Incidents
0.0
140

Esri, NASA, NGA, USGS, Texas Parks & Wildlife, Esri, TomTom, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, USFWS
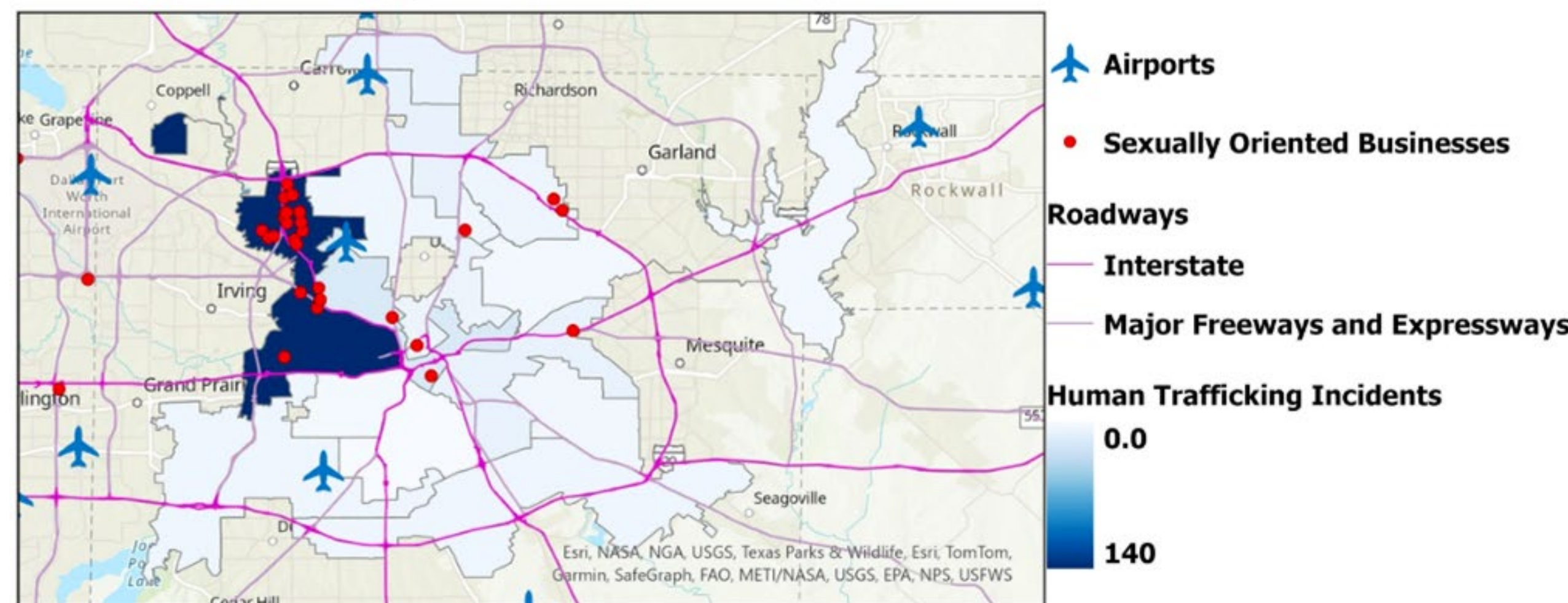
RESULTS

- Correlation matrix and the regression analysis were statistically insignificant
- Loose positive Pearson correlation

Pearson Correlation Matrix

	Human Trafficking Incidents per capita
Population Density	- 0.085
Poverty Rate	0.047
SOB per capita	**0.108**
Airport Count	- 0.019
Highway Count	- 0.114
Casinos per capita	**0.145**

CONCLUSIONS

- **On limited but more geographically specific datasets (e.g. City of Dallas), correlations were higher**
- The lack of geographic specificity may have resulted in the weak correlations (agency level)
- Further research using more specificity (eg. highway on and off ramps) should be considered

LIMITATIONS

- **The locality of data on human trafficking** (reporting agency level) reduced the accuracy of the assessment of spatial relationships
- Used data from 2019-2021, so some crime reporting may be unreliable due to effects of the COVID-19 pandemic

1 City of Dallas. (n.d.). *Human Trafficking Awareness*. Tableau Software. Retrieved October 14, 2024, from https://dallascitydata.dallascityhall.com/views/HumanTraffickingAwareness/Overview?%3Aembed=y&%3AisGuestRedirectFromVizportal=y&%3Arefresh=yes
2 de Vries, I. (2023). Examining the Geography of Illicit Massage Businesses Hosting Commercial Sex and Sex Trafficking in the United States: The Role of Census Tract and City-Level Factors. Crime & Delinquency, 69(11), 2218-2242. https://doi.org/10.1177/00111287221090952
3 Goodey, J. (2008). Human trafficking: Sketchy data and policy responses. *Criminology & Criminal Justice*, 8(4), 421–442. https://doi.org/10.1177/1748895808096471
4 Text - H.R.3244 - 106th Congress (1999-2000): Victims of Trafficking and Violence Protection Act of 2000. (2000, October 28). https://www.congress.gov/bill/106th-congress/house-bill/3244/text