



CRIME IN SEATTLE

WHO ARE WE?



Dimitar Nemski



Olivia Esau



Varitsara Petchdang

Young team of **Data Analysts**
Hired by **CPB**

Goal: Evaluate the performances of the MCPP and LEAD projects on the focused type of crimes in the different neighbourhoods.

Stakeholder and Problem

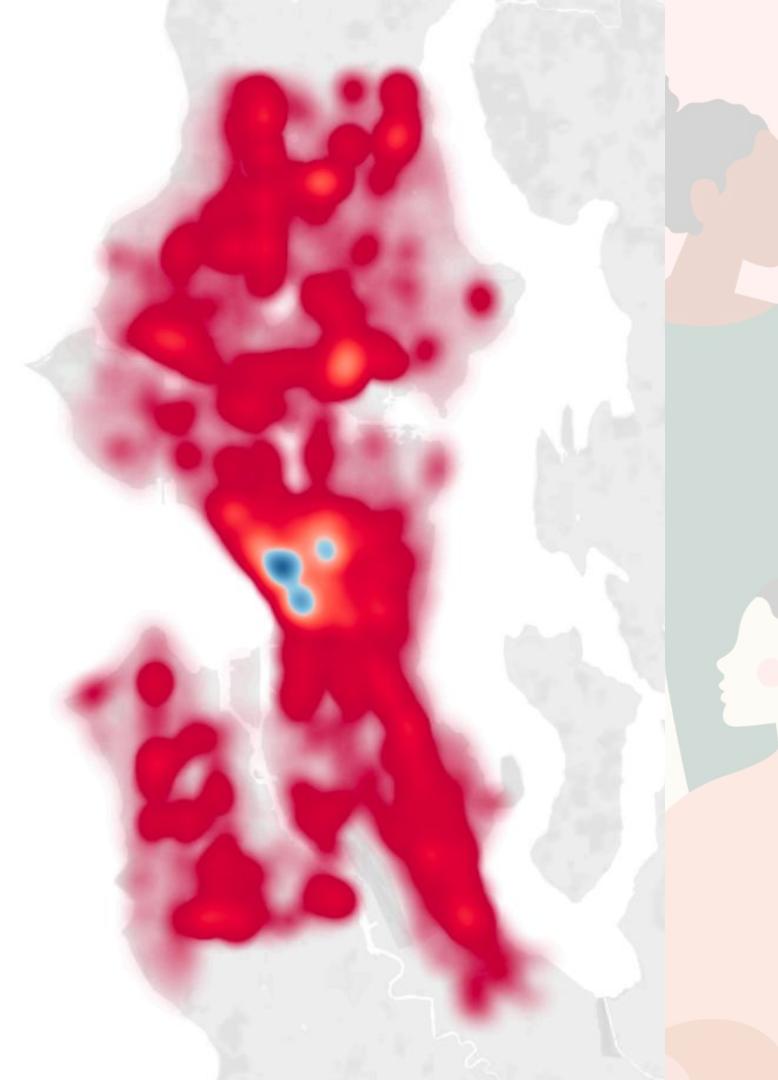
Stakeholder/Client:

Crime Prevention Bureau(**CPB**) of Seattle

Problem statement:

Significant amount of **Crime** in Seattle and how to reduce or tackle it.

Target group: Neighbourhoods communities





OUR TOPIC

**Effect of community based initiatives on
Crime in Seattle**

RESEARCH QUESTION



“ How does the implementation of the community based initiatives (MCPP and LEAD) contribute to tackling the crime issues in different areas of Seattle? ”

Our Data:



Overall:

- DateSets - 5
- Rows - 7 Millions
- Columns - 203

Range from 2011
to 2023



Our Tools:

Python

SQL

Tableau



What is
M C P P
and
L E A D ?



LEAD

(implement 2011)

FOCUS NO:

Criminals

HELP:

people whose problematic conduct stems from **mental illness, substance abuse, or extreme poverty.**

BENEFITS:

- reduces **recidivism**
- reduces **prison**
- reduces **jail usage**

**Less Criminals,
Stronger Community**

M C P P

(implement 2015)

FOCUS NO:

Citizens

BUILT:

the police and community engagement eg. community meetings, focus groups, survey data

BENEFITS:

- increase **public safety**
- reduce **crime**
- prevent **violence**

A background illustration featuring a diverse crowd of people from various ethnicities and cultures, rendered in a flat, colorful style.

Let's talk about

L E A D



Law Enforcement Assisted Diversion (LEAD)



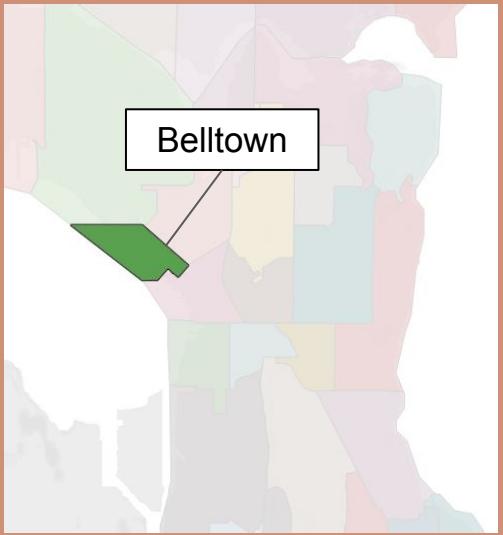
**Addressing Root Causes:
homelessness, addiction,
mental health**

**Alternative to the Criminal
Justice System**

**Positive Impact on
Recidivism**

LEAD

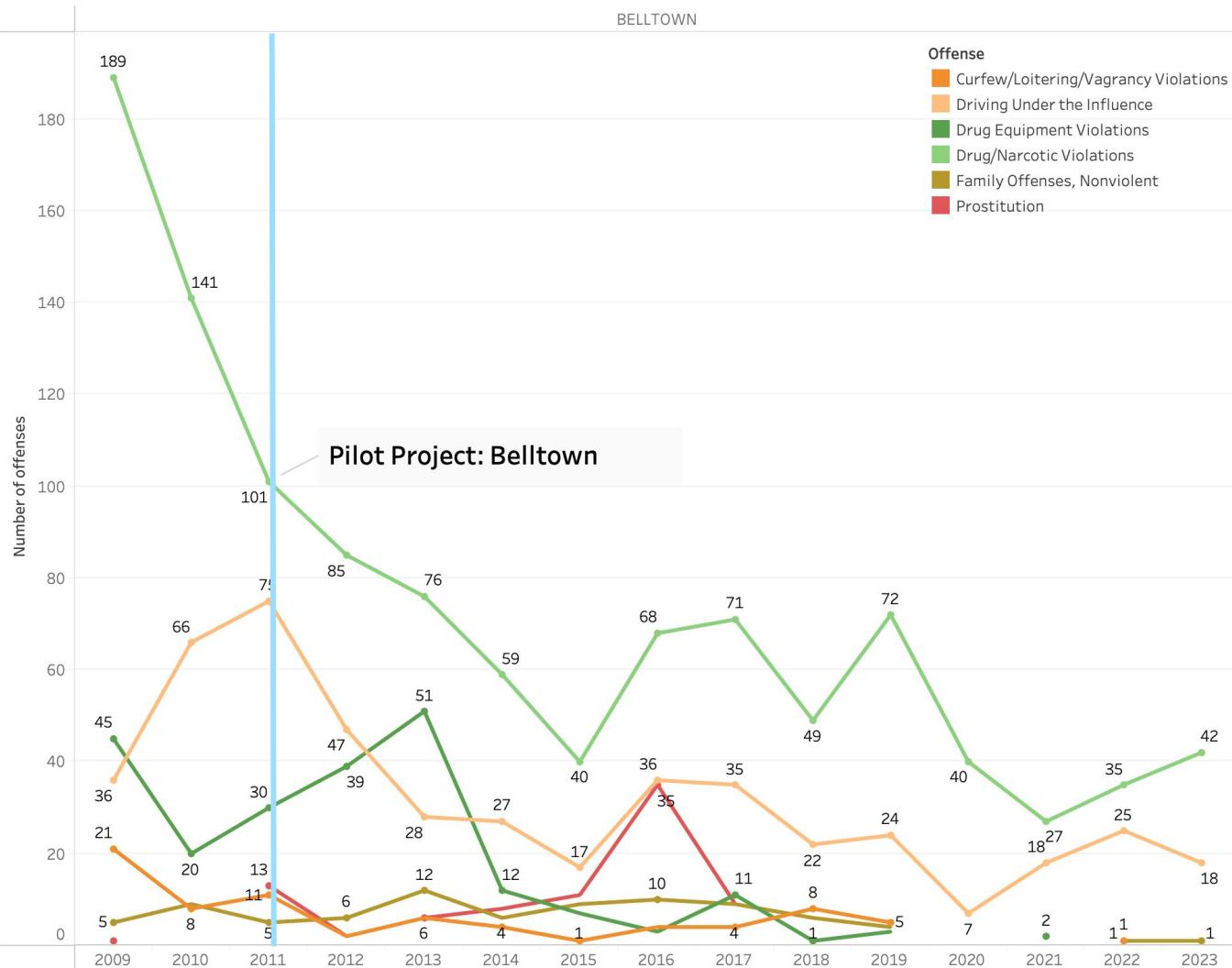
A Catalyst for Positive Transformation



BELLTOWN

Offense

- Curfew/Loitering/Vagrancy Violations
- Driving Under the Influence
- Drug Equipment Violations
- Drug/Narcotic Violations
- Family Offenses, Nonviolent
- Prostitution

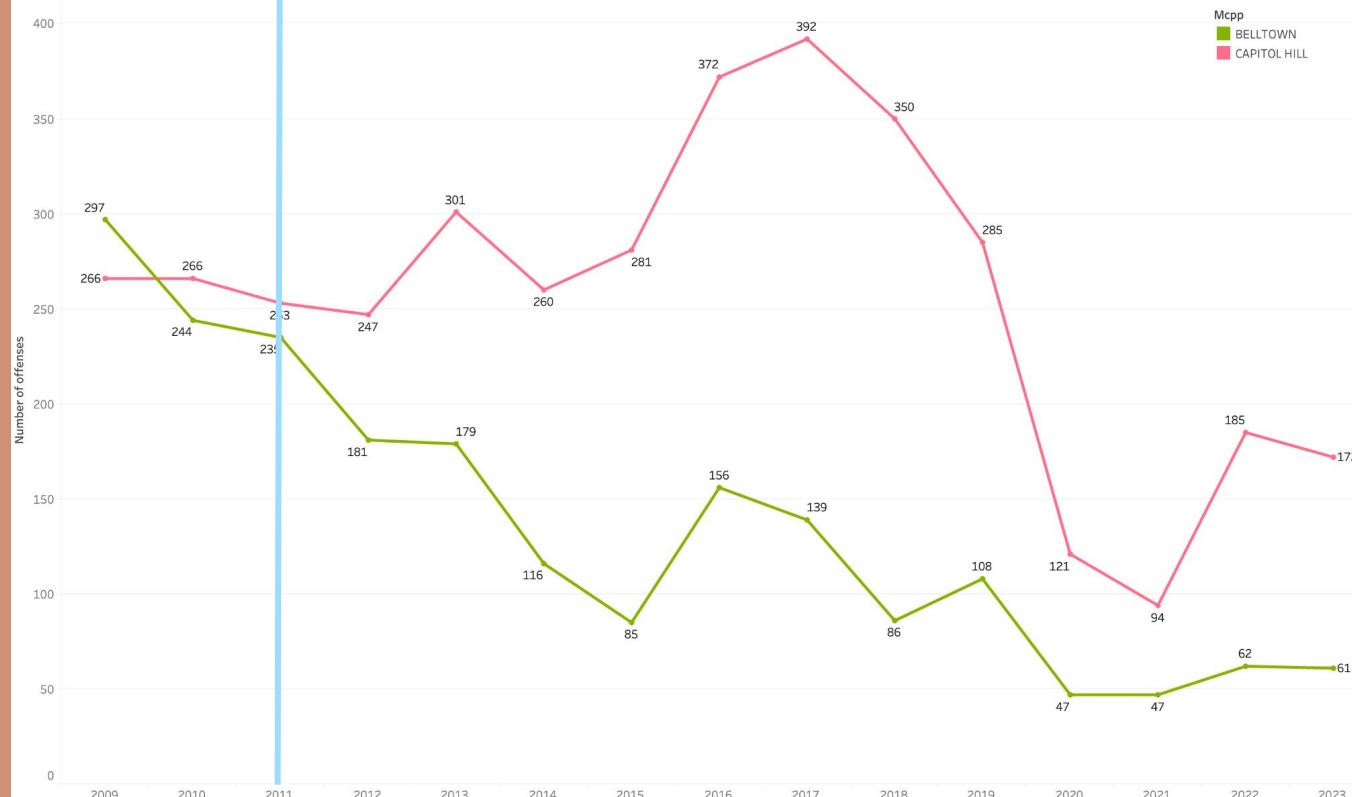
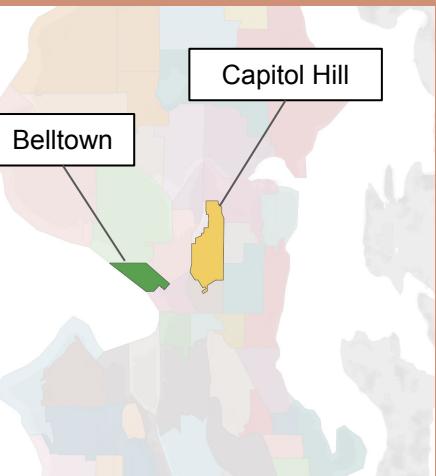


Neighborhood Trends

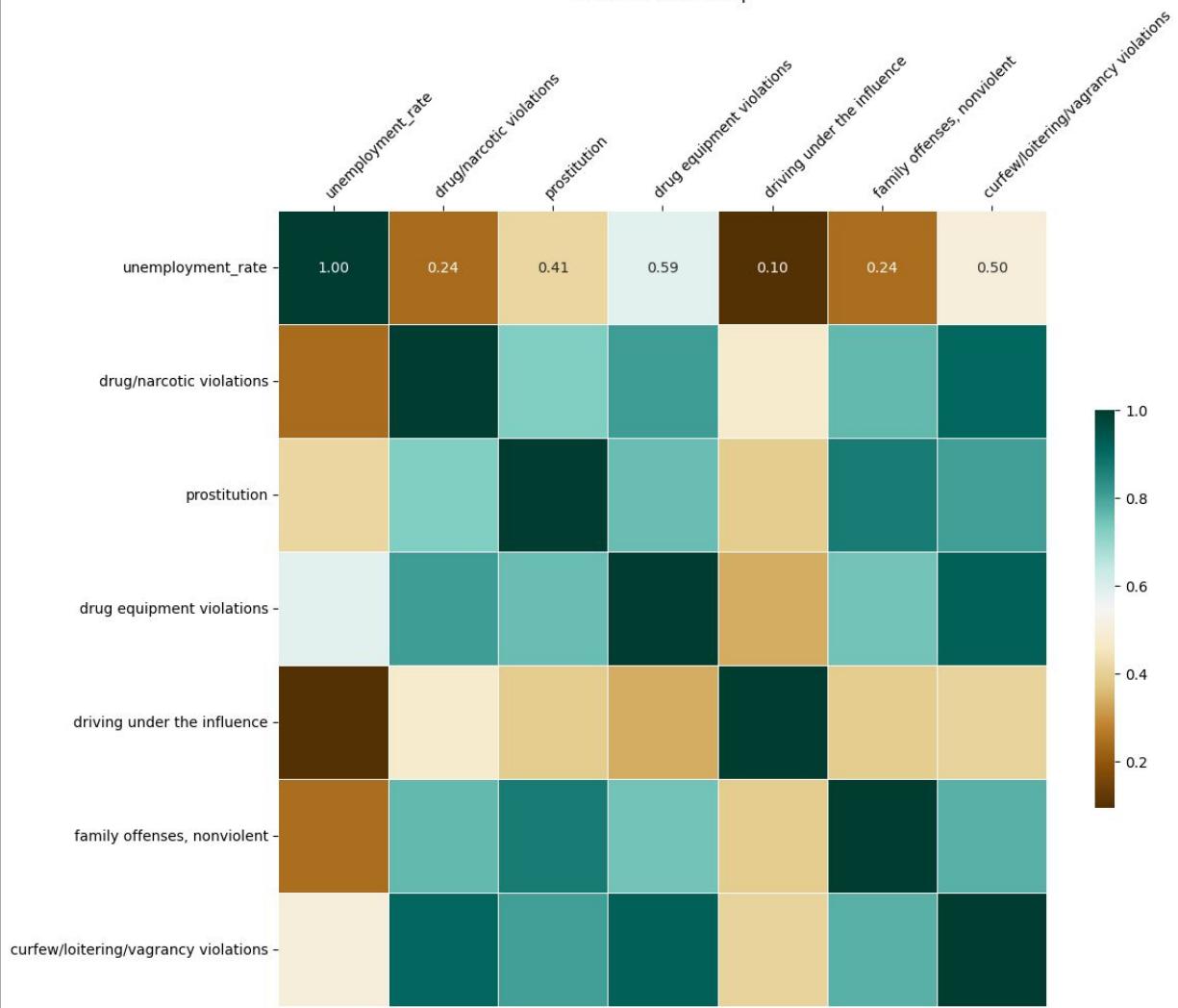
L E A D Reduces

Crime in Belltown,

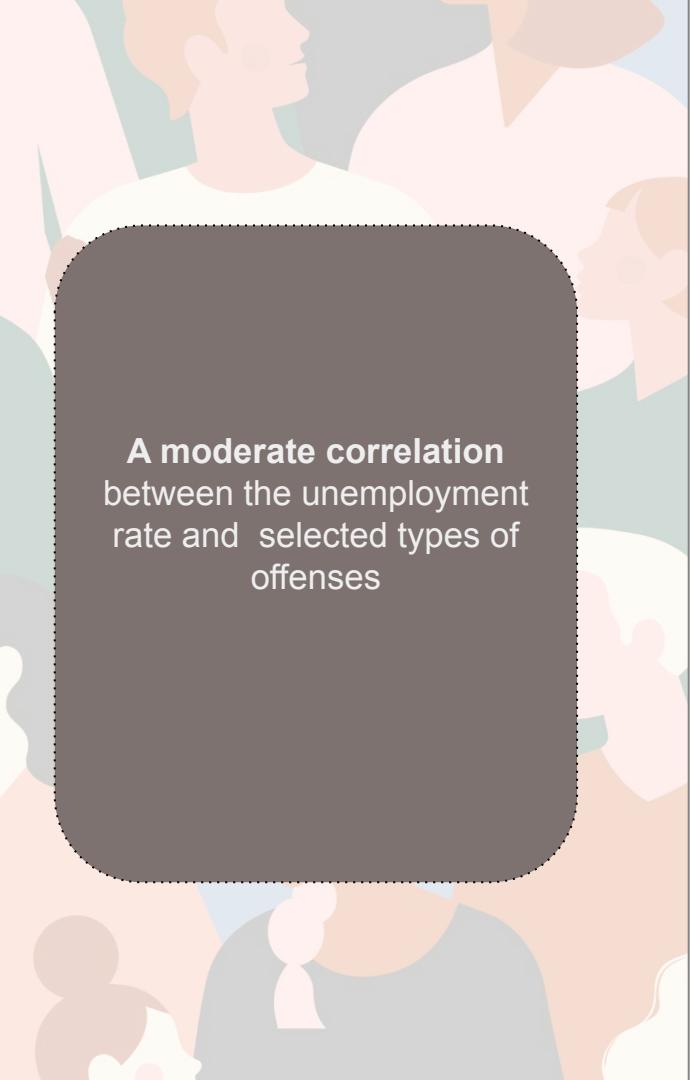
BUT NOT in Capitol Hill



Correlation Heatmap

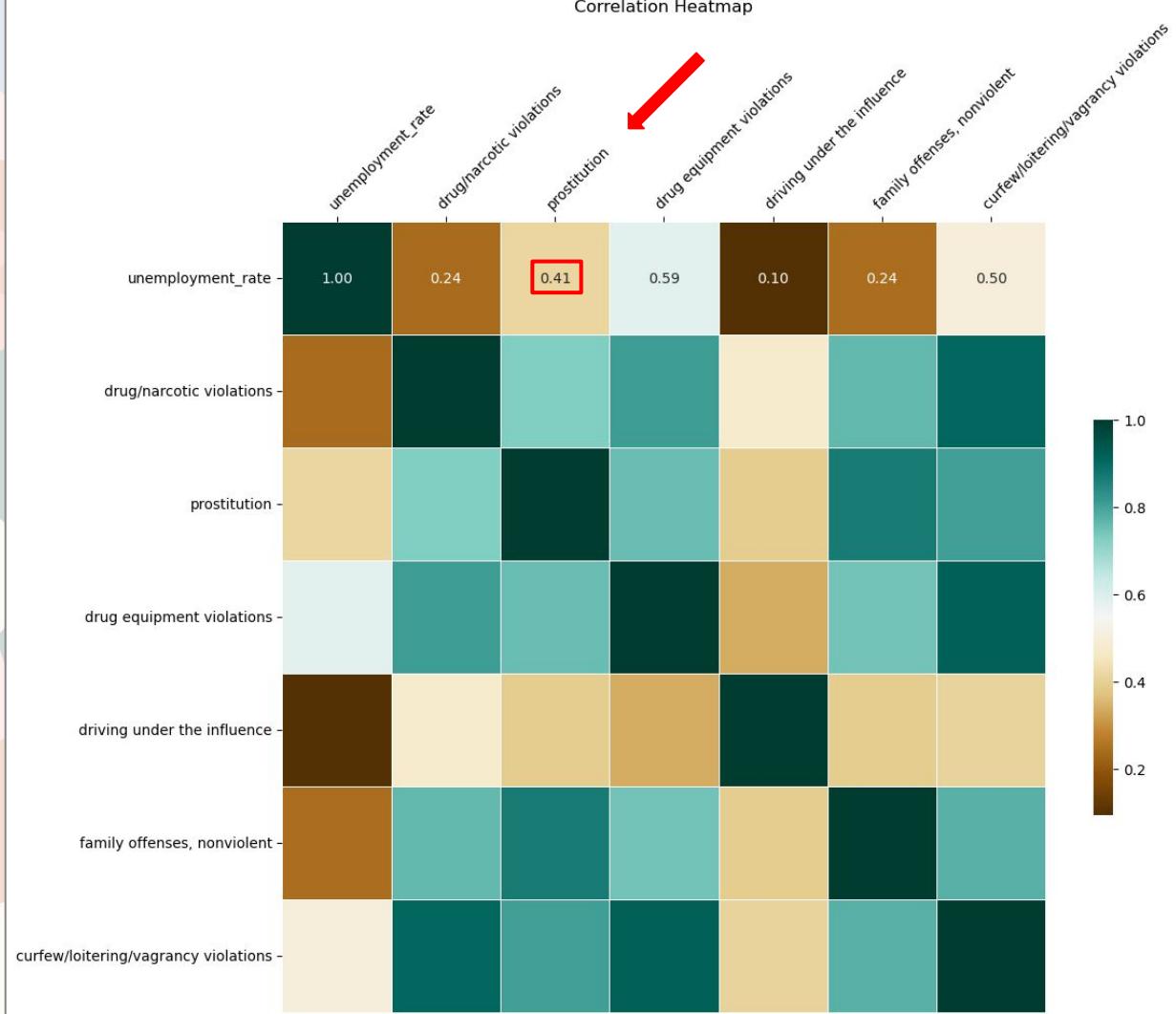


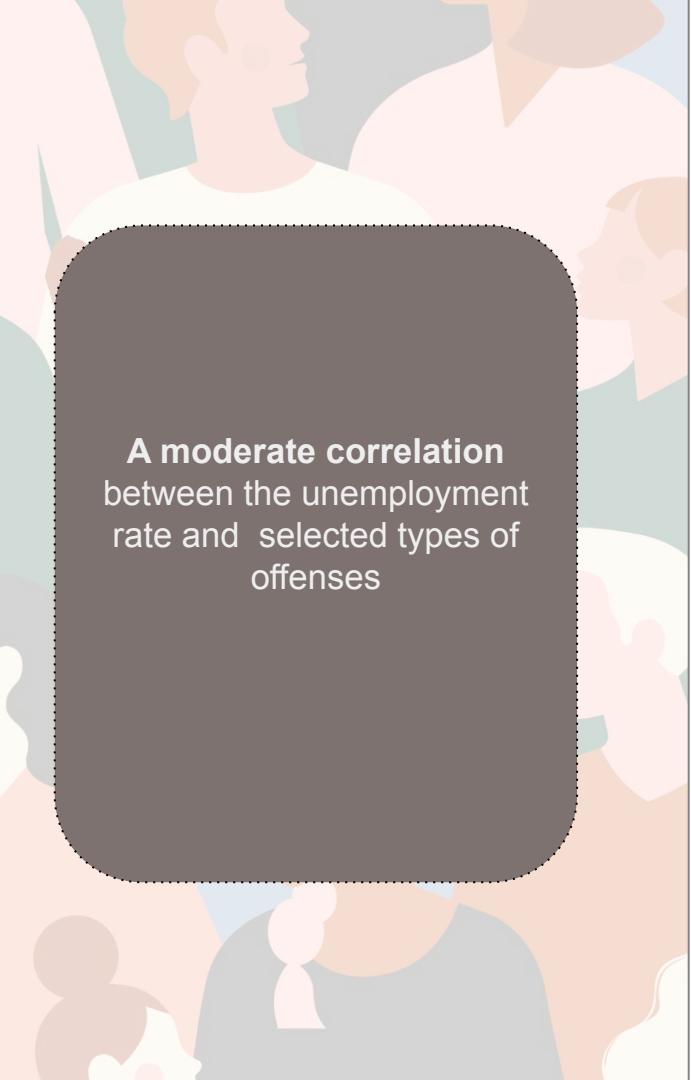
A moderate correlation
between the unemployment
rate and selected types of
offenses



A moderate correlation
between the unemployment
rate and selected types of
offenses

Correlation Heatmap





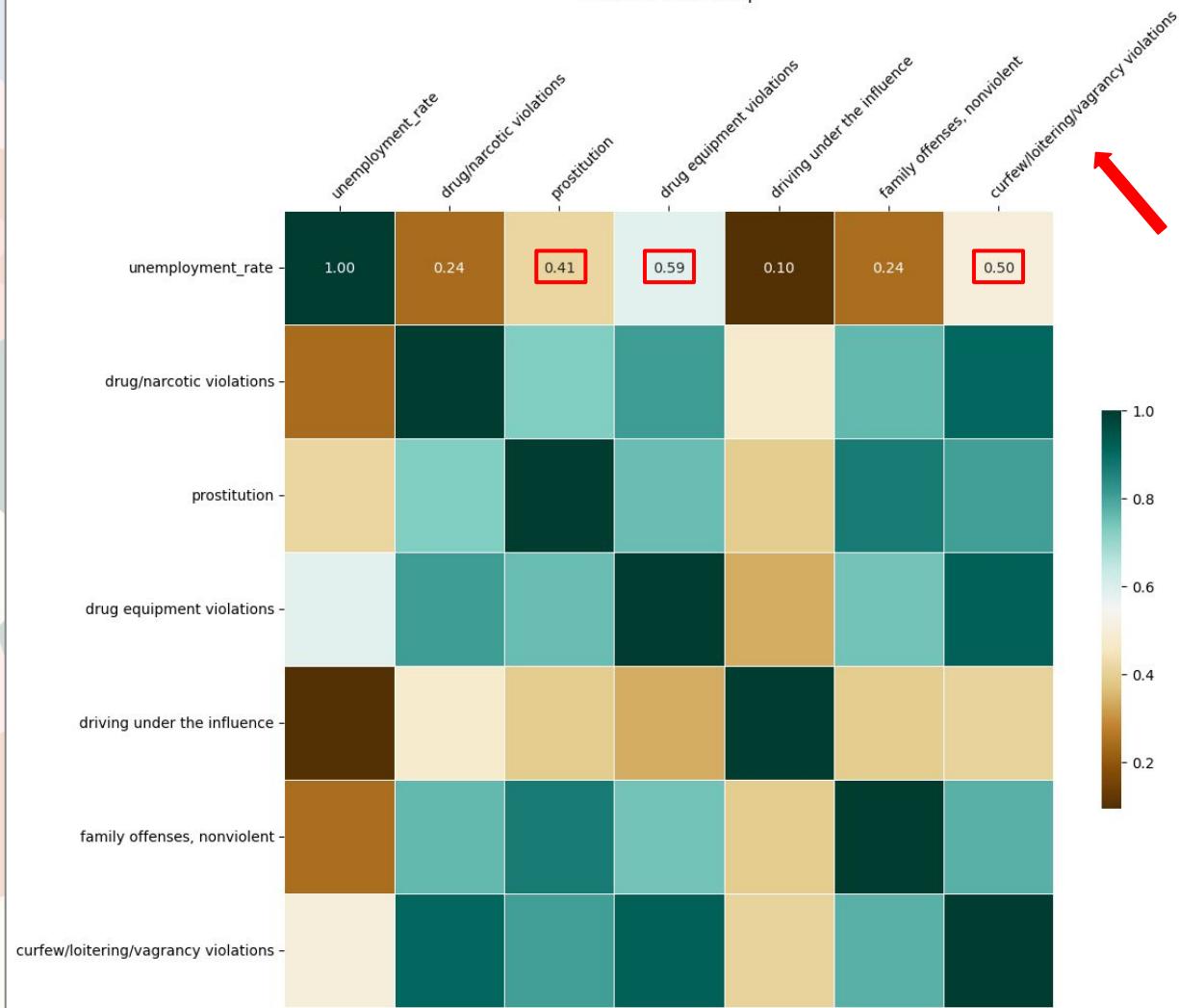
A moderate correlation
between the unemployment
rate and selected types of
offenses

Correlation Heatmap

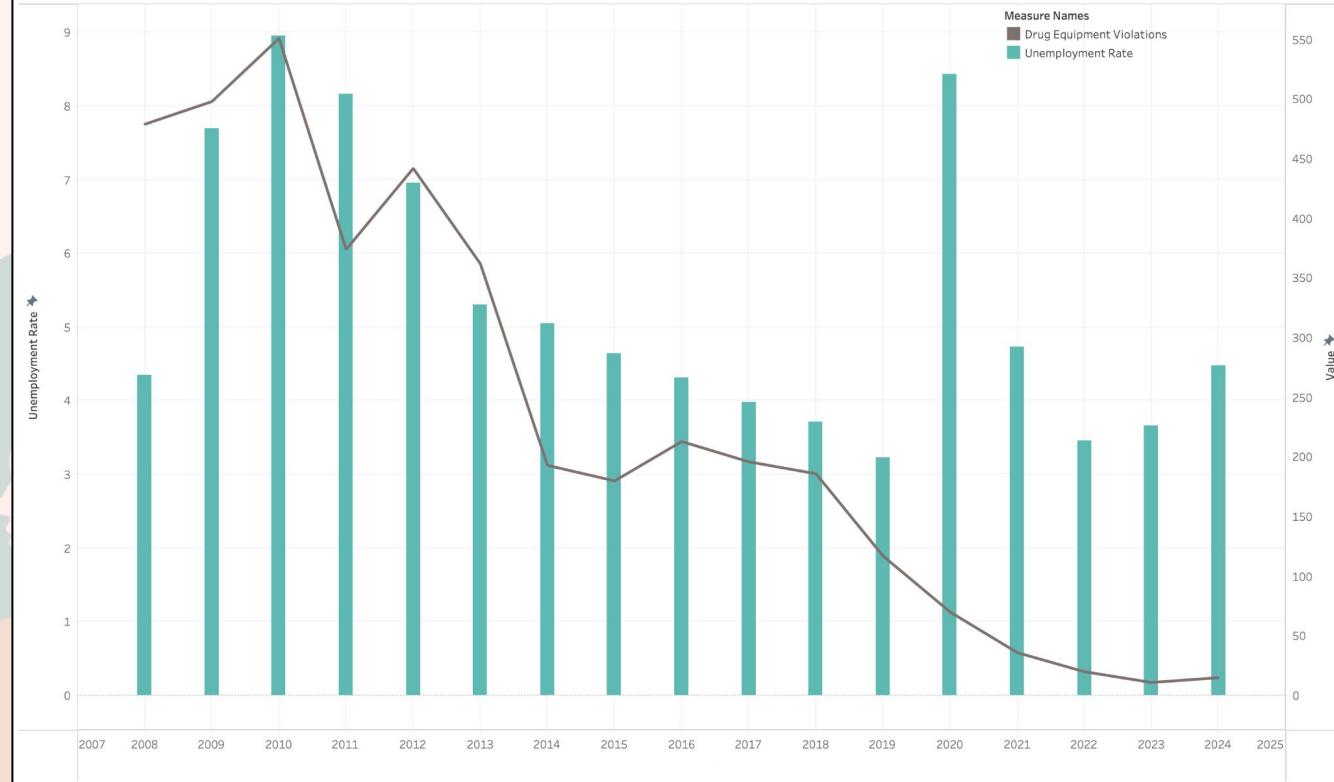


Correlation Heatmap

A moderate correlation between the unemployment rate and selected types of offenses

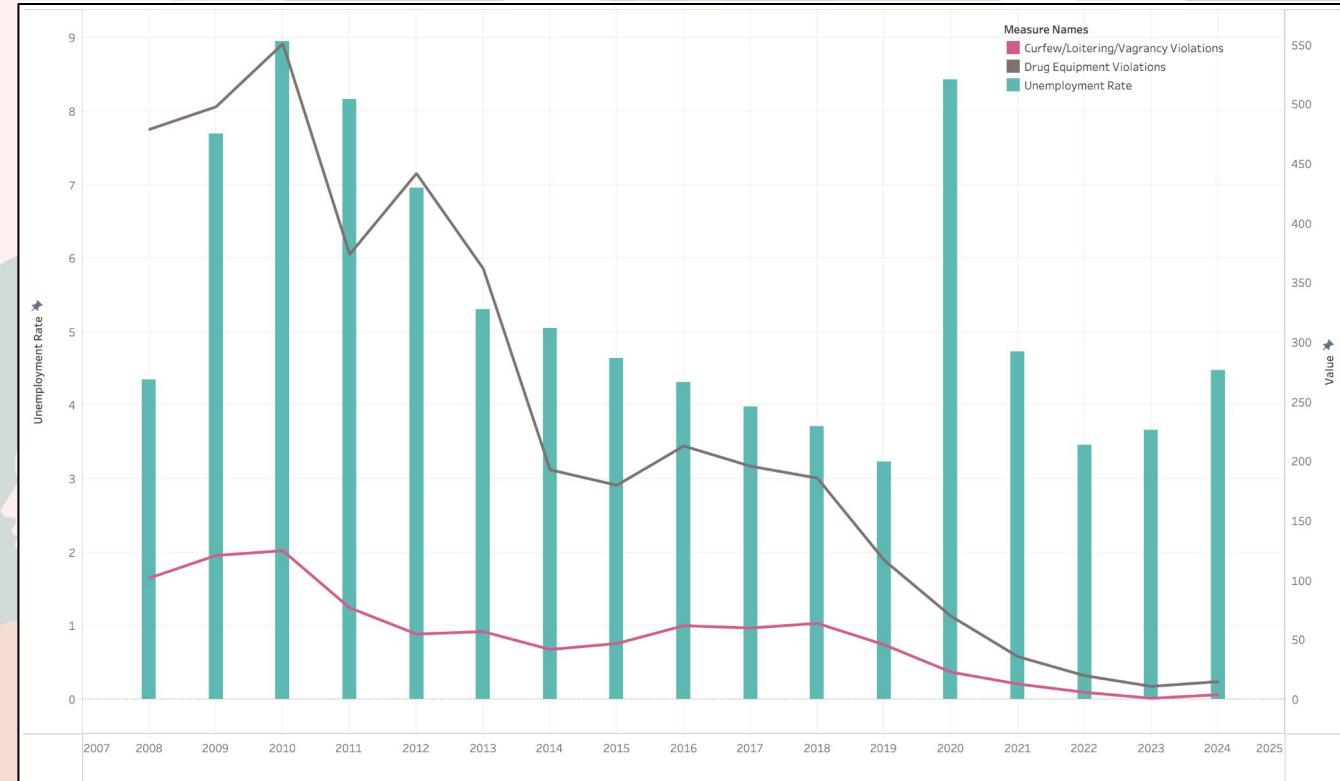


Drug Equipment Violation



**Drug Equipment
Violation**

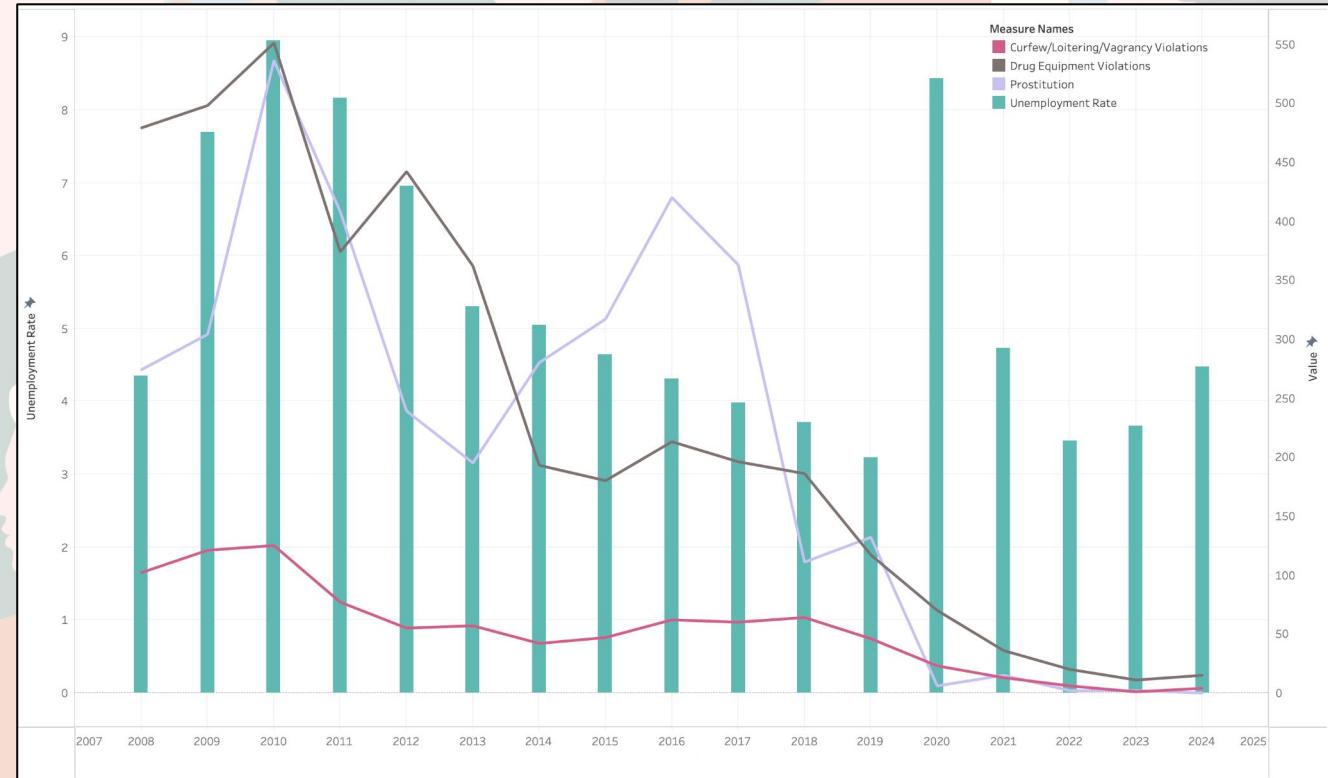
**Curfew/Loitering/Vagra
nancy Violations**



**Drug Equipment
Violation**

**Curfew/Loitering/Vagra
nacy Violations**

Prostitution





Let's talk about

M C P P

Micro-Community Policing Plans

Community Engagement

Crime Data

Police services

" No two neighborhoods in Seattle are the same "

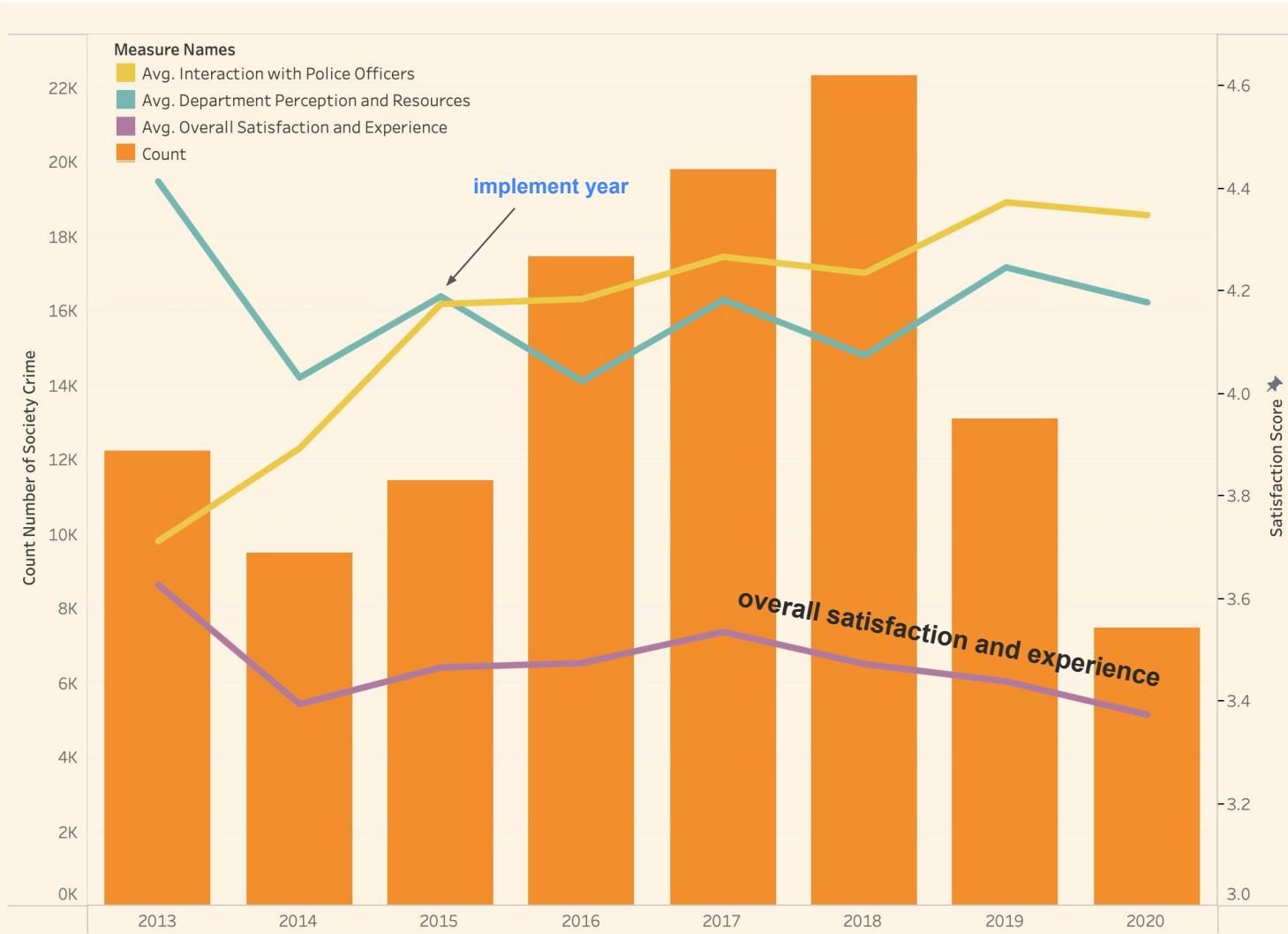
characteristics

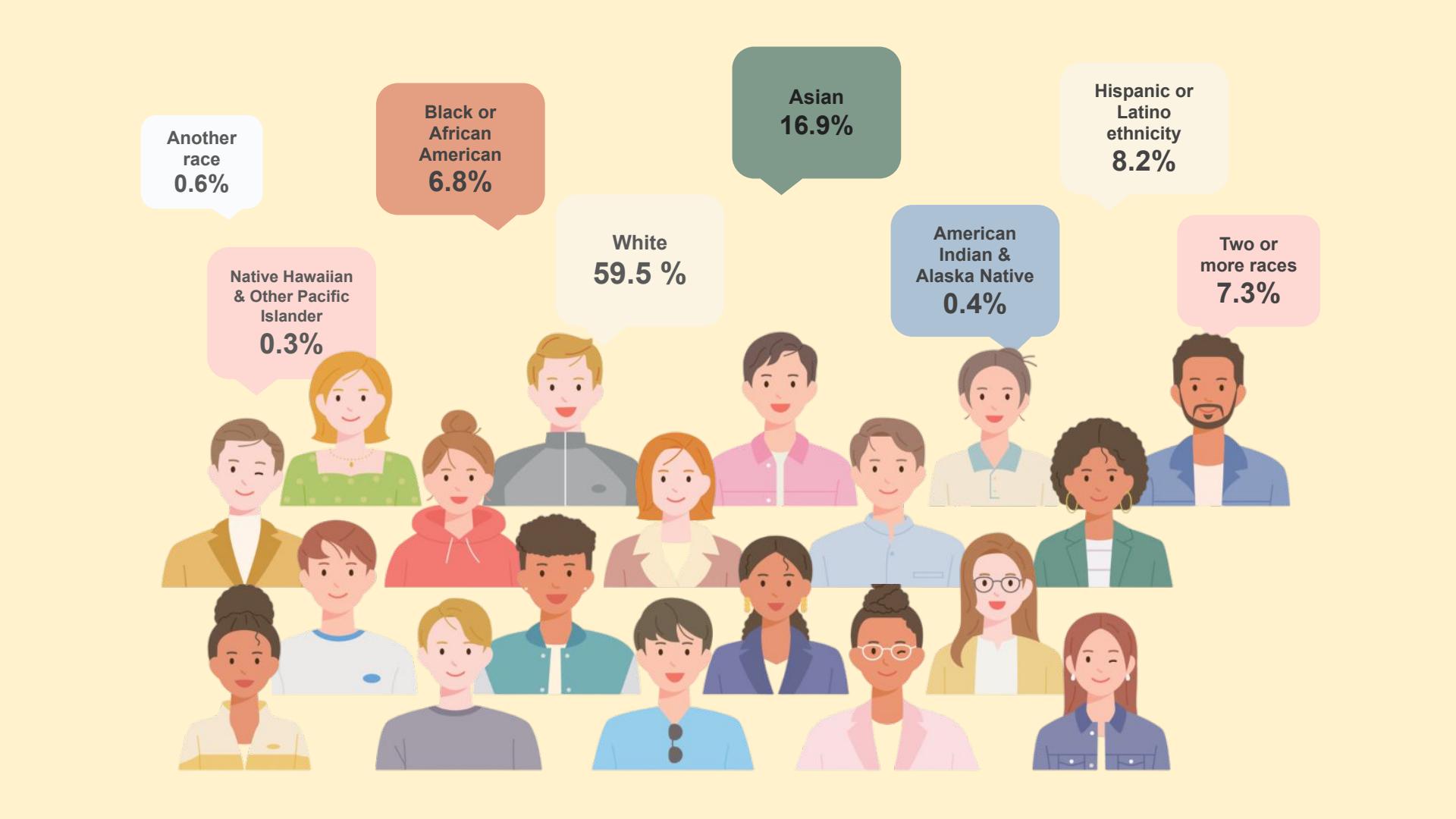
demographics

crime rates

cultural diversity







Another race
0.6%

Black or
African American
6.8%

Asian
16.9%

Hispanic or
Latino ethnicity
8.2%

Native Hawaiian & Other Pacific Islander
0.3%

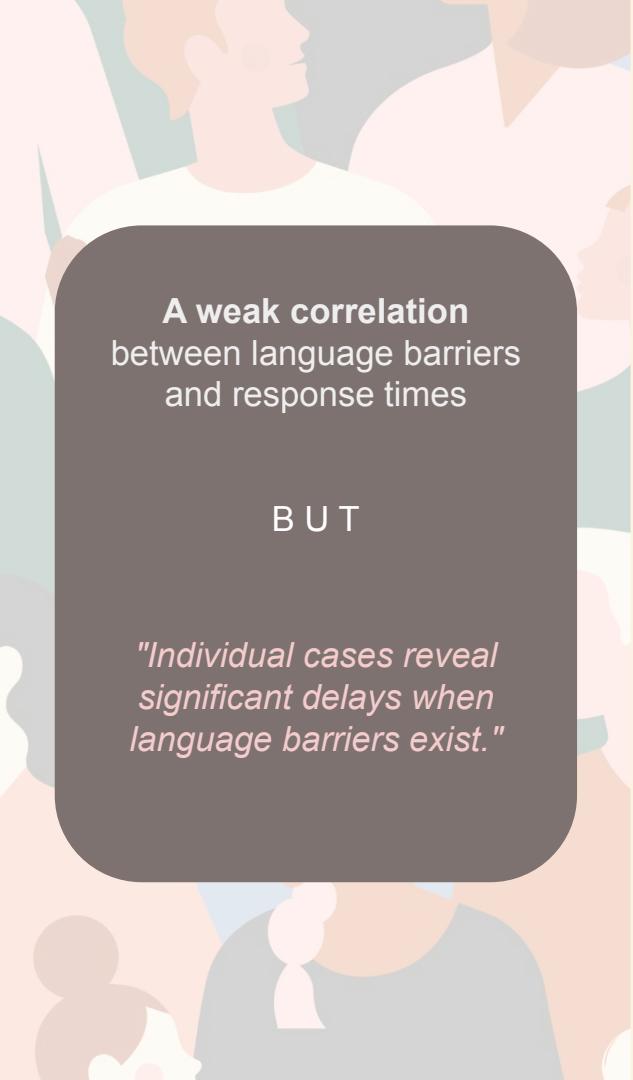
White
59.5 %

American Indian & Alaska Native
0.4%

Two or more races
7.3%



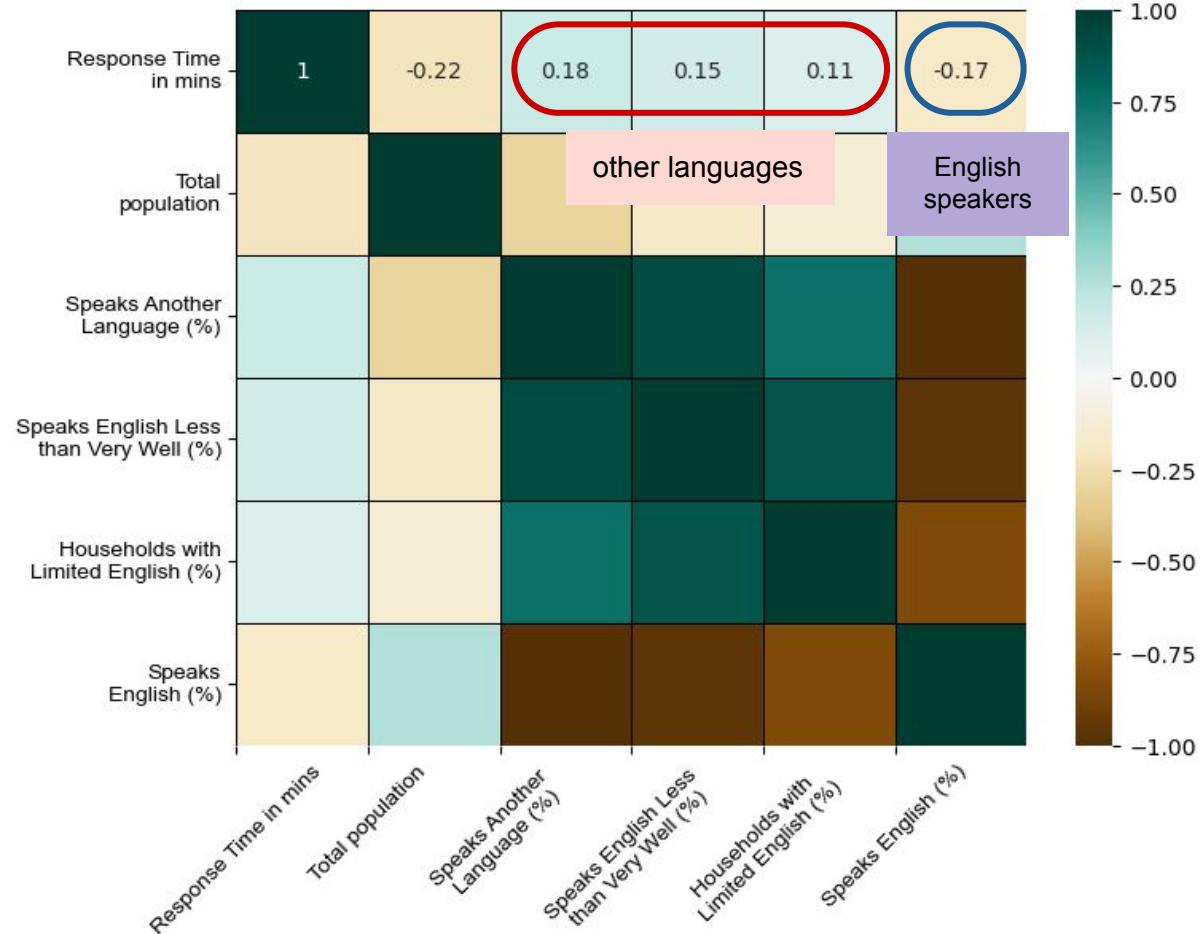
*"Is the Language Barrier
Slowing Down Police
Response Times?"*



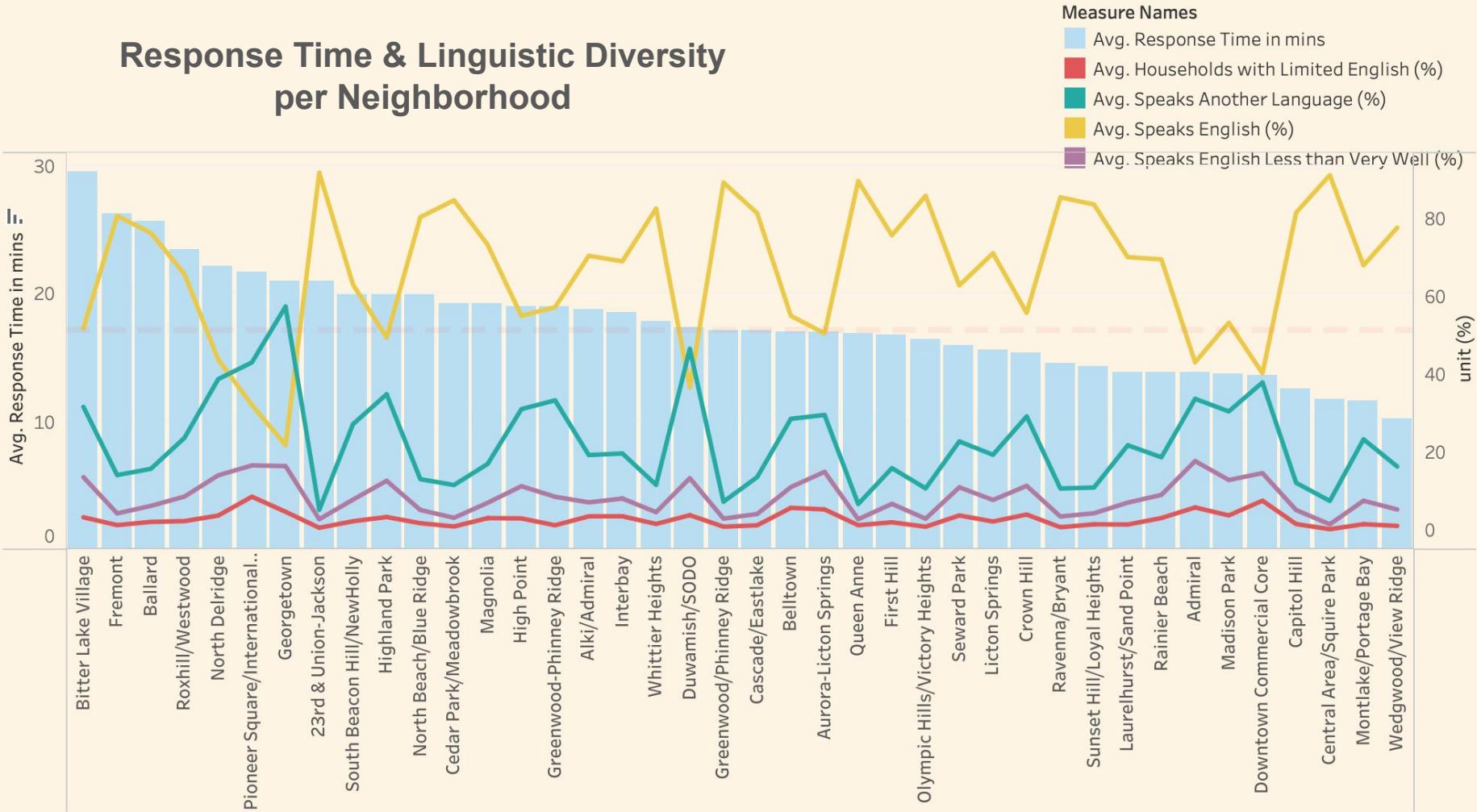
A weak correlation
between language barriers
and response times

B U T

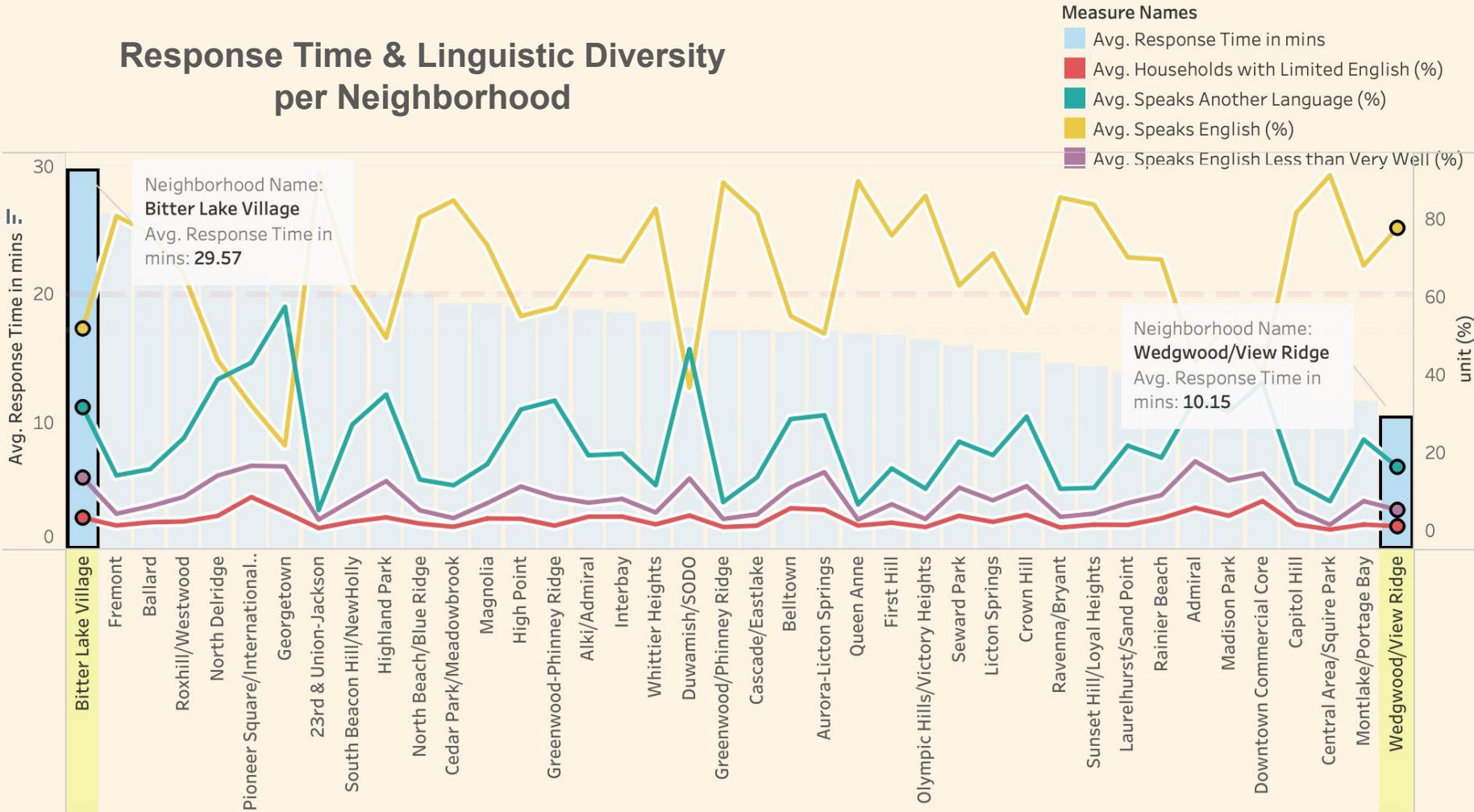
"Individual cases reveal significant delays when language barriers exist."



Response Time & Linguistic Diversity per Neighborhood



Response Time & Linguistic Diversity per Neighborhood

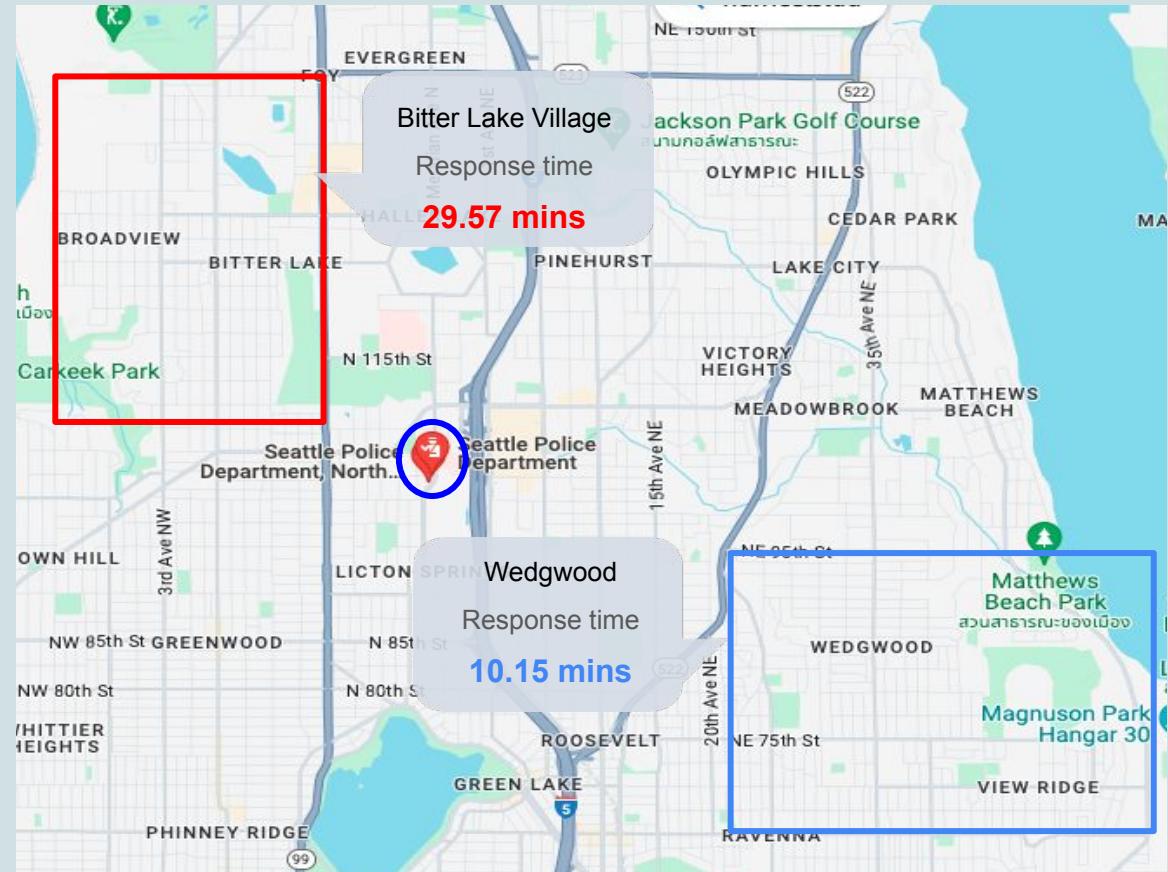


Bitter Lake Village

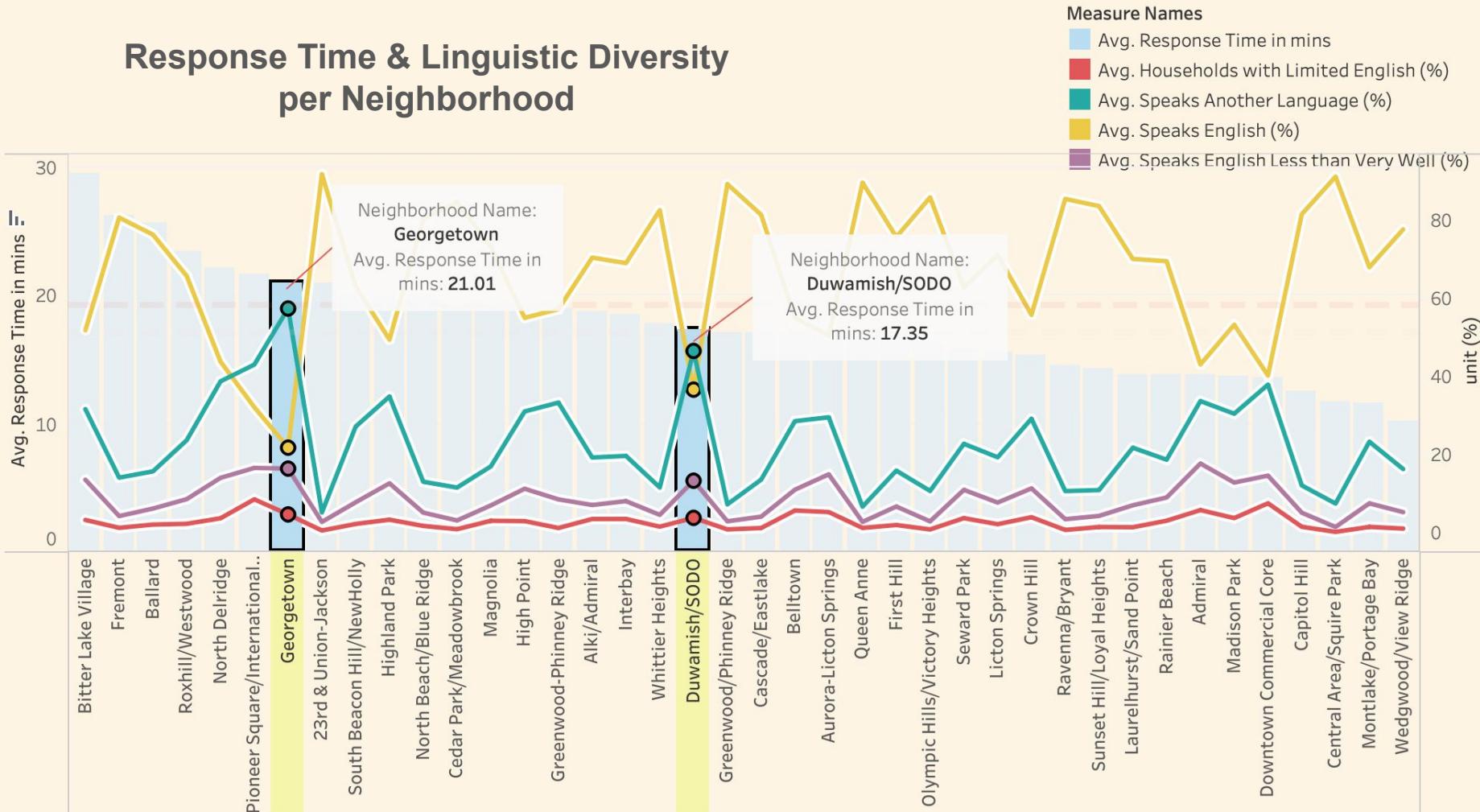
VS

Wedgwood/View Ridge

	Bitter Lake Village	Wedgwood/View Ridge
Area	2.4 km²	2.6 km²
Population	~ 146.000	~153.000
Non-English Native	31 %	15 %

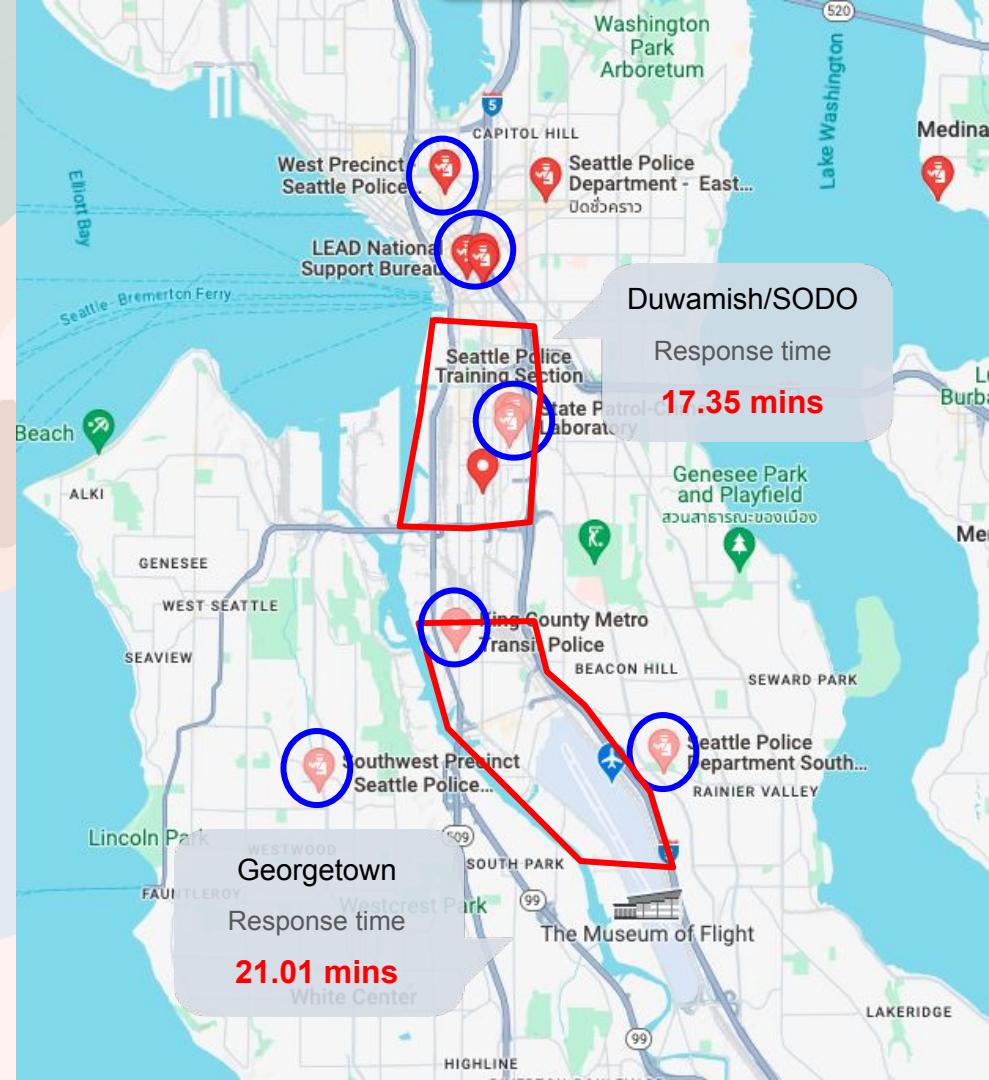


Response Time & Linguistic Diversity per Neighborhood



Neighborhoods with high linguistic diversity

	Duwamish/SODO	Georgetown
Population	~ 30.000	~ 24.000
Non-English Native	46 %	57 %



Crime against Society

e.g., gambling, prostitution, drug violations

Crime against Property

e.g., robbery, bribery, burglary

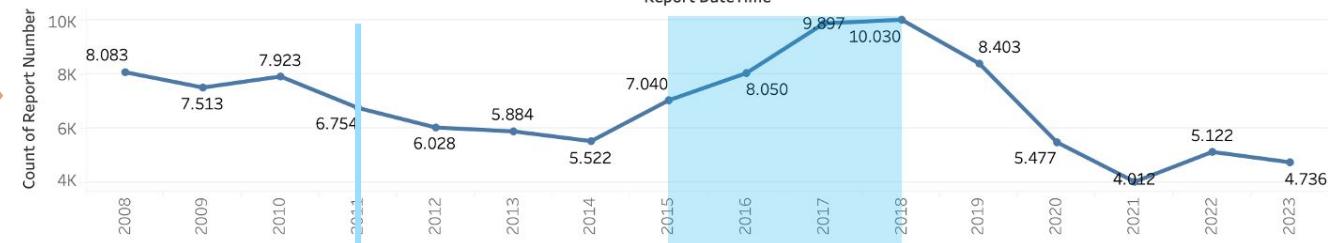
Crime against Persons

e.g., murder, rape, assault

LEAD Implementation: 2011

MCPPI Implementation: 2015 - 2017

Crime against society

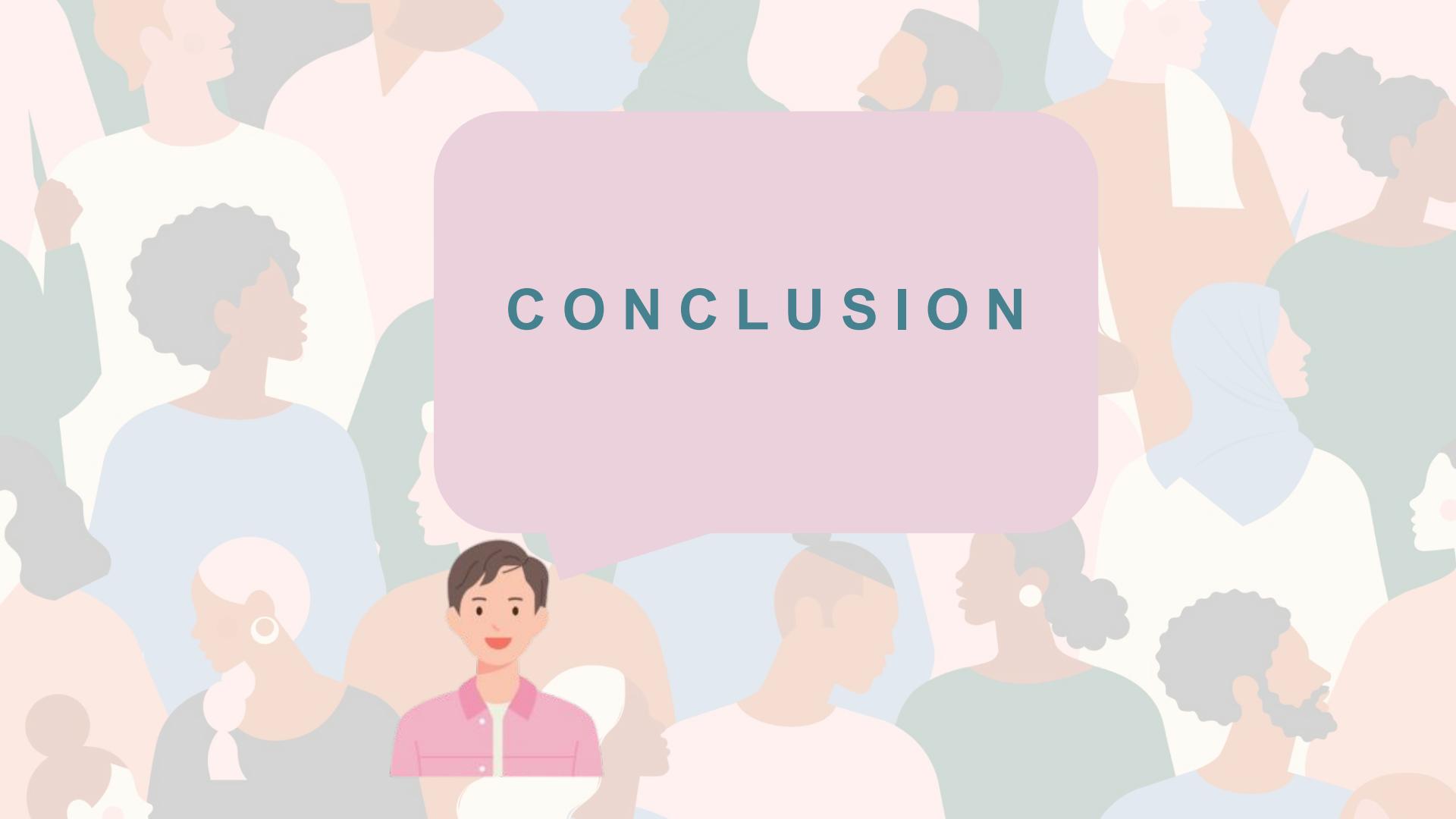


Crime Against Property



Crime against Person





CONCLUSION

CONCLUSION

- Significant crime **decreasing** effect in Belltown because of LEAD
- Satisfaction scores are **higher** after implement of MCPP
- Correlations between response times and language factors are **weak**,
but individual cases may **still provide valuable insights**.

CONTACT



Dimitar Nemski
Data Analyst



Olivia Esau
Data Analyst



Varitsara Petchdang
Data Analyst

