

# **EXPANDING IN LOS ANGELES**

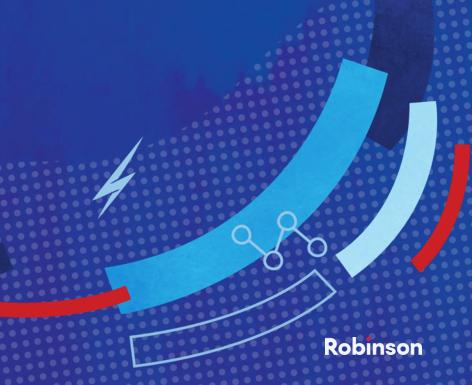
### LION CONSULTING

**MSA 8030 Communicating with Data** 

Team 7: Lilly Parham, Pamela Alvarado-Zarate & Zainab Siddiqi

**December 2, 2024** 





# **BUSINESS PROBLEM**

Identify areas and time periods that experience lower-risk and non-violent crime.



**Company Outlook** 

Since June 2024, there's been a 43.6% increase in crimes at retail stores!

#### **Potential Pain Points**



Crime Hotspots



Time Variability



Safety Guarantee Question: Is development possible considering crime rates & competitor-to-area density?

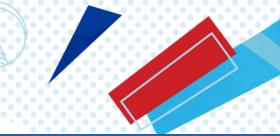


**LOS ANGELES** 

2<sup>nd</sup> largest city in the U.S.

389 crime index (2022)

# **OUTCOMES**



#### **Stakeholder Personas**

Crime Rate Reduction	Benchmark crime rates compared to city-wide competitor metrics	
Safety Incident Reports	50% less safety-related incidents reported by employees	
<b>Customer Traffic Retention</b>	Greater % of customers retention due to little to no experience of victim to crim	ne.

#### **Business Desires**

- Maintain infrastructure investment.
- Employee & customer safety.
- Avoid criminal losses (i.e., robberies, arson).

#### **Business Risks**

- Bias against or <u>neglection</u> of certain communities with high crime rate.
- Operational <u>risk of costs</u> associated with adding safety measures.

## **APPROACH**



**Geographical Analysis** (Location & Crime Density)



Common Occurrences (Crime Types)



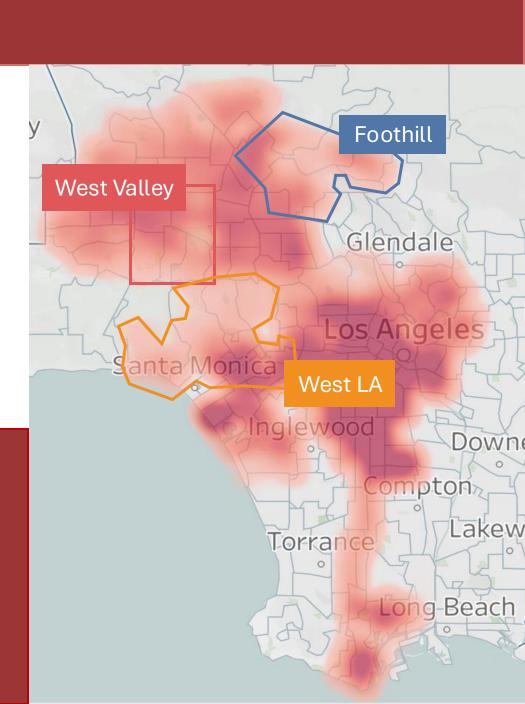
**Time-Based Operations** 

(Crime Type Patterns)

Significantly reduces location options and avoids setback for decision-making

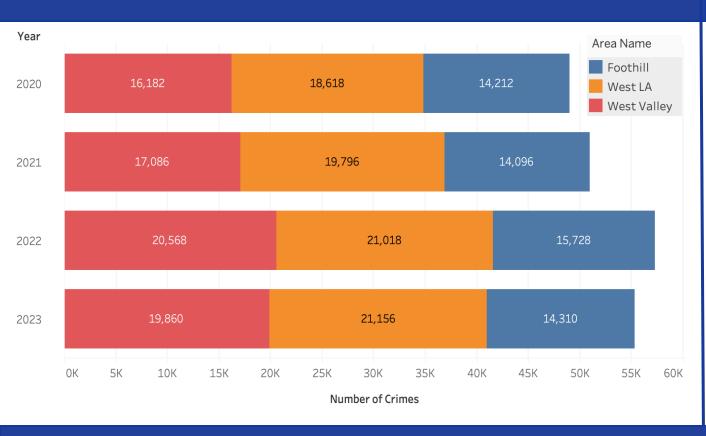
Eliminates/Reduces maintenance costs from damage against property

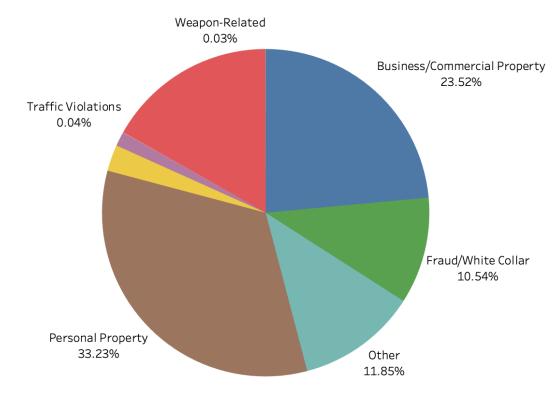
Reduces liability against employees and customers



#### TOTAL CRIME COUNT

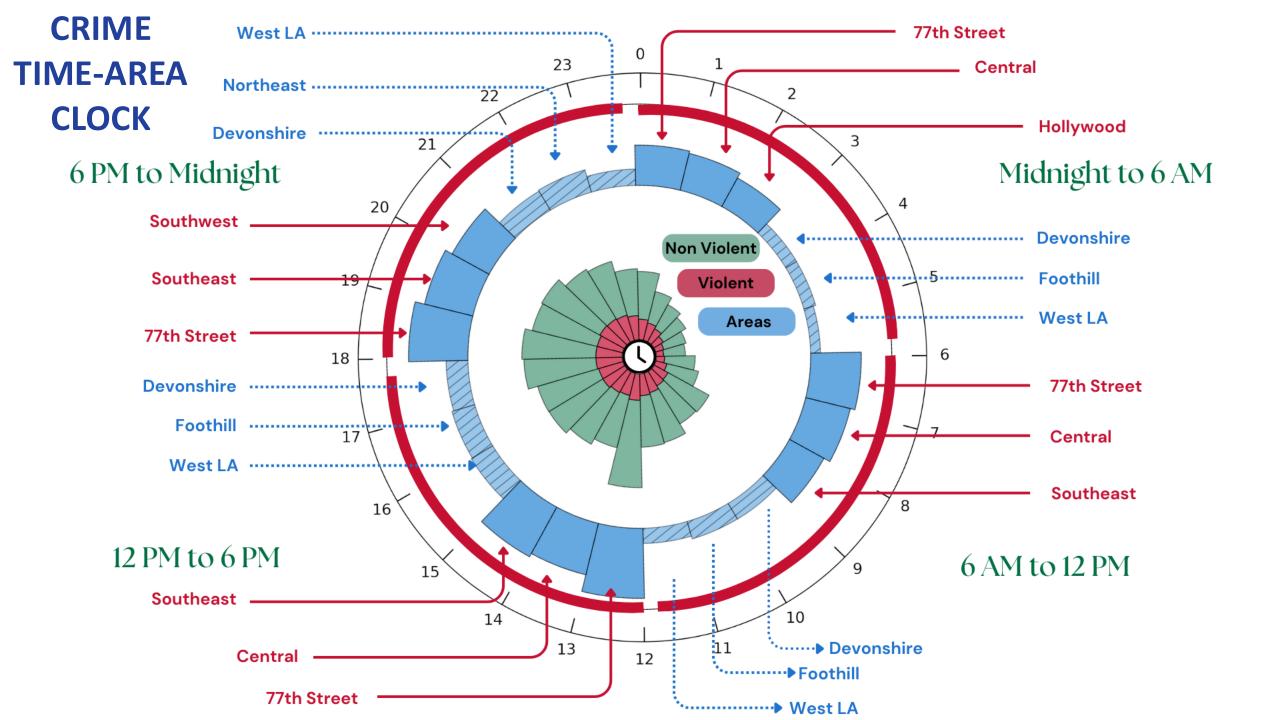
#### % TOTAL OF CRIME TYPE





Out of ~20,000 crimes committed, 16.78% as violent crimes & 0.03% weapon-related crimes.

**2022-2023:** (19%) in business/commercial property (-5%) in violent crime



# **NEW BRANCH (WEST LA)**



Significant Low Rate of Violent & Weapon-Related Crimes

Large Clientele Prospects: Santa Monica, Central Los Angeles, & West LA region





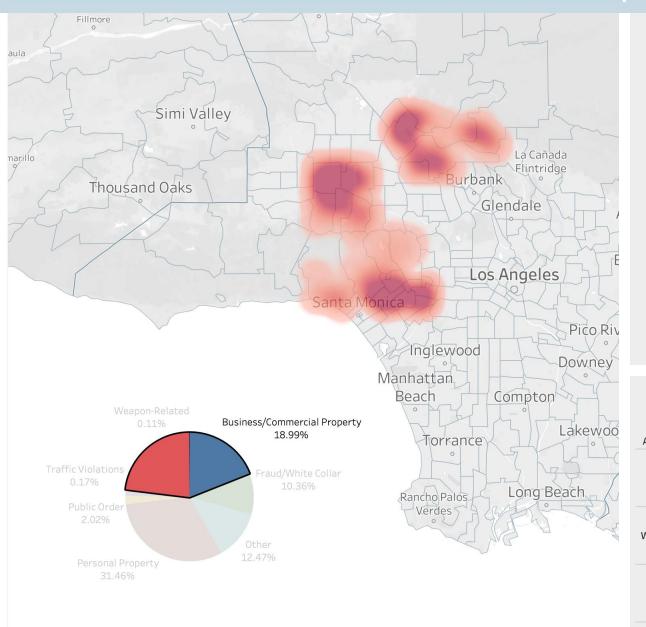
#### Frequency of crimes is **NOT** scattered.

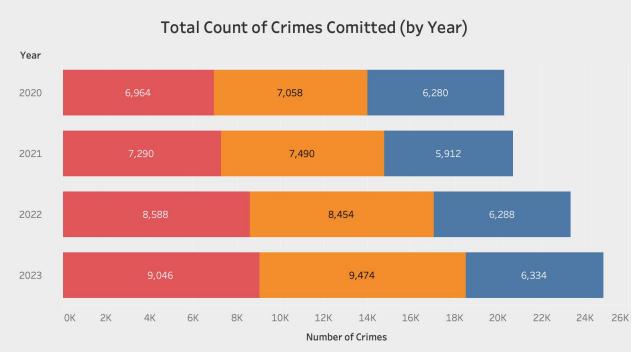
 Low to high crime frequency specific to areas within West LA



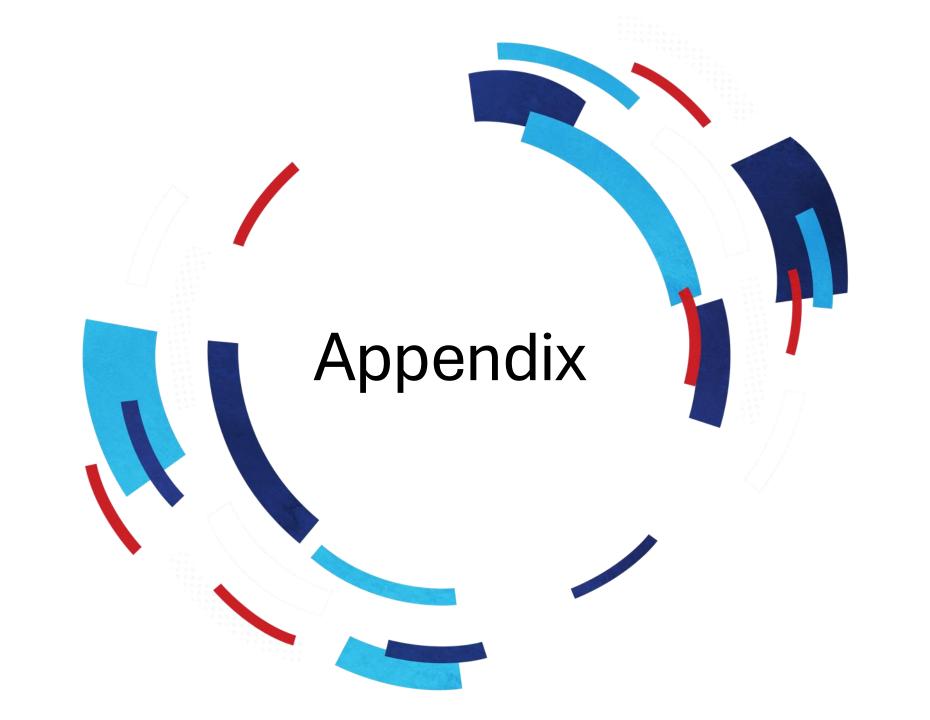
**Explore Clientele Demographics** 

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#### West LA, West Valley, Foothill: % Difference in Crime Count Year Type of Crime 2022 2023 Area Name 2020 2021 Business/Commercial Property 2.91% 25.92% 23.72% West LA Violent 9.96% -1.76% -4.67% Business/Commercial Property 19.27% 6.26% 11.50% West Valley 3.67% 1.20% Violent Business/Commercial Property -6.36% -12.47% Foothill -5.60% 0.92% 8.57% Violent



Data	Description	Data Type	Remarks
DR_NO	Division of Records #: 2-digit year, area ID, & 5 digits	int64	Unique Identifier, Required for Aggregate Functionality in Tableau
DATE OCC	Incident Occurrence: MM/DD/YY	object	Feature Engineering into Monthly, Yearly, Quarterly, or even Day of the Week Impact for Business Ops
TIME OCC	Incident Occurrence: Military time	int64	Feature Engineer into Times of the Day Categories for Business Hours
AREA NAME	21 Geographic Areas that reference landmarks/surrounding communities	object	Easier Regional Divide Specific to Business; Central <- Highest Crime
Crm Cd Desc	Crime Name Committed (Associated with Crime Code)	object	140 Different Categories, Sorting Into Crime Categories Based On Business Employee Safety & Infrastructure
Part 1-2	Crime Against Persons (1), Crime Against Property (2)	int64	Persons v Property
Premis Desc	Structure, vehicle, or location where crime occurred	float64	306 unique count, (street, apartment, home)
Weapon Desc	Weapon used in the crime	object	Can be broken down based on preventive recommendations
LOCATION	Street address of crime incident rounded to the nearest hundred block to maintain anonymity.	object	Street, Apartment, etc.
LAT	Latitude	float64	Around 34.0549° N
LON	Longitude	float64	Around 118.2426° W