Executive Summary - Expanding in Los Angeles

MSA 8030: Communicating with Data Professor Mark Jack Saturday, December 7, 2024, 11:59 PM

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Lion Consulting is preparing for a strategic expansion to the West Coast, specifically Los Angeles, to establish a new branch to bolster relationships with business partners in Asia while enhancing operational efficiency. Central to this expansion is ensuring the safety of employees, assets, and the business itself. Los Angeles, the city of dreams and the second largest in the United States, holds immense potential but comes with unique challenges. With a crime index 1.5 times higher than the national average and retail crime surging by 43.6% since June 2024, expanding our business here isn't just about strategy—it's about resilience. These challenges fuel our drive to analyze and identify safer operating areas, optimal timings to minimize risk, and ways to balance growth with security. LA remains a land of opportunity, and this is a summary of how we can navigate these complexities to make it optimal for Lion Consulting. Through our analysis, we developed targeted outcomes that guide this decision-making process and help mitigate potential risks.

The primary objective of this analysis is to identify a location in Los Angeles that minimizes crime-related risks while supporting the company's operational goals. To achieve this, we conducted a comprehensive study of LAPD crime data spanning from 2020 to 2023. This data was instrumental in uncovering patterns of crime across the city, both in terms of type, geographic distribution, and time of occurrence. These insights allowed us to pinpoint high- and low-risk areas, as well as the safest operating hours for business activities, ensuring that operations can be conducted with minimal exposure to risk.

The findings from this analysis identified three areas as the most promising locations for establishing the new branch: West Los Angeles, West Valley, and Foothill. Among these, West Los Angeles emerged as the strongest candidate. Generally speaking, West LA has the highest number of crimes committed compared to West Valley and Foothill. Up to 21,000 crimes were committed every year from 2020 to 2023, which, contradictorily, can seem like the least presentable candidate. Likewise, West LA is expected to be more susceptible to crime given its proximity to the major and highly populated cities in Los Angeles, but it can also offer a business advantage. Its central location offers strategic customer attraction from Santa Monica, central Los Angeles, and the West LA region itself. In addition, West LA appears to have three distinct areas with low (upper West LA), moderate (east West LA), and high (southside West LA) crime rates, rather than being scattered within the area. This division provides an easier approach for a new branch location. Within 2020-2023, West LA demonstrates a significantly lower total rate of violent (~16%) and weapon-related crimes (0.03%) (Figure 3). Violent crime in West LA significantly declined by 4.7% from 2022-2023, compared to Foothill (+8.6%) and West Valley (-1.2%) (Figure 4). Crimes against business and commercial properties in West LA statistically remain the highest ($\pm 23.7\%$) but declined by $\pm 2\%$ from 2022 to 2023 (Figure 4). This small percent change can indicate a potential, and perhaps slow, decline in the following years.

Nevertheless, this particular challenge can be overcome due to the high potential of business growth from a large clientele and the low probability of violent crime being experienced. In other words, safety is more guaranteed for our employees and clients, but low maintenance and security costs may or may not meet expectations.

We recommend stakeholders implement our suggestions through the analysis over three months and compare measurable analytics like safety report incidents, customer retention, and crime rate reduction through competitor benchmarks in the same city. Our deliverable is an <u>interactive</u> <u>dashboard</u> displaying simple and color-coded charts to analyze crime rates in local areas of Los Angeles. The dashboard can show only areas of interest at a given period by filtering year(s), month(s), and area(s). Selecting a section (or crime type) in the pie chart also serves as a filter to view crime type trends from the other charts and an embedded timeline. The latest crime rates are shown if directly or indirectly connected from an extract of the <u>LAPD OpenData</u>.

Implementing robust safety measures based on the crime analysis will be essential for ensuring the success of the new branch. This includes deploying advanced surveillance systems, partnering with local law enforcement, and providing employees with comprehensive training on safety protocols. These proactive steps will create a secure environment, fostering both employee confidence and operational stability.

This strategic approach offers numerous benefits to stakeholders. Lion Consulting can significantly reduce liability while improving operational efficiency by selecting a location with lower crime risk and aligning business hours with safer timeframes. Enhanced safety measures will secure the company's assets and employees, contributing to long-term cost savings and reinforcing financial stability. These efforts collectively align with the company's broader objective of establishing a secure and profitable presence on the West Coast.

While no location can guarantee absolute safety, the data supports that West Los Angeles offers the most favorable combination of safety, accessibility, and operational viability. By following these recommendations, Lion Consulting can confidently proceed with its expansion plans, ensuring the protection of its employees and assets while positioning itself for sustained growth in a competitive market. This expansion represents a significant milestone for the company, leveraging data-driven insights to achieve both safety and profitability in its operations.

Appendix

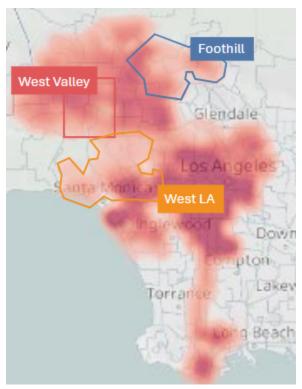


Figure 1. Density map of crime frequency in Los Angeles.

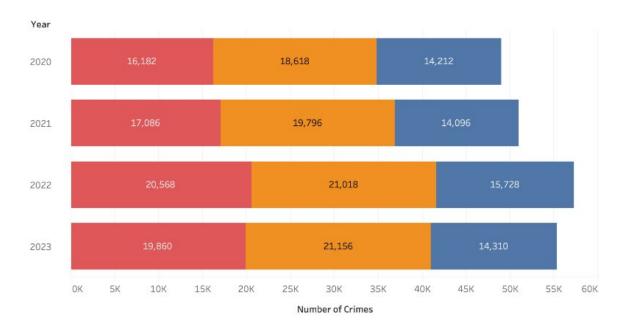


Figure 2. Total crime count in West Valley (red), West LA (orange), and Foothill (blue).

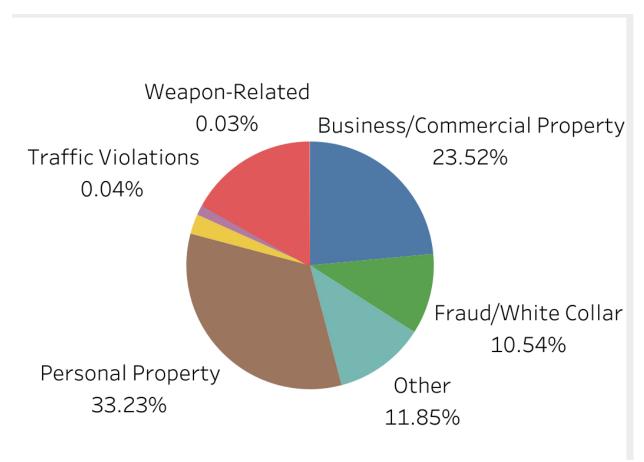


Figure 3. Percent (%) total of crime type.

| Area Name | | Year | | | |
|-------------|------------------------------|------|--------|--------|---------|
| | Type of Crime | 2020 | 2021 | 2022 | 2023 |
| West LA | Business/Commercial Property | | 2.01% | 25.92% | 23.72% |
| | Violent | | 9.96% | -1.76% | 4.67% |
| West Valley | Business/Commercial Property | | 6.26% | 10.27% | 1150% |
| | Violent | | 3.67% | 1685% | 1.20% |
| Foothill | Rusiness/Commercial Property | | -6.36% | | -12.47% |
| | Violent | | -5.60% | 0.92% | 8.57% |

Figure 4. Percent (%) difference of crime type from previous year to following year.

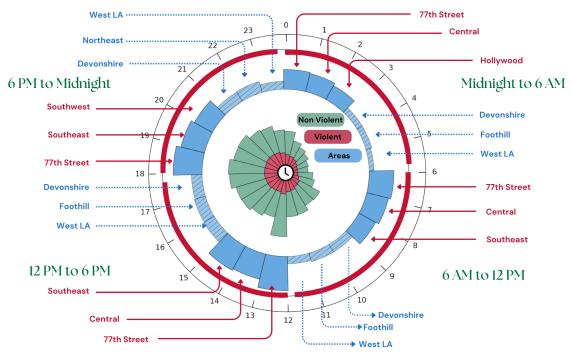


Figure 5. Hourly-based radial chart for frequency of non-violent (green) and violent (red) crime in an area. The overall frequency of violent crimes is depicted by blue.