

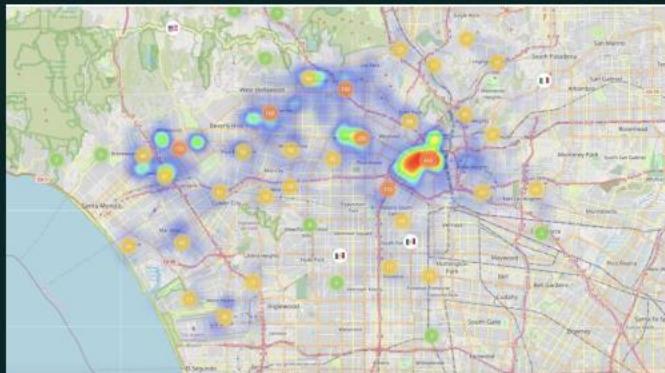
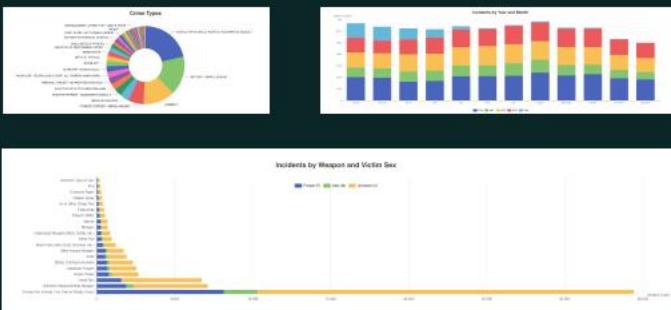
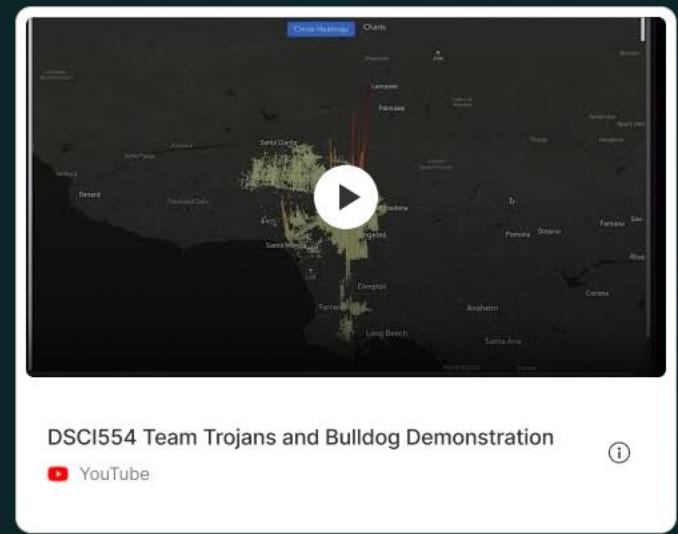
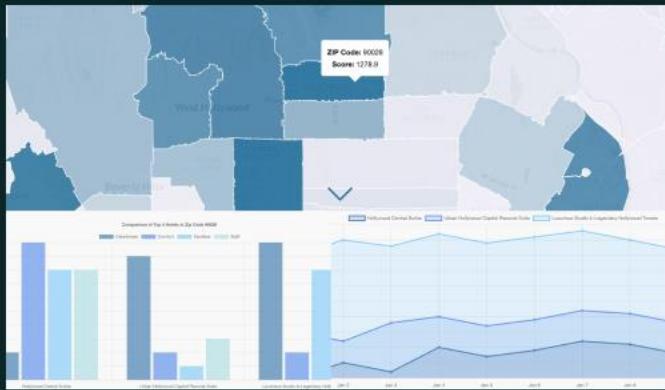
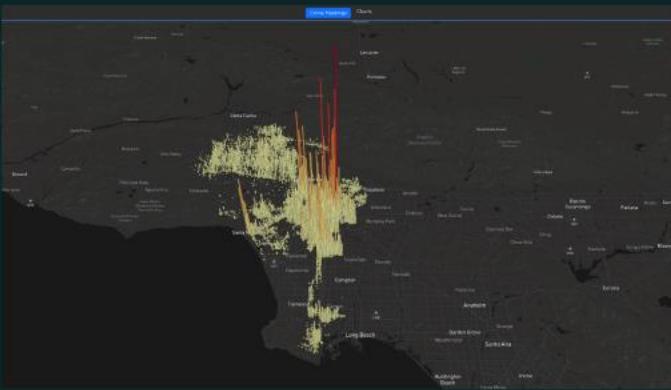
# **Neighborhood Visualization and Analysis: A Guide to Los Angeles for Travelers and Residents**

## **Trojans with Bulldog!**

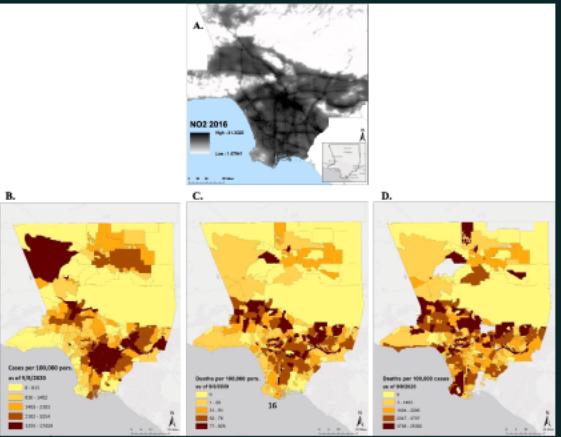
- Peter Zhao ([peterz@usc.edu](mailto:peterz@usc.edu))
- Minsang Yoo ([minsany@usc.edu](mailto:minsany@usc.edu))
- Cindy Jiang ([cindyjia@usc.edu](mailto:cindyjia@usc.edu))
- Paul Yoo ([pkyoo@usc.edu](mailto:pkyoo@usc.edu))

# Purpose

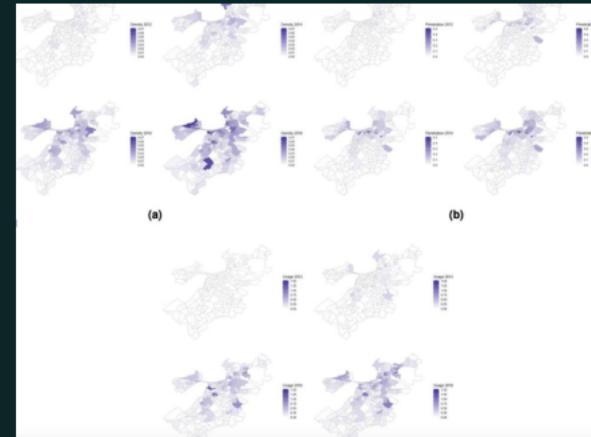
We aim to craft a 3D interactive platform that fuses multi-faceted datasets to deliver actionable insights for safer, smarter travels through Los Angeles neighborhoods.



# Related Works



J. Lipsitt, A. M. Chan-Golston, J. Liu, J. Su, Y. Zhu, and M. Jerrett, "Spatial Analysis of COVID-19 and Traffic-related Air Pollution in Los Angeles," *Environment International*, vol. 106531, 2021. [Online]. Available: <https://doi.org/10.1016/j.envint.2021.106531>



L. Ke, D. O'Brien, and B. Heydari, "Airbnb and Neighborhood Crime: The Incursion of Tourists or the Erosion of Local Social Dynamics?" *SSRN Electronic Journal*, vol. 16, no. 7, 2020. [Online]. Available: <https://doi.org/10.2139/ssrn.3725823>



CrimeMapping.com, "Crime Mapping: Los Angeles, CA", Accessed: Dec. 4, 2024. [Online]. Available: <https://www.crimemapping.com/map/ca/losangeles>



# Challenges

- 1. Effectively presenting diverse information to the users**
- 2. Balancing complexity and usability for the best user experience**
- 3. Creating 3D visualizations instead of 2D**
- 4. Heterogeneity: Inconsistent formats across datasets  
(e.g. different geospatial references and time granularities)**

# **Neighborhood Visualization and Analysis: A Guide to Los Angeles for Travelers and Residents**

## **Trojans with Bulldog!**

- Peter Zhao ([peterz@usc.edu](mailto:peterz@usc.edu))
- Minsang Yoo ([minsany@usc.edu](mailto:minsany@usc.edu))
- Cindy Jiang ([cindyjia@usc.edu](mailto:cindyjia@usc.edu))
- Paul Yoo ([pkyoo@usc.edu](mailto:pkyoo@usc.edu))



# Contribution

1. Displayed the graphs in 3D
2. Displayed actual bike tours that others have made to suggest bike trips to users
3. Used marker clustering within heatmap to visually quantify areas with highly rated restaurants
4. Used multi-faceted datasets to assist travelers in making better decisions for the upcoming FIFA World Cup and Olympics
5. Used 3D bar charts layering over map to visually show areas with high number of crime incidents

# Limitation / Future Works

1. Visualizing interactive charts based on specific areas users looking for
2. Combining 4 different datasets into one interactive map
3. Visualize 3D stacked bar chart for different crime types layering over map



# Q & A



# City of Angels, Los Angeles

## Welcome to the Los Angeles Neighborhood Explorer!

Los Angeles is a dynamic city that will host global events like the Olympic Games and FIFA World Cup in the near future. Whether you're a traveler seeking a safe and convenient stay or a resident evaluating potential neighborhoods for relocation, this platform is your go-to guide for making informed decisions.

### Purpose

This interactive dashboard is designed to provide a comprehensive visualization of Los Angeles neighborhoods. By integrating key datasets such as crime patterns, local amenities, school ratings, and transportation options, the platform helps you explore and compare neighborhoods in an intuitive, data-driven way.

### What You Can Discover

- Crime Insights: Interactive heatmaps displaying crime density with charts for specific crime types.
- Amenities Exploration: Layered maps showcasing restaurants, hotels, and other amenities filtered by ratings, price, or type.
- School Comparisons: Visualizations of school ratings and their proximity to residential areas.
- Transportation Planning: Insights into bus and metro routes, commute times, and accessibility.

This project bridges the gap between raw data and actionable insights, empowering you to make well-informed decisions—whether you're planning your next visit or finding your dream home.

### Trojans with Bulldog!

We are a team of students from the University of Southern California, passionate about data visualization and urban analytics. Our team members include:

- Peter Zhao
- Minsang Yoo
- Cindy Jiang
- Paul Yoo

With diverse backgrounds and a shared commitment to leveraging data to enhance urban experiences, we have come together to create this comprehensive guide to Los Angeles neighborhoods.

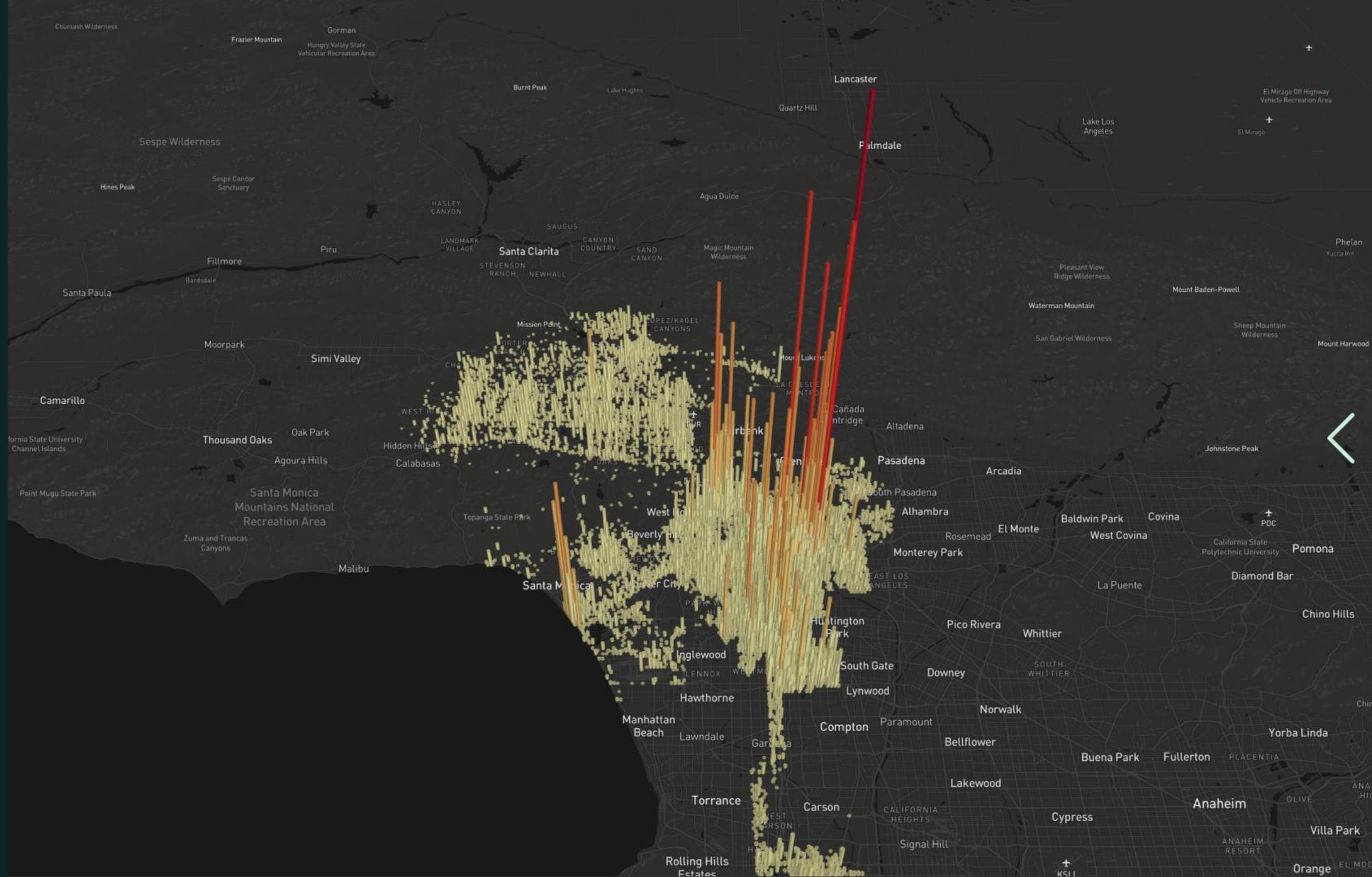


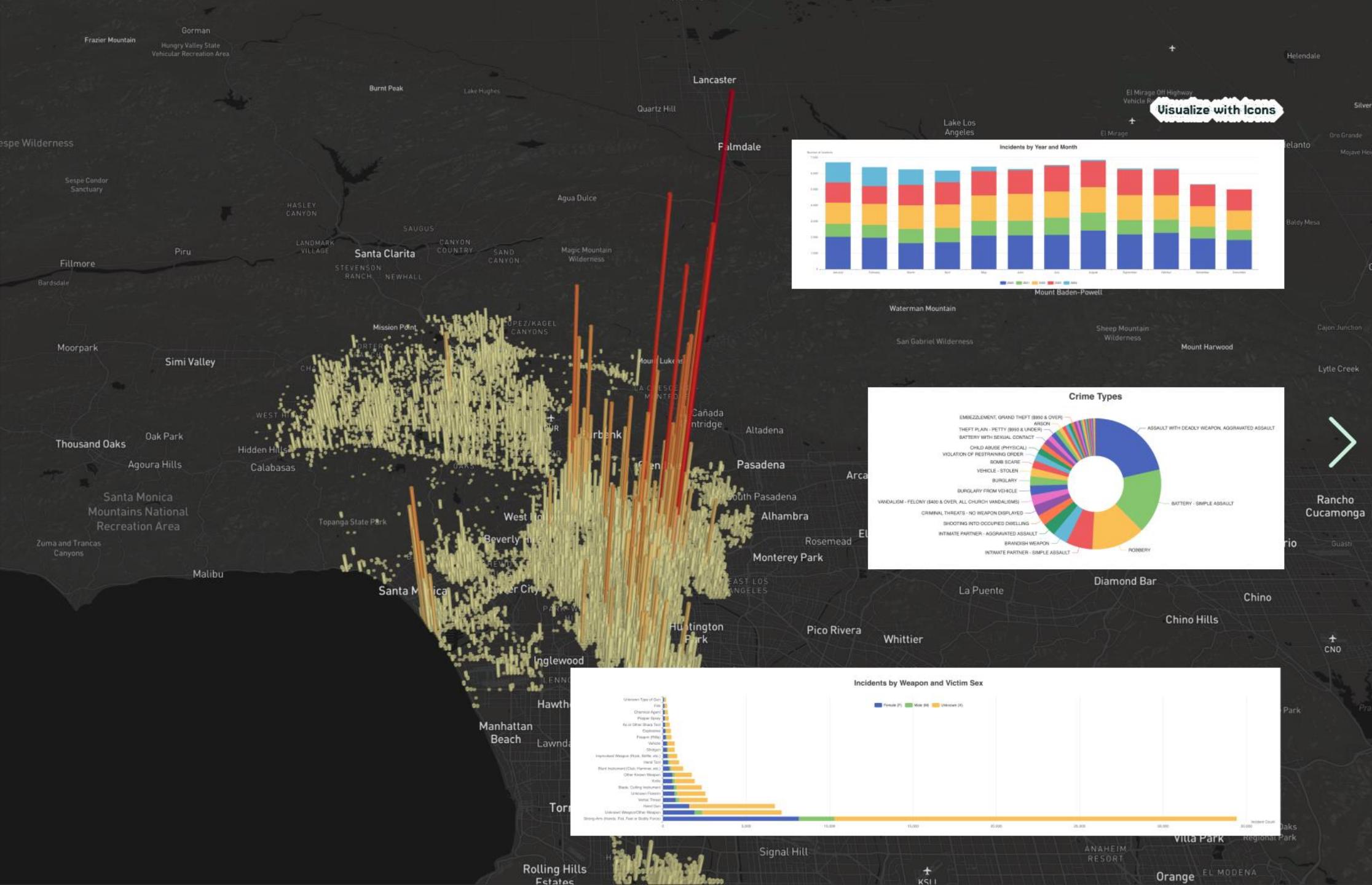
Los Angeles California - Overview | Things to do -  
Tr...

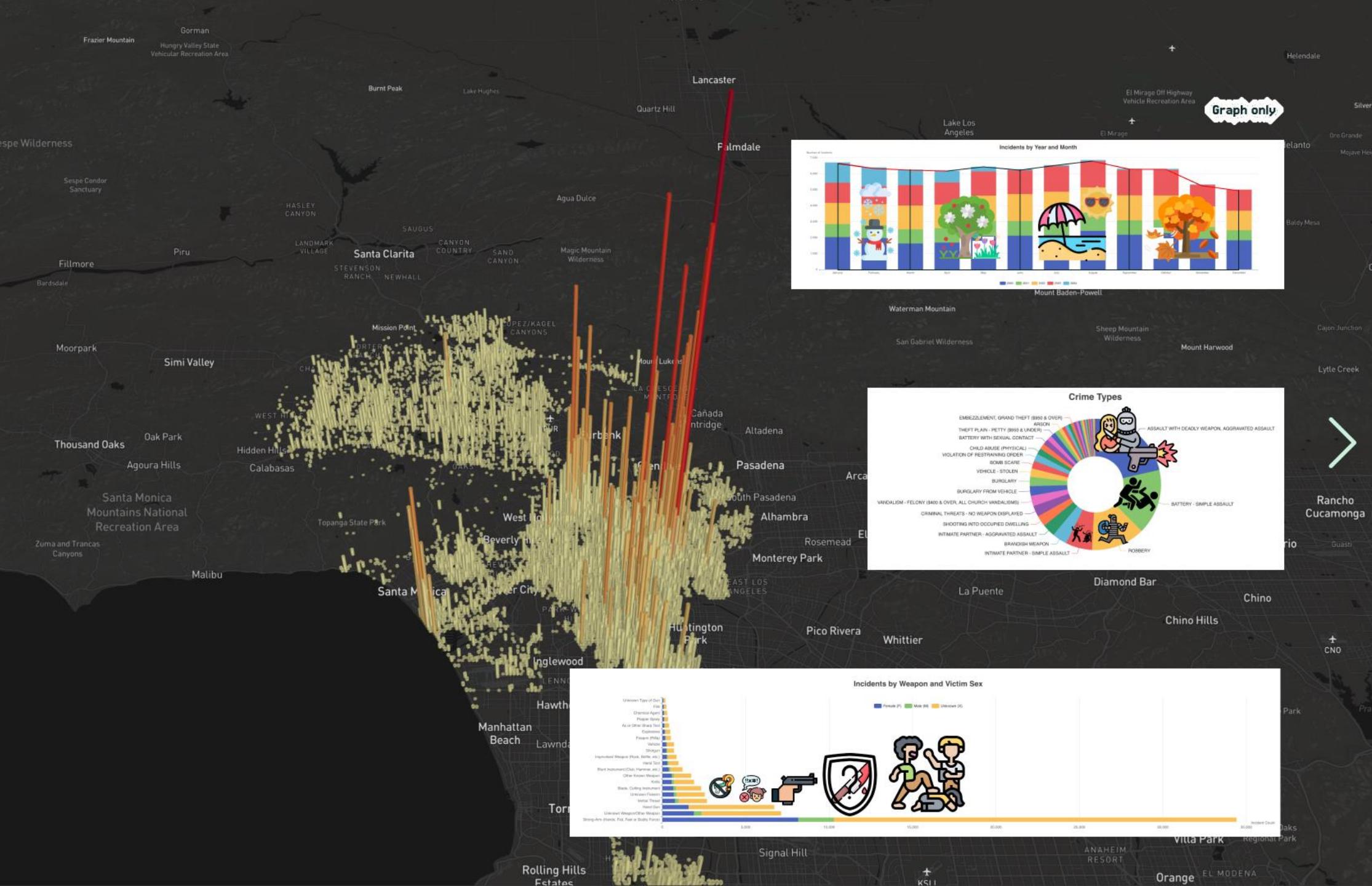
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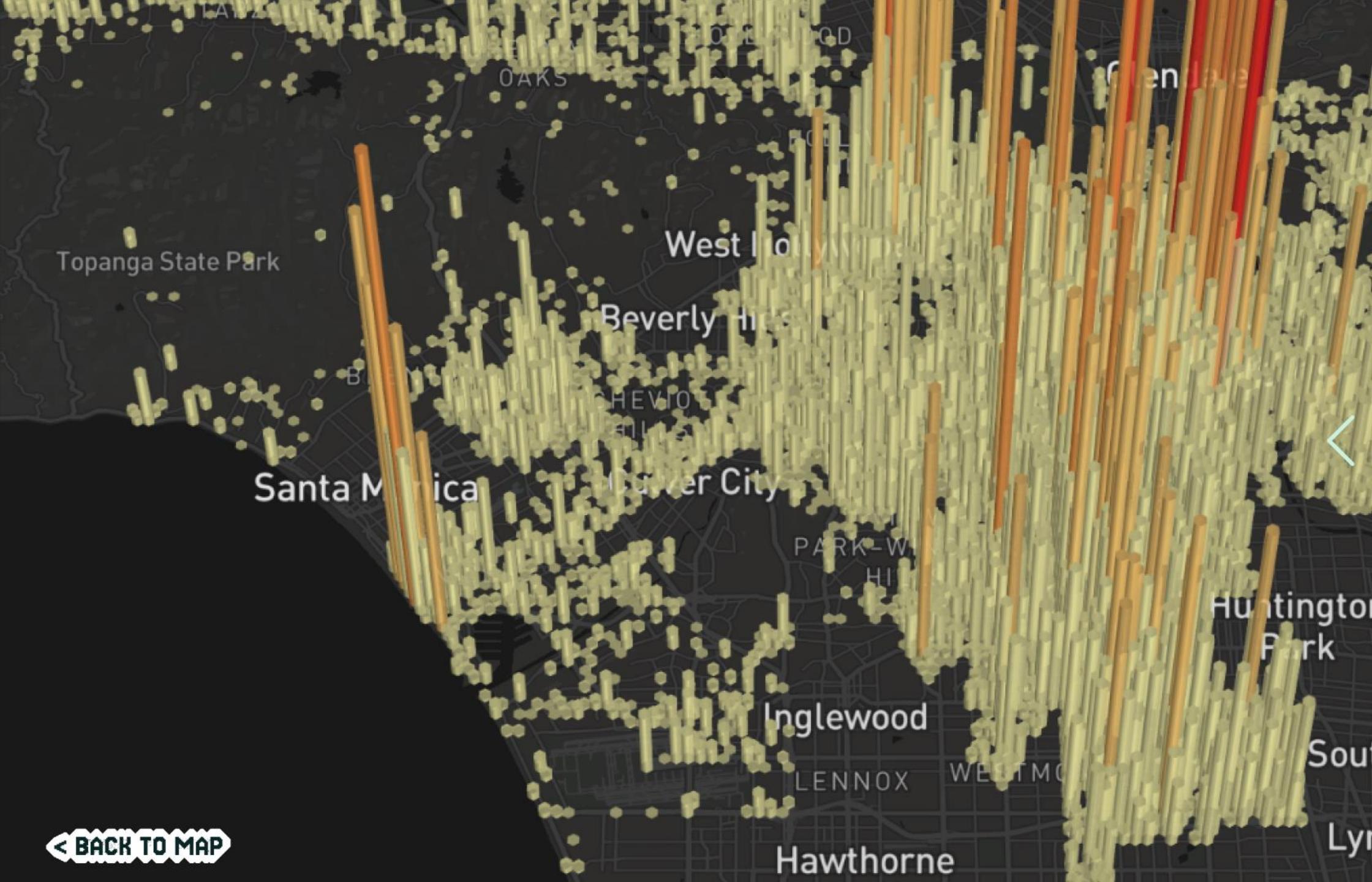


Trojans with Bulldog



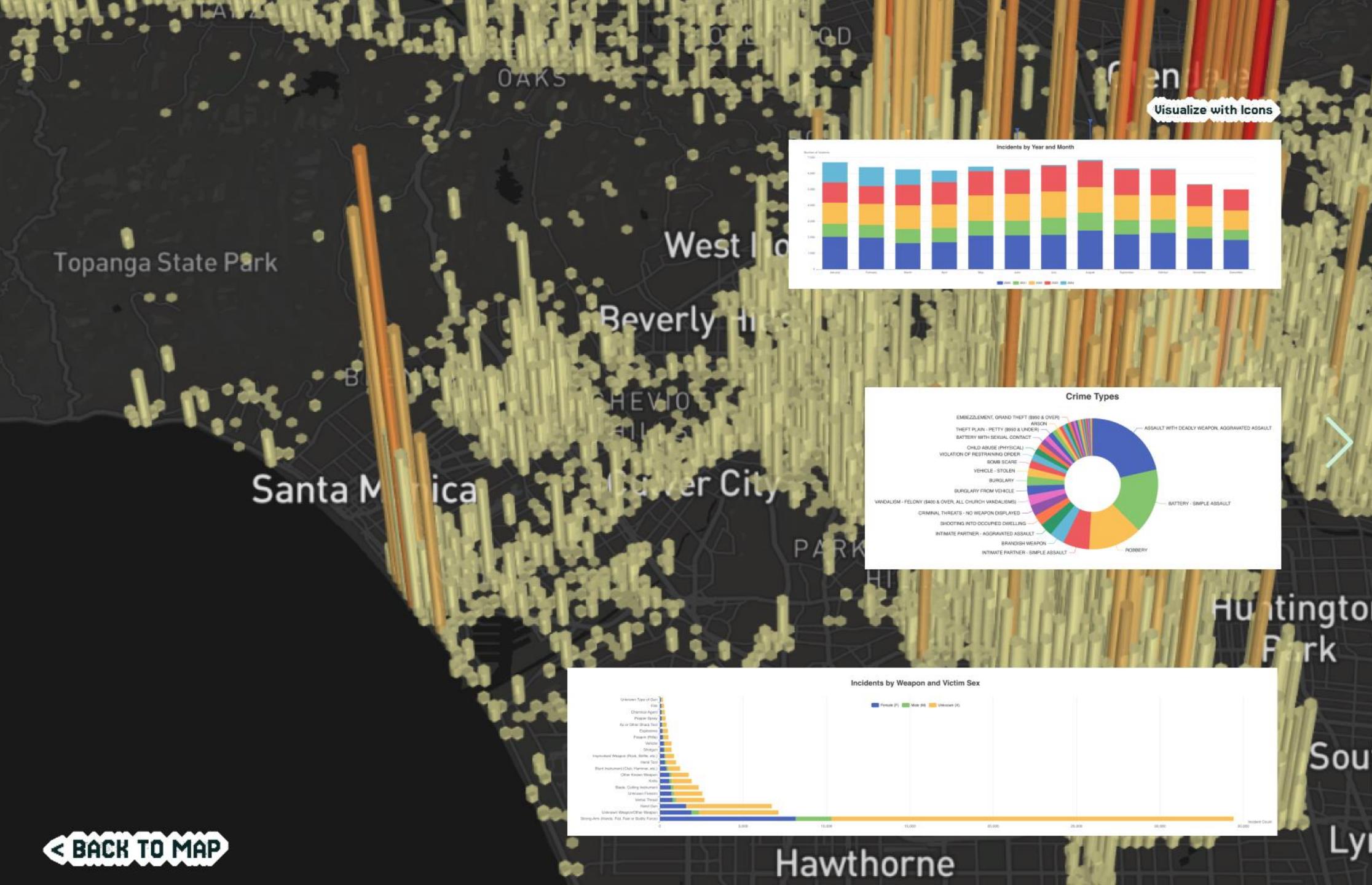


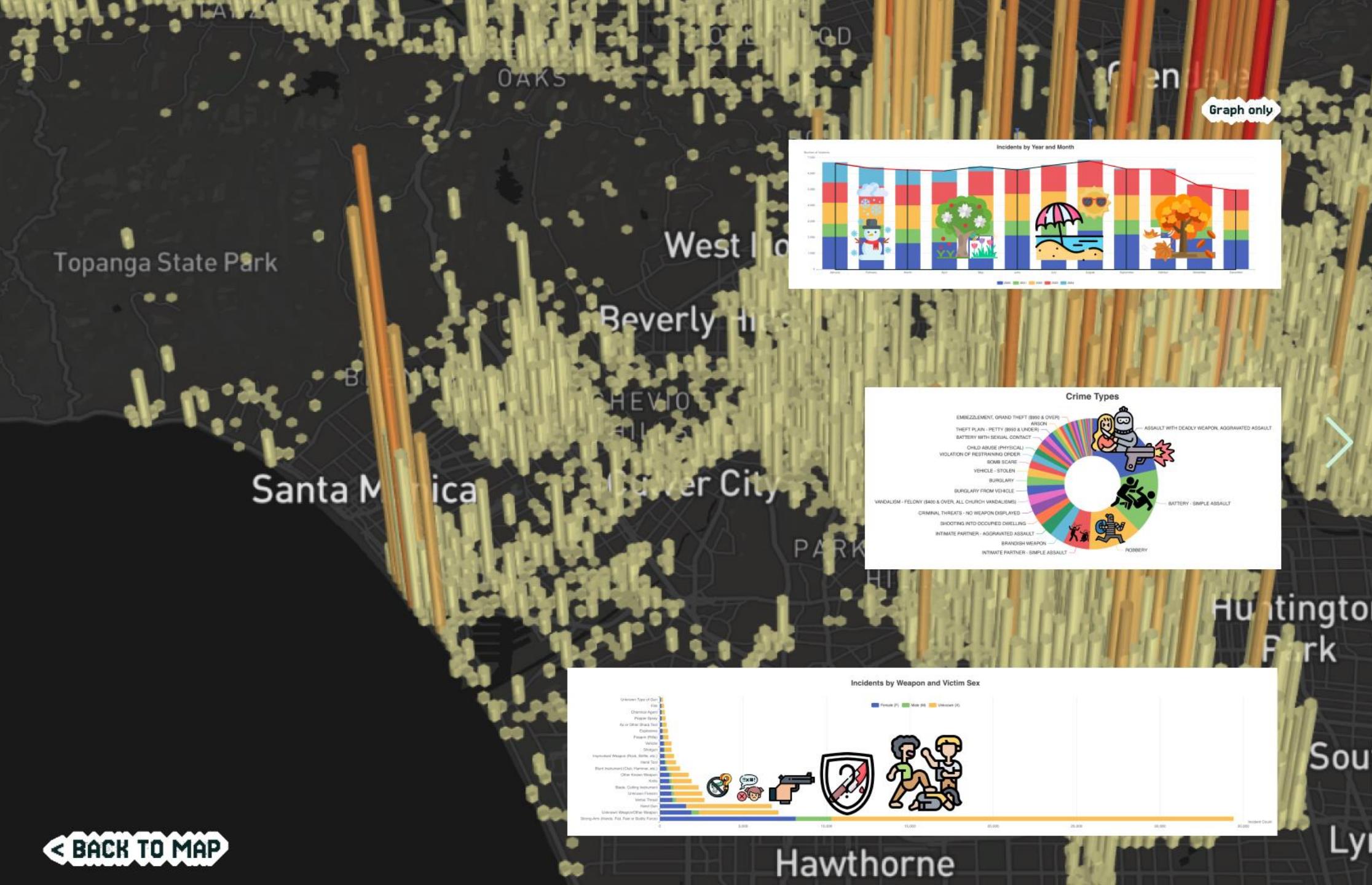


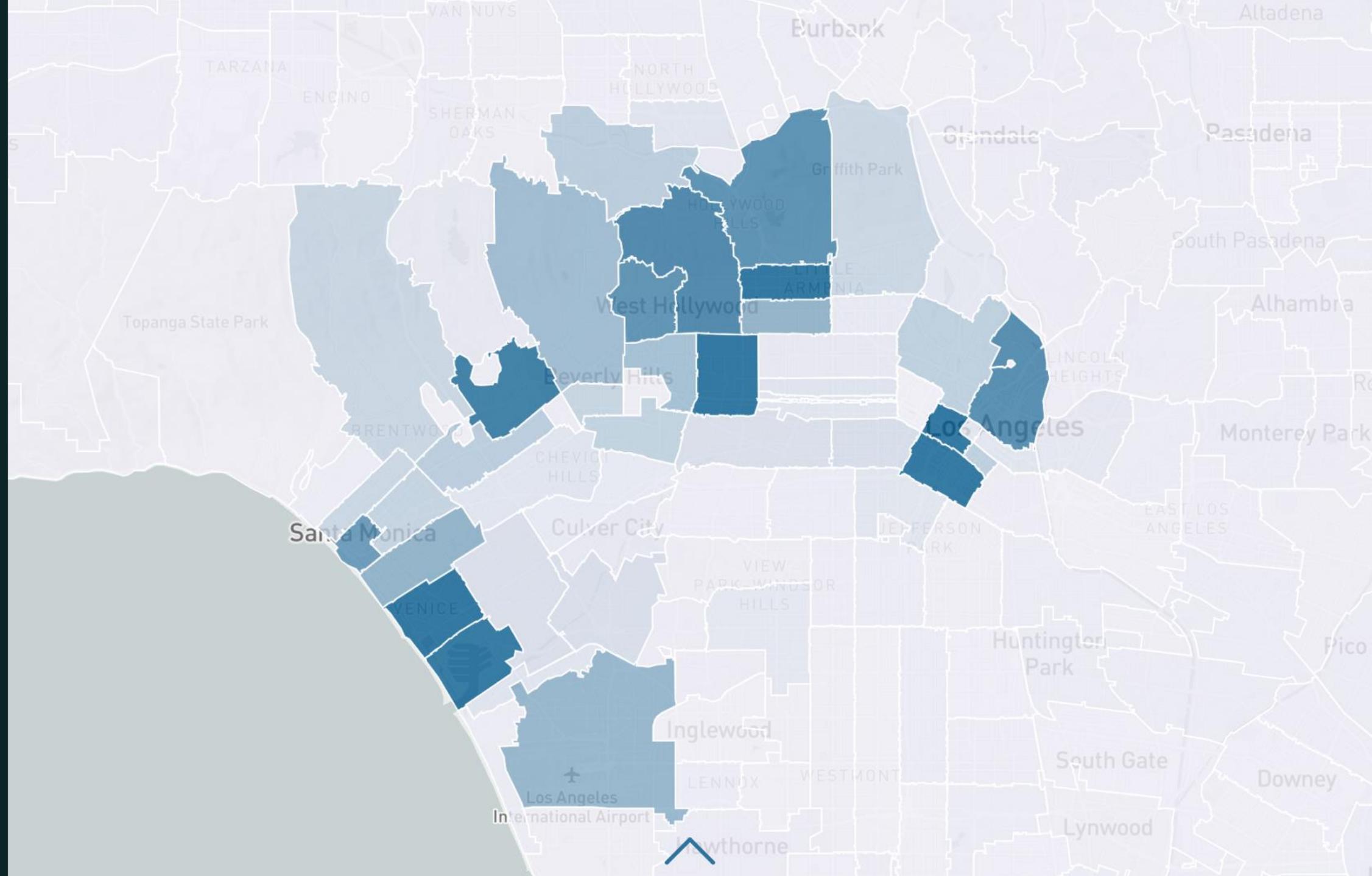


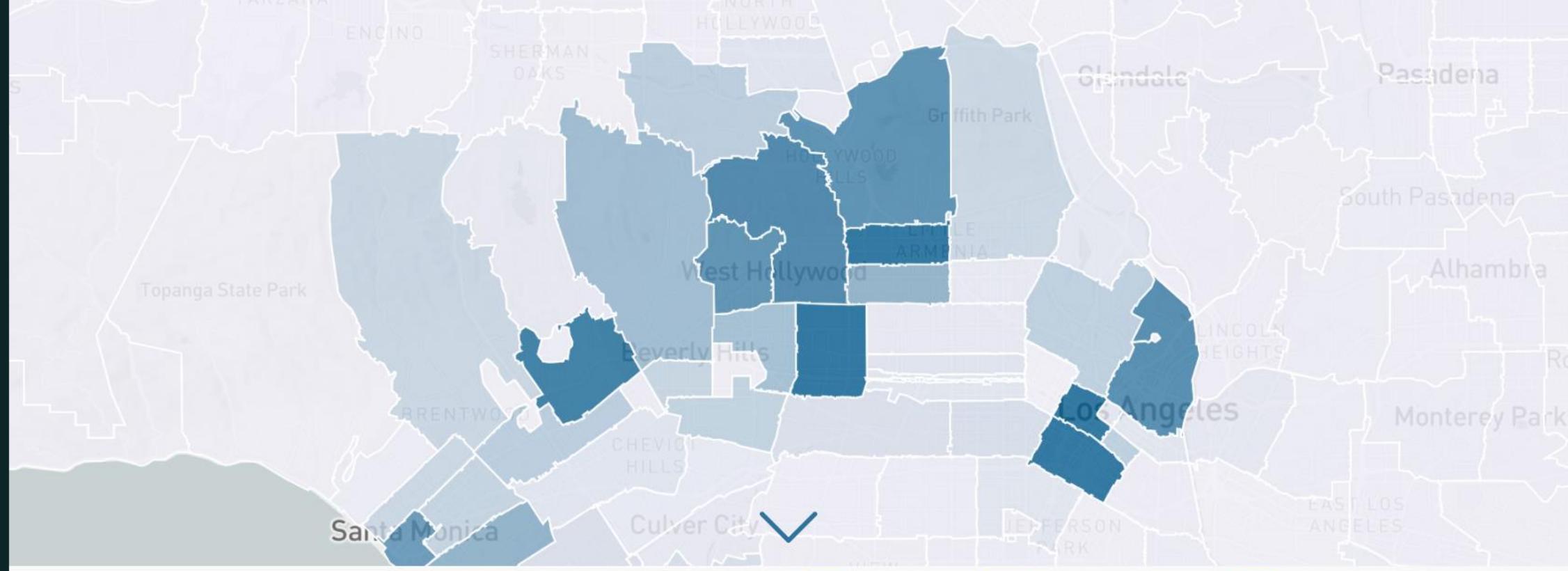
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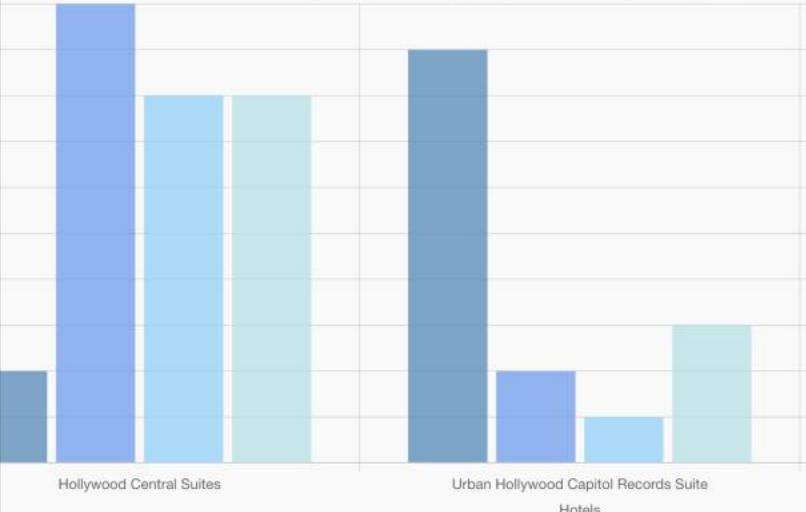






Comparison of Top 3 Hotels in Zip Code 90028

Cleanliness      Comfort      Facilities      Staff



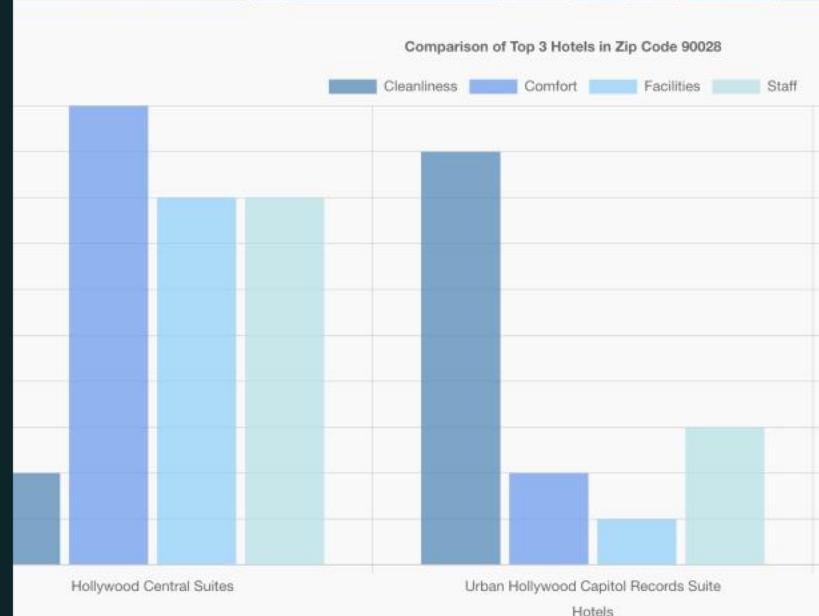
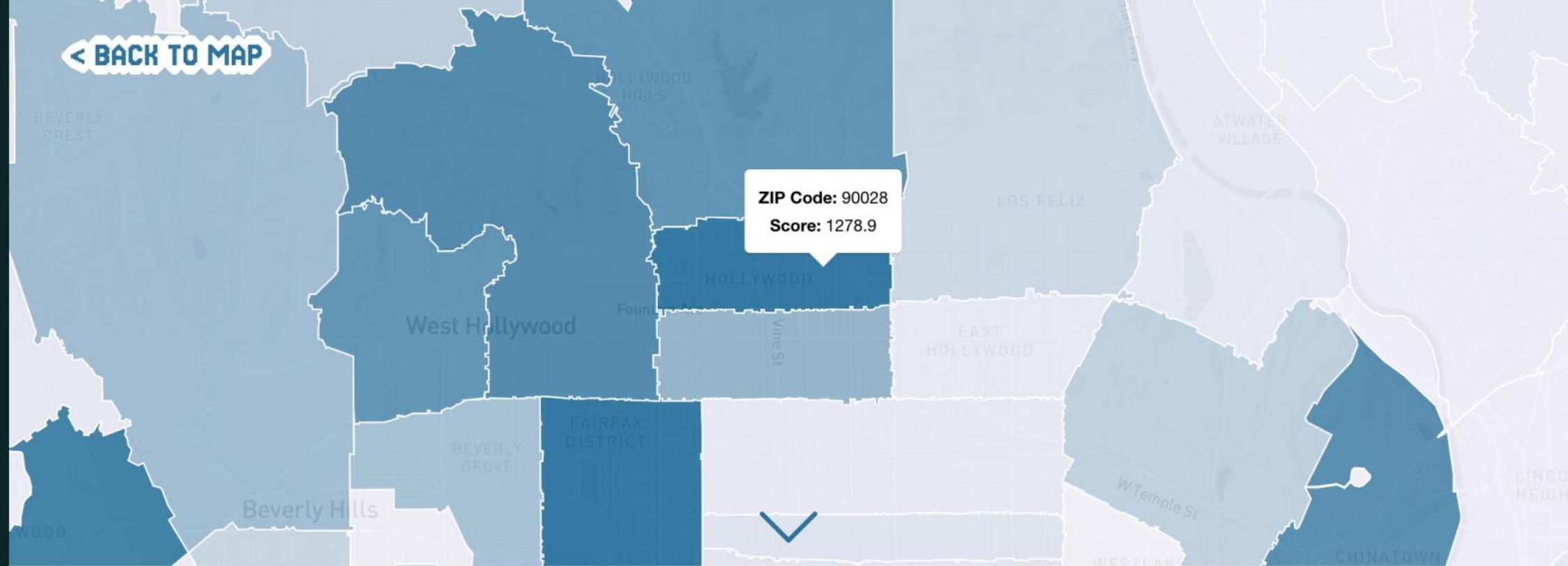
Hollywood Central Suites      Urban Hollywood Capitol Records Suite      Luxurious Studio in Legendary Hollywood Towers



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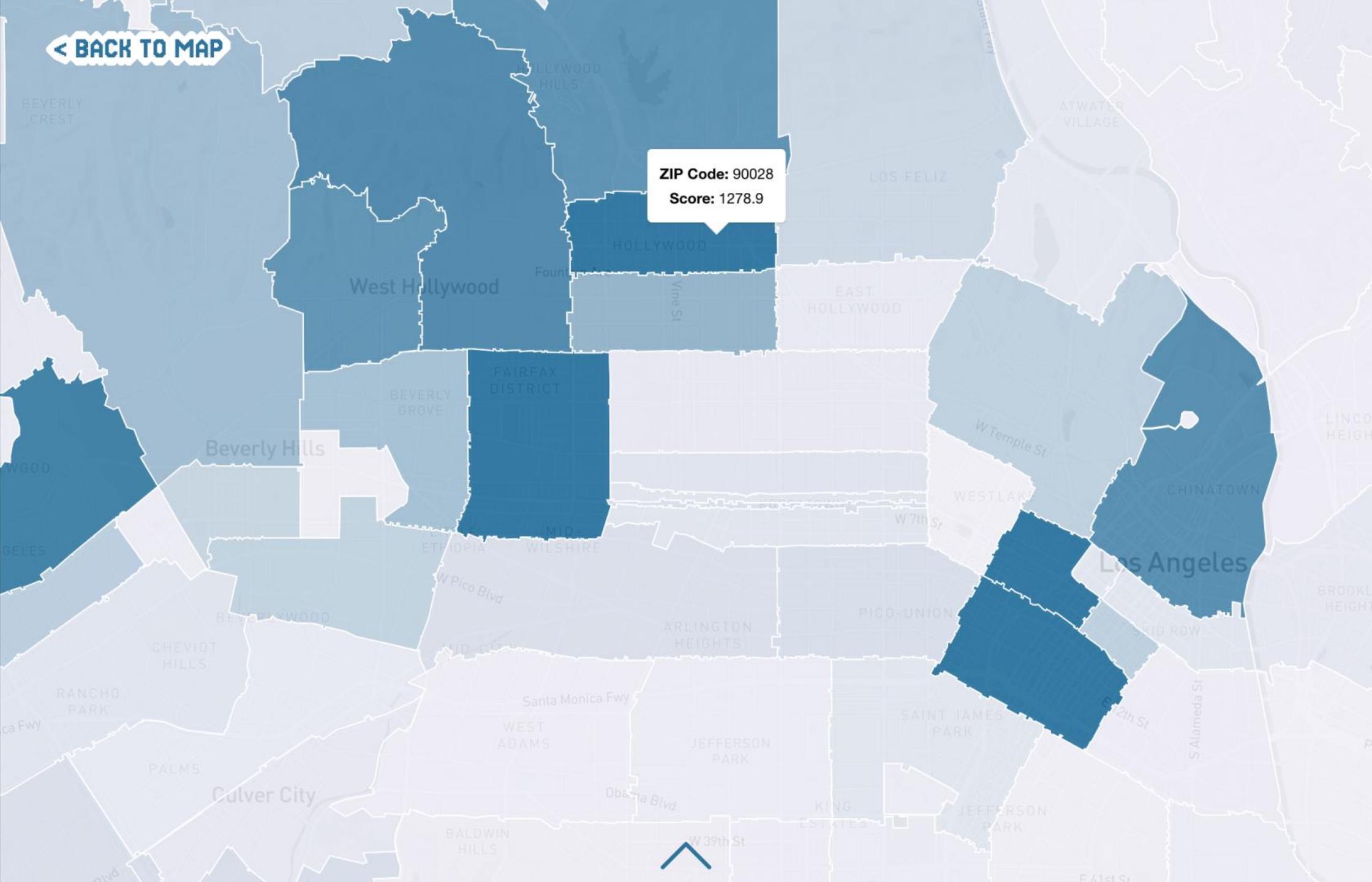
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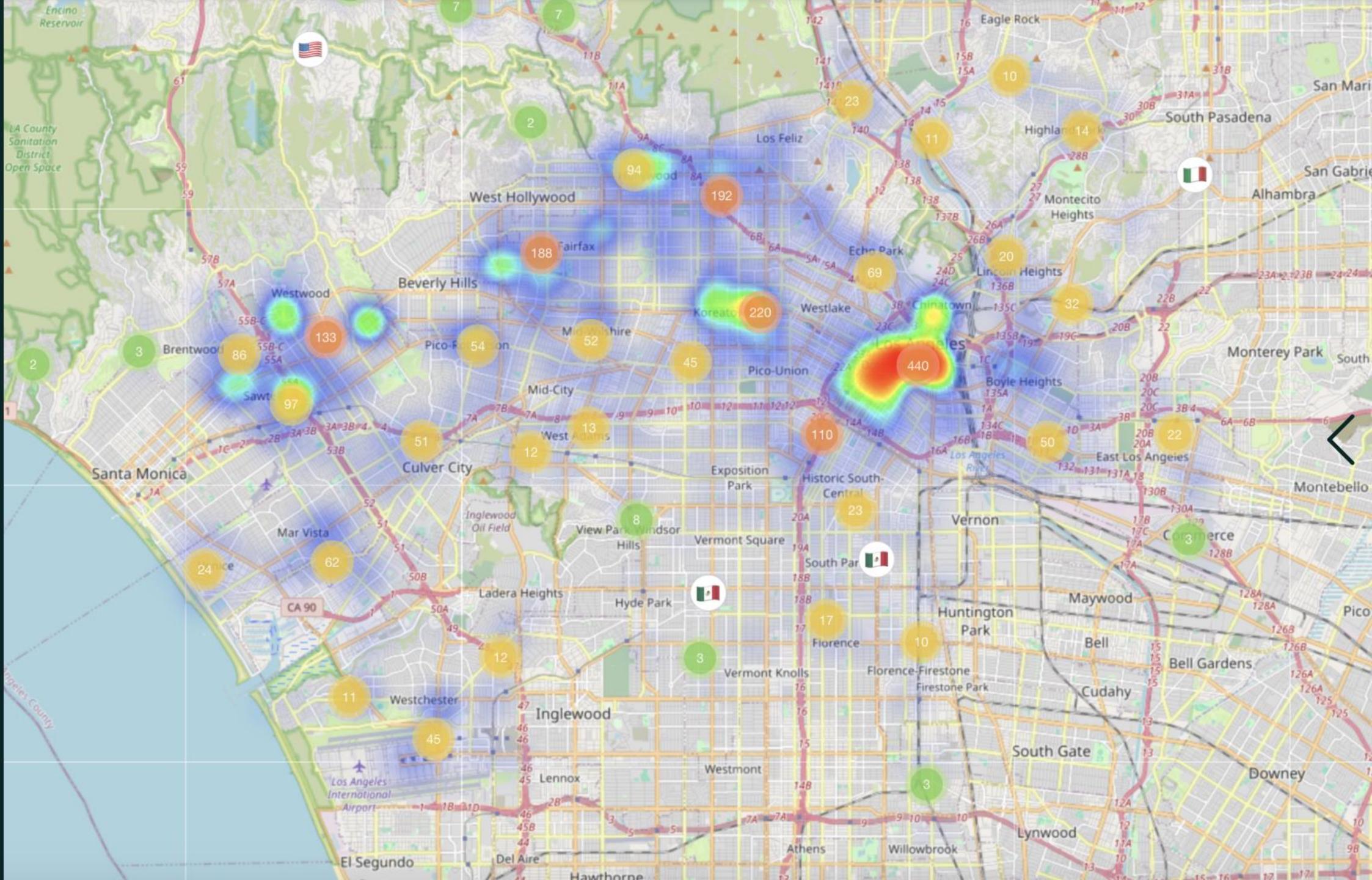


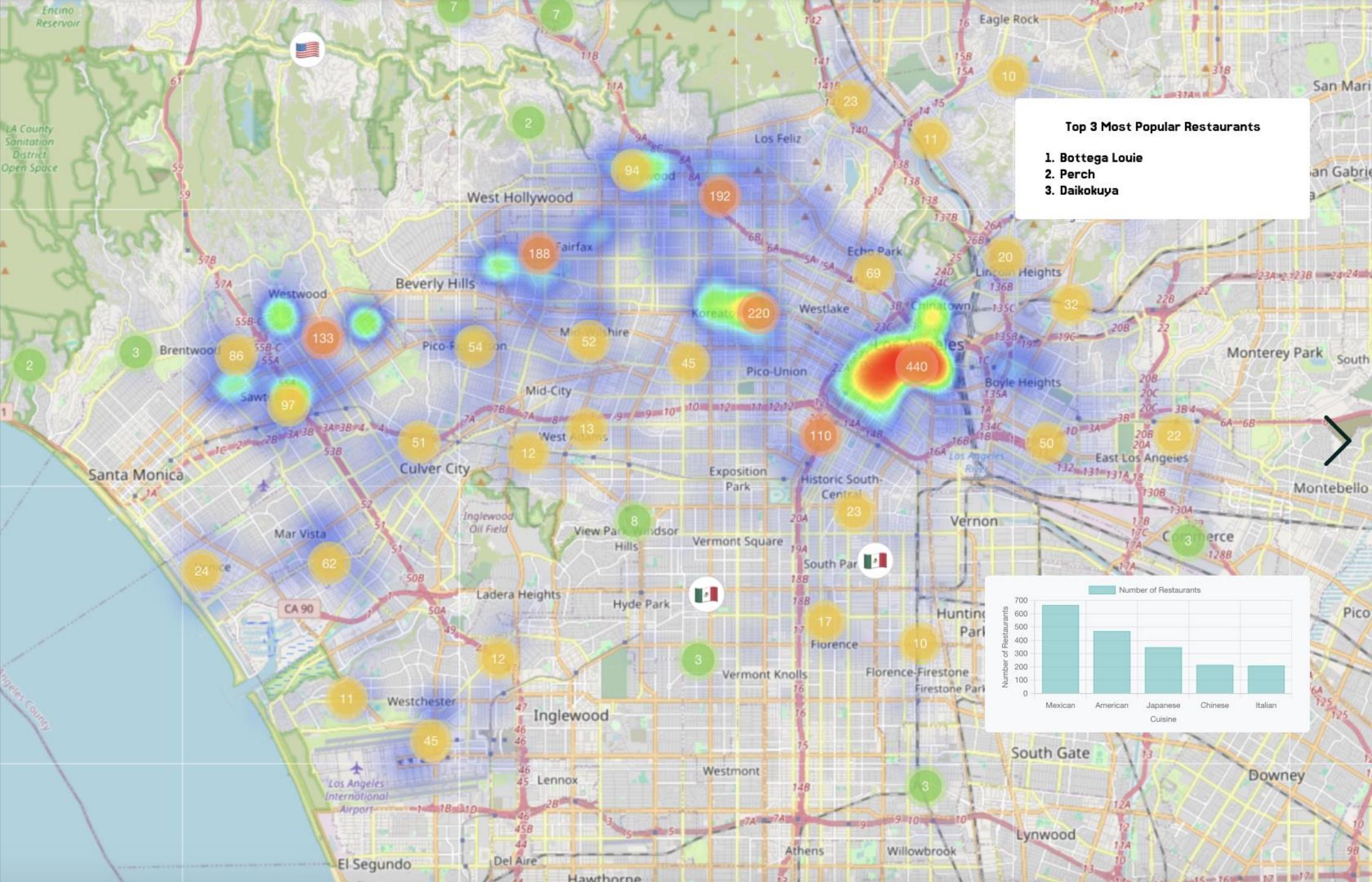
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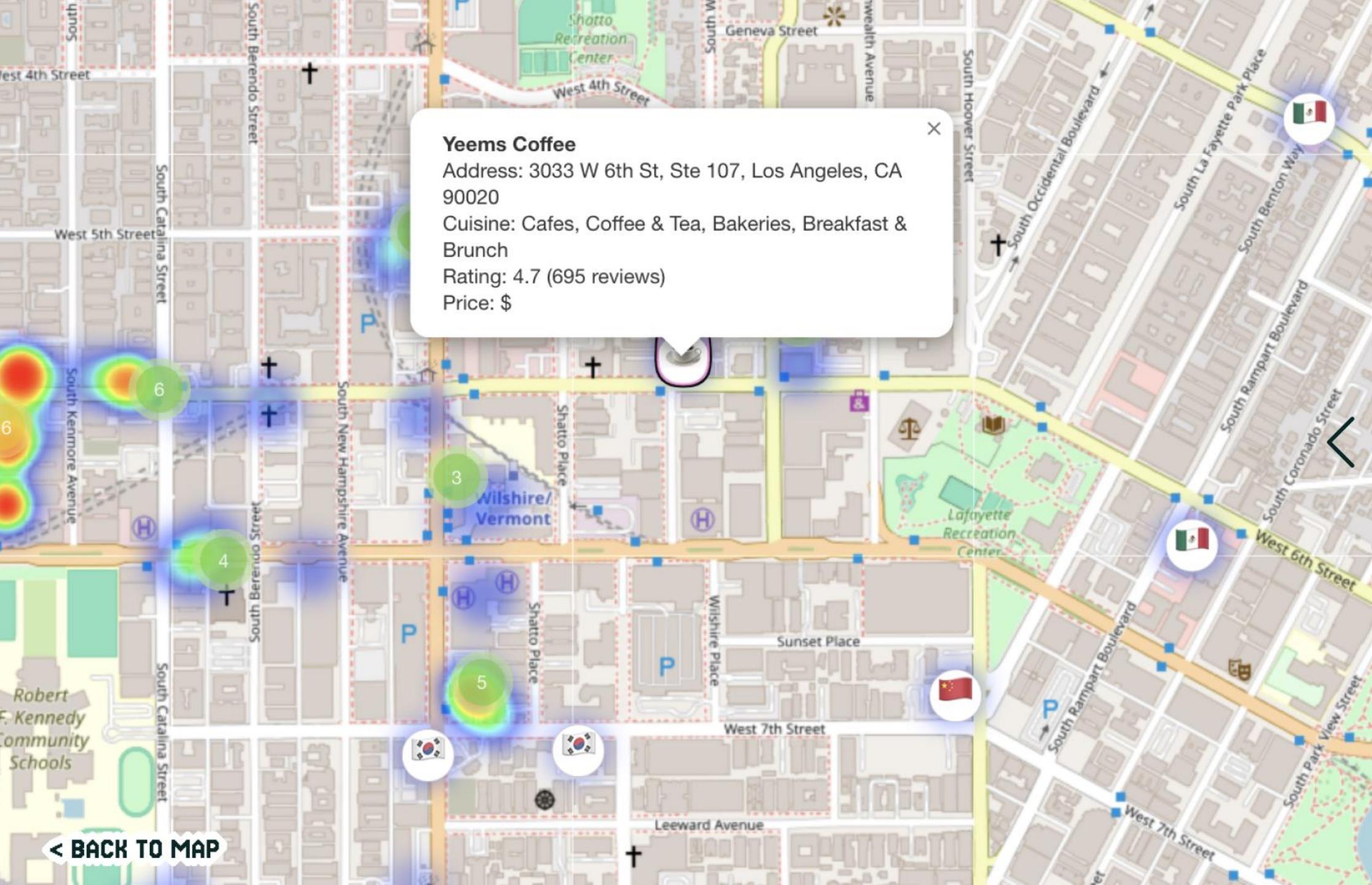


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