Bicycle and Pedestrian Collision Data

Hermosa Beach

Purpose of Study

This study is an information tool which South Bay cities can utilize to improve street safety. The study reports collision data so it can easily be viewed and accessed in one document. We hope this information and data will bring awareness and insights that can inform decision-making. Ultimately, this study looks to make our community safer for pedestrians and bicyclists.

Overview

This study analyzes collisions in Hermosa Beach relative to ten other South Bay cities (Carson, El Segundo, Gardena, Hawthorne, Inglewood, Lawndale, Manhattan Beach, Palos Verdes Estates, Redondo Beach, and Torrance). Data for Lomita, Rancho Palos Verdes, Rolling Hills, and Rolling Hills Estates is not available in records noted below - further research is in work for these cities.

The study focuses on the following data sets: 1. Pedestrian victims due to vehicle collision. 2. Bicyclist victims due to vehicle collision. This data is summarized year-over-year, geographically, by intersection, and with respect to other South Bay cities.

Methodology

Records of collisions involving pedestrians and bicyclists were taken from the California Statewide Integrated Traffic Records System (SWITRS), accessed via the Transportation Injury Mapping System (TIMS)[1]. A query was entered into TIMS to identify collisions involving pedestrians from January 1 2018, through December 31, 2022, in Hermosa Beach. The same search was made for bicycle victims involved in collisions. TIMS also provides the heatmaps and intersection rankings used in this report. The top ranked intersections by number of bicycle or pedestrian collisions were aggregated using a 150 ft search distance. Unless otherwise noted, collision counts refer to the raw count from 2018-2022.
Population-adjusted metrics are also provided using the historical E-4 population estimates from the California Department of Finance[2].
Collisions are coded in severity in the following order based on SWITRS:

1. Fatal
2. Severe (injury)
3. Visible (injury)
4. Complaint (of pain)

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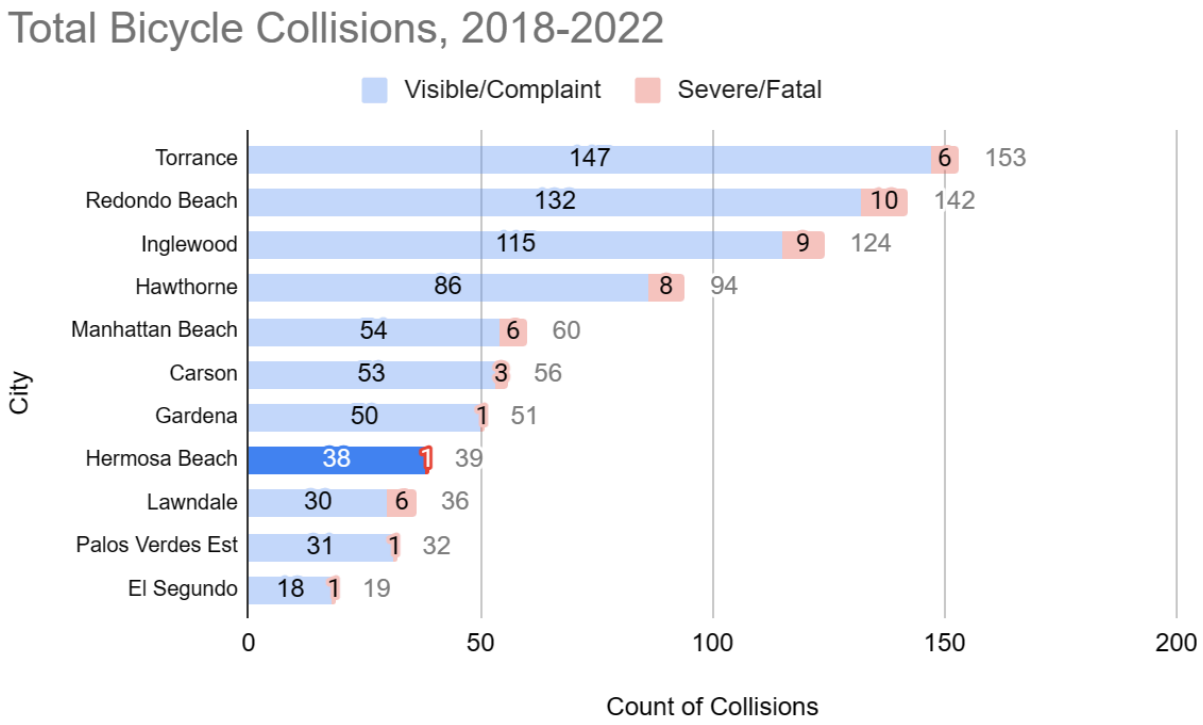
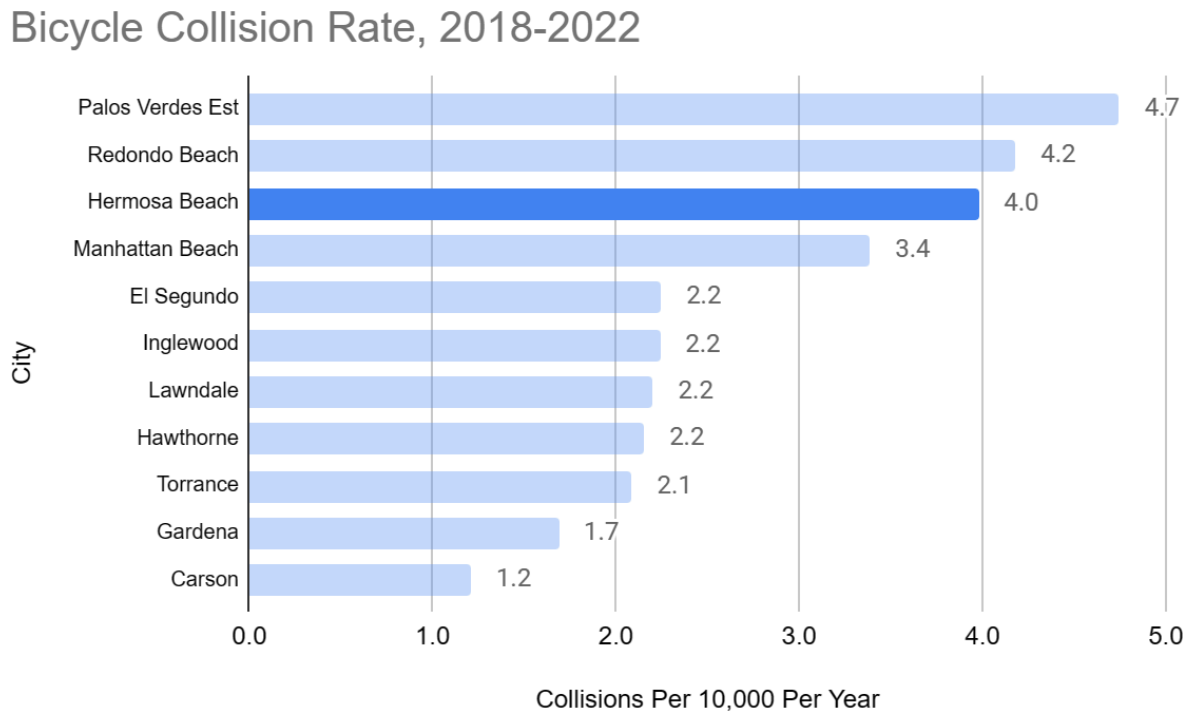
[1] https://tims.berkeley.edu/
[2] https://dof.ca.gov/Forecasting/Demographics/Estimates/

Bicycle Collision Data

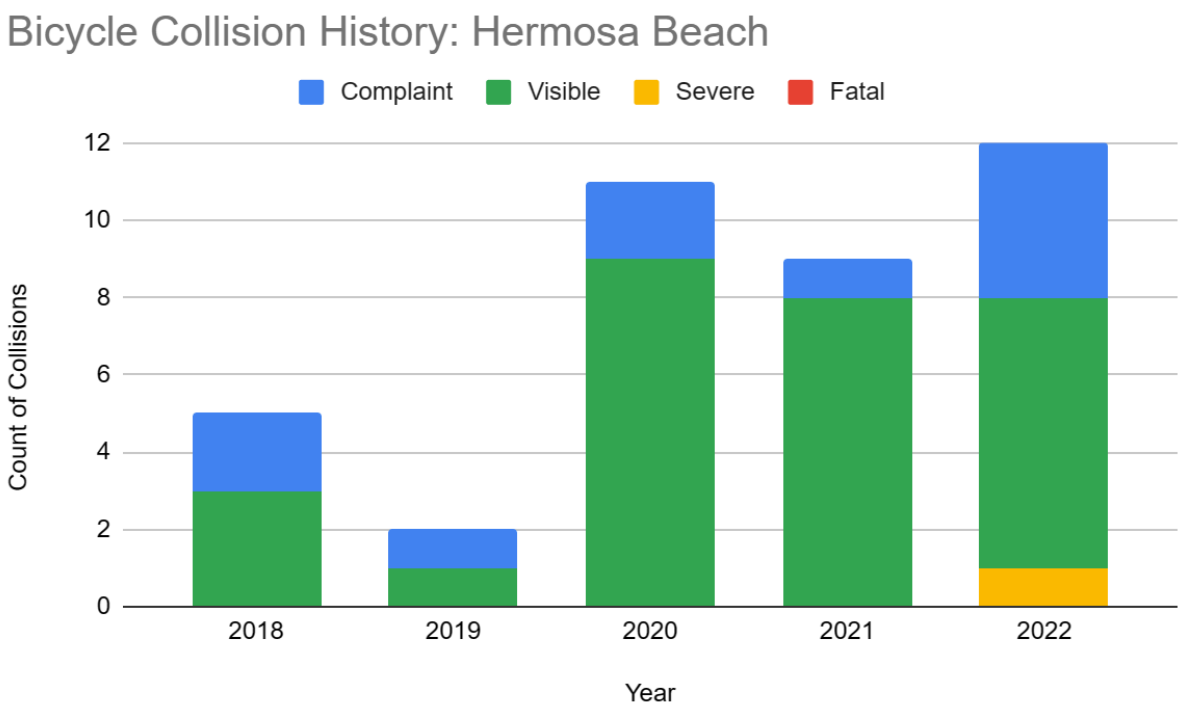
The chart below shows the total number of bicycle collisions between 2018-2022.



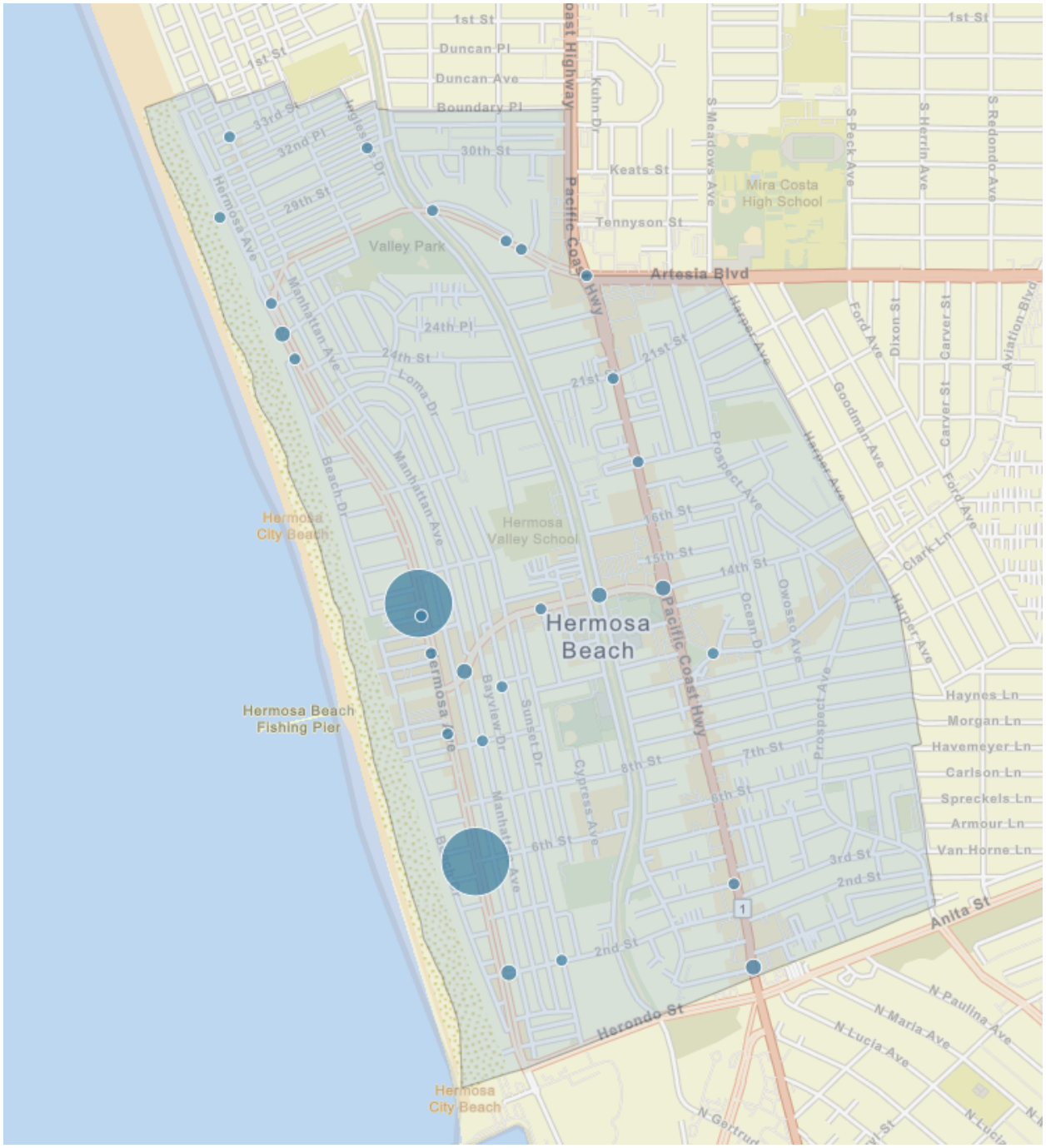
The chart below shows the average bicycle collision rate between 2018-2022, adjusted for population.



To understand this trend on a year-to-year basis, the absolute number of bicycle collisions in Hermosa Beach for each year is plotted below.



The heatmap below shows where bicycle collisions between are most common in Hermosa Beach from 2018-2022. For context, the largest circle represents 3 collisions in this period.

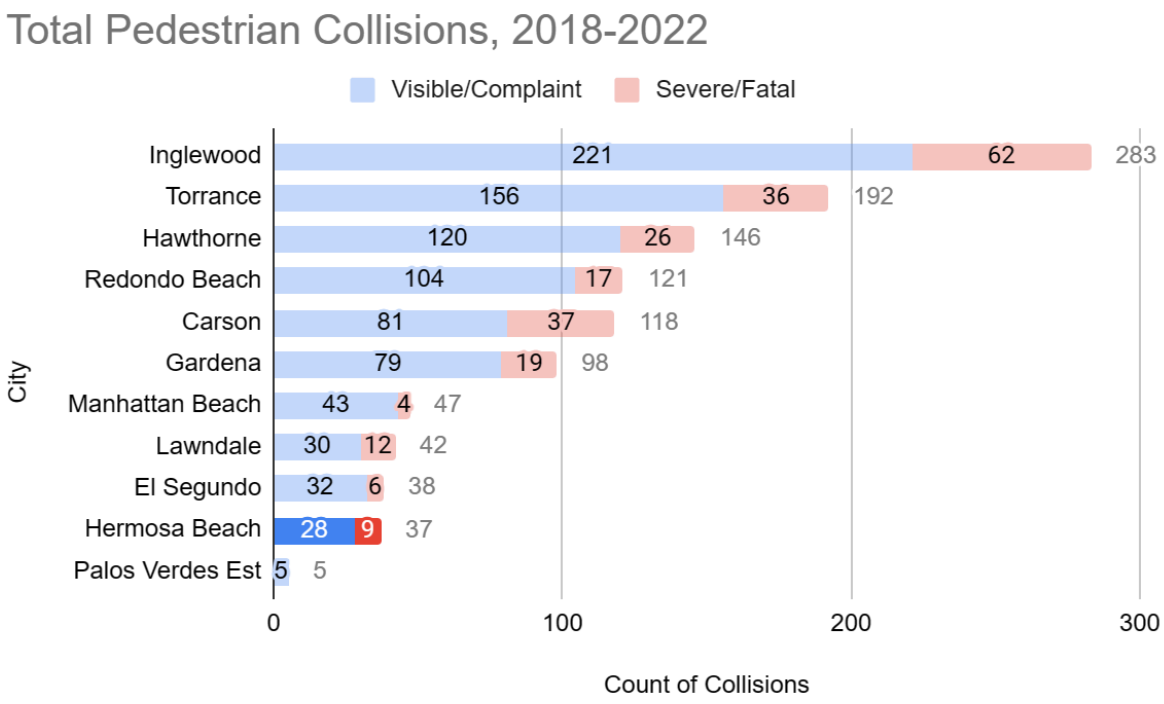


The table below shows the top ranked intersections in Hermosa Beach for bicycle collisions.

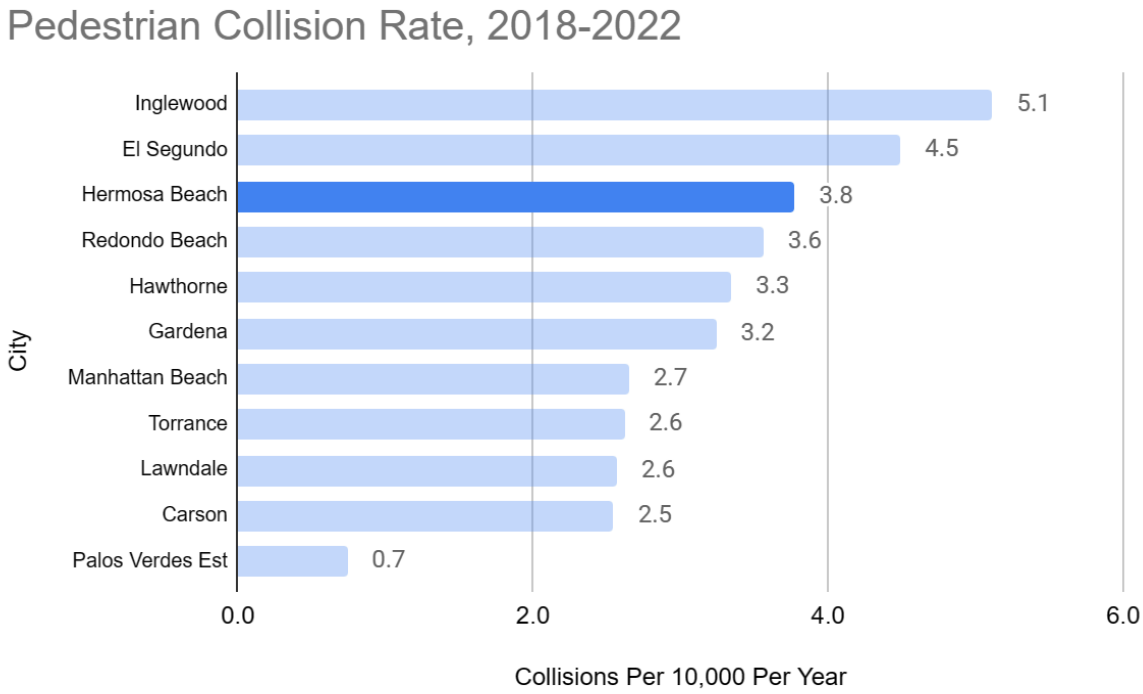
Rank	Intersection	# of Collisions
1	15TH ST & HERMOSA AVE	4
2	6TH CT & HERMOSA AVE	3
3	7TH CT & HERMOSA AVE	2
3	ARDMORE AVE & PIER AVE	2
3	PACIFIC COAST HWY & PIER AVE & SR 1	2
4	10TH ST & HERMOSA AVE	1
4	11TH CT & HERMOSA AVE	1

Pedestrian Collision Data

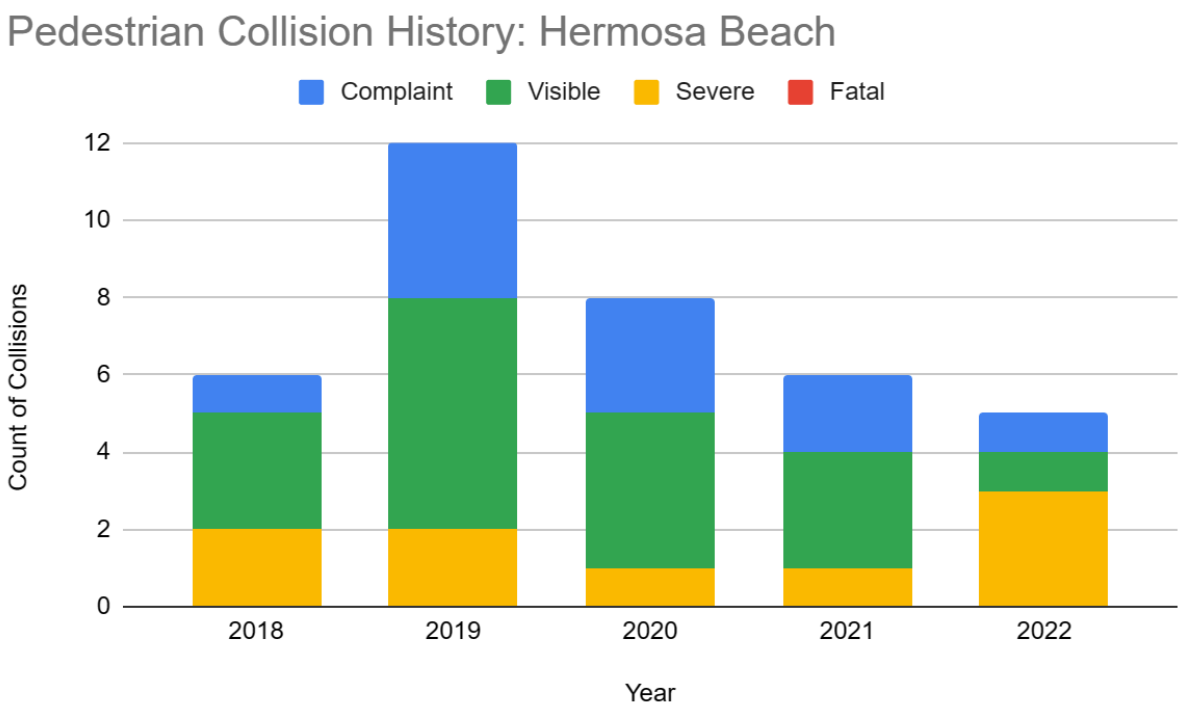
The chart below shows the total number of pedestrian collisions between 2018-2022.



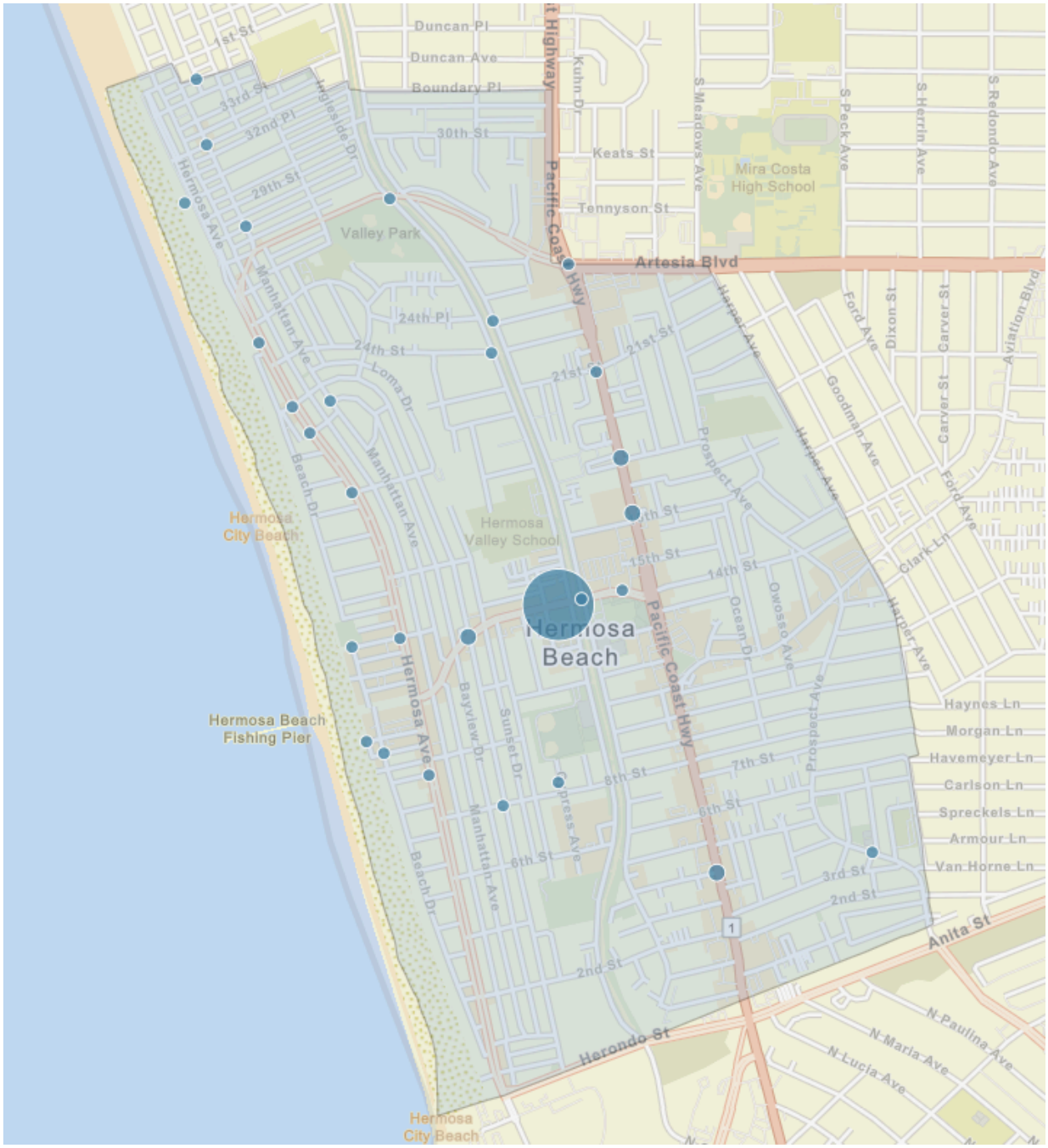
The chart below shows the average pedestrian collision rate from 2018-2022, adjusted for population.



To understand this trend on a year-to-year basis, the absolute number of pedestrian collisions in Hermosa Beach for each year is plotted below.



The heatmap below shows where pedestrian collisions between are most common in Hermosa Beach from 2018-2022. For context, the largest circle represents 4 collisions in this period.



The table below shows the top ranked intersections in Hermosa Beach for pedestrian collisions.

Rank	Intersection	# of Collisions
1	ARDMORE AVE & PIER AVE	3
2	BARD ST & PIER AVE	2
2	MONTEREY BLVD & PIER AVE	2
3	10TH CT & HERMOSA AVE	1
3	14TH ST & HERMOSA AVE	1
3	19TH CT & HERMOSA AVE	1
3	21ST ST & HERMOSA AVE	1

Conclusions

Summary: Hermosa Beach	Bicycle		Pedestrian	
Metric	***Value***	***Rank***	***Value***	***Rank***
Total Collisions from 2018-2022	39	8	37	10
Average Collisions per Year	7.8		7.4	
Collision Rate (per 10,000 pop.)	4.0	3	3.8	3

Hermosa Beach ranks 3rd across the studied South Bay cities for both bicycle and pedestrian collision rates. While the total count of collisions is lower than most other South Bay cities, the rate is disproportionately high based on population. Pier Ave and Hermosa Ave have some of the highest collision rates in Hermosa Beach.

A few caveats should be understood with the summary of this data. The SWITRS data is compiled from police reports, meaning that close calls or unsafe acts that don't result in police assistance and investigation are not represented in this data. Additionally, some regions may have reduced bicycle or pedestrian traffic and therefore collisions based on an individual's risk tolerance as it pertains to the safety of the as-built environment. Thus it is important to not only reactively focus on hot-spots but also to proactively build a complete and connected network of safe bicycle and pedestrian infrastructure (South Bay Bicycle Master Plan). Lastly, the collision data was population-adjusted to allow for a more clear comparison between cities, as a proxy for the relative amount of people walking or biking. It is understood that this is not a perfect metric for normalizing based on total time or distance spent walking or biking, but provides normalization for the general size of cities.

South Bay Bicycle Coalition Plus Walking welcomes any questions, feedback, or additional sources of data to consider as part of this summary.