Bicycle and Pedestrian Collision Data

Lawndale

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 Lawndale relative to ten other South Bay cities (Carson, El Segundo, Gardena, Hawthorne, Hermosa Beach, Inglewood, 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 Lawndale. 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
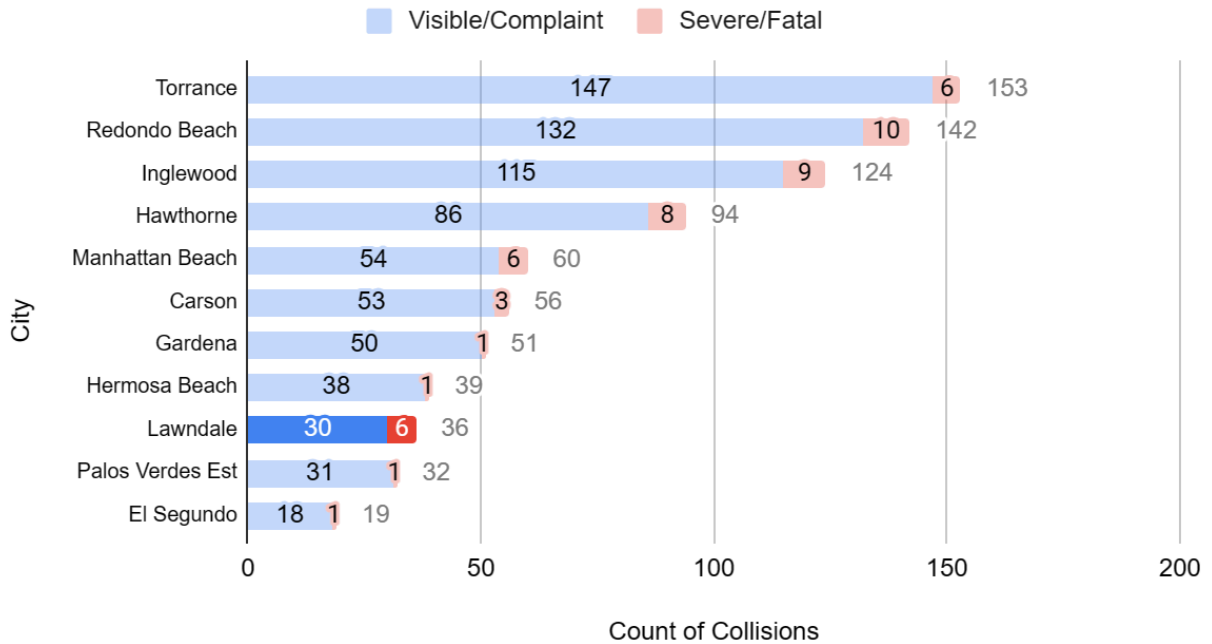2. Severe (injury)
3. Visible (injury)
4. Complaint (of pain)

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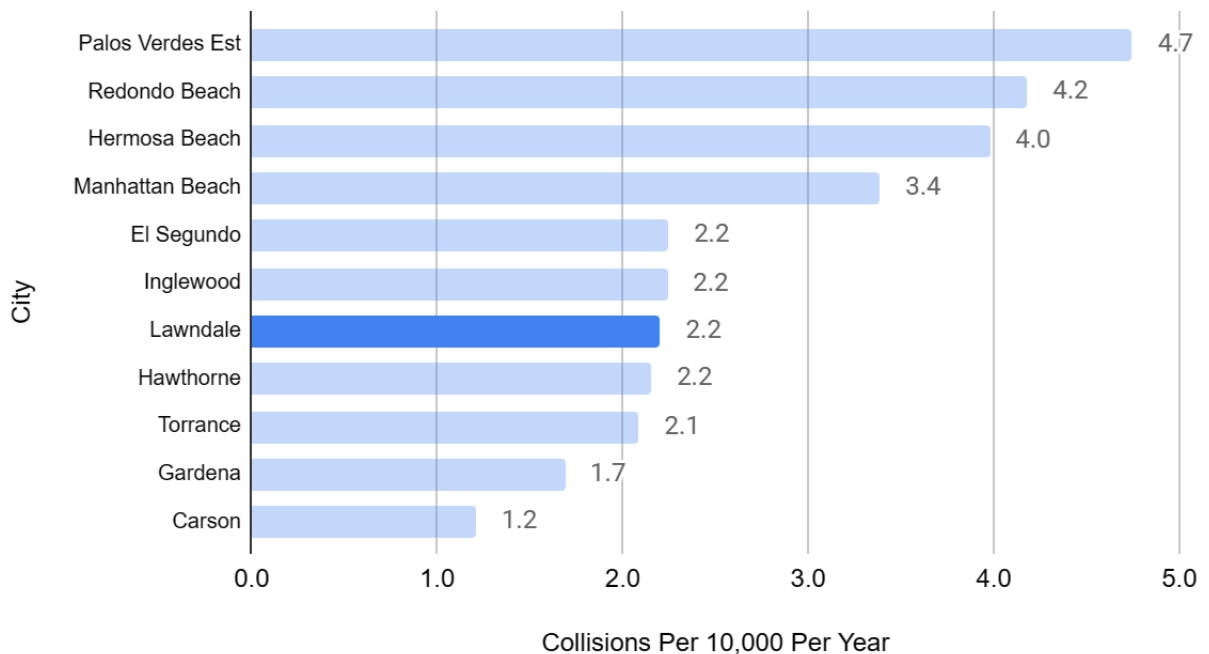[2] https://dof.ca.gov/Forecasting/Demographics/Estimates/

Bicycle Collision Data

The chart below shows the total number of bicycle collisions between 2018-2022.
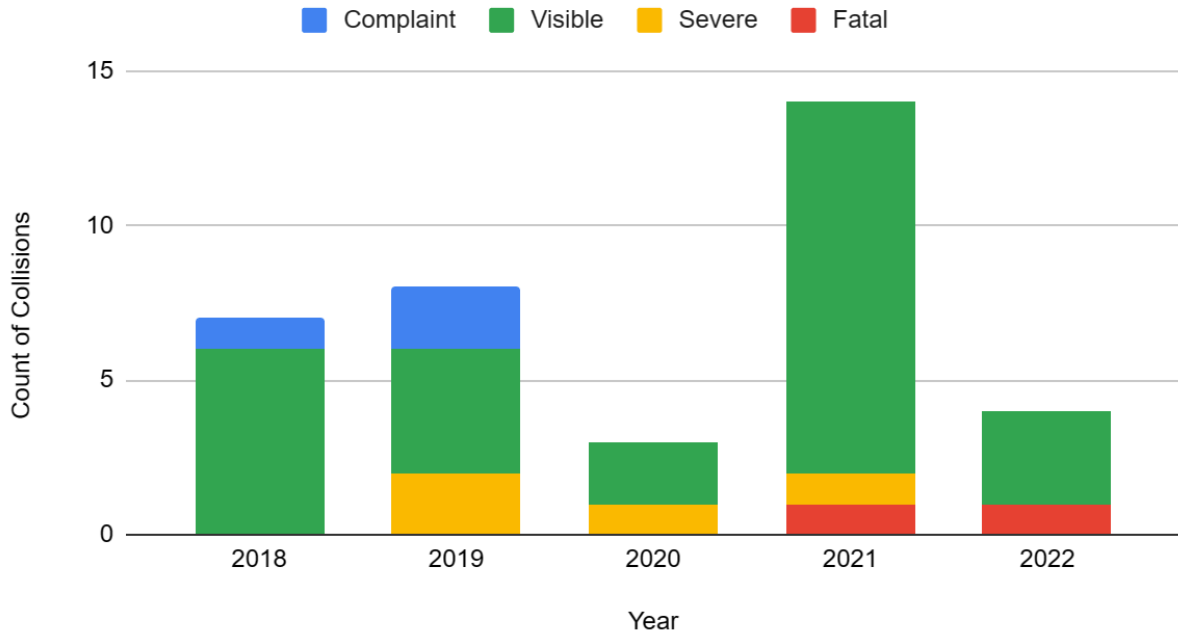
Total Bicycle Collisions, 2018-2022

Legend: Visible/Complaint · Severe/Fatal

City	Visible/Complaint	Severe/Fatal	Total
Torrance	147	6	153
Redondo Beach	132	10	142
Inglewood	115	9	124
Hawthorne	86	8	94
Manhattan Beach	54	6	60
Carson	53	3	56
Gardena	50	1	51
Hermosa Beach	38	1	39
Lawndale	30	6	36
Palos Verdes Est	31	1	32
El Segundo	18	1	19

Count of Collisions

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

Bicycle Collision Rate, 2018-2022

| City	Collisions Per 10,000 Per Year
Palos Verdes Est	4.7
Redondo Beach	4.2
Hermosa Beach	4.0
Manhattan Beach	3.4
El Segundo	2.2
Inglewood	2.2
Lawndale	2.2
Hawthorne	2.2
Torrance	2.1
Gardena	1.7
Carson	1.2

Collisions Per 10,000 Per Year

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

Bicycle Collision History: Lawndale

The heatmap below shows where bicycle collisions between are most common in Lawndale from 2018-2022. For context, the largest circle represents 3 collisions in this period.
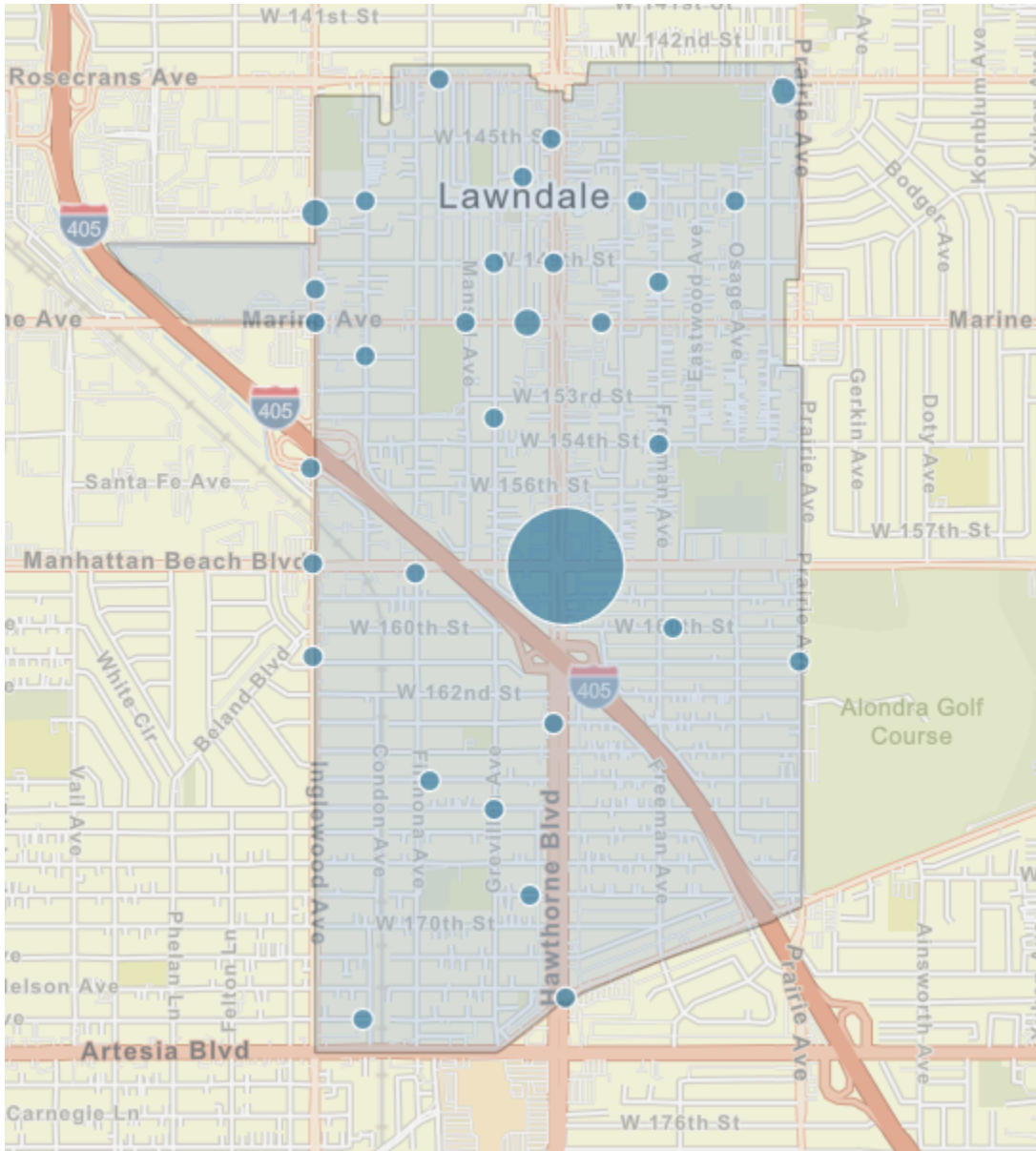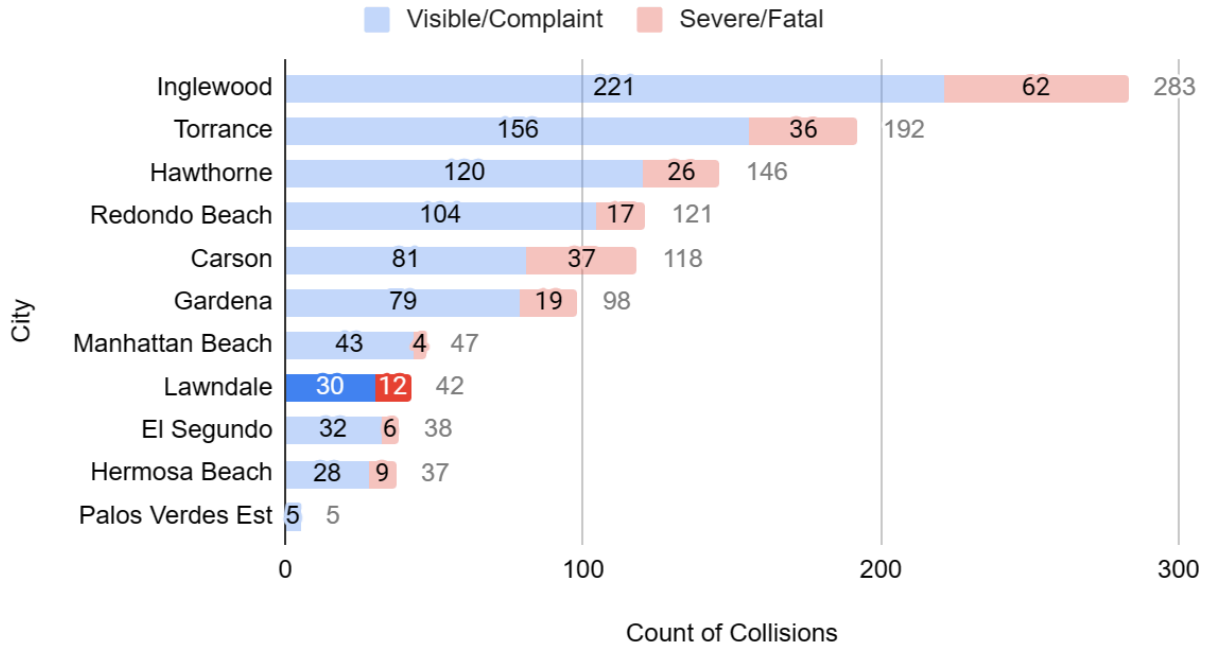
The table below shows the top ranked intersections in Lawndale for bicycle collisions.

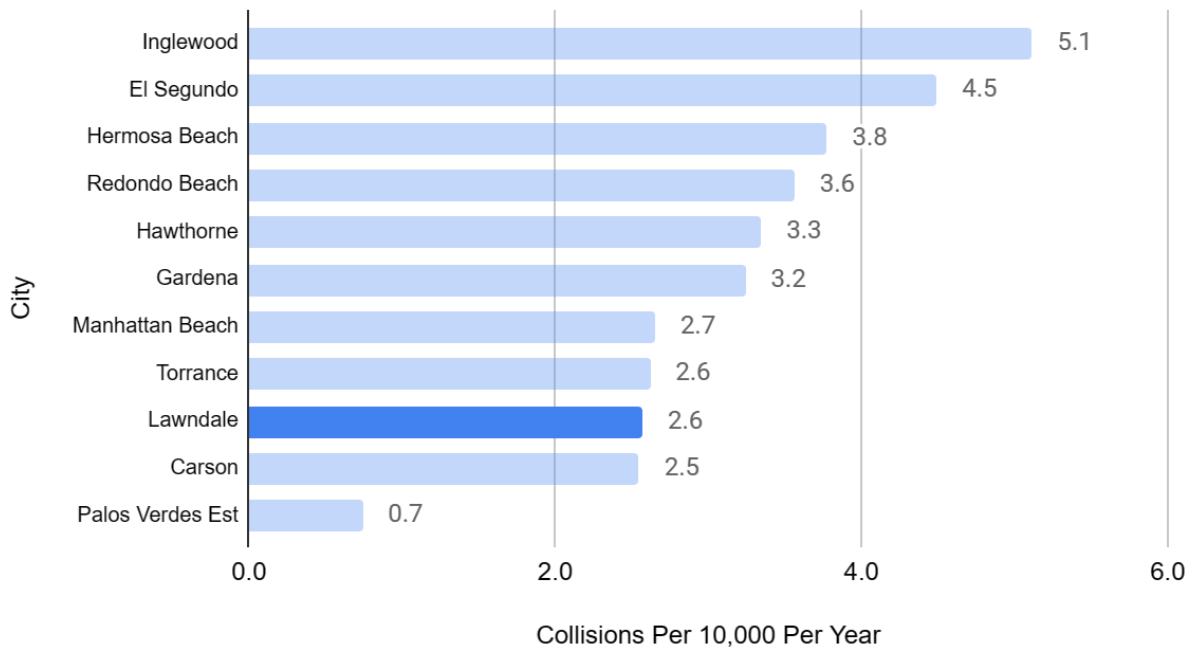| Rank	Intersection	# of Collisions
1	147TH ST & INGLEWOOD AVE	2
1	HAWTHORNE BLVD & MANHATTAN BEACH BLVD	2
1	MANHATTAN BEACH BLVD & SR 107	2
2	145TH ST & HAWTHORNE BLVD	1
2	149TH ST & HAWTHORNE BLVD	1
2	163RD ST & HAWTHORNE BLVD	1
2	161ST ST & INGLEWOOD AVE	1
2	ALLEY & MANHATTAN BEACH BLVD	1
2	AVIS AVE & ROSECRANS AVE	1
2	FIRMONA AVE & MANHATTAN BEACH BLVD	1

Pedestrian Collision Data

The chart below shows the total number of pedestrian collisions between 2018-2022.
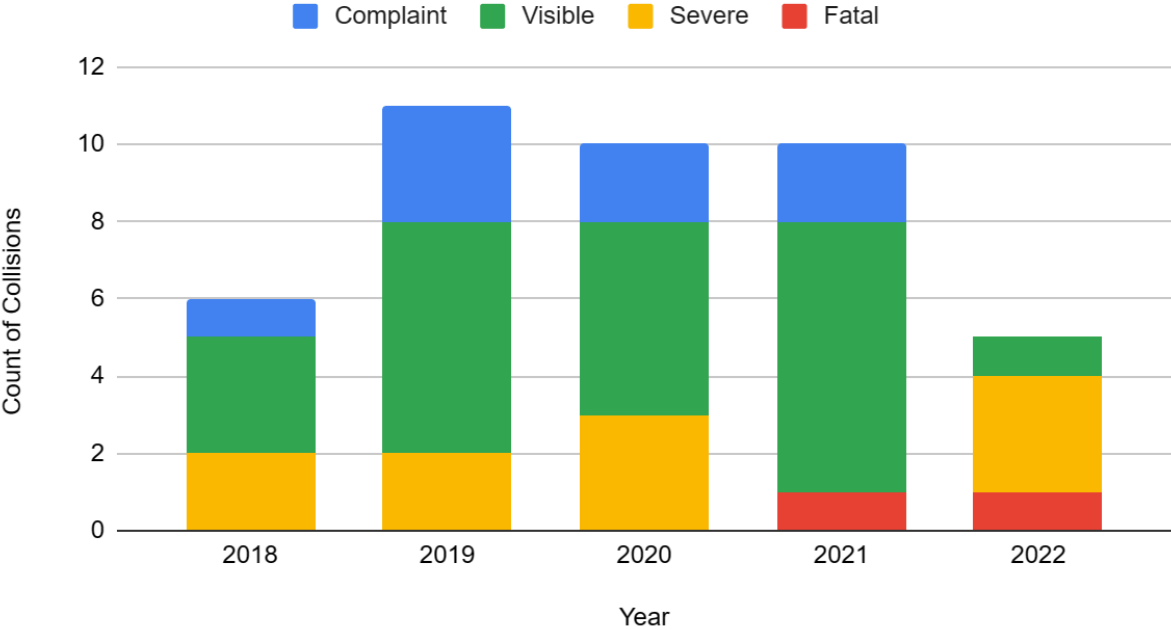
Total Pedestrian Collisions, 2018-2022

Legend: Visible/Complaint ▮ Severe/Fatal ▮

City	Visible/Complaint	Severe/Fatal	Total
Inglewood	221	62	283
Torrance	156	36	192
Hawthorne	120	26	146
Redondo Beach	104	17	121
Carson	81	37	118
Gardena	79	19	98
Manhattan Beach	43	4	47
Lawndale	30	12	42
El Segundo	32	6	38
Hermosa Beach	28	9	37
Palos Verdes Est	5		5

Count of Collisions

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

Pedestrian Collision Rate, 2018-2022

| City	Collisions Per 10,000 Per Year
Inglewood	5.1
El Segundo	4.5
Hermosa Beach	3.8
Redondo Beach	3.6
Hawthorne	3.3
Gardena	3.2
Manhattan Beach	2.7
Torrance	2.6
Lawndale	2.6
Carson	2.5
Palos Verdes Est	0.7

Collisions Per 10,000 Per Year

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

The heatmap below shows where pedestrian collisions between are most common in Lawndale from 2018-2022. For context, the largest circle represents 3 collisions in this period.
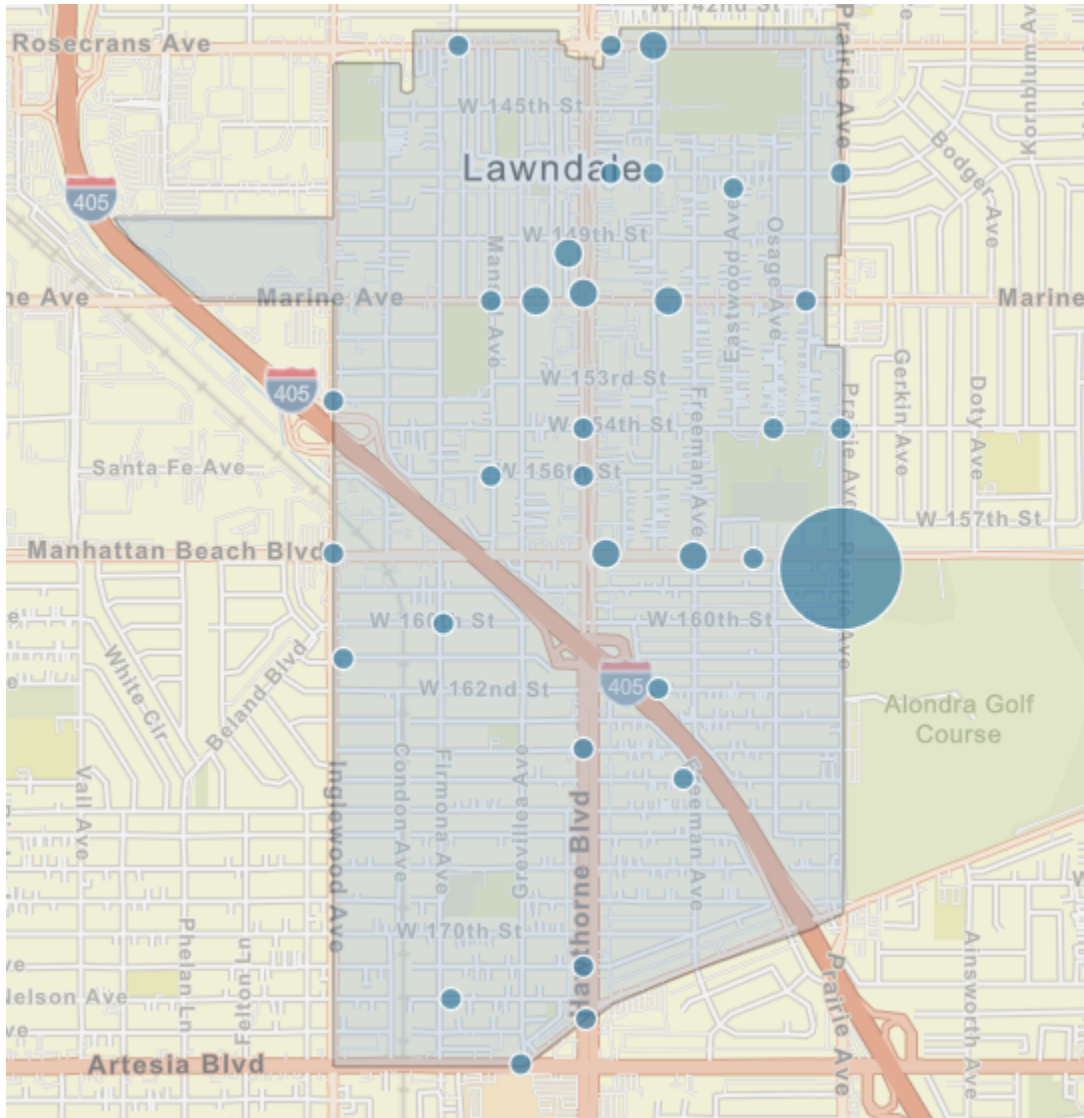
The table below shows the top ranked intersections in Lawndale for pedestrian collisions.

Rank	Intersection	# of Collisions
1	FREEMAN AVE & MANHATTAN BEACH BLVD	2
1	LARCH AVE & ROSECRANS AVE	2
2	153RD PL & INGLEWOOD AVE	1
2	149TH ST & HAWTHORNE BLVD	1
2	154TH ST & HAWTHORNE BLVD	1
2	156TH ST & HAWTHORNE BLVD	1
2	171ST ST & HAWTHORNE BLVD	1
2	161ST ST & INGLEWOOD AVE	1
2	164TH ST & HAWTHORNE BLVD	1
2	HAWTHORNE BLVD & MANHATTAN BEACH BLVD	1

Conclusions

Summary: Lawndale	Bicycle		Pedestrian	
Metric	*Value*	*Rank*	*Value*	*Rank*
Total Collisions from 2018-2022	36	9	42	8
Average Collisions per Year	7.2		8.4	
Collision Rate (per 10,000 pop.)	2.2	7	2.6	9

Lawndale ranks 7th across the studied South Bay cities for bicycle collision rate, and 8th for pedestrian collisions. Hawthorne Blvd, Manhattan Beach Blvd, and Marine Ave have some of the highest collision rates in Lawndale.

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.