



Analysis on County-Level Bike Crashes

*Orange, Seminole, and Osceola
County Bicycle Crash Analysis*



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Prepared from the FLHSMV Crash Dashboard
and BEBR county population estimates



Orange, Osceola, and Seminole Counties

Bicycle injury and fatality data summary

Study window: 2017-2019 baseline and 2022-2025 post-COVID core period. 2020-2021 excluded from the study window.

Summary

- Orange had the largest burden: post-COVID averages were 534.0 injuries and 12.5 fatalities per year, versus 445.7 injuries and 7.0 fatalities in 2017-2019. Its injury rate rose from 32.46 to 35.42 per 100,000; its fatality rate rose from 0.51 to 0.83.
- Seminole showed the strongest injury-rate growth: average annual injuries rose from 113.0 to 154.5, and the injury rate rose from 24.50 to 31.62 per 100,000. Average annual fatalities edged up from 2.0 to 2.5, and the fatality rate increased from 0.44 to 0.51.
- Osceola's injury rate was nearly flat after population adjustment, moving from 23.94 to 24.14 per 100,000, but deaths were more pronounced: average annual fatalities rose from 3.7 to 6.0, and the fatality rate rose from 1.00 to 1.33, the highest of the three counties.

County Pre/Post Averages and Rates

County	Pre avg injuries	Post avg injuries	Pre injury rate	Post injury rate	Pre avg fatalities	Post avg fatalities	Pre fatality rate	Post fatality rate
Orange	445.7	534.0	32.46	35.42	7.0	12.5	0.51	0.83
Seminole	113.0	154.5	24.50	31.62	2.0	2.5	0.44	0.51
Osceola	87.3	110.8	23.94	24.14	3.7	6.0	1.00	1.33

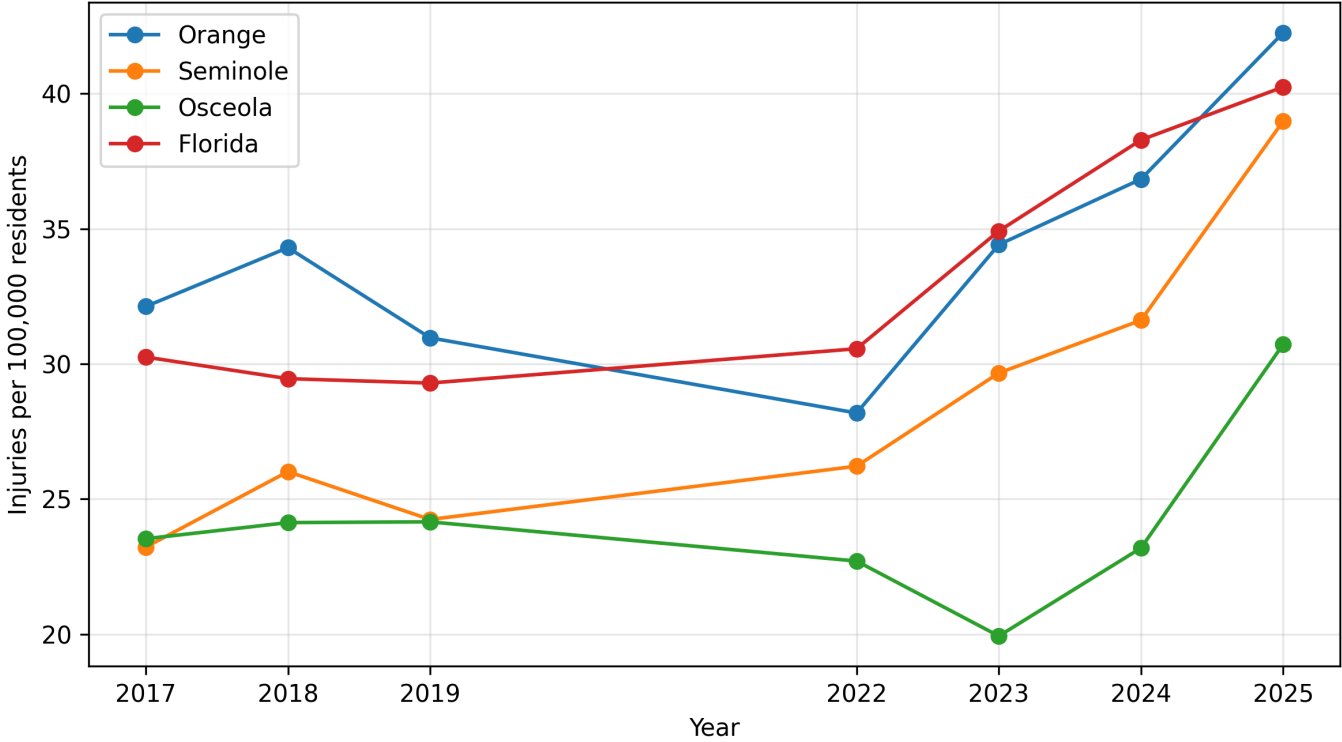
Statewide Context

Area	Pre injury rate	Post injury rate	Injury rate change	Pre fatality rate	Post fatality rate	Fatality rate change
Florida statewide	29.67	36.00	6.33	0.703	0.949	0.246

Population Method

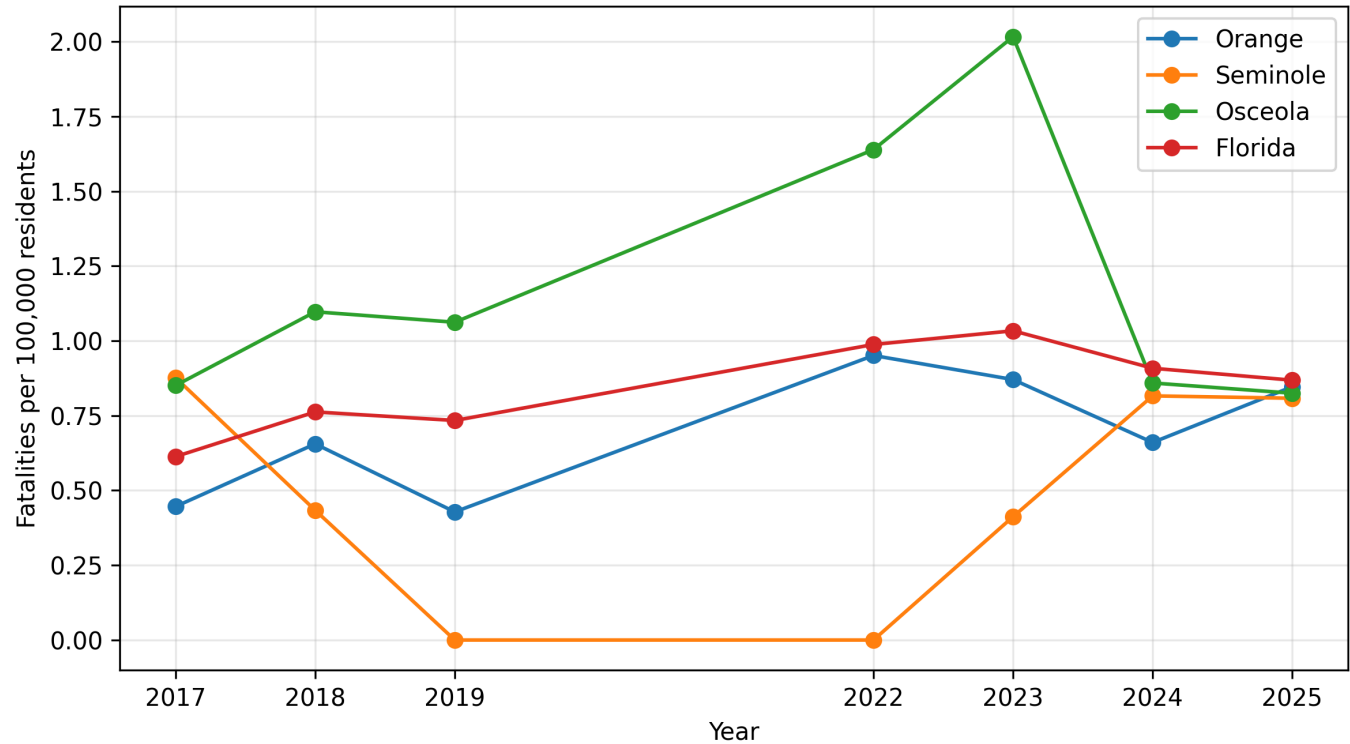
2017-2019 rates use annual population estimates modeled by linear interpolation between the 2010 and 2020 benchmark populations. 2022-2025 rates use annual population estimates modeled by linear interpolation between the 2020 and 2025 benchmark populations. Rates are per 100,000 residents; pre/post values are averages of annual values; changes are calculated from unrounded values and rounded for display.

Bicycle Injury Rates per 100,000 Residents
Orange, Seminole, Osceola, and Statewide



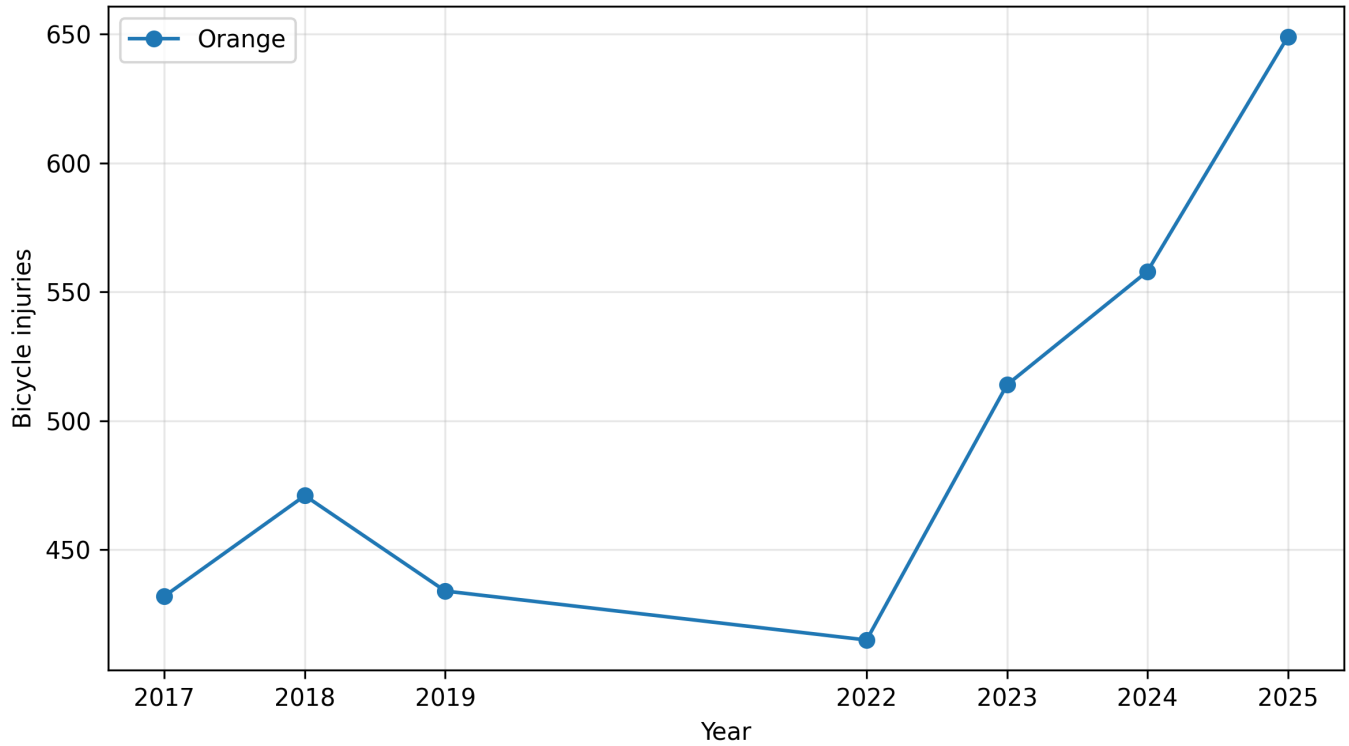
Data source: FLHSMV Crash Dashboard exports aggregated by county/year; population denominators from BEBR county population estimates.

Bicycle Fatality Rates per 100,000 Residents
Orange, Seminole, Osceola, and Statewide



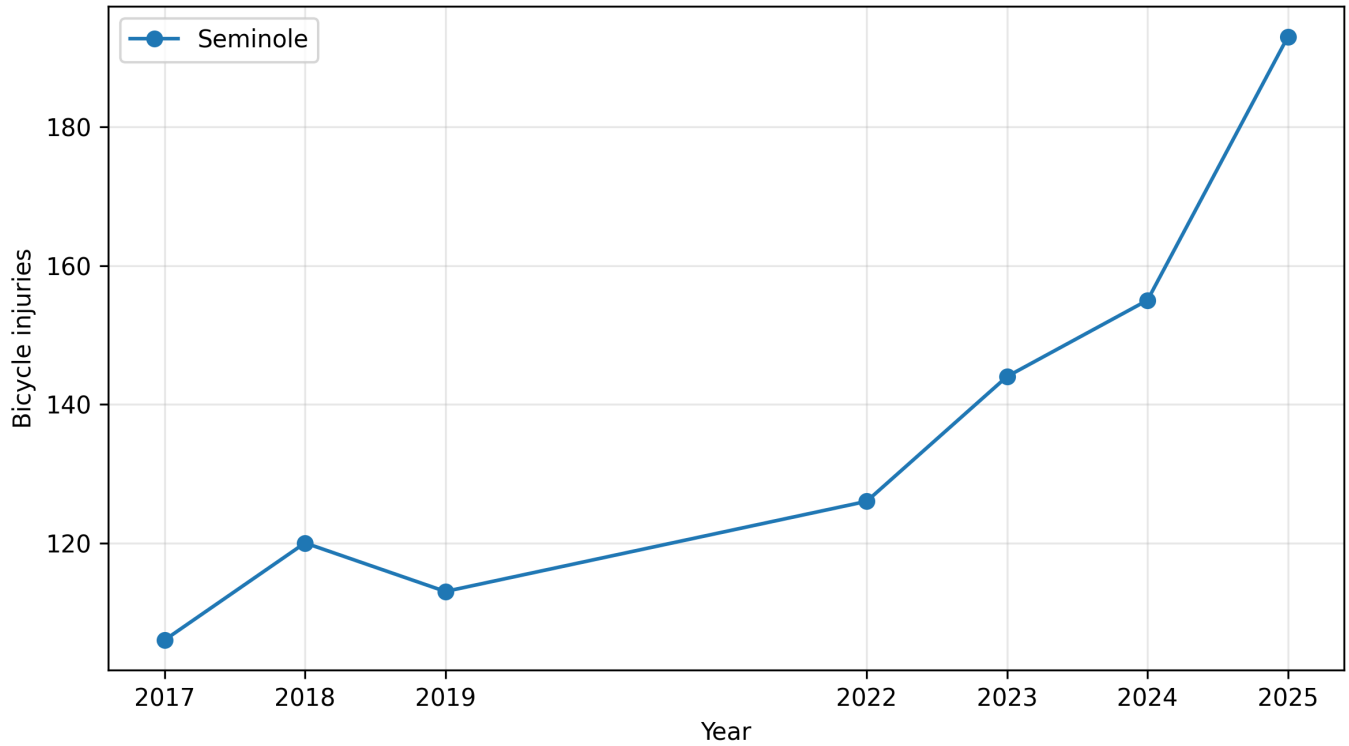
Data source: FLHSMV Crash Dashboard exports aggregated by county/year; population denominators from BEBR county population estimates.

Orange Bicycle Injury Counts, 2017-2025
(2020-2021 excluded)



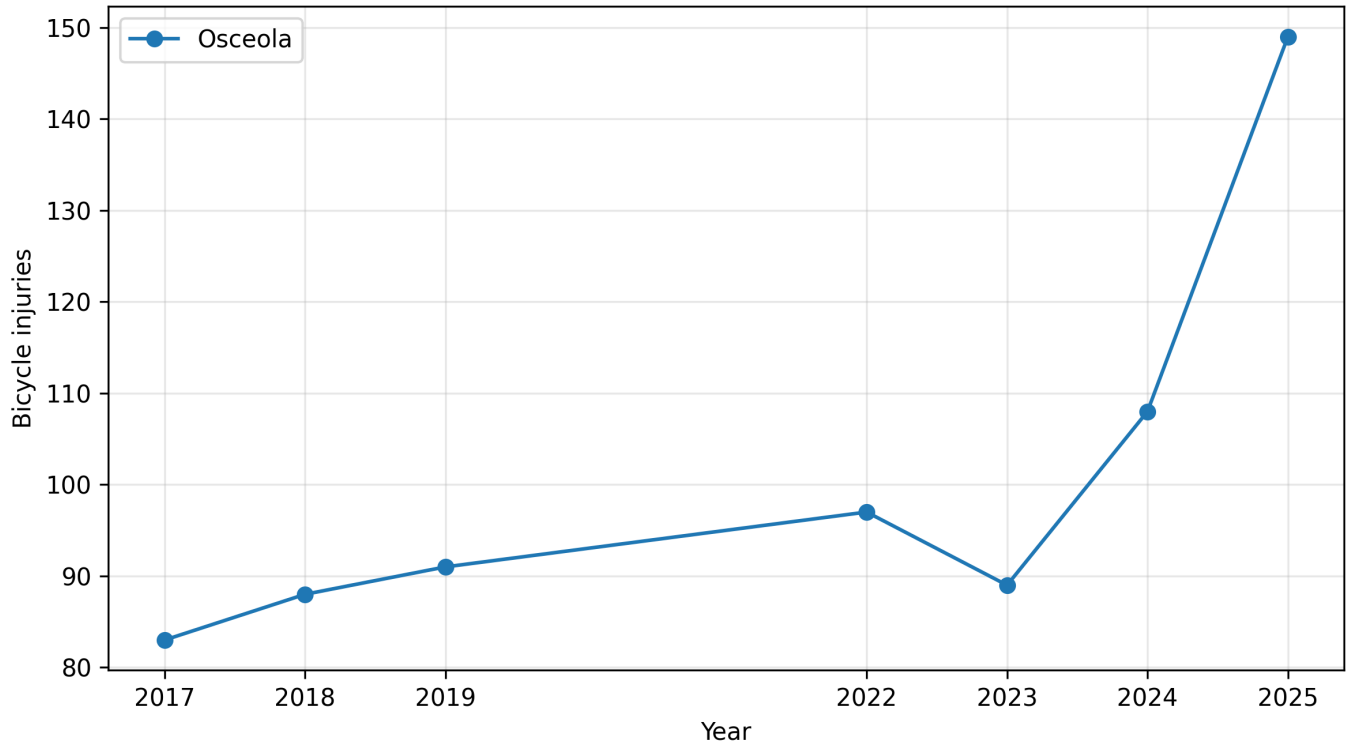
Data source: FLHSMV Crash Dashboard exports aggregated by county/year; population denominators from BEBR county population estimates.

Seminole Bicycle Injury Counts, 2017-2025
(2020-2021 excluded)



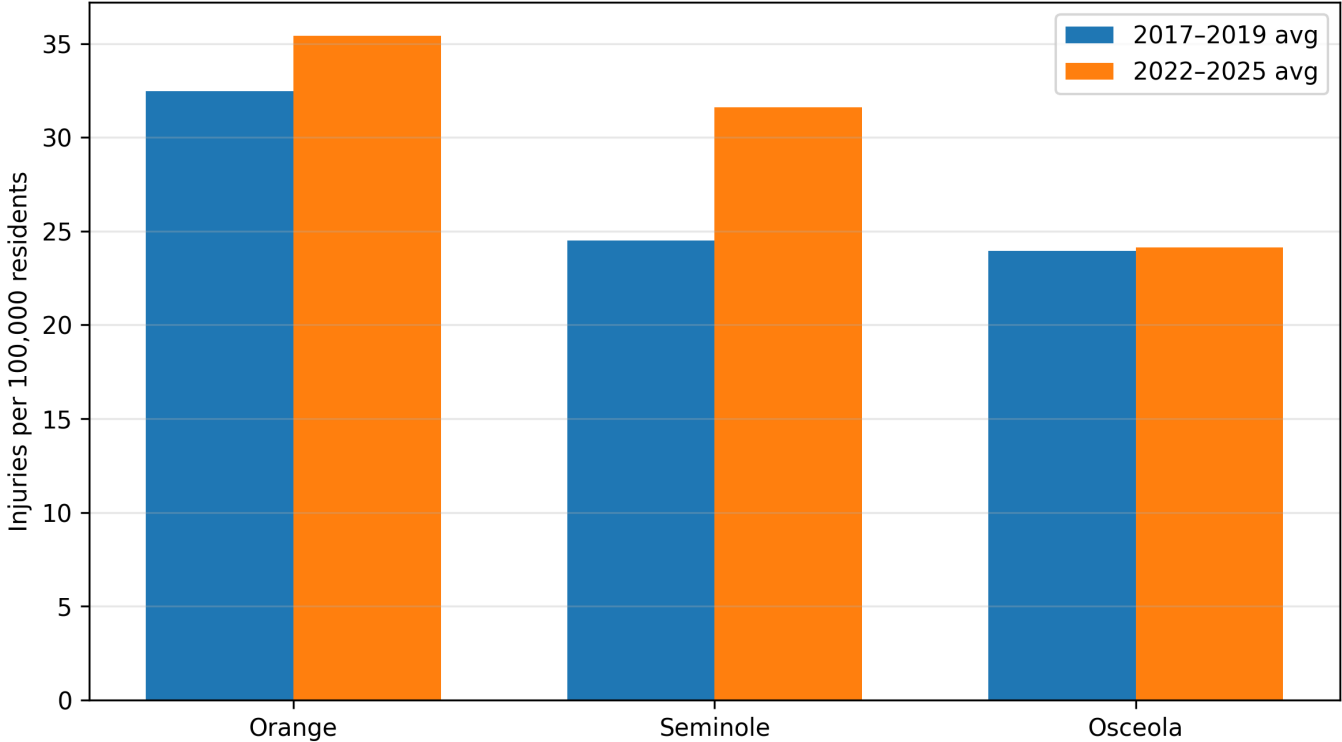
Data source: FLHSMV Crash Dashboard exports aggregated by county/year; population denominators from BEBR county population estimates.

Osceola Bicycle Injury Counts, 2017-2025
(2020-2021 excluded)



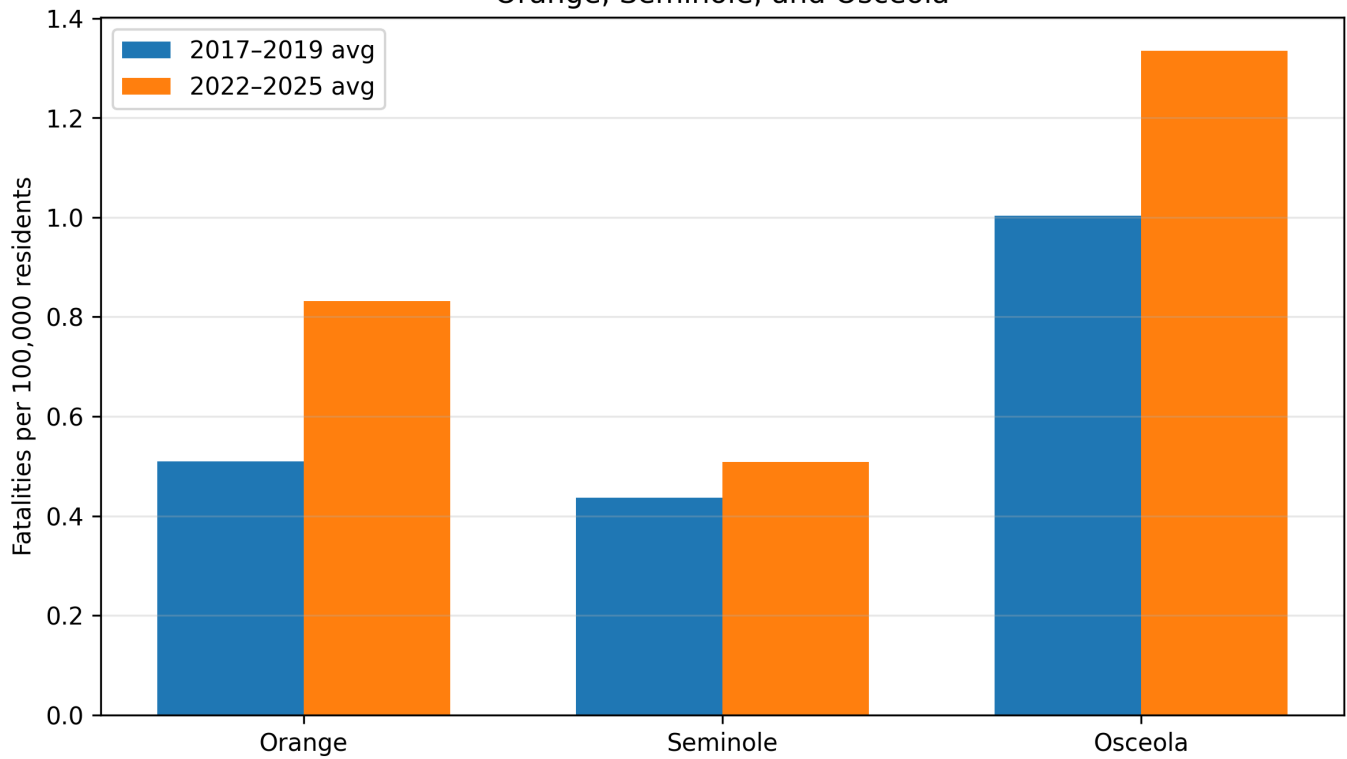
Data source: FLHSMV Crash Dashboard exports aggregated by county/year; population denominators from BEBR county population estimates.

Pre/Post Bicycle Injury Rates
Orange, Seminole, and Osceola



Data source: FLHSMV Crash Dashboard exports aggregated by county/year; population denominators from BEBR county population estimates.

Pre/Post Bicycle Fatality Rates
Orange, Seminole, and Osceola



Data source: FLHSMV Crash Dashboard exports aggregated by county/year; population denominators from BEBR county population estimates.

Annual County Data

Orange, Osceola, and Seminole Counties

2017-2019 baseline and 2022-2025 post-COVID core period. 2020-2021 excluded from the study window.

Year	County	Population	Injuries	Fatalities	Injury rate /100k	Fatality rate /100k	Fatal share
2017	Orange	1,344,722	432	6	32.13	0.45	1.4%
2017	Seminole	456,415	106	4	23.22	0.88	3.8%
2017	Osceola	352,665	83	3	23.54	0.85	3.6%
2018	Orange	1,373,118	471	9	34.30	0.66	1.9%
2018	Seminole	461,228	120	2	26.02	0.43	1.7%
2018	Osceola	364,662	88	4	24.13	1.10	4.5%
2019	Orange	1,401,513	434	6	30.97	0.43	1.4%
2019	Seminole	466,042	113	0	24.25	0.00	0.0%
2019	Osceola	376,659	91	4	24.16	1.06	4.4%
2022	Orange	1,472,714	415	14	28.19	0.95	3.4%
2022	Seminole	480,556	126	0	26.22	0.00	0.0%
2022	Osceola	427,161	97	7	22.71	1.64	7.2%
2023	Orange	1,493,598	514	13	34.41	0.87	2.5%
2023	Seminole	485,403	144	2	29.67	0.41	1.4%
2023	Osceola	446,477	89	9	19.94	2.02	10.1%
2024	Orange	1,515,901	558	10	36.84	0.66	1.8%
2024	Seminole	490,248	155	4	31.62	0.82	2.6%
2024	Osceola	465,679	108	4	23.19	0.86	3.7%
2025	Orange	1,536,049	649	13	42.25	0.85	2.0%
2025	Seminole	495,106	193	4	38.98	0.81	2.1%
2025	Osceola	484,897	149	4	30.73	0.82	2.7%