Appendix C
Safety Analysis Summary

South Bay Injury Collision Trends:
2017 – 2021

SBCCOG: Collision Summary by Jurisdiction

Jurisdiction	Injury Collisions	KSI	Bike	Pedestrian	Micromobility
Los Angeles	4,346	424	305	575	42
Los Angeles County	3,400	301	184	375	32
Torrance	2,589	116	151	200	6
Inglewood	2,392	184	124	311	19
Gardena	1,861	120	94	169	16
Hawthorne	1,391	81	114	150	14
Carson	1,341	120	60	128	8
Redondo Beach	1,265	73	147	138	13
Lawndale	533	52	52	50	3
El Segundo	435	28	30	48	5
Manhattan Beach	431	25	63	55	3
Hermosa Beach	256	17	35	38	3
Palos Verdes Estates	66	4	26	5	1
Rancho Palos Verdes	39	6	3	4	0
Lomita	26	5	1	4	0
Rolling Hills Estates	17	2	0	0	0
Rolling Hills	1	0	0	0	0
SBCCOG Total	**18,270**	**1,413**	**1,244**	**2,100**	**153**

Notes: KSI = Killed or severely injured; jurisdictions do not sum to SBCCOG total because collisions on the boundary of jurisdictions are counted for each

SBCCOG: Top Intersections for Severe Collisions

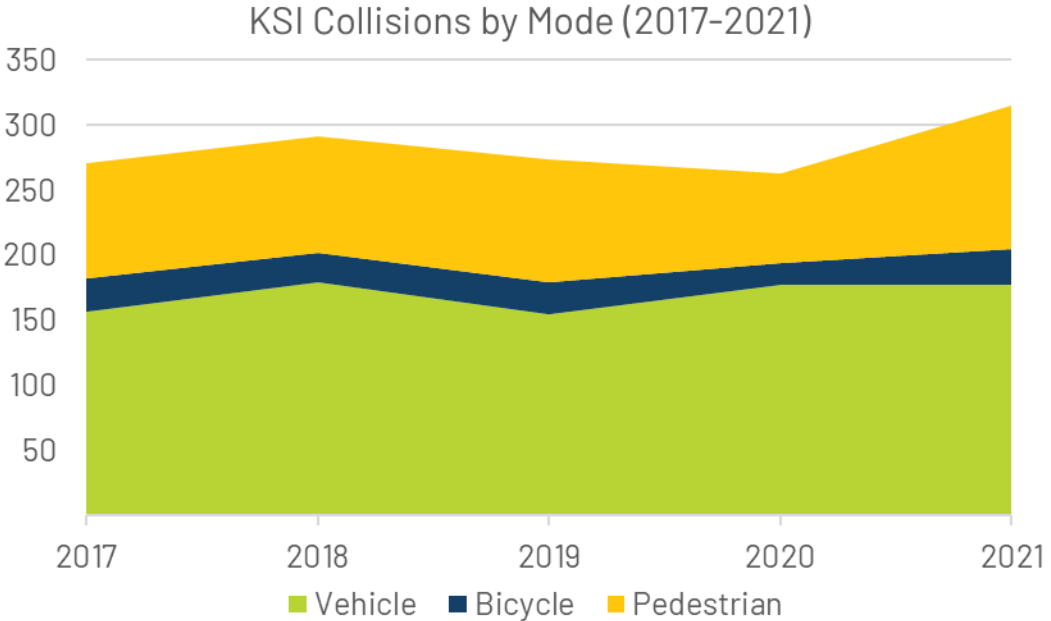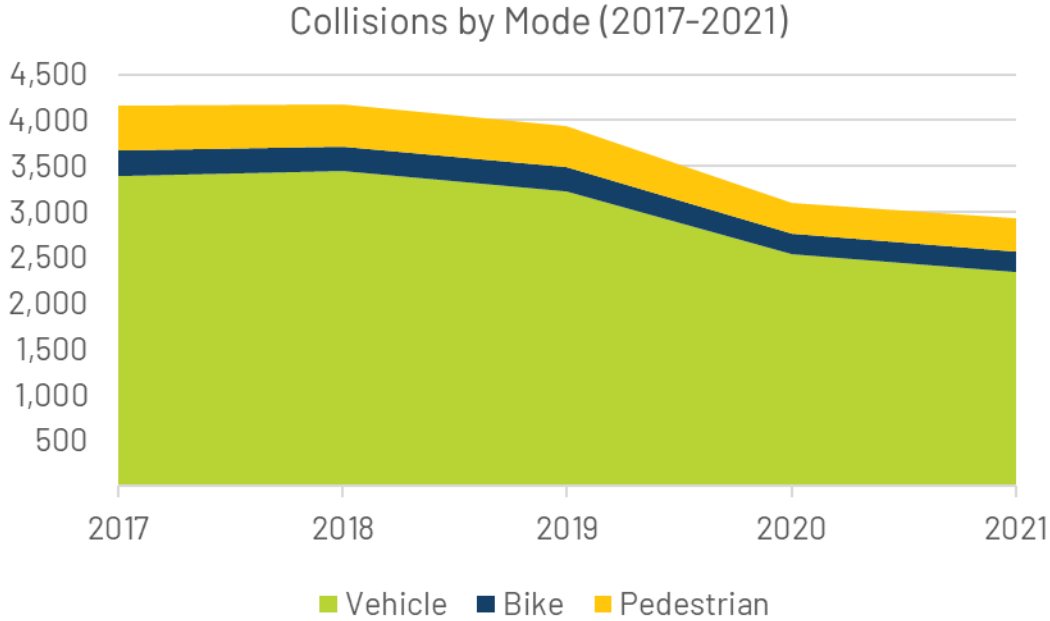| Intersection	Jurisdiction	KSI Collisions	Injury Collisions
S Normandie Avenue & West Manchester Boulevard	LOS ANGELES	6	87
Figueroa Street & Imperial Highway	LOS ANGELES	6	51
South Normandie Avenue & West El Segundo Boulevard	GARDENA	6	45
South Van Ness Avenue & West Century Boulevard	INGLEWOOD	6	28
South Vermont Avenue & West 106th Street	LA COUNTY	6	27

SBCCOG: Top Intersections for Severe Collisions on the LTN

Intersection	Jurisdiction	KSI Collisions	Injury Collisions
E Pacific Coast Highway & Eubank Avenue	LOS ANGELES	5	21
Imperial Highway & Inglewood Avenue	HAWTHORNE	4	11
East Imperial Avenue & Main Street	EL SEGUNDO	3	49
Centinela Avenue & West Beach Avenue	INGLEWOOD	3	31
South Budlong Avenue & West El Segundo Boulevard	GARDENA	3	19

SBCCOG: Collisions by Mode

Collisions by Mode (2017-2021)

Legend: ■ Vehicle ■ Bike ■ Pedestrian

KSI Collisions by Mode (2017-2021)

Legend: ■ Vehicle ■ Bicycle ■ Pedestrian

- While the number of injury collisions decreased during pandemic years, more collisions were severe
- In 2017, 7% of collisions resulted in a severe injury or fatality and in 2021, 11% resulted in a severe injury or fatality

SBCCOG: Primary Collision Factor

Top PCF:

- All collisions:
  - Vehicle ROW violation (25%)
  - Unsafe speed (21%)

- KSI collisions:
  - Vehicle ROW violation (17%)
  - Unsafe speed (17%)
  - Pedestrian violation (17%)

- Though not necessarily listed as the primary factor, drug or alcohol impairment was a factor in 17% of KSI collisions
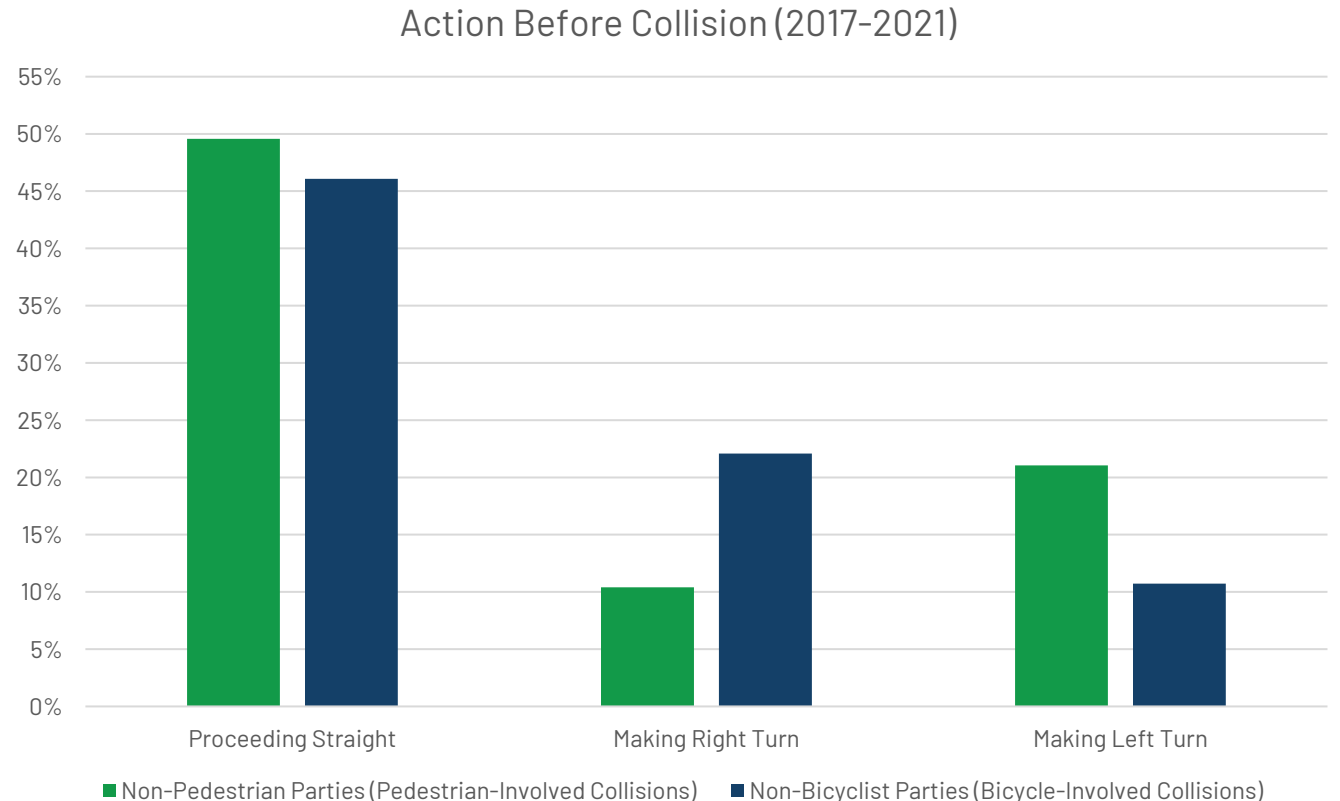

Primary Collision Factor (2017-2021)

■ All Collisions ■ KSI Collisions
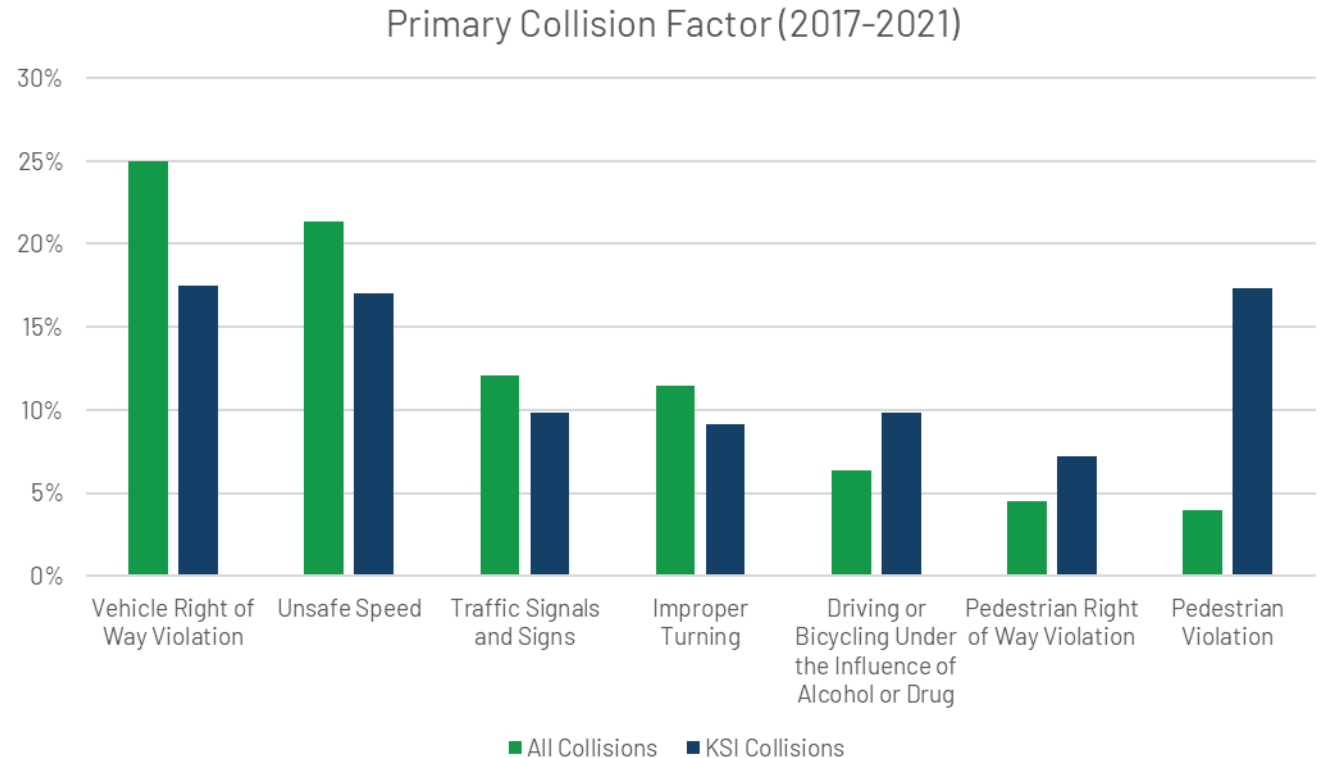
SBCCOG: Crash Type

Top crash type:

- All collisions:
  - broadside (38%)
  - rear end (22%)
- KSI collisions:
  - broadside (32%)
  - vehicle/pedestrian (29%)

Crash Type (2017-2021)
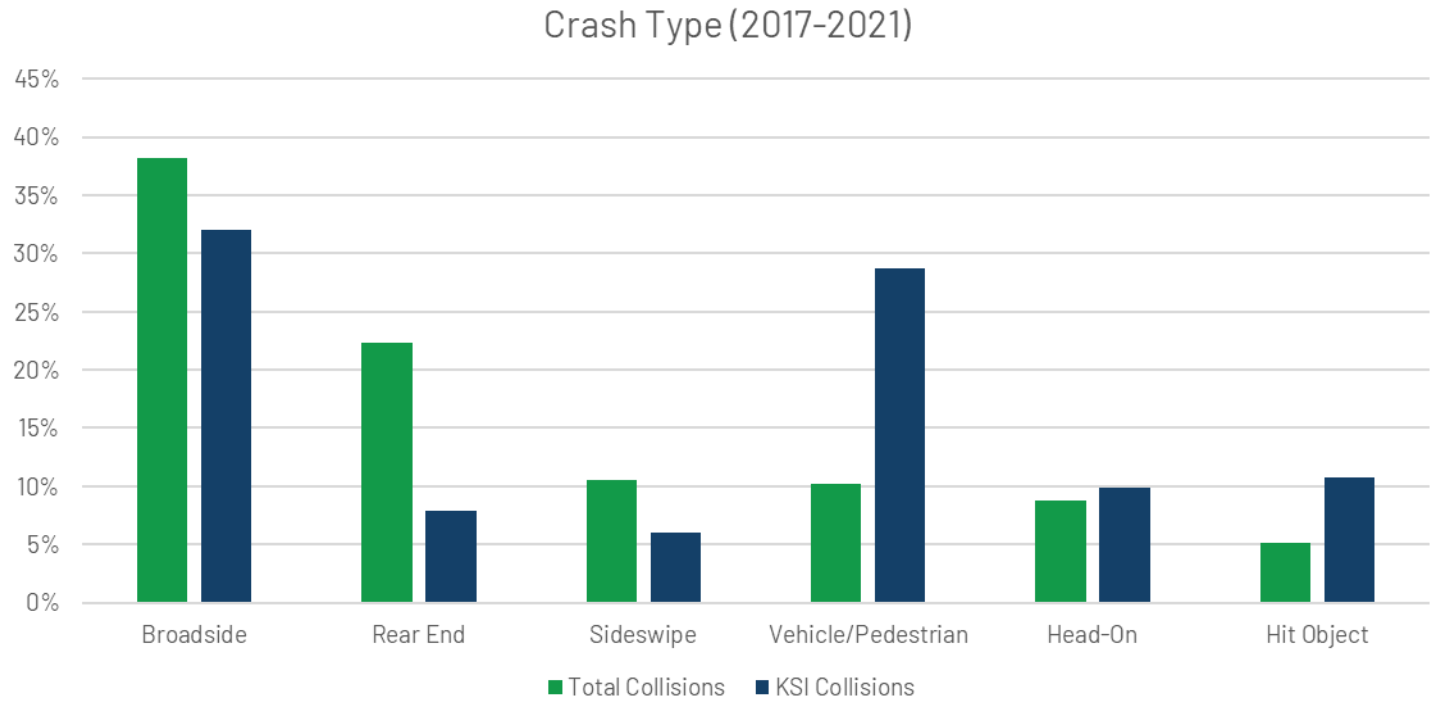
# SBCCOG: Turning Movement

Top turning movement by vehicle:

- Pedestrian-involved collisions
  - Proceeding straight (50%)
  - Making left turn (21%)
- Bicycle-involved collisions
  - Proceeding straight (46%)
  - Making right turn (22%)

## Action Before Collision (2017-2021)

SBCCOG: Pedestrian Action

Top pedestrian action:

- All collisions: crossing in the crosswalk at an intersection
- KSI collisions: crossing outside of a crosswalk

Pedestrian Action (2017-2021)

Legend: ■ Total Collisions ■ KSI Collisions
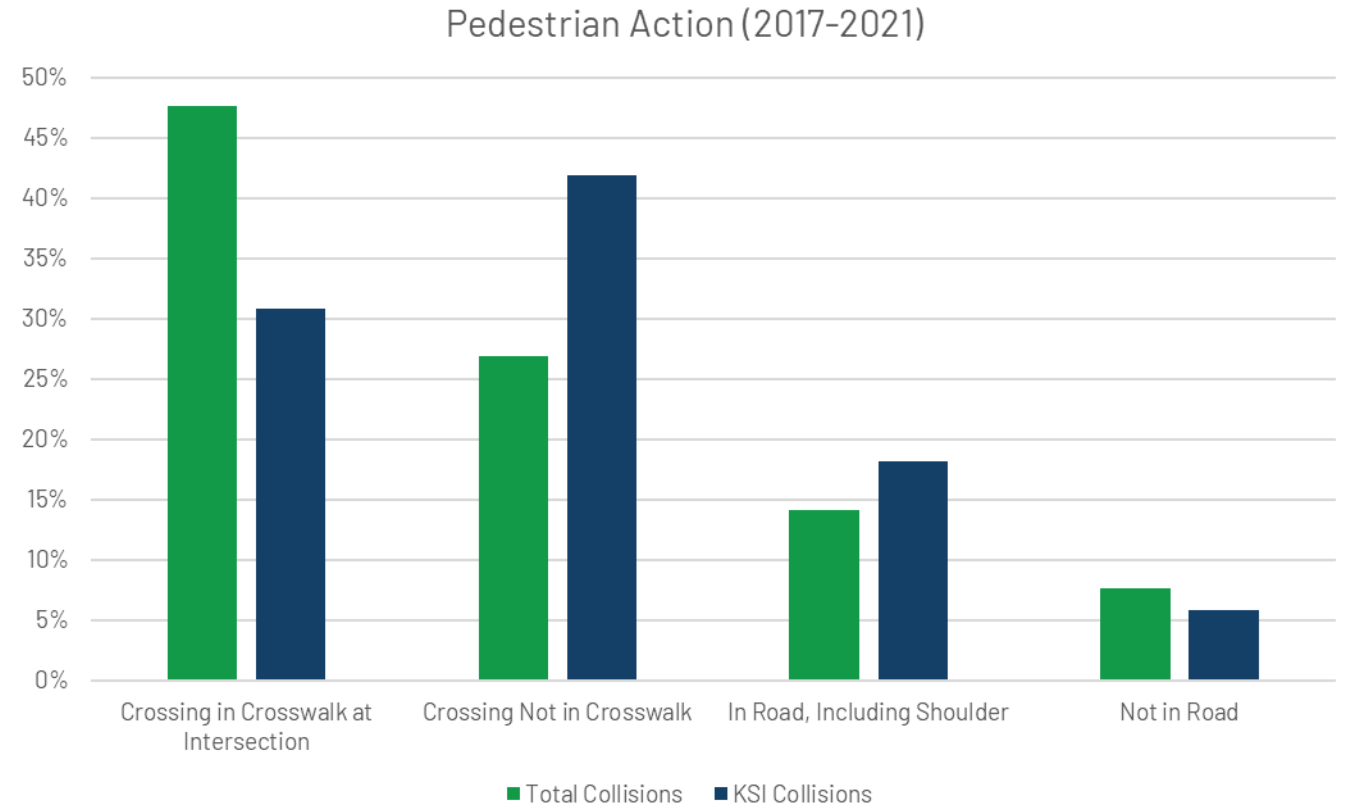
SBCCOG: Bicycle Trends

- "Wrong side of road" is a more common collision factor among bicycle-involved collisions than all mode collisions
- Top collision type (excluding "Other"):
  - Total collisions:
    - Broadside (43%)
    - Sideswipe (11%)
  - KSI collisions
    - Broadside (45%)
   - Rear end (9%)

Primary Collision Factor (2017-2021)

Legend: ■ All Mode Collisions ■ Bicycle-Involved Collisions
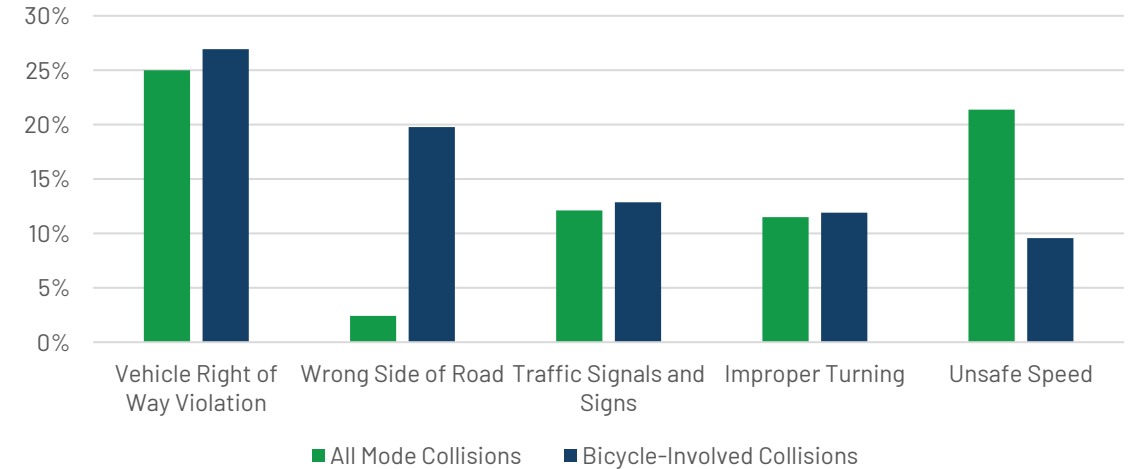
Collision Type for Bicycle-Involved Collisions (2017-2021)

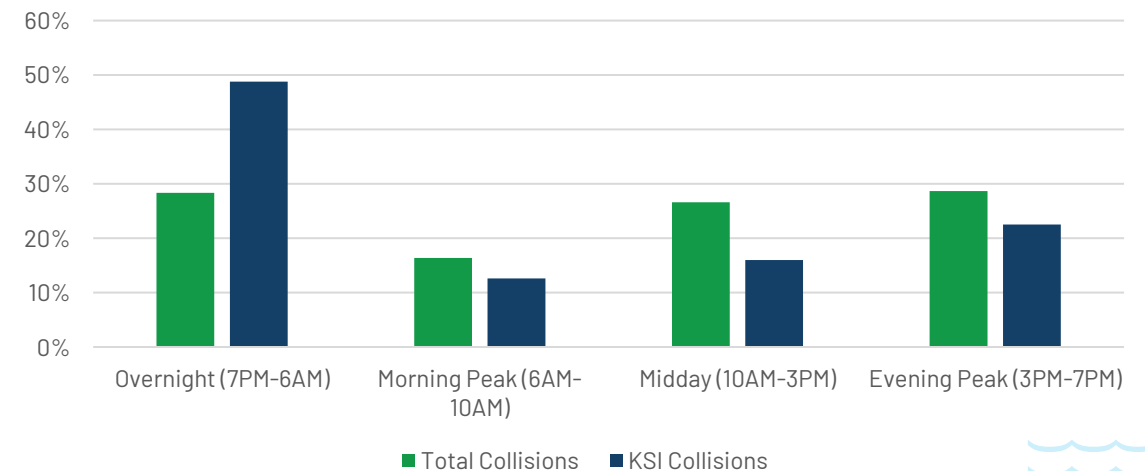Legend: ■ Total Collisions ■ KSI Collisions
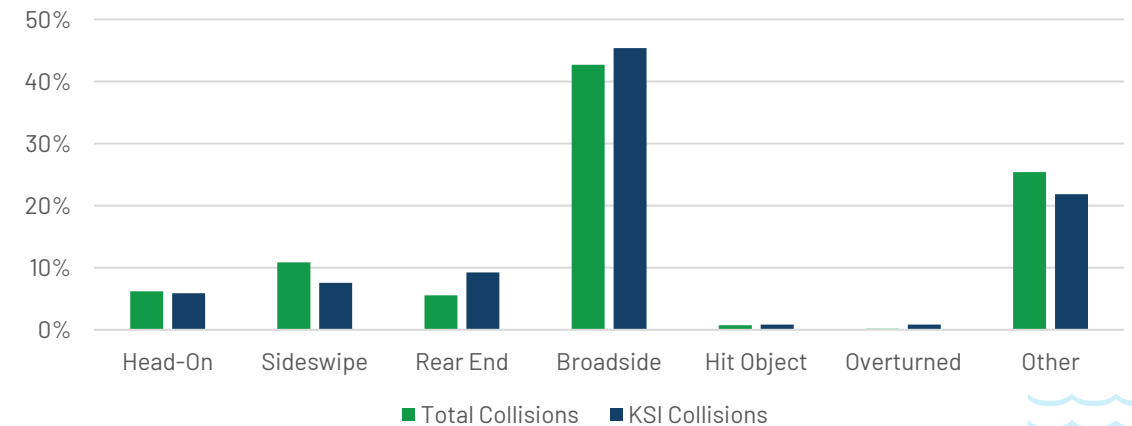
SBCCOG: Temporal Trends

- Top day of week:
  - All collisions: Friday (16%)
  - KSI collisions: Saturday (17%)

- KSI collisions represent a higher share of total collisions on weekends relative to weekdays

- Nearly 50% of KSI collisions occur overnight (7pm-6am)


Collisions by Day of Week (2017-2021)
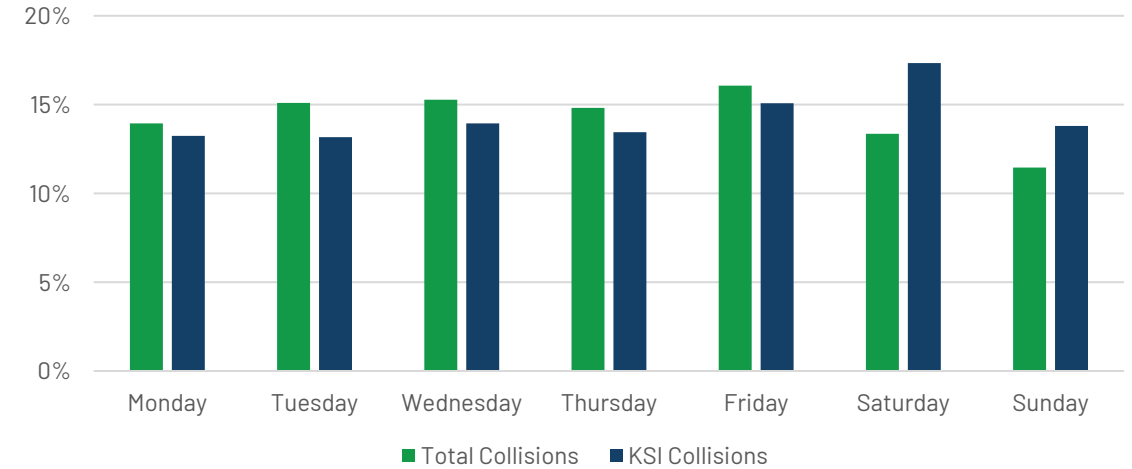
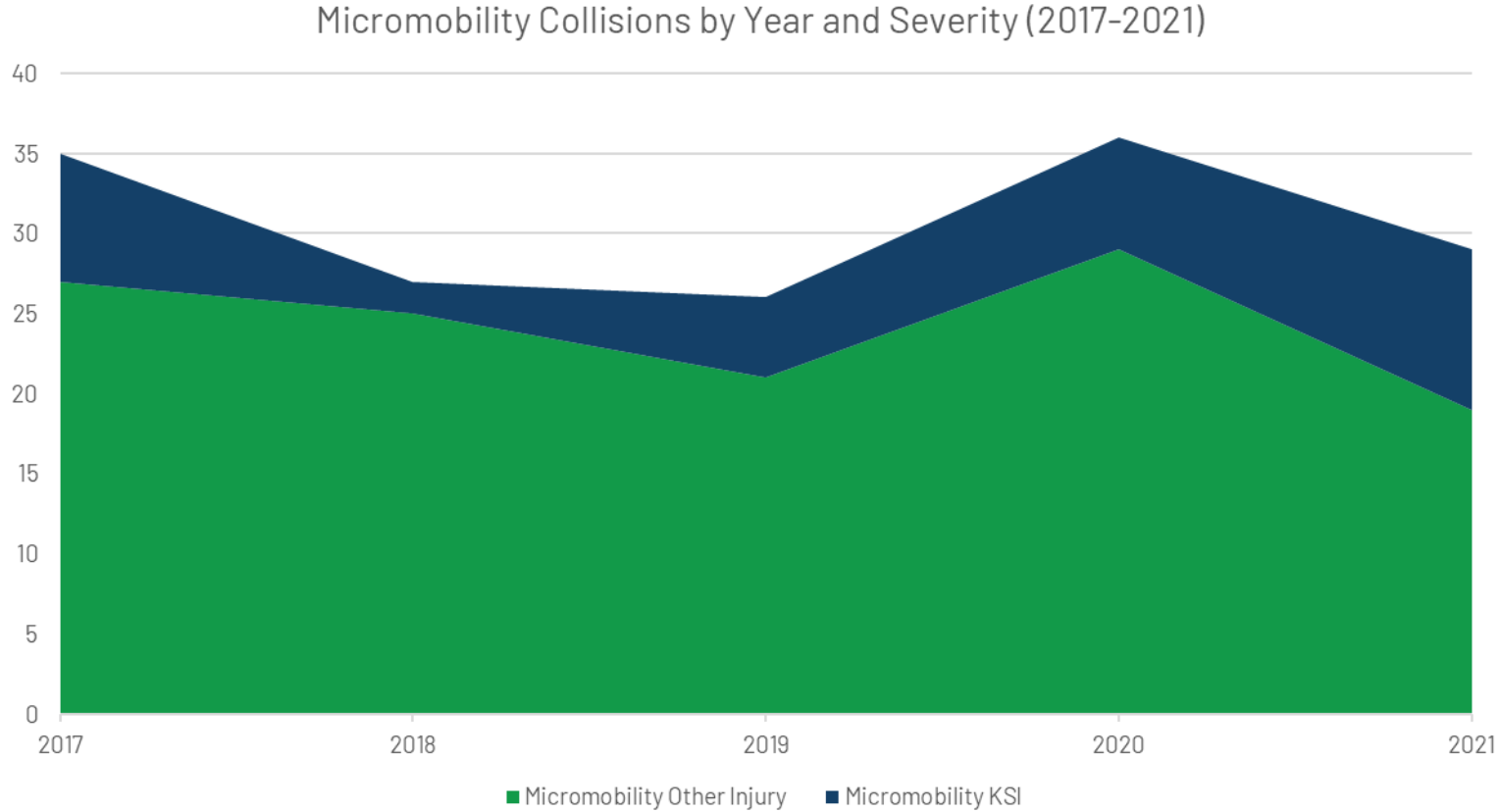Collisions by Time of Day (2017-2021)

SBCCOG: Location Trends

- Majority of all and KSI collisions occurred at an intersection

- Highest share of all and KSI collisions occurred on roadways with 4-5 lanes
  - However, only slightly higher than share of all and KSI collisions on roadways with 3 lanes

- 19% of collisions occur on the LTN

- 28% occur near a school

- 34% occur near a park

Collision Location (2017-2021)

Number of Lanes (2017-2021)
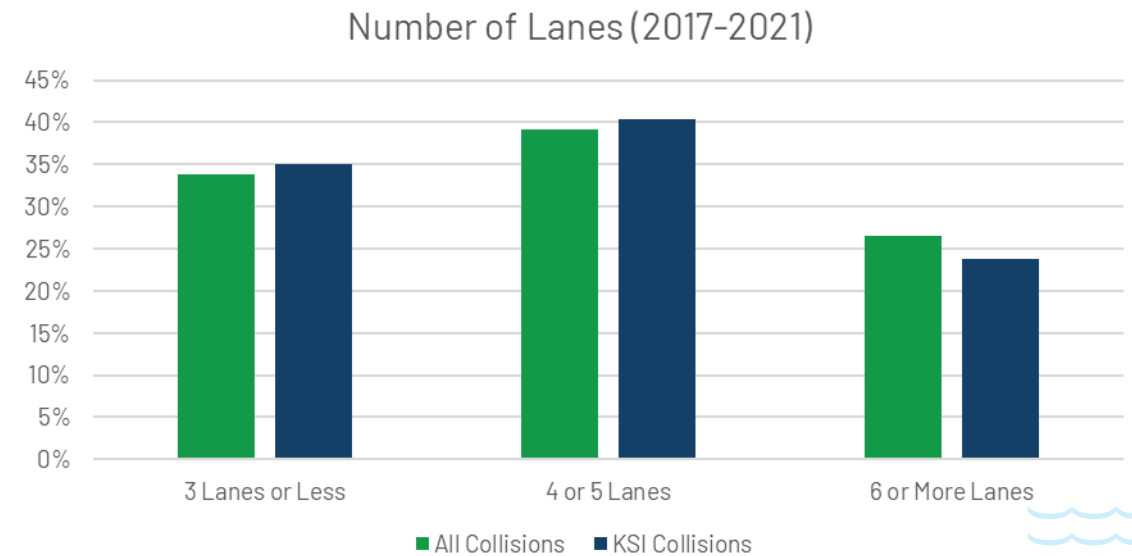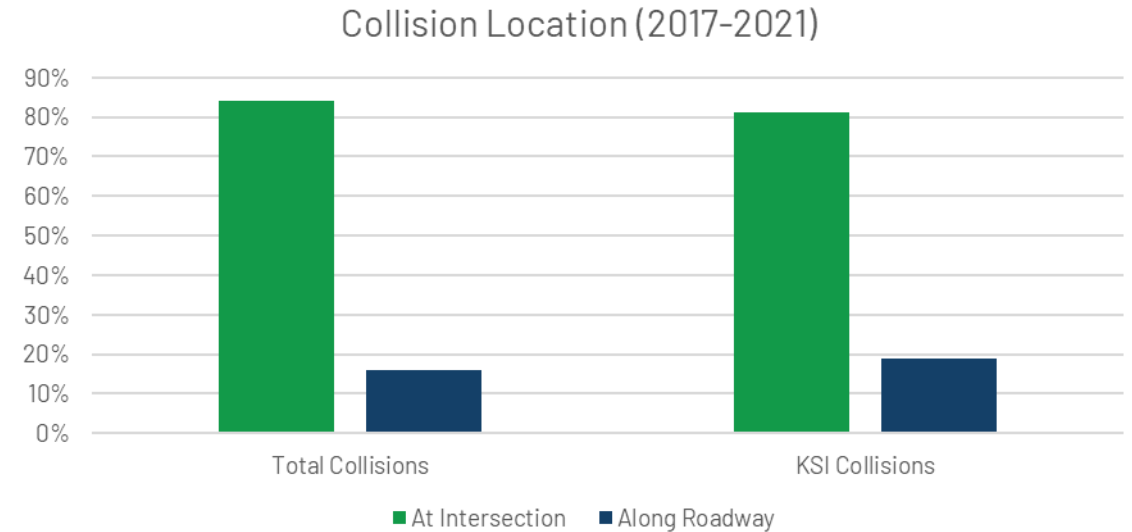
Micromobility: Collisions Trends Over Time

Micromobility Collisions by Year and Severity (2017-2021)

Legend: ■ Micromobility Other Injury ■ Micromobility KSI

Micromobility modes = motor-driven cycle, motorized bicycle, ATV, motorized transportation device, golf cart, low speed vehicle; regular bicycles not included here

# Micromobility: Primary Collision Factor

Top PCF:

- All collisions:
  - Vehicle ROW violation (22%)
  - Unsafe speed (18%)

- KSI collisions:
  - Vehicle ROW violation (44%)
  - Traffic Signals and Signs (16%)

Micromobility Collisions: Primary Collision Factor (2017-2021)
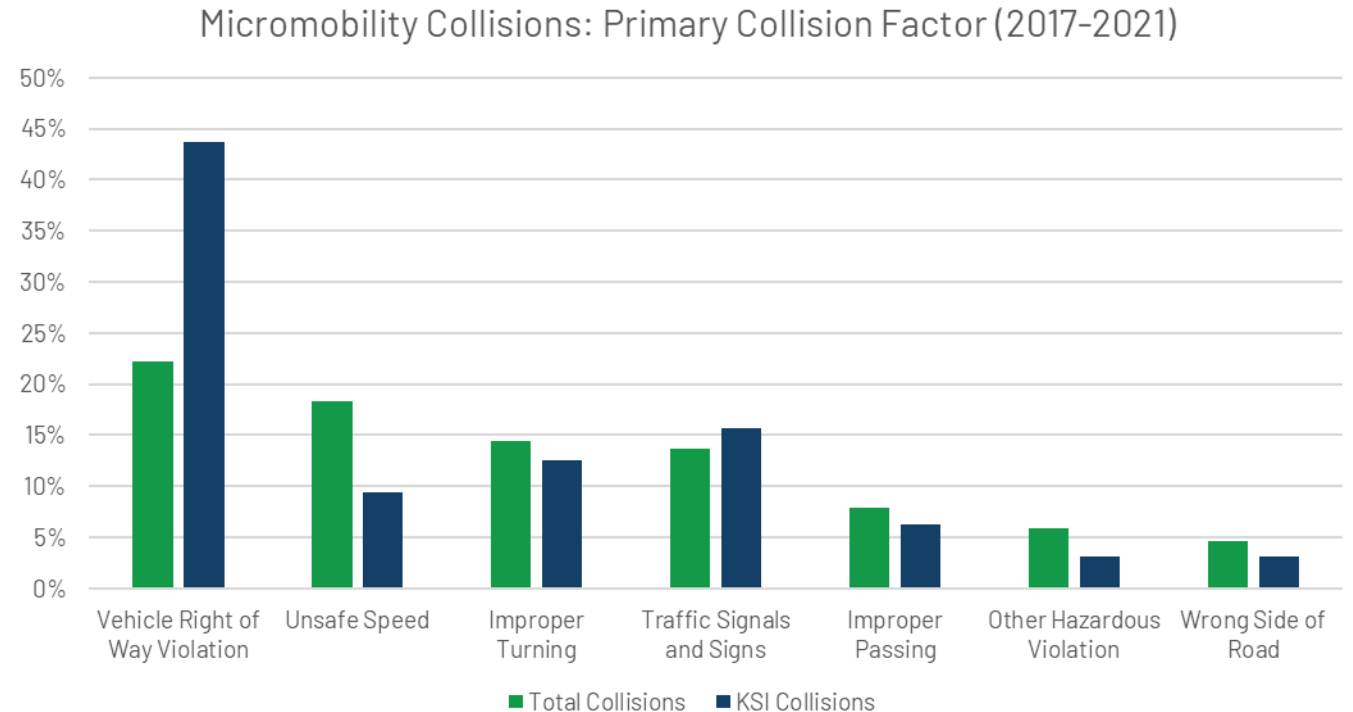
Micromobility: Crash Type

Top crash type:

- All collisions:
  - broadside (40%)
  - sideswipe (18%)
- KSI collisions:
  - broadside (63%)
  - rear end (13%)
  - head-on (13%)

Micromobility Collisions: Crash Type (2017-2021)
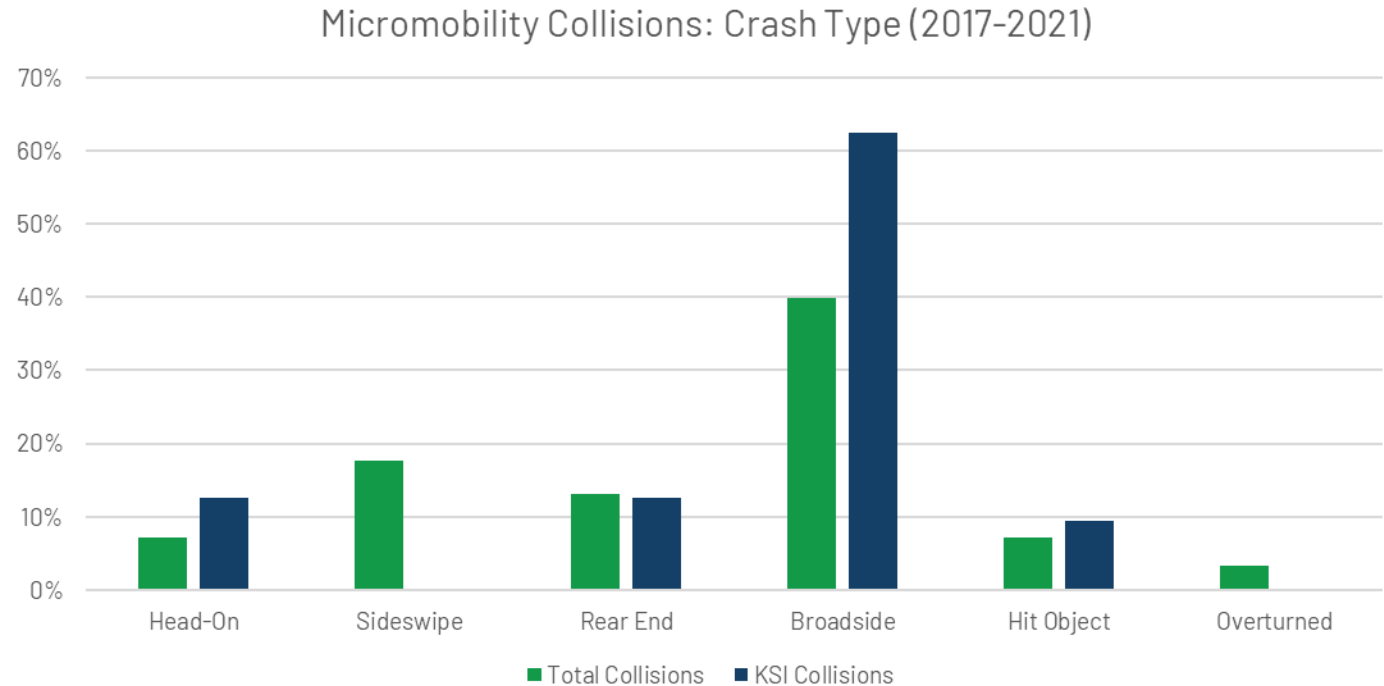
Micromobility: Location Trends

- Majority of all collisions and KSI collisions occurred at an intersection

- Highest share of all and KSI collisions occurred on roadways with 3 lanes or less

Micromobility Collisions: Collision Location (2017-2021)

Legend: ■ At Intersection ■ Along Roadway
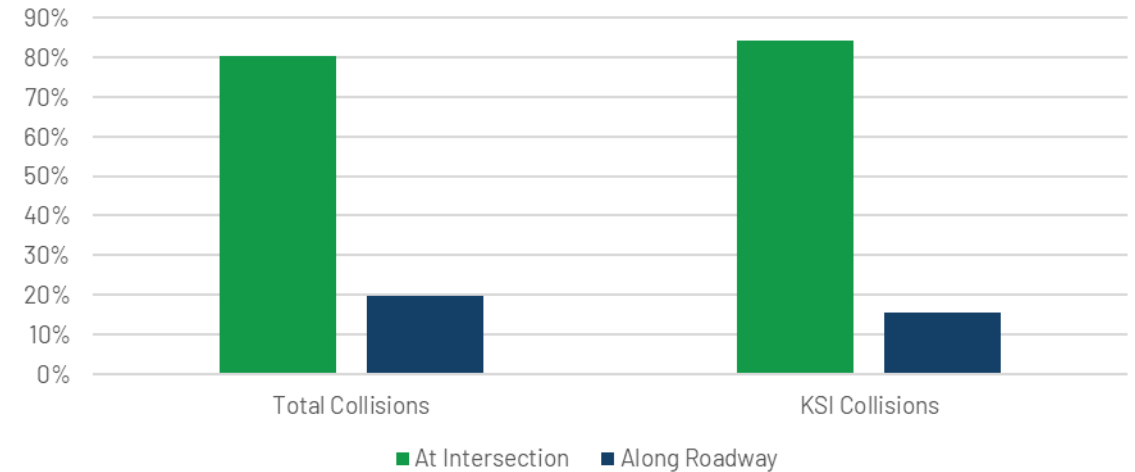
Micromobility Collisions: Number of Lanes (2017-2021)

Legend: ■ All Collisions ■ KSI Collisions
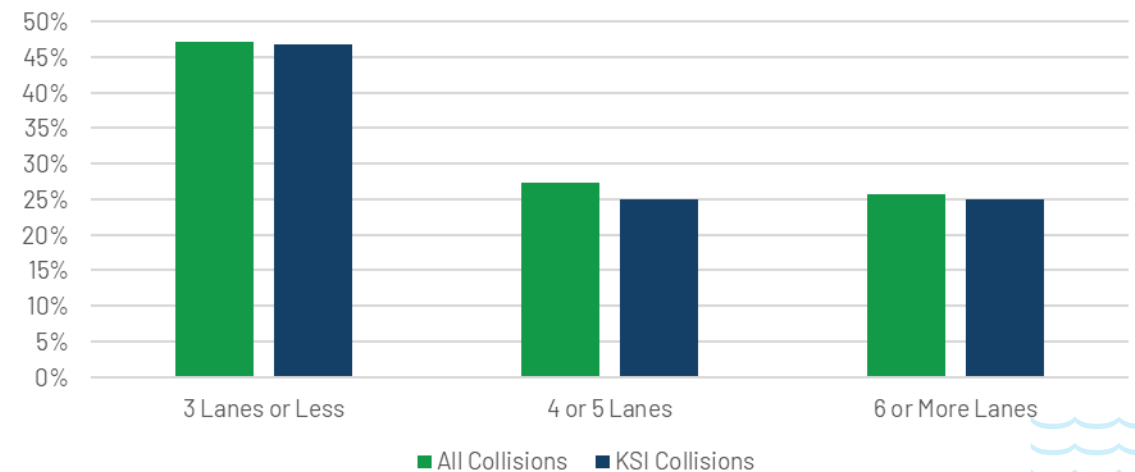
Note: Does not add up to 100% due to "unknown" lanes