

ATTACHMENT A

MAG Top 100 Intersections Ranked by Crash Risk Using 2015-2019 Crash Data (MAG Region)

Rank	Agency(ies)	Signal Owned & Maintained By	Location	Crashes	CF Score	CS Score	CT Score	Final Score
1	Phoenix	Phoenix	75TH AVE & INDIAN SCHOOL RD	251	1.059	1.355	1.289	1.264
2	Phoenix	Phoenix	67TH AVE & INDIAN SCHOOL RD	273	1.152	1.321	1.181	1.244
3	Phoenix	Phoenix	67TH AVE & MCDOWELL RD	246	1.038	1.304	1.267	1.228
4	Phoenix	Phoenix	99TH AVE & LOWER BUCKEYE RD	316	1.333	1.226	0.909	1.174
5	Glendale	Glendale	51ST AVE & CAMELBACK RD	222	0.937	1.172	1.143	1.106
6	Phoenix/Glendale	Phoenix	51ST AVE & MCDOWELL RD	201	0.848	1.088	1.230	1.063
7	Tempe	Tempe	RURAL RD & UNIVERSITY DR	241	1.017	1.139	0.956	1.063
8	Phoenix/Glendale	Phoenix/Glendale	43RD AVE & BETHANY HOME RD	194	0.819	1.078	1.158	1.033
9	Phoenix	Phoenix	75TH AVE & MCDOWELL RD	215	0.907	1.074	0.970	1.007
10	Phoenix	Phoenix	27TH AVE & CAMELBACK RD	203	0.857	1.074	0.974	0.995
11	Glendale	Glendale	51ST AVE & NORTHERN AVE	210	0.886	1.034	0.970	0.981
12	Mesa	Mesa	SOUTHERN AVE & STAPLEY DR	208	0.878	1.101	0.795	0.969
13	Phoenix	Phoenix	7TH AVE & INDIAN SCHOOL RD	191	0.806	0.973	1.103	0.964
14	Phoenix	Phoenix	75TH AVE & THOMAS RD	192	0.810	1.010	1.008	0.960
15	Phoenix	Phoenix	35TH AVE & BETHANY HOME RD	194	0.819	0.990	1.038	0.959
16	Phoenix/Glendale	Phoenix	43RD AVE & PEORIA AVE	196	0.827	1.061	0.885	0.958
17	Phoenix	Phoenix	35TH AVE & GLENDALE AVE	188	0.793	0.993	1.047	0.957
18	Phoenix	Phoenix	24TH ST & BASELINE RD	204	0.861	1.000	0.918	0.945
19	Phoenix	Phoenix	51ST AVE & INDIAN SCHOOL RD	193	0.814	0.959	1.031	0.941
20	Glendale/Phoenix	Glendale	75TH AVE & CAMELBACK RD	201	0.848	0.986	0.896	0.929
21	Phoenix/Glendale	Phoenix	43RD AVE & NORTHERN AVE	186	0.785	0.949	0.969	0.913
22	Tempe	Tempe	RURAL RD & SOUTHERN AVE	198	0.835	0.980	0.846	0.910
23	Phoenix	Phoenix	43RD AVE & MCDOWELL RD	184	0.776	0.973	0.903	0.906
24	Phoenix	Phoenix	83RD AVE & INDIAN SCHOOL RD	170	0.717	0.946	1.004	0.903
25	Glendale	Glendale	59TH AVE & BETHANY HOME RD	190	0.802	0.943	0.895	0.895
26	Glendale	Glendale	59TH AVE & NORTHERN AVE	184	0.776	0.939	0.851	0.877
27	Phoenix/Glendale	Phoenix	43RD AVE & GLENDALE AVE	190	0.802	0.943	0.818	0.876
28	Phoenix	Phoenix	35TH AVE & BELL RD	150	0.633	0.892	1.079	0.874
29	Phoenix	Phoenix	43RD AVE & THOMAS RD	187	0.789	0.889	0.917	0.871
30	Chandler	Chandler	ARIZONA AVE & WARNER RD	185	0.781	0.956	0.753	0.861
31	Avondale/Goodyear	Avondale	DYSART RD & VAN BUREN ST	184	0.776	0.939	0.763	0.855
32	Phoenix	Phoenix	51ST AVE & THOMAS RD	171	0.722	0.922	0.835	0.850
33	Phoenix	Phoenix	35TH AVE & CAMELBACK RD	177	0.747	0.899	0.825	0.842
34	Glendale	Glendale	67TH AVE & GLENDALE AVE	164	0.692	0.831	0.986	0.835
35	Glendale	Glendale	59TH AVE & THUNDERBIRD RD	199	0.840	0.926	0.638	0.832
36	Phoenix	Phoenix	I 017 & THUNDERBIRD RD	189	0.797	0.929	0.635	0.823
37	Tempe/Phoenix	Tempe	48TH ST & SOUTHERN AVE	168	0.709	0.878	0.810	0.819
38	Peoria	Peoria	83RD AVE & THUNDERBIRD RD	176	0.743	0.895	0.742	0.819
39	Phoenix	Phoenix	32ND ST & THOMAS RD	176	0.743	0.834	0.857	0.817
40	Glendale/Peoria	Glendale	83RD AVE & BELL RD	214	0.903	0.861	0.629	0.814
41	Phoenix	Phoenix	35TH AVE & PEORIA AVE	158	0.667	0.804	0.971	0.811
42	Phoenix	Phoenix	I 017 & PEORIA AVE	194	0.819	0.838	0.701	0.799
43	Phoenix	Phoenix	19TH AVE & UNION HILLS DR	139	0.586	0.774	1.051	0.796
44	Avondale/MCDOT/Tolleson	Avondale	99TH AVE & MCDOWELL RD	200	0.844	0.834	0.664	0.794
45	Phoenix	Phoenix	67TH AVE & THOMAS RD	152	0.641	0.868	0.778	0.789
46	Glendale	Glendale	59TH AVE & BELL RD	174	0.734	0.831	0.756	0.788
47	Avondale/Goodyear	Avondale	DYSART RD & MCDOWELL RD	187	0.789	0.868	0.620	0.786
48	Phoenix	Phoenix	44TH ST & THOMAS RD	166	0.700	0.770	0.904	0.786
49	Tempe	Tempe	APACHE BLVD & RURAL RD	173	0.730	0.804	0.799	0.784
50	Tempe	Tempe	BROADWAY RD & RURAL RD	175	0.738	0.878	0.640	0.784
51	Tempe	Tempe	BASELINE RD & I 010	188	0.793	0.861	0.597	0.778
52	Phoenix	Phoenix	19TH AVE & SOUTHERN AVE	150	0.633	0.780	0.907	0.775
53	Phoenix	Phoenix	7TH ST & UNION HILLS DR	145	0.612	0.845	0.774	0.769
54	Glendale/Phoenix	Glendale	59TH AVE & CAMELBACK RD	173	0.730	0.831	0.655	0.762
55	Phoenix	Phoenix	43RD AVE & INDIAN SCHOOL RD	176	0.743	0.794	0.705	0.759

Top 100 Intersections Ranked by Crash Risk Using 2015-2019 Crash Data (MAG Region)

Rank	Agency(ies)	Signal Owned & Maintained By	Location	Crashes	CF Score	CS Score	CT Score	Final Score
56	Phoenix	Phoenix	7TH ST & CAMELBACK RD	158	0.667	0.801	0.759	0.757
57	Phoenix	Phoenix	59TH AVE & THOMAS RD	164	0.692	0.838	0.658	0.756
58	Phoenix	Phoenix	27TH AVE & BETHANY HOME RD	157	0.662	0.797	0.763	0.755
59	Chandler	Chandler	DOBSON RD & RAY RD	161	0.679	0.868	0.575	0.748
60	Phoenix	Phoenix	48TH ST & BASELINE RD	170	0.717	0.814	0.639	0.746
61	Phoenix	Phoenix	35TH AVE & MCDOWELL RD	154	0.650	0.787	0.742	0.742
62	Phoenix	Phoenix	7TH ST & INDIAN SCHOOL RD	164	0.692	0.787	0.691	0.739
63	Phoenix	Phoenix	19TH AVE & GREENWAY RD	147	0.620	0.824	0.687	0.739
64	Phoenix	Phoenix	35TH AVE & DUNLAP AVE	161	0.679	0.750	0.772	0.738
65	Phoenix	Phoenix	51ST AVE & BASELINE RD	146	0.616	0.780	0.765	0.735
66	Surprise	Surprise	BELL RD & LITCHFIELD RD	180	0.759	0.780	0.619	0.735
67	Phoenix	Phoenix	7TH ST & MCDOWELL RD	155	0.654	0.747	0.763	0.728
68	Scottsdale	Scottsdale	HAYDEN RD & THOMAS RD	168	0.709	0.834	0.518	0.724
69	Tempe	Tempe	BASELINE RD & KYRENE RD	176	0.743	0.770	0.609	0.723
70	Phoenix	Phoenix	19TH AVE & BELL RD	144	0.608	0.757	0.767	0.722
71	Phoenix	Phoenix	44TH ST & MCDOWELL RD	163	0.688	0.743	0.704	0.719
72	Gilbert/Mesa	Gilbert	BASELINE RD & VAL VISTA DR	167	0.705	0.764	0.640	0.718
73	Phoenix	Phoenix	35TH AVE & UNION HILLS DR	138	0.582	0.780	0.721	0.716
74	Tempe	Tempe	BROADWAY RD & PRICE RD	166	0.700	0.777	0.608	0.716
75	Glendale/Phoenix	Glendale	67TH AVE & CAMELBACK RD	148	0.624	0.760	0.697	0.710
76	Mesa	Mesa	DOBSON RD & SOUTHERN AVE	157	0.662	0.801	0.552	0.704
77	Phoenix	Phoenix	35TH AVE & THOMAS RD	143	0.603	0.689	0.830	0.703
78	Phoenix	Phoenix	35TH AVE & NORTHERN AVE	143	0.603	0.767	0.668	0.701
79	Phoenix	Phoenix	19TH AVE & NORTHERN AVE	134	0.565	0.662	0.906	0.699
80	Phoenix	Phoenix	19TH AVE & DUNLAP AVE	118	0.498	0.642	1.010	0.698
81	Phoenix	Phoenix	16TH ST & THOMAS RD	142	0.599	0.713	0.766	0.698
82	Phoenix	Phoenix	16TH ST & CAMELBACK RD	161	0.679	0.764	0.584	0.698
83	Phoenix	Phoenix	19TH AVE & CAMELBACK RD	130	0.549	0.659	0.903	0.692
84	Phoenix	Phoenix	27TH AVE & INDIAN SCHOOL RD	132	0.557	0.679	0.854	0.692
85	Phoenix	Phoenix	35TH AVE & SOUTHERN AVE	126	0.532	0.693	0.848	0.691
86	Phoenix/Glendale	Phoenix	51ST AVE & THUNDERBIRD RD	142	0.599	0.784	0.574	0.685
87	Phoenix	Phoenix	52ND ST & MCDOWELL RD	134	0.565	0.679	0.813	0.684
88	Phoenix	Phoenix	27TH AVE & NORTHERN AVE	137	0.578	0.706	0.740	0.683
89	Phoenix	Phoenix	28TH DR & PEORIA AVE	135	0.570	0.689	0.781	0.682
90	Phoenix	Phoenix	59TH AVE & INDIAN SCHOOL RD	142	0.599	0.753	0.622	0.682
91	Phoenix	Phoenix	44TH ST & CAMELBACK RD	134	0.565	0.669	0.817	0.680
92	Phoenix	Phoenix	40TH ST & BROADWAY RD	145	0.612	0.740	0.615	0.677
93	Glendale/Phoenix	Glendale	83RD AVE & CAMELBACK RD	154	0.650	0.703	0.651	0.677
94	Phoenix	Phoenix	24TH ST & THOMAS RD	151	0.637	0.736	0.586	0.674
95	Phoenix	Phoenix	59TH AVE & MCDOWELL RD	147	0.620	0.743	0.589	0.674
96	Phoenix	Phoenix	16TH ST & INDIAN SCHOOL RD	126	0.532	0.672	0.816	0.673
97	Phoenix	Phoenix	7TH ST & BROADWAY RD	131	0.553	0.736	0.654	0.670
98	Glendale	Glendale	67TH AVE & BELL RD	145	0.612	0.699	0.665	0.669
99	Phoenix	Phoenix	7TH ST & GREENWAY PKWY	136	0.574	0.709	0.662	0.664
100	Phoenix	Phoenix	7TH ST & BETHANY HOME RD	151	0.637	0.723	0.557	0.660

NOTE: Since 2016, MAG has applied a more refined process using geolocation to accurately identify intersection crashes, thereby consolidating crash numbers at a few locations that may have been previously reported as separate intersections in different jurisdictions. This eliminates an error in data for crashes reported at intersections with shared jurisdiction/ownership or crashes at one intersection being recorded under two jurisdictions, based on the reporting officer's agency.

Definitions:

Rank - Numerical representation of the locations place sorted highest to lowest of all locations Final Score.

Agency/ies - Local agency where intersection is located. Multiple agencies are shown where the agency boundary runs through the intersection.

Signal Owned & Maintained By - Agency that owns and maintains the signal

Crashes - Total number of reported crashes at the location during the five-year analysis period (also referred to as Crash Frequency).

CF Score - Crash Frequency Score: the ratio of the crash frequency at the intersection to the highest intersection crash frequency for the region.

CS Score - Crash Severity Score: the ratio of the crash severity value for the intersection to the maximum crash severity value for the region.

CT Score - Crash Type Score: the ratio between CT Cost at a particular intersection to maximum of CT Cost at all intersections in the region.

(For a description of CS and CT scores see MAG Network Screening Methodology for Intersections)

Final Score - Weighted Intersection Safety Score (ISS) = 25% Crash Frequency Score + 50% Crash Severity Score + 25% Crash Type Score.

A detailed description of the Intersection Safety Score is provided in the document "MAG Network Screening Methodology for Intersections", available at the following link:

<http://azmag.gov/LinkClick.aspx?fileticket=L0IMsuxQNYU%3d&tabid=527&portalid=0&mid=3809>