

May 16, 2016

TO: Members of the MAG Transportation Safety Committee

FROM: Dana Alvidrez, City of Chandler, Chair

SUBJECT: MEETING NOTIFICATION AND TRANSMITTAL OF TENTATIVE AGENDA

Tuesday, May 24, 2016 - 10:00 a.m.
MAG Office Building, 2nd Floor, Ironwood Room
302 North First Avenue, Phoenix

A meeting of the MAG Transportation Safety Committee will be held at the time and place noted above. Committee members or their proxies may attend **in person, via videoconference or by telephone conference call**. Those attending by video conference must notify the MAG site three business days prior to the meeting. Those attending by telephone conference call please contact MAG offices for conference call instructions.

Please park in the garage under the MAG building, bring your ticket, parking will be validated. For those using transit, Valley Metro/RPTA will provide transit tickets for your trip. For those using bicycles, please lock your bicycle in the bike rack in the garage.

In 1996, the Regional Council approved a simple majority quorum for all MAG advisory committees. If the Transportation Safety Committee does not meet the quorum requirement, members who have arrived at the meeting will be instructed a legal meeting cannot occur and subsequently be dismissed. Your attendance at the meeting is strongly encouraged.

Pursuant to Title II of the Americans with Disabilities Act (ADA), MAG does not discriminate on the basis of disability in admissions to or participation in its public meetings. Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting MAG. Requests should be made as early as possible to allow time to arrange the accommodation.

If you have any questions regarding the meeting, please contact Sarath Joshua at (602) 254-6300.

TENTATIVE AGENDA

COMMITTEE ACTION REQUESTED

1. Call To Order

For the May 24, 2016 meeting, the quorum requirement is 10 committee members.

2. Approval of April 27, 2016 Meeting Minutes

3. Call to Audience

An opportunity will be provided to members of the public to address the Transportation Safety Committee on items not scheduled on the agenda that fall under the jurisdiction of MAG, or on items on the agenda for discussion but not for action. Members of the public will be requested not to exceed a three minute time period for their comments. A total of 15 minutes will be provided for the Call to the Audience agenda item, unless members request an exception to this limit. Please note that those wishing to comment on action agenda items will be given an opportunity at the time the item is heard.

4. Program Managers Report

The following items will be addressed:

- Avondale STSP Update
- 2016 School Crossing Guard Training Workshops
- RTSIMS Software Update

5. FY2017 RSA & PA Program Enhancements

This agenda item will continue the committee discussion on potential enhancements to the MAG RSA and PA program, by incorporating a data driven process to identify locations for conducting RSAs.

At previous meetings, a handout was provided that listed the Top 100 list of high crash risk intersections, for 2010 to 2014, along with

2. Review and approve the April 27, 2016, meeting minutes.

3. For information.

4. For information and discussion.

5. For information and discussion.

details on predominant crash types and crash severity (See Attachment One). This information was generated using the RTSIMS software. The analysis of crash data was based on suggestions made by local agency staff, RSA team members and RSA consultants, during previous RSAs.

Based on a committee recommendation, a Working Group was formed that included committee members representing local agencies with intersections on the list of Top 100 High Crash Risk Locations. The Working Group met in April to review and make recommendations on possible enhancements to the program as well as to identify potential RSA locations.

The committee will review Working Group recommendations and will have the opportunity to provide further input on the strategies to select locations for conducting RSAs. It is anticipated that, based on this input, a revised list of candidate RSA sites will be prepared for review and recommendation at the July meeting.

6. Safety Performance Measure Final Rule Making

In March 2016, the final rule on safety performance was entered in the Federal Register with an effective date of April 14, 2016. The final rule carried forward the four safety performance measures, previously announced in the advanced notice, by which the states and MPO's must set targets and report significant performance against those targets for, 1) number of fatalities; 2) rate of fatalities per 100 million vehicle miles of travel; 3) number of serious injuries; 4) rate of serious injuries per 100 million vehicle miles of travel. The final rule also included a new fifth performance measure that requires states and MPOs to report on 5) the total of non-motorized fatalities and non-motorized serious injuries.

These performance measures will guide how

6. For information and discussion.

the MAG region will set targets for implementation of safety improvements as well as strategies included in the MAG STSP. An example will be provided for the target that was identified in the STSP for the MAG region, of achieving a three to seven percent reduction in the annual sum of fatal and serious injuries, over the next five years from a specific base year. This target is identical to the target adopted by the state in the 2014 SHSP, it has been tentatively incorporated in the MAG STSP, pending this final rulemaking. The state DOTs are required formally establish the target in response to this rulemaking by August 2017 and MAG has an additional six-months to adopt the MAG target.

The Committee will discuss and provide input on setting targets for the remaining three safety performance measures.

7. Reports by Committee Members on Transportation Safety Activities

Members will be requested to report agency activities or current issues that are related to transportation safety.

8. Next Meeting

The next meeting is scheduled to be held on **Tuesday**, July 26, 2016 at 10:00 a.m. in the MAG **Ironwood Room**.

9. Adjournment

7. For information and discussion.

8. For information and discussion.

DRAFT MINUTES OF
MARICOPA ASSOCIATION OF GOVERNMENTS
TRANSPORTATION SAFETY COMMITTEE MEETING

April 27, 2016
Maricopa Association of Governments
Ironwood Room, Suite 200
302 N. 1st Ave,
Phoenix, AZ 85003

MEMBERS ATTENDING

- # Cristy Robinson, AAA Arizona
- * Tom Burch, AARP
- * Mona Aglan-Swick, ADOT (appointment pending)
- # Heather Hodgeman for Shane Kiesow,
City of Apache Junction
- * Robert Gray, ASU
Tom Peterson, City of Avondale
- * Jason Mahkovtz, City of Buckeye
Dana Alvidrez (Chair), City of Chandler
- # Nick Russo, City of El Mirage
- # Kelly LaRosa, FHWA
Leslie Bubke, Town of Gilbert
Kiran Guntupalli, City of Glendale
- * Alberto Gutier, GOHS
- # Hugh Bigalk, City of Goodyear
Mike Gillespie, Litchfield Park
Angela Horn for Nicolaas Swart,
Maricopa County
Renate Ehm, City of Mesa
- * Jeremy Knapp, Town of Paradise Valley
- # Mannar Tamirisa for Jamal Rahimi,
City of Peoria
Kerry Wilcoxon, City of Phoenix
- * George Williams, City of Scottsdale
Dana Owsiany, City of Surprise
- # Julian Dresang, City of Tempe
- * Adrian Ruiz, RPTA

OTHERS PRESENT

Sarath Joshua, MAG
Margaret Boone, MAG
Eric Nava, MAG
Eric Boyles, ADOT
Doug McCants, Horrocks

BriAnne Turpin, Michael Baker
Maria Deeb, City of Mesa
Paul Lopez, City of Avondale
Brian Fellows, Amec Foster Wheeler

- * Not present or represented by proxy
- # Participated by teleconference
- + Participated by videoconference

1. Call to Order

Chair Dana Alvidrez called the meeting to order at 9:33 a.m.

2. Approval of March 22, 2016 Meeting Minutes

Chair Dana Alvidrez called for a motion to approve the March 22, 2016 meeting minutes. Kerry Wilcoxon made a motion to approve, Renate Ehm seconded and the motion passed unanimously.

3. Call to Audience

Chair Dana Alvidrez made a call to the audience providing an opportunity to members of the public to address the Transportation Safety Committee. None requested.

4. Program Manager's Report

Chair Dana Alvidrez requested Sarath Joshua to report on the items included in the Program Manager's Report.

- City of Avondale's Strategic Transportation Safety Plan: Mr. Joshua asked Margaret Boone to provide the Committee a status on this project. Margaret Boone stated that the consultant has completed the draft final technical memoranda number five outlining the Implementation Plan. The implementation plan also includes consideration of possible countermeasures for couple locations that were identified by the network screening methodology developed in Task four. Two corridors have been identified to be the focus of potential safety improvement projects; McDowell Road and Dysart Road. Further analysis along these corridors using the methodologies identified in Task 4 provided a ranking of crash severity for specific intersection characteristic types. The draft final plan will go to the Avondale City Council in July and the project is anticipated to be complete in August.
- 2016 Crossing Guard Workshop Planning Meeting: Sarath Joshua stated the dates for this year's workshops are July 28th in Phoenix, August 2nd in Mesa, and August 4th in Peoria. The planning group is scheduled to meet with representatives from local agency police departments to discuss enhancements to the presentations given as a key part of the workshops.
- HSIP and Safety Performance Final Rule: Mr. Joshua reported that the US DOT released the final rule in March with an effective date of April 15th. The final rule includes four original proposed measures for number of fatalities, number of serious injuries, rate of fatalities per 100 million vehicle miles traveled and rate of serious injuries per 100 million vehicle miles traveled. A fifth measure was added, based on public comment, for number of bicyclist and pedestrian fatalities and serious injuries. ADOT is required to set Arizona targets for reporting by August 2017. MAG is required to do so by February 2018. There will be an item on the May agenda to discuss the MAG Targets.
- MAG RSA and PA Enhancement Working Group: Mr. Joshua stated that a working group was formed at the recommendation of the committee to discuss enhancements to the MAG RSA and PA program. In addition, the working group will define a data driven strategy to identify locations for the 2016 RSA cycle. The first working group meeting will be held today following a brief break after this meeting.

5. Programming of HSIP funding for Road Safety Projects in FY2017 and 2018

Chair Dana Alvidrez stated that this item on the agenda for discussion and possible action to recommend a list of project for HSIP funding. Sarath Joshua stated that an amount of \$508,000 was made available due to project ineligibility and asked Margaret Boone to report the details of the process resulting in the list of projects listed in Attachment One for consideration by the Committee. Ms. Boone stated that three applications were submitted on Thursday March 24th; one each from the City of Glendale and the City of Phoenix for systemic safety improvement projects, and one from the Town of Gilbert for a spot improvement project. The HSIP funds requested in the three applications totals an amount of \$963,746. Kiran Guntupalli from the City of Glendale, Kerry Wilcoxon from the City of Phoenix, and Leslie Bubke from the Town of Gilbert each provided a brief presentation to the committee highlighting their projects in terms of HSIP eligibility criteria. Mr. Joshua stated the options for the committee in coming up with a recommendation of a list of projects seeing that the amount of funding requested exceeds the amount available. Ms. Boone noted that a project ranking sheets have been provided to the committee at their place as well as to those attending by phone. Ms. Boone stated that the committee could also consider forwarding all three project applications to ADOT for consideration of eligibility and possible funding in the states FY2019 HSIP programming. Eric Boyles from ADOT agreed with the strategy to include all three projects in the recommendation to ADOT. Committee members indicated the desire to exercise the ranking option described by Mr. Joshua. Ms. Boone requested that committee members indicate their ranking for each project on the sheet and hand it to MAG staff, or send in an e-mail to mboone@azmag.gov if attending by teleconference. Chair Dana Alvidrez read the results of the ranking exercise in the order of their cumulative rank of the projects as 1) City of Glendale, 2) City of Phoenix, and 3) Town of Gilbert. The City of Phoenix and the City of Glendale both agreed to make adjustments to their applications to increase the amounts they would fund with local dollars in order to decrease the amount of HSIP requested leaving the total amount required to implement their projects the same. Chair Dana Alvidrez made a request for a motion to **recommend the list of three safety projects; two to be funded with the available HSIP funds sub-allocated to MAG in FY2017-2018, and one to be considered for the states FY2019 HSIP funding.** Kerry Wilcoxon made the motion, Leslie Bubke seconded and the motion passed unanimously.

6. Reports by Committee Members on Transportation Safety Activities

Chair Dana Alvidrez requested reports from committee members on transportation safety related activities at local agencies. Kiran Guntupalli reported that the sign management and installation project that was awarded for funding utilizing HSIP is currently underway in the City of Glendale. Tom Peterson provided information on the Avondale Strategic Transportation Safety Plan stating that the Implementation Plan will be taken to City Council for a work session in July. Mike Gillespie noted the City of Litchfield Park sign upgrade program, procured by ADOT and to be installed by City staff, will be complete by the end of the year. Mr. Joshua requested to hear from Committee members as to how local agencies are addressing the recent termination of the Interim Approval of the Clearview Font for guide signs. Renate Ehm stated that the City of Mesa is not having any issues going back to the standard FHWA font. Mr. Wilcoxon also noted that the City of Phoenix is simply using the FHWA standard font for signs that need to be replaced. Chandler is working on updating their standards to be in compliance. Avondale and Gilbert are doing the same thing with no issues.

7. Request for Future Agenda Items

Chair Dana Alvidrez requested future agenda items of interest to Committee members. None heard.

8. Next Meeting

Chair Dana Alvidrez stated that the next meeting is scheduled for Tuesday, May 24, 2016 at 10:00 a.m. in the Ironwood Room.

9. Adjournment

Chair Dana Alvidrez adjourned the meeting at 10:33 a.m.

2010 - 2014 High Crash Intersections by Safety Score (MAG Region) - KABCO

Rank	Agency	Location	Crashes	CF Score	CS Score	CT Score	Final Score	Rank from K and A Only List	Predominant Crash Frequency	Predominant Crash Type Severity					Predominant Crash Type	Pedestrian					Bicyclist					PED/BIKE Crash Frequency	Notes
										K	A	B	C	O		K	A	B	C	O	K	A	B	C	O		
1	Phoenix	INDIAN SCHOOL RD & 59TH AVE	183	0.69	1.00	0.63	0.86	13	71	2	0	9	18	42	LEFT_TURN	0	2	0	0	0	0	0	0	1	1	4	*42 RE with 1 B, 21 ANGLE with 2 A, 3 OTHER with 1 A
2	Phoenix	THOMAS RD & 43RD AVE	193	0.73	0.55	0.76	0.63	8	68	0	4	12	15	37	LEFT_TURN	1	1	2	1	0	0	0	2	1	0	8	*47 RE with 2 B, 28 ANGLE with 1 A, and 6 OTHER with 1 K and 1 A
3	Surprise	EL MIRAGE RD & BELL RD	88	0.33	0.83	0.29	0.62		25	0	0	0	3	22	REAR_END	0	0	0	1	0	0	0	0	0	0	1	*22 LT with 2 K an 1 A
4	Glendale	PEORIA AVE & 51ST AVE	142	0.53	0.71	0.45	0.62		42	0	4	6	7	25	LEFT_TURN	0	0	0	1	0	0	0	0	1	0	2	*36 RE with 2 B, 29 ANGLE with 2 B
5	Glendale	OLIVE AVE & 59TH AVE	266	1.00	0.36	1.00	0.62	6	80	0	1	4	21	54	REAR_END	0	1	4	2	1	0	0	1	2	0	11	*70 LT with 16 B, SINGLE SSWSD HEAD ON ANGLE each with 1 A
6	Tempe	SOUTHERN AVE & RURAL RD	186	0.70	0.58	0.63	0.61	3	76	0	1	1	15	59	REAR_END	0	2	2	0	1	0	1	4	2	3	15	*32 LT with 4 A, 25 ANGLE with 2 A, 3 SINGLE with 1 A
7	Phoenix	NORTHERN AVE & 7TH ST	121	0.45	0.73	0.38	0.60	15	36	1	4	4	6	21	LEFT_TURN	0	1	0	0	0	0	0	0	0	0	1	*35 RE, 1 ANGLE with 1 K and 1 A, 2 OTHER with 1 A
8	Phoenix	INDIAN SCHOOL RD & 51ST AVE	182	0.68	0.55	0.65	0.60	5	54	0	2	6	14	32	REAR_END	0	1	2	1	0	0	0	1	1	0	6	*51 LT with 1 A, 2 ANGLE with 1 K and 1 A, 2 SINGLE with 1 A, 2 OTHER with 1 A
9	Phoenix	THOMAS RD & 75TH AVE	167	0.63	0.58	0.60	0.59	4	51	1	2	6	18	24	LEFT_TURN	0	2	2	1	0	0	0	0	0	0	5	*51 RE but with 1 K
10	Phoenix	GLENDALE AVE & 43RD AVE	115	0.43	0.68	0.47	0.59	53	46	0	1	4	11	30	REAR_END	1	1	1	1	0	1	0	1	1	0	7	*34 LT with 1 A, 20 ANGLE with 1 A, 4 OTHER with 2 K
11	Phoenix	BELL RD & 43RD AVE	93	0.35	0.72	0.35	0.57	50	32	1	4	2	12	13	LEFT_TURN	1	1	0	1	0	0	0	0	0	0	3	*26 RE, 1 OTHER with 1 K
12	Avondale	MCDOWELL RD & DYSART RD	154	0.58	0.59	0.47	0.56	2	69	0	4	3	8	54	REAR_END	0	1	0	0	0	0	0	3	1	2	7	*38 LT with 1 K and 6 A, 22 ANGLE with 2 A, 3 SINGLE with 1 A
13	Phoenix	INDIAN SCHOOL RD & 67TH AVE	203	0.76	0.43	0.76	0.56	1	61	0	4	7	20	30	LEFT_TURN	0	4	1	0	0	0	1	0	0	0	6	*57 RE with 1 B, 25 ANGLE with 2 A, 4 OTHER with 2 A, 2 SINGLE with 1 A
14	Glendale	NORTHERN AVE & 59TH AVE	183	0.69	0.49	0.61	0.56	56	57	0	1	8	11	37	REAR_END	1	0	2	3	0	0	0	2	0	0	8	*49 LT with 1 A, 23 ANGLE with 1 A, 3 OTHER with 1 K
15	Phoenix	GREENWAY RD & 32ND ST	138	0.52	0.52	0.58	0.53	25	50	0	4	5	18	23	LEFT_TURN	0	1	2	1	2	0	0	2	1	0	9	*33 RE with 1 B, 2 ANGLE with 1 A
16	Phoenix	MCDOWELL RD & 44TH ST	168	0.63	0.44	0.68	0.52	55	62	1	2	6	21	32	LEFT_TURN	0	1	1	3	0	0	0	0	2	0	7	*34 RE, 28 ANGLE with 1 A
17	Tempe	SOUTHERN AVE & 48TH ST	89	0.33	0.67	0.27	0.52		32	0	1	1	6	24	REAR_END	0	2	1	0	0	0	0	0	0	0	3	*29 LT 1 K and 2 A
18	Phoenix	INDIAN SCHOOL RD & 27TH AVE	144	0.54	0.51	0.55	0.52		52	0	0	4	14	34	REAR_END	0	1	2	2	0	0	0	0	0	1	6	*35 LT with 2 A, 22 ANGLGE with 3 A and 1 OTHER with 1 K
19	Phoenix	BELL RD & 19TH AVE	147	0.55	0.49	0.58	0.52		48	0	1	5	14	28	LEFT_TURN	1	2	2	1	0	0	0	0	0	0	6	*45 RE with 1 A, 18 ANGLE with 1 A, 5 OTHER with 1 K
20	Phoenix	CAMELBACK RD & 7TH AVE	108	0.41	0.60	0.39	0.52		108	2	0	6	28	72	REAR_END	1	0	0	1	2	0	0	0	1	2	7	*19 LT with 2 B, 1 OTHER with 1 K
21	Phoenix	BELL RD & 35TH AVE	135	0.51	0.53	0.49	0.52	17	46	1	3	4	13	25	LEFT_TURN	0	2	0	0	0	0	1	0	0	0	3	*32 RE with 4 B, 18 ANGEL with 3 A, 4 OTHER with 1 A
22	Phoenix	BELL RD & 51ST AVE	121	0.45	0.55	0.46	0.51	22	41	1	2	12	13	13	LEFT_TURN	0	0	1	1	0	0	0	0	0	1	3	*34 RE with 2 A, 17 ANGLE with 2 A, SINGLE with 1 A
23	Glendale	BELL RD & 83RD AVE	212	0.80	0.42	0.48	0.51		116	0	0	4	26	86	REAR_END	0	0	1	1	0	0	0	0	2	0	4	*25 ANGLE, 23 LT with 1 K
24	Phoenix	THOMAS RD & 32ND ST	154	0.58	0.46	0.57	0.51		43	0	0	2	10	31	REAR_END	0	2	2	1	0	0	0	1	0	1	7	*39 LT with 3 A, 20 ANGLE with 1 K and 1 A
25	Mesa	ELLSWORTH RD & BASELINE RD	77	0.29	0.64	0.31	0.50		24	1	1	6	5	11	LEFT_TURN	0	0	0	2	0	0	0	1	2	0	5	*17 ANGLE with 1 K and 2 A
26	Phoenix	HAPPY VALLEY RD & 67TH AVE	80	0.30	0.64	0.30	0.50		37	0	2	5	8	22	LEFT_TURN	0	0	0	0	0	0	1	0	0	1	2	*10 ANGLE with 1 K and 1 A, 2 OTHER with 1 K
27	Phoenix	UNION HILLS DR & CAVE CREEK RD	110	0.41	0.57	0.39	0.50	10	42	1	3	15	12	11	LEFT_TURN	0	1	0	0	0	0	0	1	0	2	*31 RE with 1 A, 12 ANGLE with 2 A, 2 OTHER with 1 A	
28	Phoenix	HIGHLAND AVE & 16TH ST	79	0.30	0.62	0.36	0.50		18	1	0	2	6	9	ANGLE	0	0	2	1	0	1	0	2	2	0	8	*17 RE with 1 A, 10 LT with 1 A, 3 OTHER with 1 K
29	Phoenix	INDIAN SCHOOL RD & 19TH AVE	133	0.50	0.49	0.52	0.50	30	46	0	2	5	16	23	LEFT_TURN	0	1	0	2	0	0	0	2	0	0	5	*28 RE with 1 A, 2 ANGLE with 1 K and 2 A, 4 OTHER with 1 A
30	Phoenix	GREENWAY RD & 40TH ST	72	0.27	0.63	0.32	0.50		22	1	1	4	4	12	LEFT_TURN	1	0	0	2	0	0	0	2	2	0	7	*20 RE, 6 ANGLE, 3 OTHER with 1 K
31	Chandler	WARNER RD & ARIZONA AVE	146	0.55	0.48	0.47	0.49	29	50	0	0	1	11	38	REAR_END	0	0	1	0	0	0	1	0	0	1	3	*34 LT with 2 A, 4 UNK with 2 A
32	Phoenix	MCDOWELL RD & 43RD AVE	157	0.59	0.41	0.65	0.49		59	0	1	5	11	42	LEFT_TURN	0	0	2	3	0	0	1	2	0	0	8	*41 RE with NO K or A
33	Phoenix	NORTHERN AVE & 43RD AVE	116	0.44	0.51	0.47	0.49	37	43	0	4	8	12	19	LEFT_TURN	0	1	2	1	1	0	0	1	1	1	8	*22 Angle with 1 K
34	Phoenix	GREENWAY RD & 43RD AVE	58	0.22	0.66	0.23	0.49		21	1	2	4	9	5	ANGLE	0	0	1	0	0	0	0	0	0	0	1	*6 LT with 1 A, 4 SINGLE with 1 A
35	Chandler	RAY RD & ALMA SCHOOL RD	97	0.36	0.61	0.22	0.48		40	0	1	0	6	33	REAR_END	0	0	0	0	0	0	0	0	0	0	0	*13 LT no K or A
36	Tempe	RURAL RD & BROADWAY RD	160	0.60	0.44	0.47	0.48	86	69	0	0	4	12	53	REAR_END	0	1	0	3	1	0	0	0	2	0	7	*25 LT with 1 K and 1 A
37	Phoenix	BASELINE RD & 24TH ST	138	0.52	0.46	0.50	0.48	65	52	0	1	4	17	30	REAR_END	0	0	2	0	0	0	0	2	2	3	9	*47 LT with 2 A
38	Phoenix	CACTUS RD & 43RD AVE	129	0.48	0.48	0.42	0.47	49	40	0	3	6	7	24	LEFT_TURN	0	0	1	1	0	0	0	0	0	0	2	*34 RE, 14 ANGLE with 1 K
39	Phoenix	INDIAN SCHOOL RD & 16TH ST	134	0.50	0.42	0.55	0.47	88	38	0	0	1	7	30	REAR_END	0	1	2	0	1	0	0	3	0	1	8	*36 LT with 1 A, 19 ANGLE with 1 K and 1 A
40	Phoenix	BUCKEYE RD & 35TH AVE	103	0.39	0.51	0.40	0.46	11	48	1	1	4	15	27	REAR_END	0	0	1	0	0	0	1	0	1	1	4	*34 ANGLE with 9 A
41	Phoenix	CAMELBACK RD & 16TH ST	141	0.53	0.41	0.57	0.46		39	0	0	4	9	26	LEFT_TURN	0	0	2	4	0	0	1	0	1	0	8	*1 SINGLE with 1 K hitting a sign support
42	Mesa	SOUTHERN AVE & DOBSON RD	201	0.76	0.30	0.65	0.46	18	83	0	1	9	21	52	REAR_END	0	0	3	1	1	0	1	4	1	0	11	*41 ANGLE with 3 A
43	Phoenix	UNION HILLS DR & 19TH AVE	122	0.46	0.46	0.46	0.46	47	39	1	2	7	7	22	LEFT_TURN	0	1	2	0	0	0	0	1	0	0	4	*31 RE with 1 A
44	Glendale	THUNDERBIRD RD & 59TH AVE	206	0.77	0.29	0.62	0.45	43	63	0	0	2	13	48	REAR_END	0	0	0	0	1	0	1	4	2	2	10	*43 LT with 1 A, 39 ANGLE with 2 A
45	Phoenix	PARADISE VILLAGE PKWY & CACTUS RD	63	0.24	0.58	0.29	0.45		24	0	0	1	5	18	LEFT_TURN	1	0	0	1	0	0	0	1	0	0	3	*17 ANGLE with 1 K and 1 A
46	Scottsdale	SCOTTSDALE RD & OSBORN RD	53	0.20	0.61	0.24	0.45		16	0	0	1	4	11	REAR_END	1	0	3	0	0	0	0	0	0	0	4	*10 LT with 1 K and 1 A
47	Tempe	BASELINE RD & I 0101	264	0.99	0.22	0.61	0.45		93	0	0	3	19	71	REAR_END	0	1	0	1	0	0	0	2	1	2	7	*42 LT with 1 A
48	Phoenix	BASELINE RD & 19TH AVE	103	0.39	0.50	0.35	0.45	20	28	0	0	4	7	17	REAR_END	0	1	0	0	0	0	0	1	0	0	2	*21 LT with 5 A

Rank	City	Address	CF	CS	CT	Final	Rank from K and A	Predominant Crash	Predominant Crash Type Severity					Predominant	Pedestrian					Bicyclist					PED/BIKE Crash	Notes		
									1	2	3	4	5		1	2	3	4	5	1	2	3	4	5				
49	Phoenix	DUNLAP AVE & 35TH AVE	177	0.67	0.31	0.63	0.45	14	56	0	3	5	17	31	LEFT_TURN	0	1	3	0	1	0	0	2	1	0	8	*46 RE with 1 A	
50	Phoenix	BASELINE RD & 48TH ST	106	0.40	0.47	0.42	0.44	40	49	1	1	5	8	34	REAR_END	0	0	1	0	0	0	0	2	1	1	5	*40 LT with 3 A	
51	Phoenix	PEORIA AVE & I 017	155	0.58	0.39	0.47	0.44		68	0	0	7	17	44	REAR_END	0	1	1	0	0	0	0	4	2	0	8	*58 LT with 1 A, 34 ANGLE with 1 K and 1 A	
52	Phoenix	GREENWAY PKWY & 16TH ST	47	0.18	0.61	0.20	0.44		12	1	1	2	4	4	LEFT_TURN	1	0	0	0	0	0	0	1	1	0	3	*11 ANGLE with 1 A	
53	Gilbert	WARNER RD & VAL VISTA DR	116	0.44	0.44	0.41	0.43	61	34	0	0	2	6	26	REAR_END	0	0	0	0	1	0	2	1	1	3	8	*25 ANGLE with 1 A, 22 LT with 2 A	
54	Scottsdale	THOMAS RD & SCOTTSDALE RD	123	0.46	0.44	0.37	0.43	91	60	0	1	9	8	42	REAR_END	1	1	0	2	0	0	0	2	0	0	6	*15 ANGLE with 3 A	
55	Tempe	HARDY DR & BASELINE RD	109	0.41	0.42	0.45	0.43		26	0	2	9	4	11	LEFT_TURN	0	0	2	2	0	0	0	3	2	1	10	*25 RE with 1 K, 24 ANGLE with 1 A	
56	Phoenix	THOMAS RD & 67TH AVE	171	0.64	0.28	0.62	0.42	28	65	0	2	8	25	30	LEFT_TURN	0	0	1	3	0	0	0	0	1	0	5	*47 RE with no K or A, 1 ANGLE with 1 A	
57	Tempe	UNIVERSITY DR & RURAL RD	214	0.80	0.19	0.74	0.42		84	0	0	3	9	72	REAR_END	0	0	1	1	3	0	0	7	2	3	17	*43 LT with 12 B	
58	Phoenix	MCDOWELL RD & 67TH AVE	196	0.74	0.24	0.63	0.42	44	65	0	1	8	15	41	LEFT_TURN	0	0	0	1	1	0	1	0	0	0	3	*59 RE with no K or A, 14 ANGLE with 1 A	
59	Phoenix	INDIAN SCHOOL RD & 7TH ST	132	0.50	0.38	0.45	0.42		40	0	0	1	10	29	REAR_END	0	0	1	2	0	0	0	1	0	0	4	*37 LT with 1 A	
60	Glendale	GLENDALE AVE & 67TH AVE	146	0.55	0.27	0.74	0.42	27	38	0	5	4	10	19	LEFT_TURN	0	2	1	1	3	0	0	1	3	1	12	*37 RE with no K or A, 5 Head On with 1 A	
61	Tempe	MCCLINTOCK DR & APACHE BLVD	134	0.50	0.40	0.38	0.42		69	0	0	3	8	58	REAR_END	0	1	1	0	0	0	1	2	3	0	8	*15 ANGLE with 1 K and 1 A, 9 LT with 1 A	
62	Phoenix	THUNDERBIRD RD & 43RD AVE	91	0.34	0.46	0.35	0.41	77	32	0	3	9	11	9	LEFT_TURN	1	0	0	1	0	0	0	0	1	0	3	*2 OTHER with 1 K	
63	Phoenix	THUNDERBIRD RD & I 017	187	0.70	0.25	0.60	0.41	38	96	0	0	6	25	65	REAR_END	0	3	1	2	0	0	0	3	0	0	9	*47 LT with no K or A, 46 ANGLE with 2 A	
64	Chandler	RAY RD & MCCLINTOCK DR	119	0.45	0.42	0.35	0.41	97	33	0	0	0	7	26	REAR_END	0	0	0	0	0	0	1	0	1	0	2	*28 LT with 1 K and 1 A, 15 ANGLE with 2 A	
65	Phoenix	CAMELBACK RD & 27TH AVE	177	0.67	0.25	0.63	0.41		53	0	3	11	11	28	LEFT_TURN	0	0	2	0	0	0	0	1	1	0	4	*52 RE with 3 B	
66	Phoenix	UNION HILLS DR & 32ND ST	59	0.22	0.55	0.18	0.41		18	2	0	0	2	14	LEFT_TURN	0	0	0	0	0	0	0	0	0	0	0	0	
67	Phoenix	THOMAS RD & 36TH ST	102	0.38	0.41	0.43	0.41	95	32	0	0	1	4	27	REAR_END	1	1	1	1	1	0	0	3	0	0	8	*30 LT with 1 A, 2 OTHER with 1 K and 1 A	
68	Phoenix	MCDOWELL RD & 32ND ST	146	0.55	0.29	0.63	0.41	12	54	0	3	8	14	29	LEFT_TURN	0	0	0	3	1	0	1	1	3	1	10	*26 ANGLE with 3 A	
69	Phoenix	GREENWAY RD & 19TH AVE	100	0.38	0.42	0.40	0.40		34	0	0	6	9	19	LEFT_TURN	0	0	1	1	1	0	0	0	0	0	3		
70	Peoria	UNION HILLS DR & 83RD AVE	117	0.44	0.43	0.30	0.40	70	49	1	3	0	2	43	REAR_END	0	0	0	0	0	0	2	0	2	0	4	*22 LT, 21 ANGLE with 1 A	
71	Phoenix	MCDOWELL RD & 16TH ST	100	0.38	0.41	0.41	0.40	99	31	0	2	3	8	18	LEFT_TURN	1	1	0	0	2	0	0	1	1	0	6	*31 RE, 14 ANGLE with 1 A	
72	Gilbert	VAL VISTA DR & ELLIOT RD	116	0.44	0.40	0.36	0.40	67	39	0	2	0	3	34	LEFT_TURN	0	0	1	0	0	1	1	0	0	0	3	*2 OTHER with 1 K and 1 A, 1 HEAD_ON with 1 A	
73	Avondale	VAN BUREN ST & DYSART RD	135	0.51	0.39	0.33	0.40		59	0	2	1	5	51	REAR_END	0	0	0	0	0	0	1	1	0	0	2	*3 SINGLE with 1 K, 29 LT, 10 ANGLE with 1 A	
74	Phoenix	THOMAS RD & CENTRAL AVE	69	0.26	0.42	0.46	0.40	73	24	0	0	4	10	10	REAR_END	1	3	3	2	1	0	0	2	0	0	12	*10 OTHER with 1 K and 3 A, 8 LT with 1 A, 7 ANGLE with 1 A	
75	Chandler	WARNER RD & ALMA SCHOOL RD	118	0.44	0.41	0.29	0.39		54	1	1	2	13	37	REAR_END	0	0	0	0	0	0	0	2	0	2	4		
76	Phoenix	INDIAN SCHOOL RD & 75TH AVE	137	0.52	0.31	0.51	0.39	9	58	0	4	11	14	29	LEFT_TURN	0	0	0	0	1	0	0	1	1	1	4	*18 ANGLE with 3 A	
77	Glendale	BELL RD & 75TH AVE	125	0.47	0.39	0.30	0.39		68	0	1	3	14	50	REAR_END	0	0	1	0	0	0	2	0	1	2	6	*26 SIDESWIPE SD, 17 ANGLE with 1 K and 2 A	
78	Phoenix	MCDOWELL RD & 35TH AVE	105	0.39	0.39	0.37	0.39		26	1	0	1	7	17	ANGLE	0	0	0	0	0	0	0	2	1	0	3	*26 RE with no K or A, 25 LT with 1 A	
79	Glendale	BELL RD & 59TH AVE	199	0.75	0.18	0.65	0.39		62	0	0	1	15	46	REAR_END	0	1	0	1	2	0	0	0	1	0	5	*31 LT with 1 A, 1 UNK with 1 A	
80	Phoenix	INDIAN SCHOOL RD & 43RD AVE	122	0.46	0.37	0.35	0.39		62	0	0	1	15	46	REAR_END	0	0	2	0	0	0	0	0	0	1	3	*31 LT with 1 A	
81	Phoenix	THOMAS RD & 16TH ST	151	0.57	0.27	0.55	0.39	23	42	0	4	8	6	24	LEFT_TURN	0	1	1	1	2	0	0	3	0	0	8	*31 ANGLE with 1 A, 40 RE with no K or A, One Head on A	
82	Glendale	GLENDALE AVE & 75TH AVE	96	0.36	0.37	0.44	0.38		27	0	0	5	8	14	LEFT_TURN	1	0	1	0	1	0	0	1	2	1	7	*18 ANGLE with 2 B, OTHER with 1 K	
83	Phoenix	CAMELBACK RD & 20TH ST	94	0.35	0.39	0.41	0.38		32	0	0	3	9	20	REAR_END	1	1	2	1	0	0	0	1	0	1	7	*16 LT with 2 B, OTHER with 1 K	
84	Phoenix	THOMAS RD & 59TH AVE	164	0.62	0.24	0.58	0.38	43	60	0	2	6	18	34	LEFT_TURN	0	2	1	1	0	0	0	1	0	0	5	*54 RE with 1 A	
85	Mesa	MCDOWELL RD & S 2020	26	0.10	0.57	0.09	0.38		9	0	2	0	3	4	LEFT_TURN	0	0	0	0	0	0	0	0	0	0	0		
86	Phoenix	CAMELBACK RD & 35TH AVE	167	0.63	0.24	0.56	0.38	68	48	0	1	2	14	31	LEFT_TURN	0	1	3	0	0	0	1	0	1	0	6	*48 RE with 2 B, 21 ANGLE with 2 A	
87	Phoenix	INDIAN SCHOOL RD & 32ND ST	90	0.34	0.38	0.40	0.38		27	0	0	2	6	19	LEFT_TURN	1	1	1	0	0	0	0	3	2	0	8	*14 RE with 1 B, 2 OTHER with 1 K and 1 A	
88	Glendale	PEORIA AVE & 59TH AVE	171	0.64	0.25	0.49	0.38	36	62	0	0	4	14	44	REAR_END	0	0	0	0	1	0	0	2	1	0	4	*34 LT with 2 A, 16 ANGLE with 1 A	
89	Phoenix	INDIAN SCHOOL RD & CENTRAL AVE	114	0.43	0.37	0.32	0.37		49	0	0	3	8	38	REAR_END	0	0	1	1	0	0	0	0	0	0	2	*17 LT with 3 B, 3 OTHER with 1 K	
90	Mesa	STAPLEY DR & SOUTHERN AVE	160	0.60	0.23	0.53	0.37	34	73	0	1	5	9	58	REAR_END	0	0	2	1	3	0	0	4	0	0	10	*19 LT with 3 A, 2 SINGLE with 1 A	
91	Phoenix	GLENDALE AVE & 35TH AVE	125	0.47	0.23	0.68	0.37	72	41	0	0	8	11	22	LEFT_TURN	0	2	5	1	2	0	0	0	1	0	11	*29 RE with 4 B, 1 SINGLE A, 6 OTHER with 1 A	
92	Gilbert	MCQUEEN RD & ELLIOT RD	104	0.39	0.38	0.29	0.37		30	0	1	0	6	23	REAR_END	0	0	0	0	0	0	0	1	1	0	2	*28 LT with 2 A, 19 ANGLE with 1 K	
93	Phoenix	BELL RD & 20TH ST	26	0.10	0.54	0.12	0.37		4	0	0	2	0	2	REAR_END	1	0	0	0	0	0	0	0	1	0	2	*4 LT with 1 B, 4 ANGLE with 1 B, 1 OTHER with 1 K	
94	Phoenix	PEORIA AVE & 35TH AVE	138	0.52	0.25	0.55	0.37	60	39	0	1	4	9	25	REAR_END	0	0	3	0	0	0	0	1	0	1	5	*32 LT with 3 A, 19 ANGLE with 1 A	
95	Buckeye	YUMA RD & WATSON RD	82	0.31	0.39	0.33	0.36		23	0	3	2	8	10	LEFT_TURN	1	0	0	1	0	0	0	0	2	1	5	*22 RE with 1 B, 10 ANGLE with 2 B, 3 OTHER with 1 K	
96	Phoenix	ROSE LN & 27TH AVE	13	0.05	0.54	0.11	0.36		18	0	2	4	5	7	ANGLE	2	0	0	0	0	0	1	1	0	0	4	*9 LT with 2 B, 6 RE, 2 Other with 2 K	
97	Phoenix	MCDOWELL RD & 40TH ST	89	0.33	0.35	0.39	0.36		26	0	0	7	5	14	LEFT_TURN	0	0	2	1	0	0	0	1	2	0			