


Submitted by  
*Indian Nations  
Council of Governments*



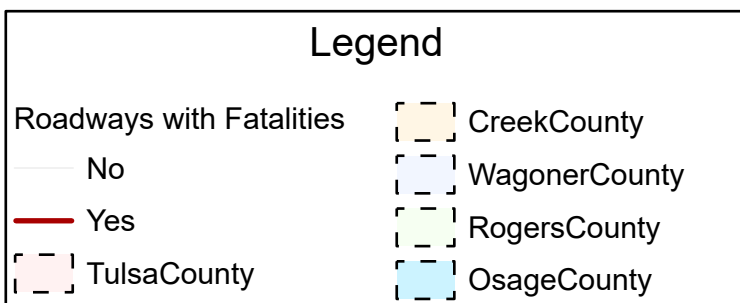
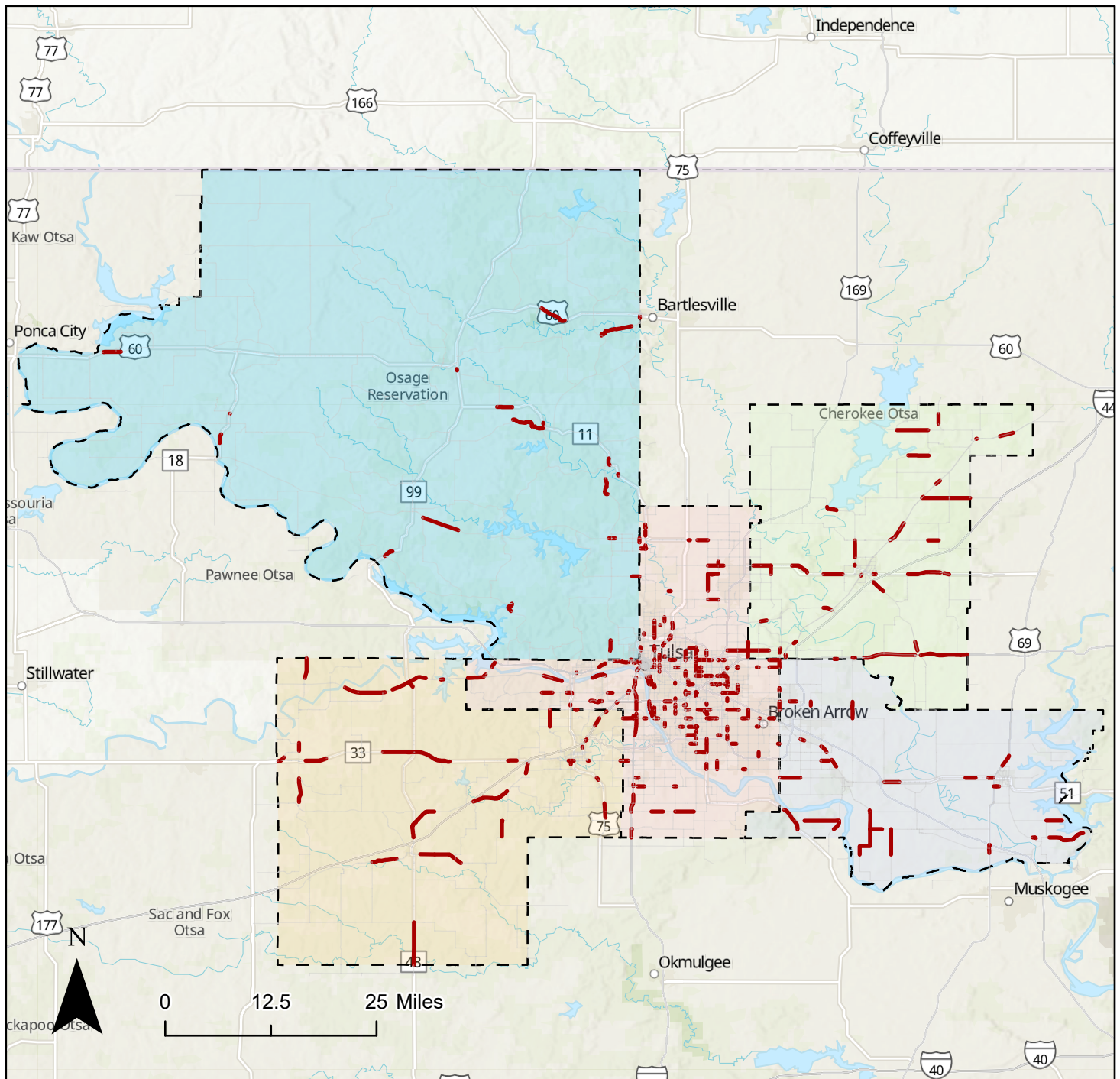
**TRAVEL  
WITH  
CARE**



**Appendices  
C-I:  
Reports,  
Resolution,  
and Cost  
Estimates**

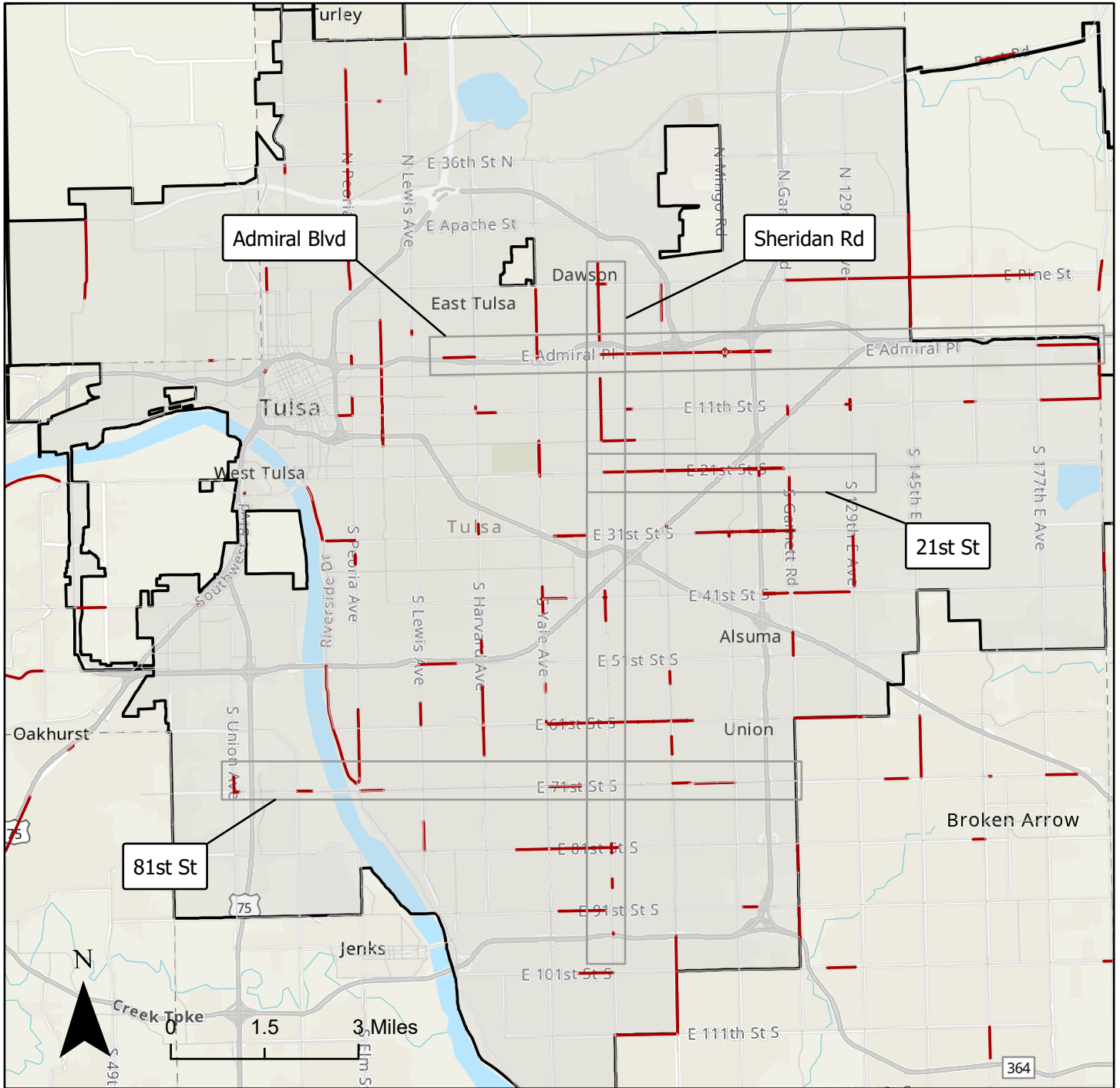
# Roadway Crash Fatalities (2016-2020)

## Indian Nations Council of Government (INCOG)



Data sourced from ODOT Safe-T (2016-2020) and INCOG.

# Roadway Crash Fatalities (2016-2020) City of Tulsa

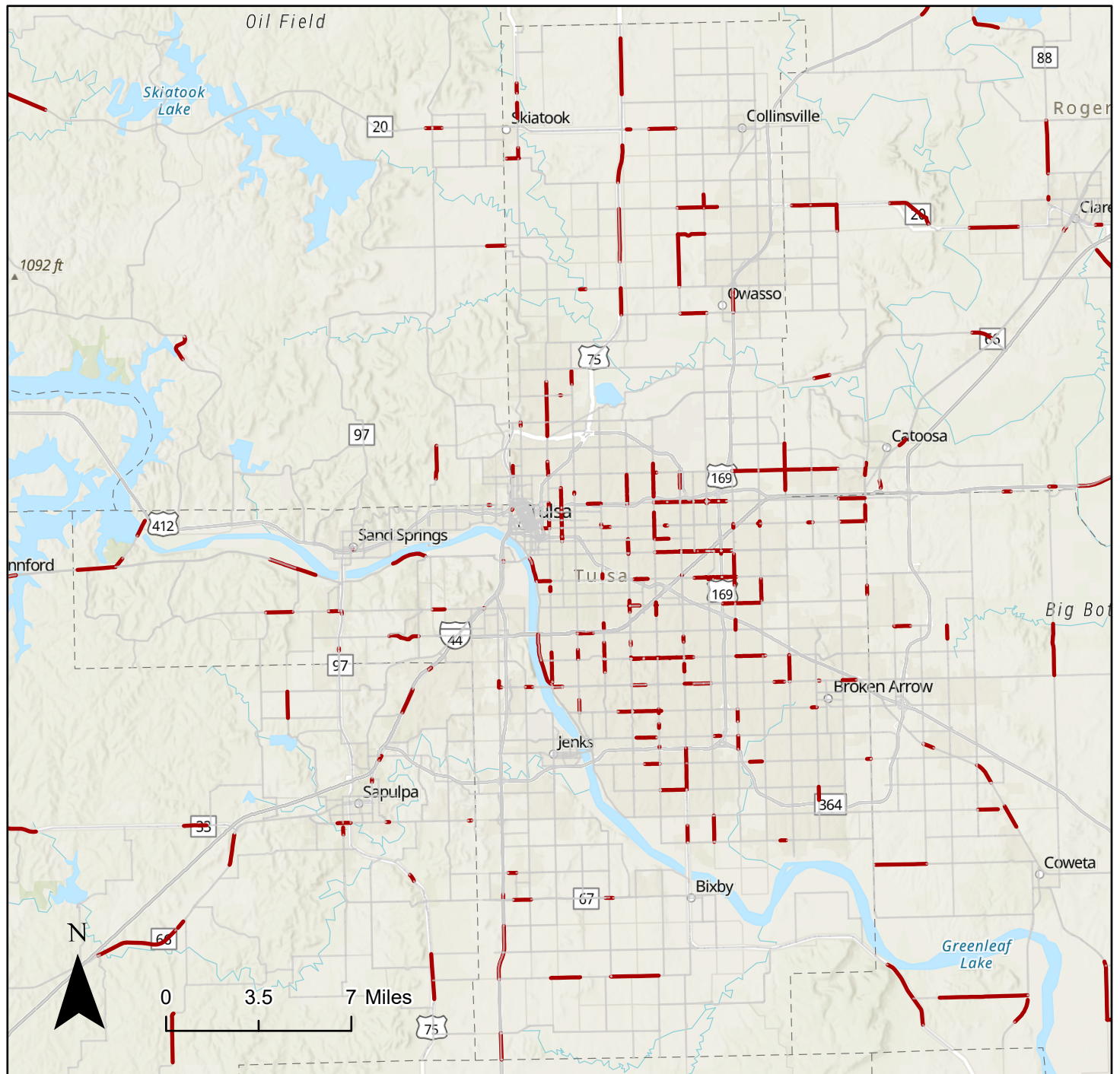


**Legend**

- No
- Yes
- ⌈ ⌋ Tulsa County
- ▭ City of Tulsa

Data sourced from ODOT Safe-T (2016-2020) and INCOG.

# Roadway Crash Fatalities (2016-2020) Tulsa County



**Legend**

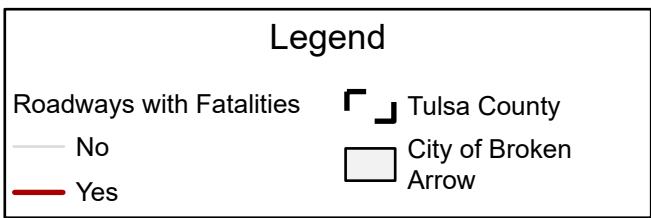
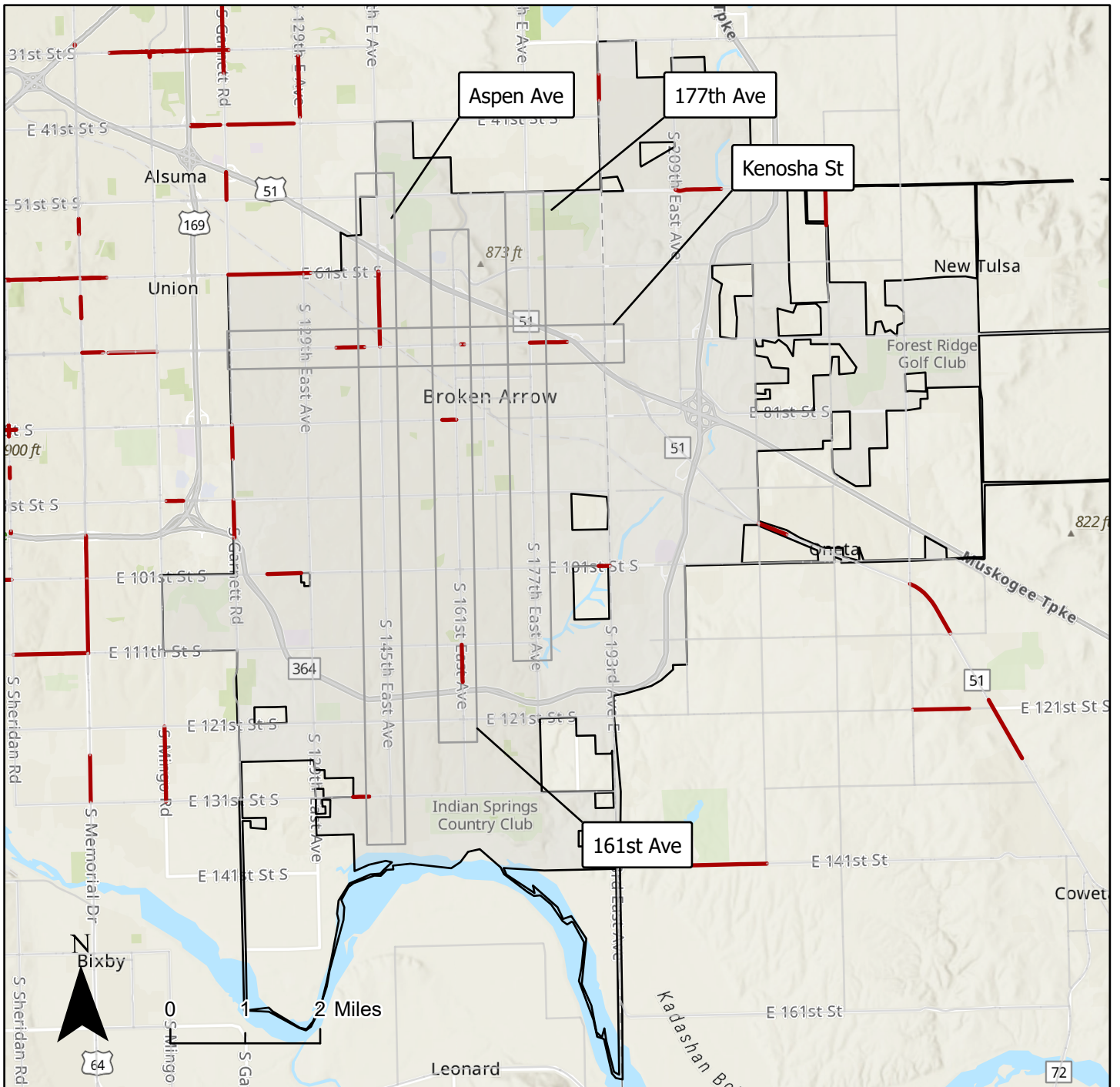
Roadways with Fatalities

- No
- Yes

Tulsa County

Data sourced from ODOT Safe-T (2016-2020) and INCOG.

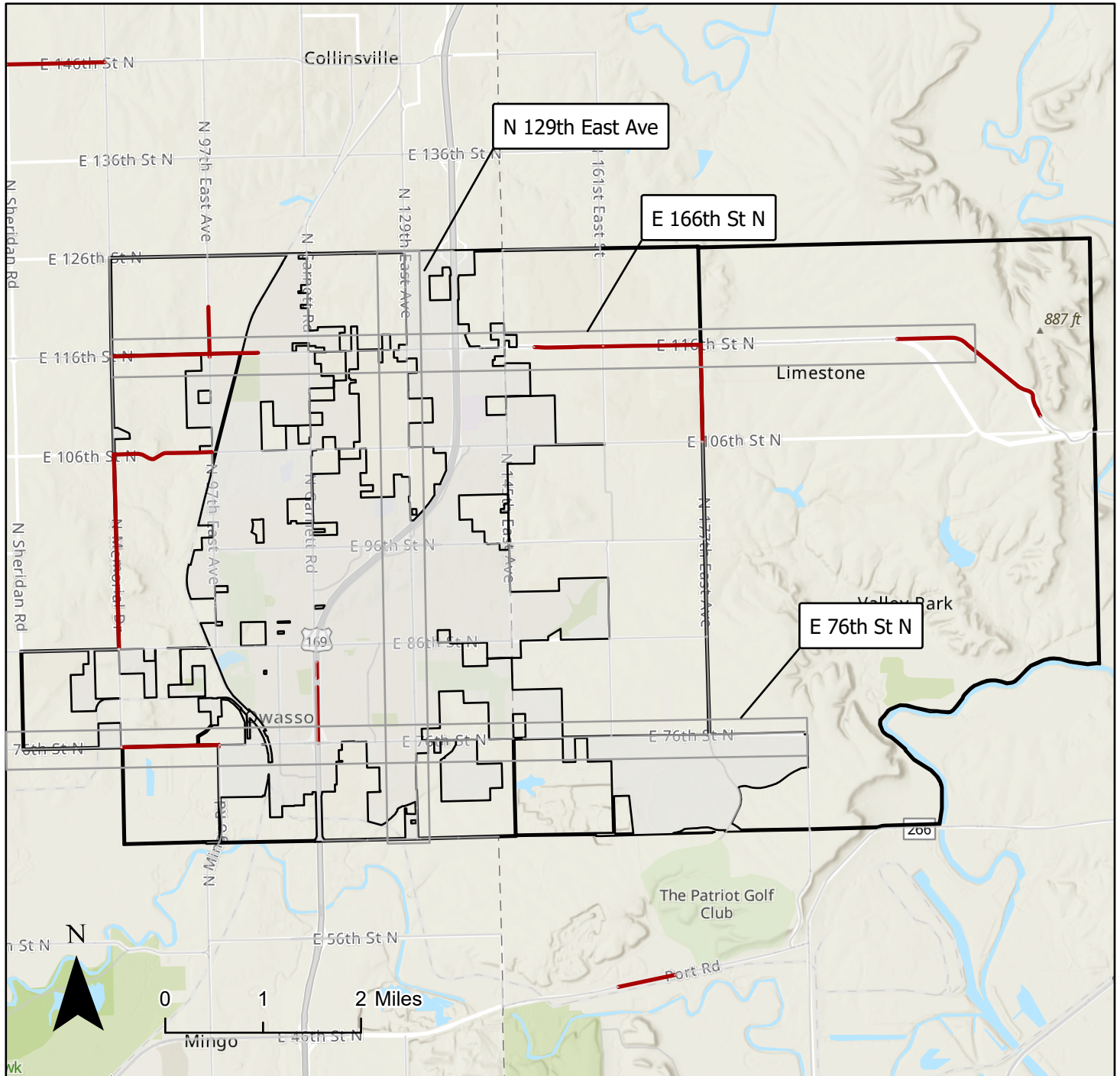
# Roadway Crash Fatalities (2016-2020) City of Broken Arrow



Data sourced from ODOT Safe-T (2016-2020) and INCOG.



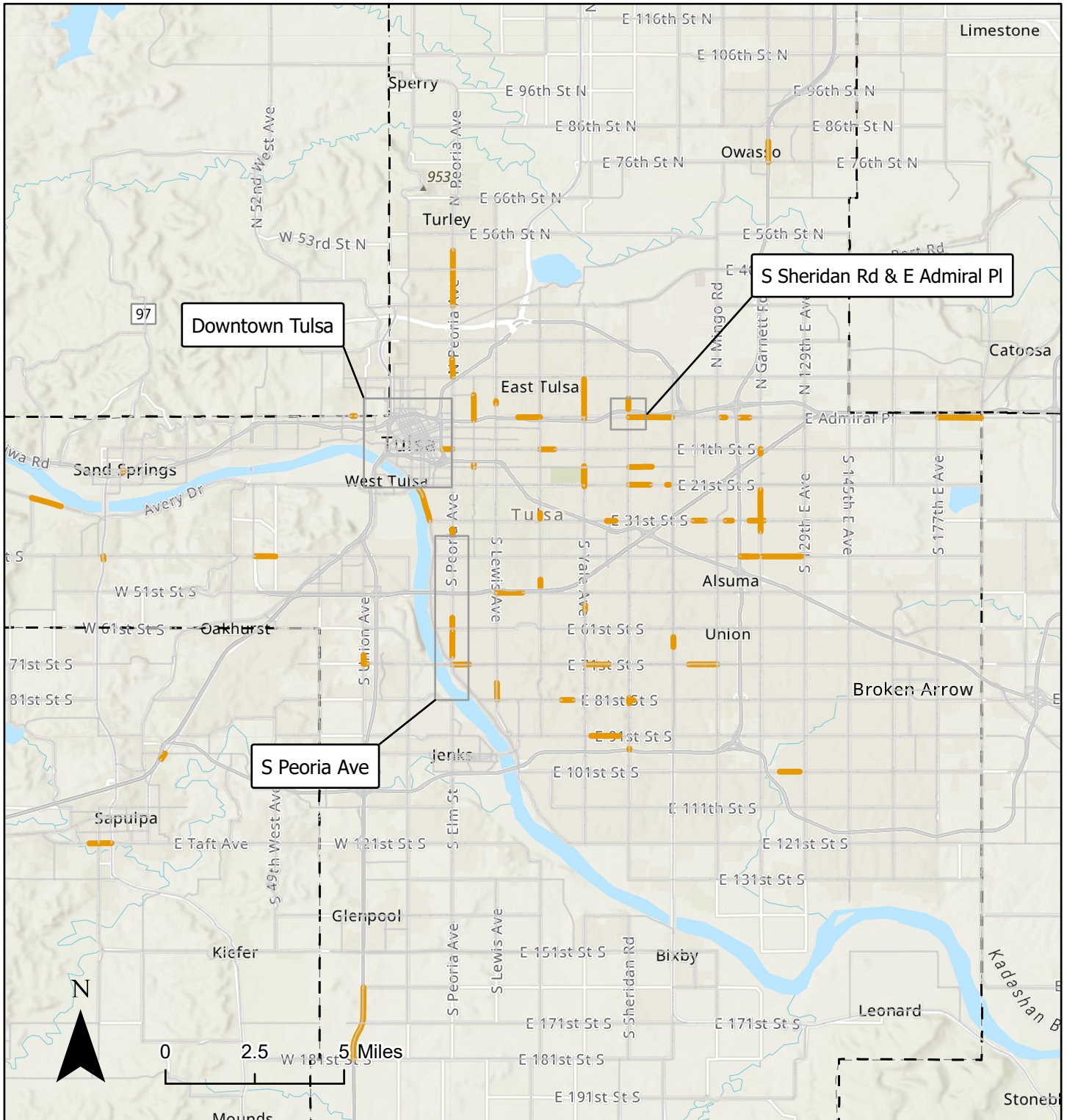
# Roadway Crash Fatalities (2016-2020) City of Owasso



Legend	
Roadways with Fatalities	▭ Tulsa County
— No	▭ City of Owasso
— Yes	

Data sourced from ODOT Safe-T (2016-2020) and INCOG.

# Pedestrian/Bicycle Involved Roadway Fatalities, 2016-2020



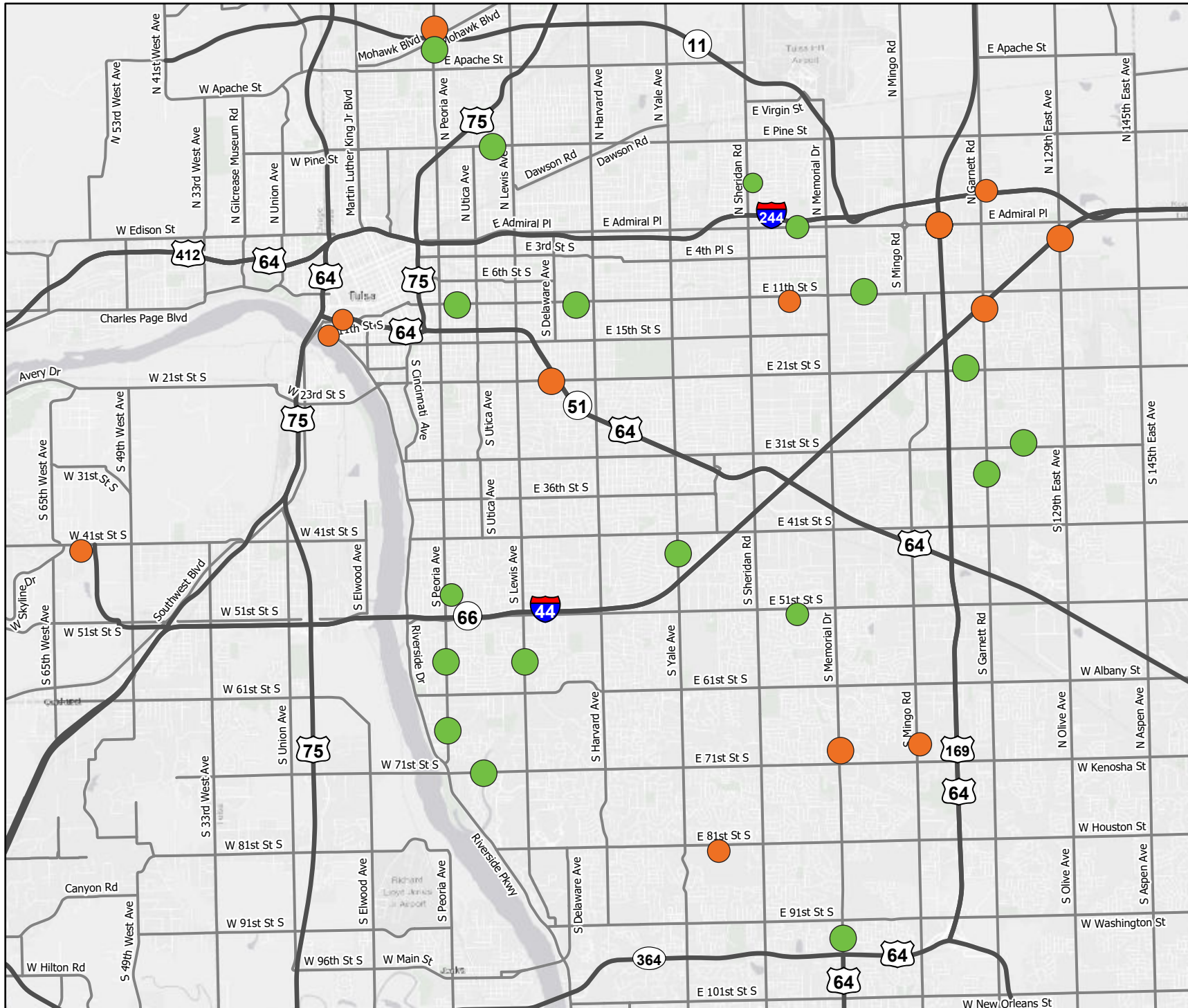
**Legend**

- Roadway with Pedestrian/Bicycle Fatalities
  - No
  - Yes
- [ - - ] County Border

Data sourced from ODOT Safe-T (2016-2020) and INCOG.



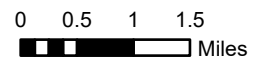
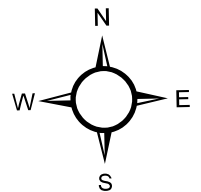
# Improve Our Tulsa - Traffic Capital Needs - Traffic Signals & Midblock Crossings



## Map Legend

- Traffic signal planned
- Mid-block pedestrian crossing

*\*Note: Signal at Yale and Lansing (school) is an unknown location*



# Fatality and Serious Injury Crashes in Tulsa county with HDC, APP, Urbanized area

## Crash 2016 2020

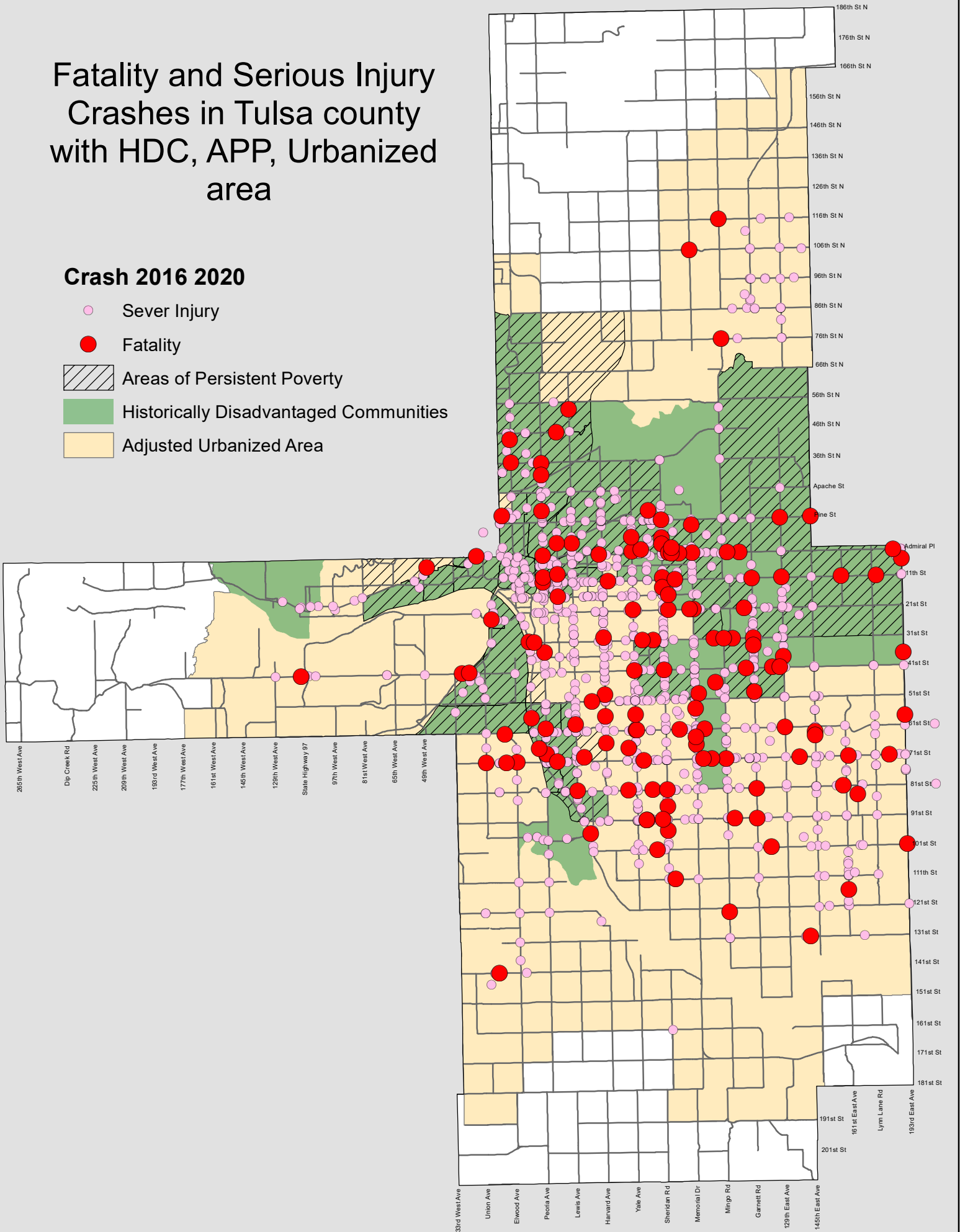
○ Severe Injury

● Fatality

▨ Areas of Persistent Poverty

■ Historically Disadvantaged Communities

■ Adjusted Urbanized Area



# **The Tulsa Region Safe Streets Partnership**

## **Memorandum of Understanding for Participation INCOG & Local Public Agencies (LPAs)**

This Memorandum of Understanding is intended to serve as a master Memorandum, documenting preliminary agreement between INCOG and Local Public Agencies whose mission is dedicated to transportation, public safety or public service to transportation and public safety organizations that wish to collaborate on planning, executing projects related to the adoption of “Vision Zero” and reducing traffic fatalities and serious injuries based on INCOG resolution to achieve 25% reduction by the year 2030.

This initial Memorandum of Understanding is hereby made by and between the Indian Nations Council of Governments (INCOG), the City of Tulsa, the City of Broken Arrow, the City of Jenks, the City of Owasso, the Wagoner County, and the Tulsa County, hereinafter referred to as Partner Agencies. Partner Agencies have agreed to this Memorandum by signing a signature page, made a part of this agreement.

The purpose of this Memorandum of Understanding is to document a consensus process to secure funding through the annual Safe Streets for All (SS4A) discretionary grant program from the US Department of Transportation. The SS4A grant will supplement other local efforts to improve safety on local and tribal roads within INCOG region. The agreement further spells out general direction for expending these funds with the MPO leading the application process and finally leading to implementation of most effective strategies for achieving safety of all roadway users. This agreement further provides for a cooperative regional data collection and dissemination, sharing and exchanging information.

This Memorandum of Understanding is NOT intended to impinge on any public agency internal protocols or standards for procurement. Methods to implement the grant proceeds will be agreed upon separately, “as-needed” between individual LPAs and INCOG, sharing resources and funding.

### **Members**

For purposes of this agreement a member shall be defined as a Partner Agency who has executed this MOU. For management and operation matters each of the Partner will consult INCOG as the central agency for coordination of 2022 SS4A grant. The LPA signatories and INCOG each will designate a point of contact for execution of the grant agreement. Partner Agencies are defined as: the Indian Nations Council of Governments (INCOG), the City of Tulsa, the City of Broken Arrow, the City of Jenks, the City of Owasso, the Wagoner County, and the Tulsa County.

## **Regional Coordination**

It is hereby agreed that at minimal, Tulsa Regional Safe Streets for All Program will provide the participants to this MOU with:

1. the ability to share procurement standards for implementation of Safe Streets for All Projects,
2. the ability to identify specific elements that are common to all regional traffic crashes and primary causes,
3. the ability to regionally create a systemwide program to further improve safety for all users and
4. the ability to monitor and improve delivery of safe mechanisms to reduce vulnerable user crashes.
5. The ability to work toward the goal of reducing fatalities and serious injuries by 25% before 2030.

These pre-award coordination efforts will continue with the implementation of the discretionary grant, creating regional opportunity with regional solutions and further will be open to any other local public agency that is within the INCOG region.

Priority project locations and implementable solutions security related to this regional program will be based on the Regional Local Road Safety Action Plan developed in 2022 with input from all stakeholders in the region. The measures will be tailored to the location based on engineering principles and MUTCD guidance that is followed by all LPAs.

## **Agency Responsibilities**

It is recognized that each local public agency owns and operates the roadway infrastructure within the jurisdictions, independent of each other. Therefore, each agency will be responsible for owning, operating and maintaining any specific projects implemented as a part of SS4A grant.

INCOG, as a lead applicant for the implementation of Safe Streets grant will coordinate the agreements with Federal agency, for providing periodic reports, tracking of various projects in any stage, and seeking disbursement of federal funds subject to the needs and conditions set forth in any future agreement that is mutually executed between the LPA and INCOG. All federal fund disbursements will be based on reimbursement upon acceptable invoices from each LPA.

**Additional Capabilities and Issue Resolution**

If a Partner LPA wishes to procure additional funding and implementation capacity, this understanding allows for such independence and does not limit in any way from participating in regional cooperative and coordination of Safe Streets projects.

**Term of Agreement**

This MOU will be in effect for the period of three years or until the SS4A grant is fully expended. This MOU will be periodically reviewed at the request of any partner. This MOU can be amended as agreed to by INCOG and other partners.

**ADD SIGNATURE PAGES FOR EACH PARTNER AGENCY**

\_\_\_\_\_  
Indian Nations Council of Governments (INCOG)

\_\_\_\_\_  
The City of Tulsa

\_\_\_\_\_  
The City of Broken Arrow

\_\_\_\_\_  
The City of Jenks

\_\_\_\_\_  
The City of Owasso

\_\_\_\_\_  
The Tulsa County

\_\_\_\_\_  
The Wagoner County

RESOLUTION No. 310

**Adopting the INCOG Local Road Safety Plan and Expressing the goal of the Indian Nations Council of Governments (INCOG) Board of Directors to reduce traffic fatalities and serious injuries by 25% by 2030 and to work toward achieving Zero Fatalities due to traffic crashes in the Tulsa Transportation Management Area and the INCOG Region.**

**WHEREAS**, roadway fatalities kill tens of thousands of people in the United States each year;

**WHEREAS**, according to the National Highway Traffic Safety Administration 38,680 lives were lost in motor vehicle crashes in 2020;

**WHEREAS**, more than 100 people lose their lives on a typical day on the roadways of the Nation, with traffic crashes being the leading cause of death for people ages 1 to 25;

**WHEREAS**, the counties in the INCOG region, Creek, Osage, Rogers, Wagoner & Tulsa Counties have experienced 114 Fatalities, 414 Serious Injuries, 1,894 Minor Injuries in Year 2020 alone;

**WHEREAS**, INCOG has partnered with Federal Highway Administration (FHWA) and the Oklahoma Department of Transportation (ODOT) and numerous local public agencies to develop the INCOG Regional Local Road Safety Action Plan based on data, analysis, and to identify proactive low-cost, high-impact solutions to reduce fatalities and serious injuries within the five-county region;

**WHEREAS**, INCOG has recognized and prioritized roadway safety and safe pedestrian and cyclist transportation when funding projects utilizing the Surface Transportation Block Grant Program funds, and the Transportation Alternatives Program funds; and

**WHEREAS**, INCOG has promoted the adoption of Complete Streets initiatives and designs and tools including increasing the technical capacity of the region and local public agencies.

**NOW, THEREFORE, BE IT RESOLVED**, that the INCOG Board of Directors adopts the Local Road Safety Action Plan (LRSP) and commits to advancing policies that will reduce roadway fatalities and serious injuries by 25% by 2030; and commits to the vision of achieving zero fatalities in the future.

**FURTHER BE IT RESOLVED**, that the INCOG region commits to recognize the need for a safe systems approach in transportation to improve access, safety, and mobility, and supports the use of the term "crash" and not "accident" when describing traffic incidents and encourages all local public agencies to use this term.

**APPROVED** by the INCOG Board of Directors on this 12<sup>th</sup> day of July, 2022.



Karen Keith, Chair

Indian Nations Council of Governments



Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022  
 by Viplav Putta

## Study Map & Totals

### Legend

- ▲ Fatality
- Injury
- Property Damage



Remarks:

NONE

828 NONMAPPABLE COLLISIONS \*\*

Date Range: 01-01-2016 thru 12-31-2020

	2016						2017						2018					
	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot
Collisions	26	194	863	1333		2416	26	202	824	1425		2477	27	216	784	1444		2471
Persons	26	220	1209	2149		3604	26	241	1117	2287		3671	29	262	1055	2284		3630



**STUDY TOTALS (CONT.)**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

	2019						2020					
	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot
<b>Collisions</b>	26	175	810	1413		2424	32	165	710	1222		2129
<b>Persons</b>	28	205	1055	2195		3483	33	190	950	1950		3123

	Study Total					
	Fatality	Suspected Serious Injury	Non-Incapacitating Injury	Possible Injury	Property Damage	Total
<b>Collisions</b>	137	952	3991	6837		11917
<b>Persons</b>	142	1118	5386	10865		17511

\*\* NONMAPPABLE COLLISIONS ARE NOT PLOTTED ON THE MAP DUE TO INSUFFICIENT LOCATION INFORMATION.





**STUDY TOTALS - BY CITY AND HWY CLASS**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

**STUDY TOTALS**

Year	CITY STREET COLLISIONS			
	Fat	Inj *	PD	Tot
2016	26	2390		2416
2017	26	2451		2477
2018	27	2444		2471
2019	26	2398		2424
2020	32	2097		2129
<b>Total:</b>	<b>137</b>	<b>11780</b>		<b>11917</b>

**County: (57) OSAGE**

	CITY STREET COLLISIONS			
	Fat	Inj *	PD	Tot
(80) TULSA	2	55		57

**County: (72) TULSA**

	CITY STREET COLLISIONS			
	Fat	Inj *	PD	Tot
(50) TULSA	135	11703		11838

**County: (73) WAGONER**

	CITY STREET COLLISIONS			
	Fat	Inj *	PD	Tot
(50) TULSA		22		22

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

Collisions By Type Of Collision

Type Of Collision	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Rear-End (front-to-rear)	4	759		763	2	779		781	1	757		758	2	715		717		591		591
Head-On (front-to-front)	1	38		39		32		32	2	28		30		29		29	3	32		35
Right Angle (front-to-side)	1	443		444	3	356		359	2	345		347	1	379		380	2	349		351
Angle Turning	3	717		720	2	842		844	5	868		873	5	794		799	9	654		663
Other Angle	1	13		14		3		3		8		8		4		4		6		6
Sideswipe Same Direction		59		59	1	66		67		60		60		69		69		75		75
Sideswipe Opposite Direction	1	21		22		24		24		28		28		22		22	1	24		25
Fixed Object	5	82		87	3	98		101	5	118		123	5	119		124	4	123		127
Pedestrian	8	82		90	11	90		101	6	85		91	13	98		111	9	94		103
Pedal Cycle		31		31	1	37		38	4	38		42		47		47	2	39		41
Animal						3		3	1	1		2		2		2		4		4
Overturn/Rollover	1	17		18		32		32		24		24		23		23		17		17
Vehicle-Train														1		1		2		2
Other Single Vehicle Crash		33		33	1	15		16		2		2		8		8		8		8
Other	1	95		96	2	74		76	1	82		83		88		88	2	79		81
<b>Total</b>	<b>26</b>	<b>2390</b>		<b>2416</b>	<b>26</b>	<b>2451</b>		<b>2477</b>	<b>27</b>	<b>2444</b>		<b>2471</b>	<b>26</b>	<b>2398</b>		<b>2424</b>	<b>32</b>	<b>2097</b>		<b>2129</b>
<b>Percent</b>	<b>0.2</b>	<b>20.1</b>		<b>20.3</b>	<b>0.2</b>	<b>20.6</b>		<b>20.8</b>	<b>0.2</b>	<b>20.5</b>		<b>20.7</b>	<b>0.2</b>	<b>20.1</b>		<b>20.3</b>	<b>0.3</b>	<b>17.6</b>		<b>17.9</b>

Collisions By Type Of Collision

Type Of Collision	Total				
	Fat	Inj *	PD	Tot	Pct
Rear-End (front-to-rear)	9	3601		3610	30.3
Head-On (front-to-front)	6	159		165	1.4
Right Angle (front-to-side)	9	1872		1881	15.8
Angle Turning	24	3875		3899	32.7
Other Angle	1	34		35	0.3
Sideswipe Same Direction	1	329		330	2.8
Sideswipe Opposite Direction	2	119		121	1.0
Fixed Object	22	540		562	4.7
Pedestrian	47	449		496	4.2
Pedal Cycle	7	192		199	1.7
Animal	1	10		11	0.1
Overturn/Rollover	1	113		114	1.0
Vehicle-Train		3		3	
Other Single Vehicle Crash	1	66		67	0.6
Other	6	418		424	3.6
<b>Total</b>	<b>137</b>	<b>11780</b>		<b>11917</b>	<b>100</b>
<b>Percent</b>	<b>1.1</b>	<b>98.9</b>		<b>100</b>	

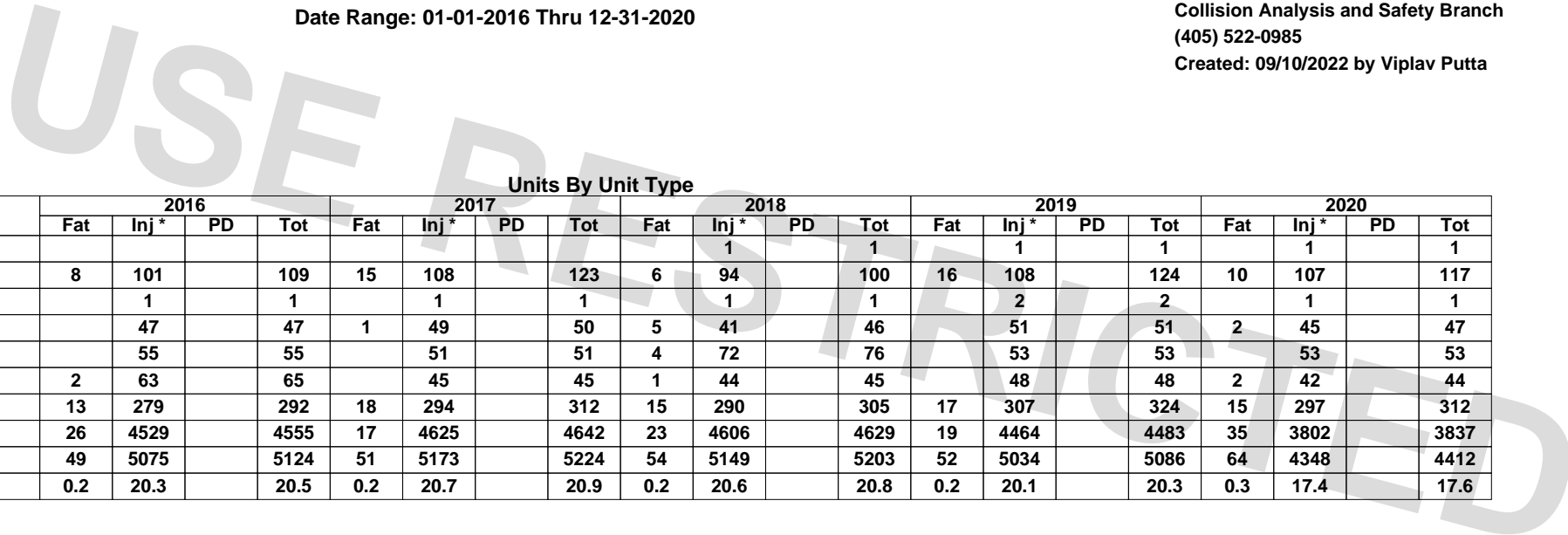
\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



**TABULATION OF COLLISIONS**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta



**Units By Unit Type**

Unit Type	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Train										1		1		1		1		1		1
Pedestrian	8	101		109	15	108		123	6	94		100	16	108		124	10	107		117
Animal		1		1		1		1		1		1		2		2		1		1
Pedal Cycle		47		47	1	49		50	5	41		46		51		51	2	45		47
Parked Vehicle		55		55		51		51	4	72		76		53		53		53		53
CMV	2	63		65		45		45	1	44		45		48		48	2	42		44
Other Single Vehicle	13	279		292	18	294		312	15	290		305	17	307		324	15	297		312
Other Multi-Vehicle	26	4529		4555	17	4625		4642	23	4606		4629	19	4464		4483	35	3802		3837
Total	49	5075		5124	51	5173		5224	54	5149		5203	52	5034		5086	64	4348		4412
Percent	0.2	20.3		20.5	0.2	20.7		20.9	0.2	20.6		20.8	0.2	20.1		20.3	0.3	17.4		17.6

**Units By Unit Type**

Unit Type	Total		Tot	Pct
	Fat	Inj *		
Train		3	3	
Pedestrian	55	518	573	2.3
Animal		6	6	
Pedal Cycle	8	233	241	1.0
Parked Vehicle	4	284	288	1.1
CMV	5	242	247	1.0
Other Single Vehicle	78	1467	1545	6.2
Other Multi-Vehicle	120	22026	22146	88.4
Total	270	24779	25049	100
Percent	1.1	98.9	100	



\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

Vehicles By Vehicle Type

Vehicle Type	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Passenger Vehicle-2 Door	2	200	95	297		192	117	309	1	175	97	273		153	92	245	2	118	83	203
Passenger Vehicle-4 Door	7	1431	885	2323	4	1473	916	2393	6	1487	918	2411	2	1448	912	2362	6	1342	768	2116
Passenger Vehicle-Convertible		8	3	11		10	2	12		11	8	19		13	4	17		11	2	13
Pickup Truck	2	323	436	761	1	301	420	722		309	461	770	2	298	391	691	1	273	332	606
Single-Unit Truck (2 axles)		6	20	26		5	8	13		2	14	16		3	19	22		4	21	25
Single-Unit Truck (3 or more axles)		2	12	14		2	5	7		1	11	12		1	6	7		1	4	5
School Bus		4	2	6		2	3	5		4	4	8		3	3	6				
Truck/Trailer		3	7	10			11	11		2	5	7		3	6	9		2	15	17
Truck-Tractor (bobtail)		1	3	4			1	1							1	1			1	1
Truck-Tractor/Semi-Trailer		2	12	14		1	7	8			6	6			7	7			10	10
Truck-Tractor/Double			1	1																
Truck-Tractor/Triple																				
Bus/Large Van (9-15 seats)		1		1		3	1	4		2	5	7		1	4	5		2	2	4
Bus (16+ seats)		10	2	12		6	4	10		5	5	10		6	4	10		3	6	9
Motorcycle	5	104		109	4	88	2	94	4	93	5	102	5	85	1	91	6	79	2	87
Motor Scooter/Moped		3		3		8		8		6		6		7		7		3		3
Motor Home																				
Farm Machinery			1	1						1		1						1		1
ATV															1	1		1		1
Sport Utility Vehicle (SUV)	2	610	501	1113	3	640	540	1183	6	640	513	1159	4	652	524	1180	4	530	424	958
Passenger Van		85	41	126	1	104	57	162		74	60	134		73	54	127		60	35	95
Truck More Than 10,000 lbs.			5	5			5	5			6	6		3	6	9			5	5
Van (10,000 lbs. or less)		51	42	93		26	42	68		38	34	72		29	31	60	1	21	20	42
Other		2	35	37		4	31	35		2	34	36		3	48	51		2	43	45
<b>Total</b>	<b>18</b>	<b>2846</b>	<b>2103</b>	<b>4967</b>	<b>13</b>	<b>2865</b>	<b>2172</b>	<b>5050</b>	<b>17</b>	<b>2852</b>	<b>2186</b>	<b>5055</b>	<b>13</b>	<b>2781</b>	<b>2114</b>	<b>4908</b>	<b>20</b>	<b>2453</b>	<b>1773</b>	<b>4246</b>
<b>Percent</b>	<b>0.1</b>	<b>11.7</b>	<b>8.7</b>	<b>20.5</b>	<b>0.1</b>	<b>11.8</b>	<b>9.0</b>	<b>20.8</b>	<b>0.1</b>	<b>11.8</b>	<b>9.0</b>	<b>20.9</b>	<b>0.1</b>	<b>11.5</b>	<b>8.7</b>	<b>20.3</b>	<b>0.1</b>	<b>10.1</b>	<b>7.3</b>	<b>17.5</b>

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

Vehicles By Vehicle Type

Vehicle Type	Total				
	Fat	Inj *	PD	Tot	Pct
Passenger Vehicle-2 Door	5	838	484	1327	5.5
Passenger Vehicle-4 Door	25	7181	4399	11605	47.9
Passenger Vehicle-Convertible		53	19	72	0.3
Pickup Truck	6	1504	2040	3550	14.7
Single-Unit Truck (2 axles)		20	82	102	0.4
Single-Unit Truck (3 or more axles)		7	38	45	0.2
School Bus		13	12	25	0.1
Truck/Trailer		10	44	54	0.2
Truck-Tractor (bobtail)		1	6	7	
Truck-Tractor/Semi-Trailer		3	42	45	0.2
Truck-Tractor/Double			1	1	
Truck-Tractor/Triple					
Bus/Large Van (9-15 seats)		9	12	21	0.1
Bus (16+ seats)		30	21	51	0.2
Motorcycle	24	449	10	483	2.0
Motor Scooter/Moped		27		27	0.1
Motor Home					
Farm Machinery		2	1	3	
ATV		1	1	2	
Sport Utility Vehicle (SUV)	19	3072	2502	5593	23.1
Passenger Van	1	396	247	644	2.7
Truck More Than 10,000 lbs.		3	27	30	0.1
Van (10,000 lbs. or less)	1	165	169	335	1.4
Other		13	191	204	0.8
<b>Total</b>	<b>81</b>	<b>13797</b>	<b>10348</b>	<b>24226</b>	<b>100</b>
<b>Percent</b>	<b>0.3</b>	<b>57.0</b>	<b>42.7</b>	<b>100</b>	

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



**TABULATION OF COLLISIONS**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
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 Created: 09/10/2022 by Viplav Putta

**Day And Time Of Occurrence Of Collisions**

Day	Hour Of The Day																								Tot	Pcnt						
	AM												PM																			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12								
Sunday	34	37	18	17	7	10	12	22	28	32	40	59	71	72	66	68	63	66	70	60	48	36	18	74	1028	8.6						
Monday	3	13	3	5	14	38	98	108	61	77	96	126	88	144	155	159	215	121	80	55	32	41	25	40	1797	15.1						
Tuesday	2	4	4	5	11	34	105	95	59	79	103	140	129	163	171	178	214	132	94	71	66	37	19	41	1956	16.4						
Wednesday	10	6	8	3	12	31	84	111	67	67	114	134	132	139	160	161	218	121	87	62	61	36	19	40	1883	15.8						
Thursday	11	13	5	10	8	37	91	101	49	63	107	133	134	142	164	177	186	133	91	58	57	32	29	33	1864	15.6						
Friday	13	9	7	4	9	35	89	83	74	84	116	141	165	132	187	182	171	122	94	69	84	69	47	60	2046	17.2						
Saturday	35	31	17	13	2	15	24	23	29	49	61	73	99	95	91	83	106	84	87	66	66	62	43	89	1343	11.3						
	Early Morning - Sunrise						Morning Peak						Mid Morning/Afternoon						PM Peak						Evening - Late Night						Tot	100
Total	603						1413						4593						2960						2348						11917	
Percent	5.1						11.9						38.5						24.8						19.7						100	

**Roadway/Lighting**

Roadway Conditions	Lighting Conditions					Total	Percent
	Daylight	Darkness	Twilight	Lighted	Unknown		
Dry	7825	665	321	1717	4	10532	88.4
Wet (Water)	806	157	50	268	3	1284	10.8
Ice, Snow, or Slush	38	7	5	11		61	0.5
Mud, Dirt, Gravel, or Sand	2	1		2		5	
Other	25	4		3	3	35	0.3
Total	8696	834	376	2001	10	11917	100
Percent	73.0	7.0	3.2	16.8	0.1	100	

**Weather Conditions**

Weather Conditions	Total	Percent
Clear	8474	71.1
Clouds Present	2295	19.3
Raining/Fog	968	8.1
Snowing/Sleet/Hail	62	0.5
Other	118	1.0
Total	11917	100



**TABULATION OF COLLISIONS**

Date Range: 01-01-2016 Thru 12-31-2020

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**Drivers By Driver Conditions**

Unsafe/Unlawful	Apparently Normal			Alcohol Involved						Sleep Suspected			Drug Use Indicated			Unknown Condition			Total						
				Ability Impaired			Odor Detected																		
	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Total	Pcnt		
Failed to Yield	11	2982		2	32			26				4			6			6	393		19	3443		3462	14.5
Failed to Stop	1	783		2	24			1	15			11			11			7	176		11	1020		1031	4.3
Failed to Signal		2																1				3		3	
Improper Turn	3	1249			11			7				1			3			3	112		6	1383		1389	5.8
Improper Start	1	101																6			1	107		108	0.5
Improper Stop		24																8				32		32	0.1
Improper Backing		39						2						1				8				50		50	0.2
Improper Parking		3																8				11		11	
Improper Passing	1	45			2			1									1	7			2	55		57	0.2
Improper Lane Change	1	232			4			3						3				41			1	283		284	1.2
Left of Center	2	103			7			6				4			7			5	42		7	169		176	0.7
Following Too Close	1	560			8			6				3						95			1	672		673	2.8
Unsafe Speed	10	1846		3	32			4	41			17			1	16		16	345		34	2297		2331	9.7
DWI		22		4	197			3	67					1	36			1	11		9	333		342	1.4
Inattention	2	814			7			16			1	51			6				117		3	1011		1014	4.2
Negligent Driving	1	33			2			1											8		1	44		45	0.2
Defective Vehicle		110																	10			120		120	0.5
Wrong Way		14			5			2											3			24		24	0.1
No Improper Action	64	11442		1	31			1	12			2			5			17	413		83	11905		11988	50.1
Other	6	588			2			8				1			4			19	173		25	776		801	3.3
<b>Total</b>	<b>104</b>	<b>20992</b>		<b>12</b>	<b>364</b>			<b>9</b>	<b>213</b>			<b>1</b>	<b>94</b>		<b>2</b>	<b>98</b>		<b>75</b>	<b>1977</b>		<b>203</b>	<b>23738</b>		<b>23941</b>	<b>100</b>
<b>Percent</b>	<b>0.4</b>	<b>87.7</b>		<b>0.1</b>	<b>1.5</b>				<b>0.9</b>				<b>0.4</b>		<b>0.4</b>			<b>0.3</b>	<b>8.3</b>		<b>0.8</b>	<b>99.2</b>		<b>100</b>	

Severities Indicate Highest Severity in Collision

**Collisions By Special Feature**

Special Feature	Total			
	Fat	Inj *	PD	Tot
Bridge	1	12		13
Work Zone		266		266
Cross Median		21		21
Train Collision		4		4

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



**STUDY CRITERIA**

Date Range: 01-01-2016 Thru 12-31-2020

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**ROADWAY / REGION**

QUERY OVER		SELECTIONS
1	City	County: 72, City: 50
2	City	County: 73, City: 50
3	City	County: 57, City: 80

**DATE**

Date Range	01-01-2016 to 12-31-2020
------------	--------------------------

**REPORT SECTIONS**

Collision Map & Study Totals	(Included)
Collision Analysis Tables	(Included)
- Totals By City, Hwy Class	Checked
- Other Analysis Tables	Checked
Rate Analysis	(Included)
Query Criteria	(Included)

**FILTER COLLISIONS**

Roadway Type	City St. Data Only
- Severity	2 - Possible Injury
	3 - Non Incapacitating Injury
	4 - Suspected Serious Injury
	5 - Fatality
Incl. Crashes Assoc. w/ Every Int.	Checked
Environment Fields	

23 USC 409







**STUDY TOTALS (CONT.)**

Date Range: 01-01-2016 Thru 12-31-2020

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	2019						2020					
	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot
<b>Collisions</b>	2	7	49	56		114	5	1	26	49		81
<b>Persons</b>	2	7	60	87		156	5	1	32	77		115

	Study Total					
	Fatality	Suspected Serious Injury	Non-Incapacitating Injury	Possible Injury	Property Damage	Total
<b>Collisions</b>	19	33	231	283		566
<b>Persons</b>	19	38	304	438		799



**STUDY TOTALS - BY CITY AND HWY CLASS**

**Date Range: 01-01-2016 Thru 12-31-2020**

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
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**STUDY TOTALS**

Year	COUNTY ROAD COLLISIONS			
	Fat	Inj *	PD	Tot
2016	3	127		130
2017	6	114		120
2018	3	118		121
2019	2	112		114
2020	5	76		81
<b>Total:</b>	<b>19</b>	<b>547</b>		<b>566</b>

**County: (72) TULSA**

	COUNTY ROAD COLLISIONS			
	Fat	Inj *	PD	Tot
<b>(00) - RURAL -</b>	<b>19</b>	<b>546</b>		<b>565</b>
<b>(50) TULSA</b>		<b>1</b>		<b>1</b>
<b>Total:</b>	<b>19</b>	<b>547</b>		<b>566</b>

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

Collisions By Type Of Collision

Type Of Collision	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Rear-End (front-to-rear)		20		20		18		18		21		21		23		23		9		9
Head-On (front-to-front)		3		3	2	3		5		8		8		5		5	2	4		6
Right Angle (front-to-side)		18		18		13		13		13		13		8		8		12		12
Angle Turning	1	14		15		23		23		17		17		15		15	2	8		10
Other Angle																		1		1
Sideswipe Same Direction		4		4		1		1												
Sideswipe Opposite Direction		6		6	1	2		3		3		3		3		3		1		1
Fixed Object	2	43		45	2	39		41	3	36		39		34		34		28		28
Pedestrian		3		3		3		3		2		2		1		1	1	1		2
Pedal Cycle						1		1						2		2		1		1
Animal		1		1						1		1		1		1		1		1
Overturn/Rollover		6		6		9		9		12		12	1	14		15		8		8
Vehicle-Train		1		1														1		1
Other Single Vehicle Crash		1		1																
Other		7		7	1	2		3		5		5	1	6		7		1		1
<b>Total</b>	<b>3</b>	<b>127</b>		<b>130</b>	<b>6</b>	<b>114</b>		<b>120</b>	<b>3</b>	<b>118</b>		<b>121</b>	<b>2</b>	<b>112</b>		<b>114</b>	<b>5</b>	<b>76</b>		<b>81</b>
<b>Percent</b>	<b>0.5</b>	<b>22.4</b>		<b>23.0</b>	<b>1.1</b>	<b>20.1</b>		<b>21.2</b>	<b>0.5</b>	<b>20.8</b>		<b>21.4</b>	<b>0.4</b>	<b>19.8</b>		<b>20.1</b>	<b>0.9</b>	<b>13.4</b>		<b>14.3</b>

Collisions By Type Of Collision

Type Of Collision	Total				
	Fat	Inj *	PD	Tot	Pct
Rear-End (front-to-rear)		91		91	16.1
Head-On (front-to-front)	4	23		27	4.8
Right Angle (front-to-side)		64		64	11.3
Angle Turning	3	77		80	14.1
Other Angle		1		1	0.2
Sideswipe Same Direction		5		5	0.9
Sideswipe Opposite Direction	1	15		16	2.8
Fixed Object	7	180		187	33.0
Pedestrian	1	10		11	1.9
Pedal Cycle		4		4	0.7
Animal		4		4	0.7
Overturn/Rollover	1	49		50	8.8
Vehicle-Train		2		2	0.4
Other Single Vehicle Crash		1		1	0.2
Other	2	21		23	4.1
<b>Total</b>	<b>19</b>	<b>547</b>		<b>566</b>	<b>100</b>
<b>Percent</b>	<b>3.4</b>	<b>96.6</b>		<b>100</b>	

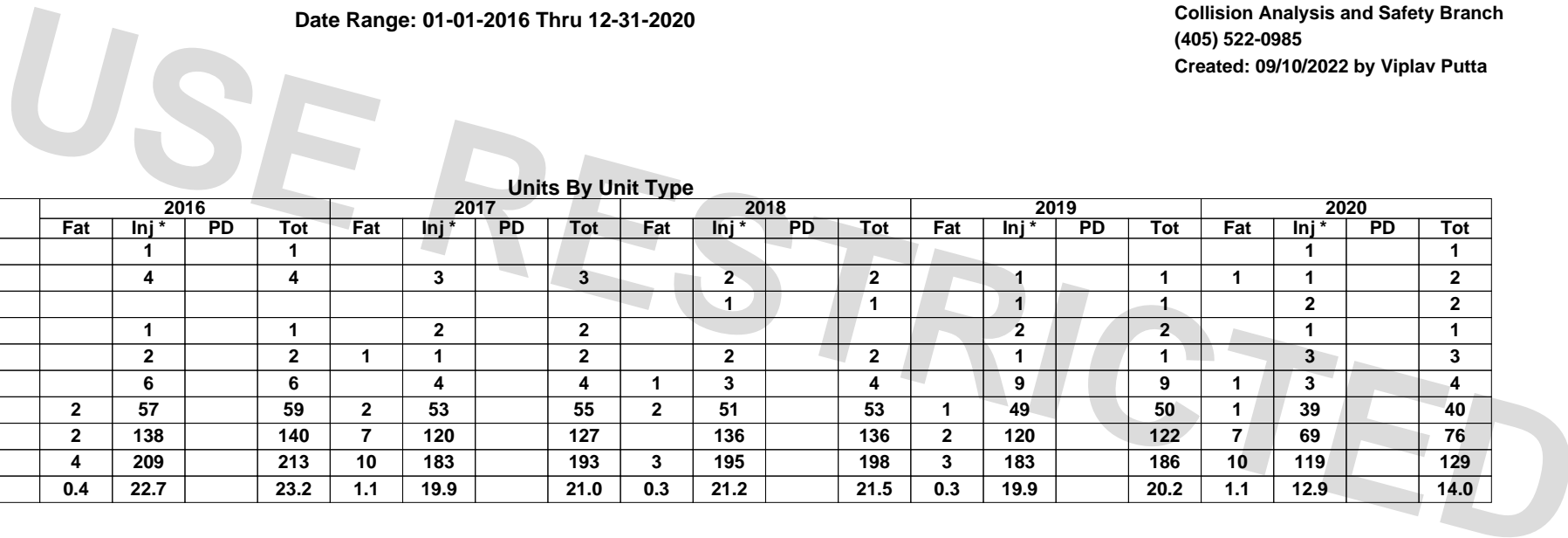
\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
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Units By Unit Type

Unit Type	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Train		1		1														1		1
Pedestrian		4		4		3		3		2		2		1		1	1	1		2
Animal										1		1		1		1		2		2
Pedal Cycle		1		1		2		2						2		2		1		1
Parked Vehicle		2		2	1	1		2		2		2		1		1		3		3
CMV		6		6		4		4	1	3		4		9		9	1	3		4
Other Single Vehicle	2	57		59	2	53		55	2	51		53	1	49		50	1	39		40
Other Multi-Vehicle	2	138		140	7	120		127		136		136	2	120		122	7	69		76
Total	4	209		213	10	183		193	3	195		198	3	183		186	10	119		129
Percent	0.4	22.7		23.2	1.1	19.9		21.0	0.3	21.2		21.5	0.3	19.9		20.2	1.1	12.9		14.0

Units By Unit Type

Unit Type	Total				
	Fat	Inj *	PD	Tot	Pct
Train		2		2	0.2
Pedestrian	1	11		12	1.3
Animal		4		4	0.4
Pedal Cycle		6		6	0.7
Parked Vehicle	1	9		10	1.1
CMV	2	25		27	2.9
Other Single Vehicle	8	249		257	28.0
Other Multi-Vehicle	18	583		601	65.4
Total	30	889		919	100
Percent	3.3	96.7		100	



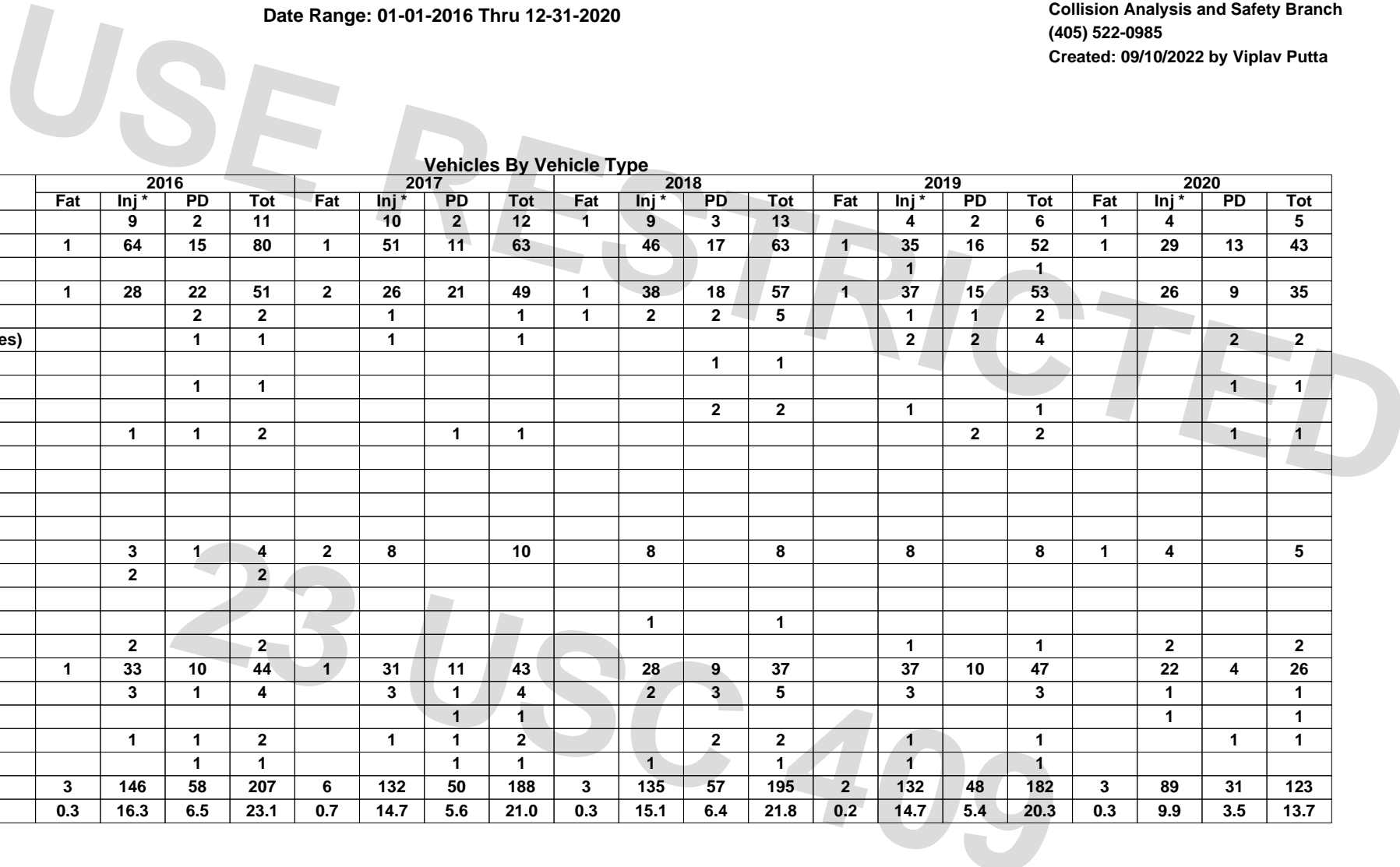
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Date Range: 01-01-2016 Thru 12-31-2020

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Vehicles By Vehicle Type

Vehicle Type	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Passenger Vehicle-2 Door		9	2	11		10	2	12	1	9	3	13		4	2	6	1	4		5
Passenger Vehicle-4 Door	1	64	15	80	1	51	11	63		46	17	63	1	35	16	52	1	29	13	43
Passenger Vehicle-Convertible														1		1				
Pickup Truck	1	28	22	51	2	26	21	49	1	38	18	57	1	37	15	53		26	9	35
Single-Unit Truck (2 axles)			2	2		1		1	1	2	2	5		1	1	2				
Single-Unit Truck (3 or more axles)			1	1		1		1						2	2	4			2	2
School Bus											1	1								
Truck/Trailer			1	1															1	1
Truck-Tractor (bobtail)											2	2		1		1				
Truck-Tractor/Semi-Trailer		1	1	2			1	1							2	2			1	1
Truck-Tractor/Double																				
Truck-Tractor/Triple																				
Bus/Large Van (9-15 seats)																				
Bus (16+ seats)																				
Motorcycle		3	1	4	2	8		10		8		8		8		8	1	4		5
Motor Scooter/Moped		2		2																
Motor Home																				
Farm Machinery										1		1								
ATV		2		2										1		1		2		2
Sport Utility Vehicle (SUV)	1	33	10	44	1	31	11	43		28	9	37		37	10	47		22	4	26
Passenger Van		3	1	4		3	1	4		2	3	5		3		3		1		1
Truck More Than 10,000 lbs.							1	1										1		1
Van (10,000 lbs. or less)		1	1	2		1	1	2			2	2		1		1			1	1
Other			1	1			1	1		1		1		1		1				
<b>Total</b>	<b>3</b>	<b>146</b>	<b>58</b>	<b>207</b>	<b>6</b>	<b>132</b>	<b>50</b>	<b>188</b>	<b>3</b>	<b>135</b>	<b>57</b>	<b>195</b>	<b>2</b>	<b>132</b>	<b>48</b>	<b>182</b>	<b>3</b>	<b>89</b>	<b>31</b>	<b>123</b>
<b>Percent</b>	<b>0.3</b>	<b>16.3</b>	<b>6.5</b>	<b>23.1</b>	<b>0.7</b>	<b>14.7</b>	<b>5.6</b>	<b>21.0</b>	<b>0.3</b>	<b>15.1</b>	<b>6.4</b>	<b>21.8</b>	<b>0.2</b>	<b>14.7</b>	<b>5.4</b>	<b>20.3</b>	<b>0.3</b>	<b>9.9</b>	<b>3.5</b>	<b>13.7</b>

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



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Date Range: 01-01-2016 Thru 12-31-2020

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Vehicles By Vehicle Type

Vehicle Type	Total			Tot	Pct
	Fat	Inj *	PD		
Passenger Vehicle-2 Door	2	36	9	47	5.3
Passenger Vehicle-4 Door	4	225	72	301	33.6
Passenger Vehicle-Convertible		1		1	0.1
Pickup Truck	5	155	85	245	27.4
Single-Unit Truck (2 axles)	1	4	5	10	1.1
Single-Unit Truck (3 or more axles)		3	5	8	0.9
School Bus			1	1	0.1
Truck/Trailer			2	2	0.2
Truck-Tractor (bobtail)		1	2	3	0.3
Truck-Tractor/Semi-Trailer		1	5	6	0.7
Truck-Tractor/Double					
Truck-Tractor/Triple					
Bus/Large Van (9-15 seats)					
Bus (16+ seats)					
Motorcycle	3	31	1	35	3.9
Motor Scooter/Moped		2		2	0.2
Motor Home					
Farm Machinery		1		1	0.1
ATV		5		5	0.6
Sport Utility Vehicle (SUV)	2	151	44	197	22.0
Passenger Van		12	5	17	1.9
Truck More Than 10,000 lbs.		1	1	2	0.2
Van (10,000 lbs. or less)		3	5	8	0.9
Other		2	2	4	0.4
<b>Total</b>	<b>17</b>	<b>634</b>	<b>244</b>	<b>895</b>	<b>100</b>
<b>Percent</b>	<b>1.9</b>	<b>70.8</b>	<b>27.3</b>	<b>100</b>	

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



**TABULATION OF COLLISIONS**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

USE RESTRICTED 409

**Day And Time Of Occurrence Of Collisions**

Day	Hour Of The Day																								Tot	Pcnt		
	AM												PM															
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12				
Sunday	2	1		2	2	2		3		2	5	2	5	4	3	4	4	6	4	2	2	1	3	1	60	10.6		
Monday		1	2		2		6	5	1	5	2	2	3	4	8	2	2	9	4		4	2	1	1	66	11.7		
Tuesday	1				4	7	7	4	3	3	4	6	2	10	8	8	3	6	4	6	2	2	3	3	96	17.0		
Wednesday	1	1			3	9	5	3	4	6	3	3	5	3	6	10	10	6	3	1	4	3		1	90	15.9		
Thursday	2	1			2	3	8	6	7	4	3	6	3		3	11	3	3	2	1	2	1	1	1	73	12.9		
Friday		1	1	2	2	3	8	5	5	2	3	8	2	5	8	11	6	6	8	7	2	5	2	3	105	18.6		
Saturday	1	3	2	4	1			4	2	3	3		3	10	6	7	5	4	6	3	2	2	1	4	76	13.4		
	Early Morning - Sunrise						Morning Peak						Mid Morning/Afternoon						PM Peak			Evening - Late Night					Tot	
Total	68						86						176						126			110					566	
Percent	12.0						15.2						31.1						22.3			19.4					100	

**Roadway/Lighting**

Roadway Conditions	Lighting Conditions					Total	Percent
	Daylight	Darkness	Twilight	Lighted	Unknown		
Dry	316	118	18	16		468	82.7
Wet (Water)	55	21	4	1		81	14.3
Ice, Snow, or Slush	6	6		1		13	2.3
Mud, Dirt, Gravel, or Sand	2	1				3	0.5
Other	1					1	0.2
Total	380	146	22	18		566	100
Percent	67.1	25.8	3.9	3.2		100	

**Weather Conditions**

Weather Conditions	Total	Percent
Clear	361	63.8
Clouds Present	132	23.3
Raining/Fog	67	11.8
Snowing/Sleet/Hail	5	0.9
Other	1	0.2
Total	566	100





TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

Drivers By Driver Conditions

Unsafe/Unlawful	Apparently Normal			Alcohol Involved						Sleep Suspected			Drug Use Indicated			Unknown Condition			Total				
				Ability Impaired			Odor Detected																
	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Total	Pcnt
Failed to Yield	1	92														5			1	97		98	11.1
Failed to Stop	1	15						1					2						1	18		19	2.1
Failed to Signal																							
Improper Turn	1	18																	1	18		19	2.1
Improper Start																							
Improper Stop		3																		3		3	0.3
Improper Backing		5																		5		5	0.6
Improper Parking		3																		3		3	0.3
Improper Passing		5														2				7		7	0.8
Improper Lane Change		3																		3		3	0.3
Left of Center		24						1		1			1		2	4		2	31		33	3.7	
Following Too Close		33														2				35		35	4.0
Unsafe Speed	3	107			1		1	5		1			1			9			5	123		128	14.5
DWI				4	19			6					2	9					6	34		40	4.5
Inattention		65						2		10										3		80	9.0
Negligent Driving		21						1								1				23		23	2.6
Defective Vehicle		14																		14		14	1.6
Wrong Way																1				1		1	0.1
No Improper Action	7	337					1	2		1						2			8	342		350	39.5
Other	1	20			1											1	1			2	22	24	2.7
<b>Total</b>	<b>14</b>	<b>765</b>		<b>4</b>	<b>21</b>		<b>2</b>	<b>18</b>		<b>13</b>			<b>3</b>	<b>12</b>		<b>3</b>	<b>30</b>		<b>26</b>	<b>859</b>		<b>885</b>	<b>100</b>
<b>Percent</b>	<b>1.6</b>	<b>86.4</b>		<b>0.5</b>	<b>2.4</b>		<b>0.2</b>	<b>2.0</b>		<b>1.5</b>			<b>0.3</b>	<b>1.4</b>		<b>0.3</b>	<b>3.4</b>		<b>2.9</b>	<b>97.1</b>		<b>100</b>	

Severities Indicate Highest Severity in Collision

Collisions By Special Feature

Special Feature	Total			
	Fat	Inj *	PD	Tot
Bridge	1	5		6
Work Zone				
Cross Median		1		1
Train Collision		2		2

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



**STUDY CRITERIA**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

**ROADWAY / REGION**

QUERY OVER	
1	County

**SELECTIONS**

County: 72

**DATE**

Date Range	01-01-2016 to 12-31-2020
------------	--------------------------

**REPORT SECTIONS**

Collision Map & Study Totals	(Included)
Collision Analysis Tables	(Included)
- Totals By City, Hwy Class	Checked
- Other Analysis Tables	Checked
Rate Analysis	(Included)
Query Criteria	(Included)

**FILTER COLLISIONS**

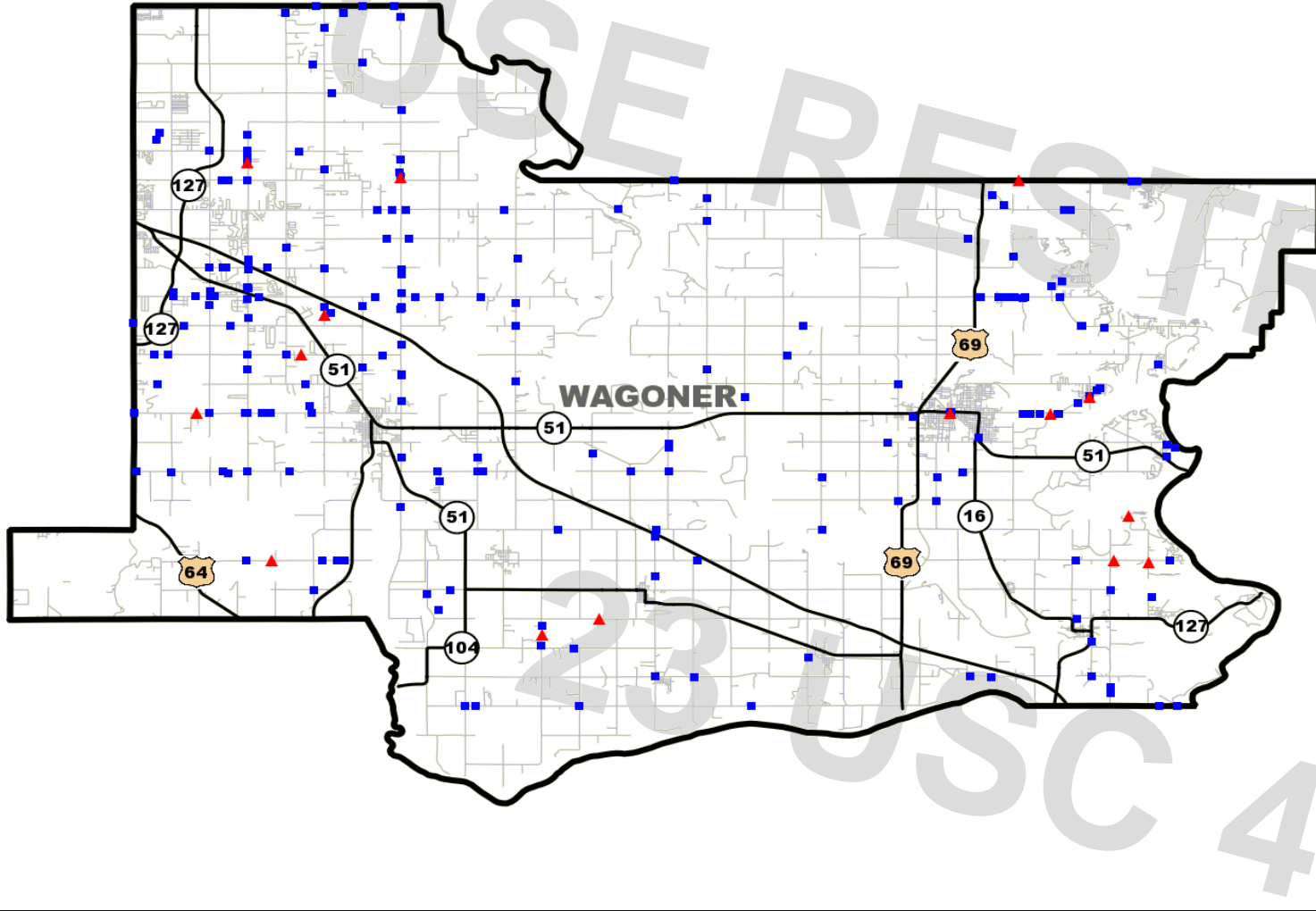
Roadway Type	County Rd. Data Only
- Severity	2 - Possible Injury
	3 - Non Incapacitating Injury
	4 - Suspected Serious Injury
	5 - Fatality
Incl. Crashes Assoc. w/ Every Int.	Checked
Environment Fields	

23 USC 409



Program Provided by:  
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## Study Map & Totals



Legend

- ▲ Fatality
- Injury
- Property Damage



Remarks:  
 NONE

Date Range: 01-01-2016 thru 12-31-2020

	2016						2017						2018					
	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot
Collisions	4	7	34	8		53	8	31	4		43	5	11	21	4		41	
Persons	4	9	49	10		72	10	38	5		53	6	16	26	7		55	



**STUDY TOTALS (CONT.)**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
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 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

	2019						2020					
	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot
<b>Collisions</b>	3	7	34	6		50	3	8	21	7		39
<b>Persons</b>	3	9	55	8		75	3	12	29	9		53

	Study Total					
	Fatality	Suspected Serious Injury	Non-Incapacitating Injury	Possible Injury	Property Damage	Total
<b>Collisions</b>	15	41	141	29		226
<b>Persons</b>	16	56	197	39		308



### STUDY TOTALS - BY CITY AND HWY CLASS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
Traffic Engineering Division  
Collision Analysis and Safety Branch  
(405) 522-0985  
Created: 09/10/2022 by Viplav Putta

#### STUDY TOTALS

Year	COUNTY ROAD COLLISIONS			
	Fat	Inj *	PD	Tot
2016	4	49		53
2017		43		43
2018	5	36		41
2019	3	47		50
2020	3	36		39
Total:	15	211		226

#### County: (73) WAGONER

	COUNTY ROAD COLLISIONS			
	Fat	Inj *	PD	Tot
(00) - RURAL -	15	211		226

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

Collisions By Type Of Collision

Type Of Collision	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Rear-End (front-to-rear)		5		5						2		2		4		4				
Head-On (front-to-front)		4		4		1		1	1		1	1	2		3	2				2
Right Angle (front-to-side)		2		2		3		3		4		4		5		5		6		6
Angle Turning		1		1		1		1		3		3		8		8				
Other Angle																				
Sideswipe Same Direction																				
Sideswipe Opposite Direction		2		2						1		1	1		1		1			1
Fixed Object	1	24		25		26		26	3	19		22	2	20		22	1	21		22
Pedestrian		2		2		3		3	1			1		1		1		1		1
Pedal Cycle																				
Animal						2		2												
Overturn/Rollover	3	8		11		7		7		5		5		4		4		7		7
Vehicle-Train										1		1		1		1				
Other Single Vehicle Crash																				
Other		1		1						1		1		1		1				
<b>Total</b>	<b>4</b>	<b>49</b>		<b>53</b>		<b>43</b>		<b>43</b>	<b>5</b>	<b>36</b>		<b>41</b>	<b>3</b>	<b>47</b>		<b>50</b>	<b>3</b>	<b>36</b>		<b>39</b>
<b>Percent</b>	<b>1.8</b>	<b>21.7</b>		<b>23.5</b>		<b>19.0</b>		<b>19.0</b>	<b>2.2</b>	<b>15.9</b>		<b>18.1</b>	<b>1.3</b>	<b>20.8</b>		<b>22.1</b>	<b>1.3</b>	<b>15.9</b>		<b>17.3</b>

Collisions By Type Of Collision

Type Of Collision	Total				
	Fat	Inj *	PD	Tot	Pct
Rear-End (front-to-rear)		11		11	4.9
Head-On (front-to-front)	4	7		11	4.9
Right Angle (front-to-side)		20		20	8.8
Angle Turning		13		13	5.8
Other Angle					
Sideswipe Same Direction					
Sideswipe Opposite Direction		5		5	2.2
Fixed Object	7	110		117	51.8
Pedestrian	1	7		8	3.5
Pedal Cycle					
Animal		2		2	0.9
Overturn/Rollover	3	31		34	15.0
Vehicle-Train		2		2	0.9
Other Single Vehicle Crash					
Other		3		3	1.3
<b>Total</b>	<b>15</b>	<b>211</b>		<b>226</b>	<b>100</b>
<b>Percent</b>	<b>6.6</b>	<b>93.4</b>		<b>100</b>	

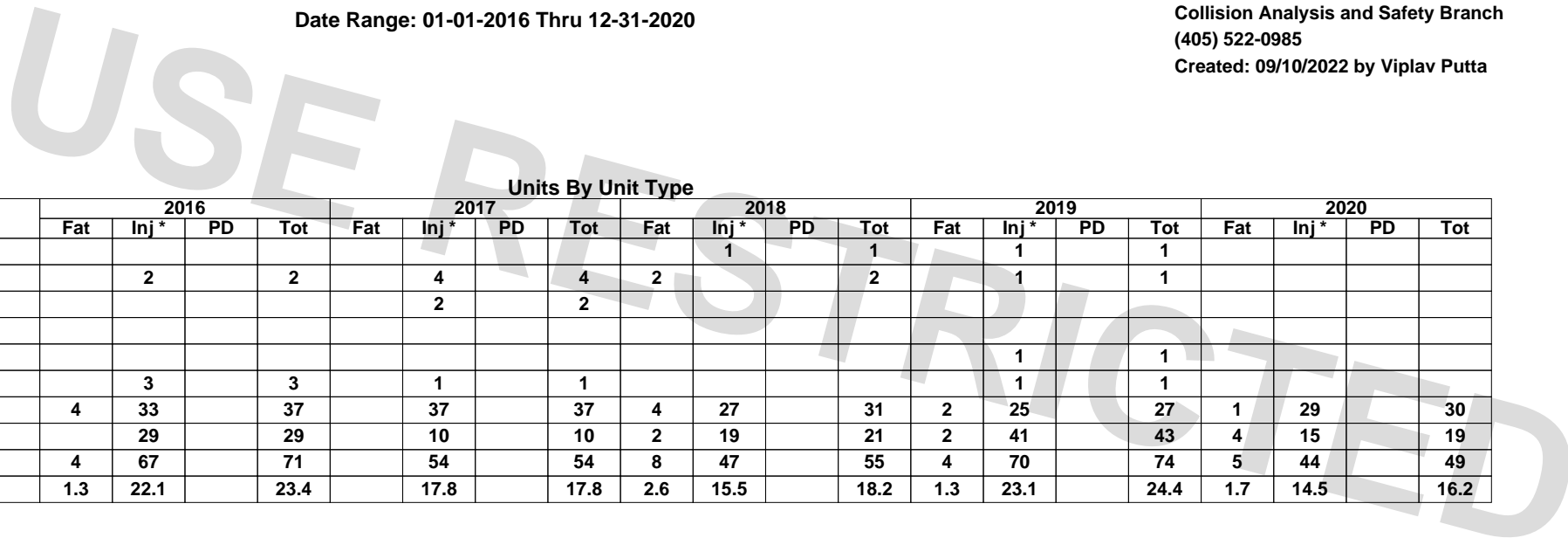
\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
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Units By Unit Type

Unit Type	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Train										1		1		1		1				
Pedestrian		2		2		4		4	2			2		1		1				
Animal						2		2												
Pedal Cycle																				
Parked Vehicle														1		1				
CMV		3		3		1		1						1		1				
Other Single Vehicle	4	33		37		37		37	4	27		31	2	25		27	1	29		30
Other Multi-Vehicle		29		29		10		10	2	19		21	2	41		43	4	15		19
Total	4	67		71		54		54	8	47		55	4	70		74	5	44		49
Percent	1.3	22.1		23.4		17.8		17.8	2.6	15.5		18.2	1.3	23.1		24.4	1.7	14.5		16.2

Units By Unit Type

Unit Type	Total				
	Fat	Inj *	PD	Tot	Pct
Train		2		2	0.7
Pedestrian	2	7		9	3.0
Animal		2		2	0.7
Pedal Cycle					
Parked Vehicle		1		1	0.3
CMV		5		5	1.7
Other Single Vehicle	11	151		162	53.5
Other Multi-Vehicle	8	114		122	40.3
Total	21	282		303	100
Percent	6.9	93.1		100	



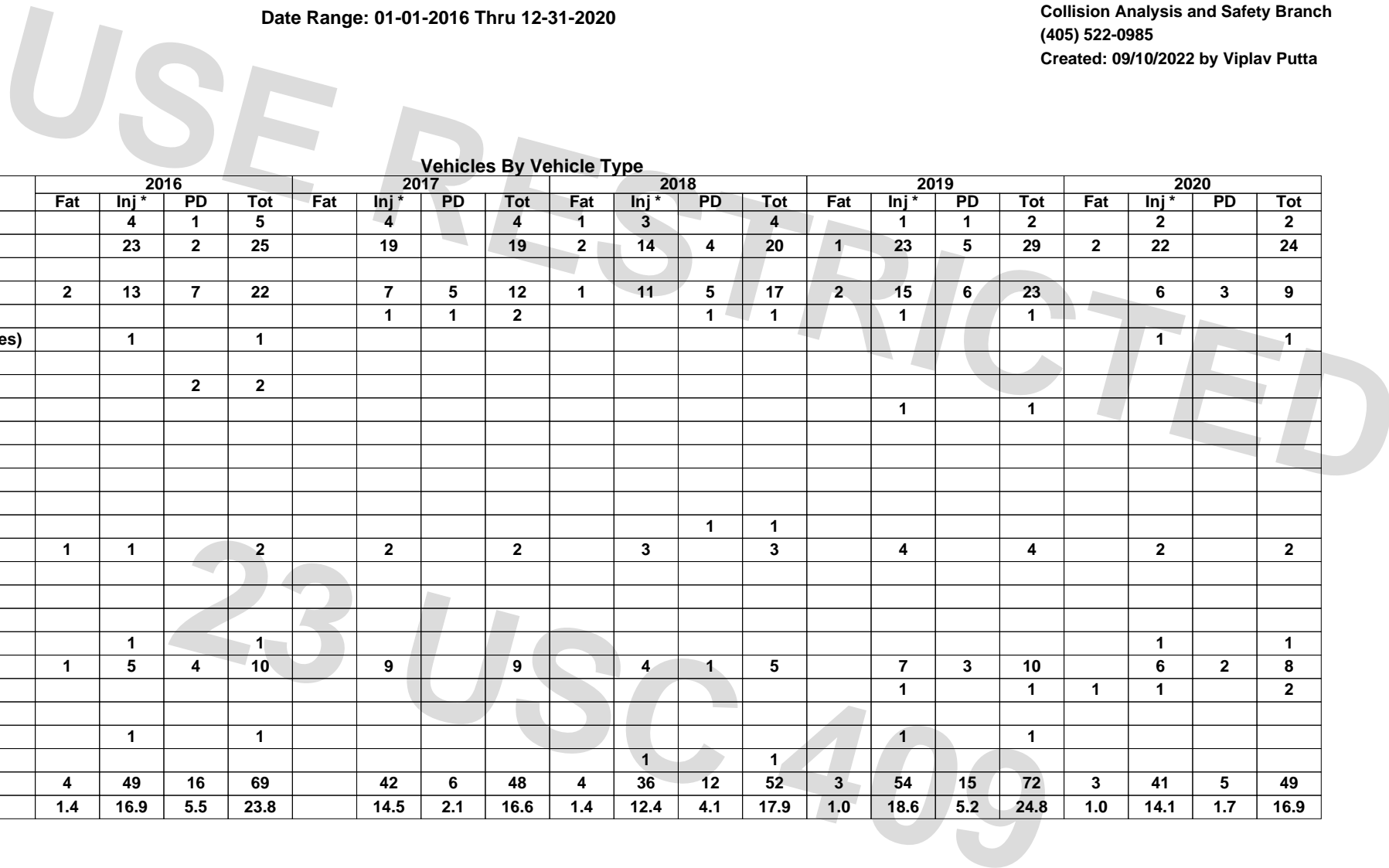
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TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
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 Created: 09/10/2022 by Viplav Putta



Vehicles By Vehicle Type

Vehicle Type	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Passenger Vehicle-2 Door		4	1	5		4		4	1	3		4		1	1	2		2		2
Passenger Vehicle-4 Door		23	2	25		19		19	2	14	4	20	1	23	5	29	2	22		24
Passenger Vehicle-Convertible																				
Pickup Truck	2	13	7	22		7	5	12	1	11	5	17	2	15	6	23		6	3	9
Single-Unit Truck (2 axles)						1	1	2			1	1		1		1				
Single-Unit Truck (3 or more axles)		1		1														1		1
School Bus																				
Truck/Trailer			2	2																
Truck-Tractor (bobtail)														1		1				
Truck-Tractor/Semi-Trailer																				
Truck-Tractor/Double																				
Truck-Tractor/Triple																				
Bus/Large Van (9-15 seats)																				
Bus (16+ seats)											1	1								
Motorcycle	1	1		2		2		2		3		3		4		4		2		2
Motor Scooter/Moped																				
Motor Home																				
Farm Machinery																				
ATV		1		1														1		1
Sport Utility Vehicle (SUV)	1	5	4	10		9		9		4	1	5		7	3	10		6	2	8
Passenger Van														1		1	1	1		2
Truck More Than 10,000 lbs.																				
Van (10,000 lbs. or less)		1		1										1		1				
Other										1		1								
<b>Total</b>	<b>4</b>	<b>49</b>	<b>16</b>	<b>69</b>		<b>42</b>	<b>6</b>	<b>48</b>	<b>4</b>	<b>36</b>	<b>12</b>	<b>52</b>	<b>3</b>	<b>54</b>	<b>15</b>	<b>72</b>	<b>3</b>	<b>41</b>	<b>5</b>	<b>49</b>
<b>Percent</b>	<b>1.4</b>	<b>16.9</b>	<b>5.5</b>	<b>23.8</b>		<b>14.5</b>	<b>2.1</b>	<b>16.6</b>	<b>1.4</b>	<b>12.4</b>	<b>4.1</b>	<b>17.9</b>	<b>1.0</b>	<b>18.6</b>	<b>5.2</b>	<b>24.8</b>	<b>1.0</b>	<b>14.1</b>	<b>1.7</b>	<b>16.9</b>

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.





TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

Vehicles By Vehicle Type

Vehicle Type	Total			Tot	Pct
	Fat	Inj *	PD		
Passenger Vehicle-2 Door	1	14	2	17	5.9
Passenger Vehicle-4 Door	5	101	11	117	40.3
Passenger Vehicle-Convertible					
Pickup Truck	5	52	26	83	28.6
Single-Unit Truck (2 axles)		2	2	4	1.4
Single-Unit Truck (3 or more axles)		2		2	0.7
School Bus					
Truck/Trailer			2	2	0.7
Truck-Tractor (bobtail)		1		1	0.3
Truck-Tractor/Semi-Trailer					
Truck-Tractor/Double					
Truck-Tractor/Triple					
Bus/Large Van (9-15 seats)					
Bus (16+ seats)			1	1	0.3
Motorcycle	1	12		13	4.5
Motor Scooter/Moped					
Motor Home					
Farm Machinery					
ATV		2		2	0.7
Sport Utility Vehicle (SUV)	1	31	10	42	14.5
Passenger Van	1	2		3	1.0
Truck More Than 10,000 lbs.					
Van (10,000 lbs. or less)		2		2	0.7
Other		1		1	0.3
<b>Total</b>	<b>14</b>	<b>222</b>	<b>54</b>	<b>290</b>	<b>100</b>
<b>Percent</b>	<b>4.8</b>	<b>76.6</b>	<b>18.6</b>	<b>100</b>	

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**TABULATION OF COLLISIONS**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

USE RESTRICTED 409

**Day And Time Of Occurrence Of Collisions**

Day	Hour Of The Day																								Tot	Pcnt		
	AM												PM															
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12				
Sunday	3	3	1		1	2		1	1			1	1	1	4	1	3	4	2	1		1		4	35	15.5		
Monday			1		1	1	1	1		3	3	2	3	4	3	3	2	2	2	2	3	1	1		39	17.3		
Tuesday	1		2	1		3	1	2	1			3	1	4	1	1	1	3	1	1	2				29	12.8		
Wednesday			1			1	1	2	1			1	2	2	4	4	5	2	2		2	2	1	1	34	15.0		
Thursday							3	1		2	2	2	1	2		1	2	1	3	2	2	1	4	29	12.8			
Friday						1	1	3	1		3	5	1	2	2	2	2	4	2	1	1	1	1	2	35	15.5		
Saturday	2					1	2	1		2		1	1			3	3	2	2	1		2	1	1	25	11.1		
<b>Total</b>	<b>Early Morning - Sunrise</b>						<b>Morning Peak</b>						<b>Mid Morning/Afternoon</b>						<b>PM Peak</b>			<b>Evening - Late Night</b>					<b>Tot</b>	<b>100</b>
	26						24						69						45			62					226	
<b>Percent</b>	11.5						10.6						30.5						19.9			27.4					100	

**Roadway/Lighting**

Roadway Conditions	Lighting Conditions					Total	Percent
	Daylight	Darkness	Twilight	Lighted	Unknown		
Dry	121	64	9	3		197	87.2
Wet (Water)	11	11				22	9.7
Ice, Snow, or Slush	3					3	1.3
Mud, Dirt, Gravel, or Sand	2		1			3	1.3
Other	1					1	0.4
<b>Total</b>	<b>138</b>	<b>75</b>	<b>10</b>	<b>3</b>		<b>226</b>	<b>100</b>
<b>Percent</b>	<b>61.1</b>	<b>33.2</b>	<b>4.4</b>	<b>1.3</b>		<b>100</b>	

**Weather Conditions**

Weather Conditions	Total	Percent
Clear	172	76.1
Clouds Present	37	16.4
Raining/Fog	12	5.3
Snowing/Sleet/Hail	4	1.8
Other	1	0.4
<b>Total</b>	<b>226</b>	<b>100</b>



**TABULATION OF COLLISIONS**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

**Drivers By Driver Conditions**

Unsafe/Unlawful	Apparently Normal			Alcohol Involved						Sleep Suspected			Drug Use Indicated			Unknown Condition			Total				
				Ability Impaired			Odor Detected																
	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Total	Pcnt
Failed to Yield		21			1															23		23	7.9
Failed to Stop		8																		8		8	2.7
Failed to Signal																							
Improper Turn		2																		2		2	0.7
Improper Start																							
Improper Stop																							
Improper Backing		1																		1		1	0.3
Improper Parking		1																		1		1	0.3
Improper Passing																							
Improper Lane Change																							
Left of Center		9						1								1	1		1	11		12	4.1
Following Too Close		2																		2		2	0.7
Unsafe Speed		75														4	5		4	83		87	29.9
DWI				4	25		3	3					1	5		1			9	33		42	14.4
Inattention		17								4							1			24		24	8.2
Negligent Driving		11																		11		11	3.8
Defective Vehicle								1												1		1	0.3
Wrong Way																							
No Improper Action	4	64																	4	64		68	23.4
Other		8														1			1	8		9	3.1
<b>Total</b>	<b>4</b>	<b>219</b>		<b>4</b>	<b>26</b>		<b>3</b>	<b>10</b>		<b>4</b>			<b>1</b>	<b>5</b>		<b>7</b>	<b>8</b>		<b>19</b>	<b>272</b>		<b>291</b>	<b>100</b>
<b>Percent</b>	<b>1.4</b>	<b>75.3</b>		<b>1.4</b>	<b>8.9</b>		<b>1.0</b>	<b>3.4</b>		<b>1.4</b>			<b>0.3</b>	<b>1.7</b>		<b>2.4</b>	<b>2.7</b>		<b>6.5</b>	<b>93.5</b>		<b>100</b>	

Severities Indicate Highest Severity in Collision

**Collisions By Special Feature**

Special Feature	Total			
	Fat	Inj *	PD	Tot
Bridge				
Work Zone		2		2
Cross Median				
Train Collision		2		2

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



**STUDY CRITERIA**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

**ROADWAY / REGION**

QUERY OVER	
1	County

**SELECTIONS**

County: 73

**DATE**

Date Range	01-01-2016 to 12-31-2020
------------	--------------------------

**REPORT SECTIONS**

Collision Map & Study Totals	(Included)
Collision Analysis Tables	(Included)
- Totals By City, Hwy Class	Checked
- Other Analysis Tables	Checked
Rate Analysis	(Included)
Query Criteria	(Included)

**FILTER COLLISIONS**

Roadway Type	County Rd. Data Only
- Severity	2 - Possible Injury
	3 - Non Incapacitating Injury
	4 - Suspected Serious Injury
	5 - Fatality
Incl. Crashes Assoc. w/ Every Int.	Checked
Environment Fields	

23 USC 409



Program Provided by:  
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 by Viplav Putta

## Study Map & Totals

### Legend

- ▲ Fatality
- Injury
- Property Damage



Remarks:

NONE

327 NONMAPPABLE COLLISIONS \*\*

Date Range: 01-01-2016 thru 12-31-2020

	2016						2017						2018					
	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot
Collisions	3	25	229	275		532	6	22	238	257		523	4	33	255	220		512
Persons	3	30	325	416		774	6	24	349	404		783	5	38	366	326		735



**STUDY TOTALS (CONT.)**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
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	2019						2020					
	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot
<b>Collisions</b>	3	24	295	181		503	2	22	235	132		391
<b>Persons</b>	3	28	438	267		736	2	25	345	210		582

	Study Total					
	Fatality	Suspected Serious Injury	Non-Incapacitating Injury	Possible Injury	Property Damage	Total
<b>Collisions</b>	18	126	1252	1065		2461
<b>Persons</b>	19	145	1823	1623		3610

\*\* NONMAPPABLE COLLISIONS ARE NOT PLOTTED ON THE MAP DUE TO INSUFFICIENT LOCATION INFORMATION.



**STUDY TOTALS - BY CITY AND HWY CLASS**

**Date Range: 01-01-2016 Thru 12-31-2020**

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

**STUDY TOTALS**

Year	CITY STREET COLLISIONS			
	Fat	Inj *	PD	Tot
2016	3	529		532
2017	6	517		523
2018	4	508		512
2019	3	500		503
2020	2	389		391
<b>Total:</b>	<b>18</b>	<b>2443</b>		<b>2461</b>

**County: (72) TULSA**

	CITY STREET COLLISIONS			
	Fat	Inj *	PD	Tot
<b>(60) BROKEN ARROW</b>	<b>17</b>	<b>2214</b>		<b>2231</b>

**County: (73) WAGONER**

	CITY STREET COLLISIONS			
	Fat	Inj *	PD	Tot
<b>(60) BROKEN ARROW</b>	<b>1</b>	<b>229</b>		<b>230</b>

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

Collisions By Type Of Collision

Type Of Collision	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Rear-End (front-to-rear)		221		221		192		192		200		200	1	200		201		139		139
Head-On (front-to-front)		11		11	1	8		9	2	4		6	1	8		9		4		4
Right Angle (front-to-side)		52		52		57		57		26		26		43		43		37		37
Angle Turning		168		168	4	183		187		196		196		178		178		138		138
Other Angle		1		1		1		1		1		1		1		1		1		1
Sideswipe Same Direction		10		10		11		11		10		10		8		8		8		8
Sideswipe Opposite Direction		2		2		3		3		7		7		4		4		3		3
Fixed Object	1	37		38	1	27		28	1	33		34		24		24	1	29		30
Pedestrian	1	4		5		10		10		4		4		7		7		5		5
Pedal Cycle		3		3		4		4		5		5	1	3		4		4		4
Animal										3		3		2		2				
Overturn/Rollover		5		5		11		11		6		6		8		8		7		7
Vehicle-Train																				
Other Single Vehicle Crash		2		2						3		3		1		1		3		3
Other	1	13		14		10		10	1	10		11		13		13	1	11		12
<b>Total</b>	<b>3</b>	<b>529</b>		<b>532</b>	<b>6</b>	<b>517</b>		<b>523</b>	<b>4</b>	<b>508</b>		<b>512</b>	<b>3</b>	<b>500</b>		<b>503</b>	<b>2</b>	<b>389</b>		<b>391</b>
<b>Percent</b>	<b>0.1</b>	<b>21.5</b>		<b>21.6</b>	<b>0.2</b>	<b>21.0</b>		<b>21.3</b>	<b>0.2</b>	<b>20.6</b>		<b>20.8</b>	<b>0.1</b>	<b>20.3</b>		<b>20.4</b>	<b>0.1</b>	<b>15.8</b>		<b>15.9</b>

Collisions By Type Of Collision

Type Of Collision	Total				
	Fat	Inj *	PD	Tot	Pct
Rear-End (front-to-rear)	1	952		953	38.7
Head-On (front-to-front)	4	35		39	1.6
Right Angle (front-to-side)		215		215	8.7
Angle Turning	4	863		867	35.2
Other Angle		5		5	0.2
Sideswipe Same Direction		47		47	1.9
Sideswipe Opposite Direction		19		19	0.8
Fixed Object	4	150		154	6.3
Pedestrian	1	30		31	1.3
Pedal Cycle	1	19		20	0.8
Animal		5		5	0.2
Overturn/Rollover		37		37	1.5
Vehicle-Train					
Other Single Vehicle Crash		9		9	0.4
Other	3	57		60	2.4
<b>Total</b>	<b>18</b>	<b>2443</b>		<b>2461</b>	<b>100</b>
<b>Percent</b>	<b>0.7</b>	<b>99.3</b>		<b>100</b>	

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.

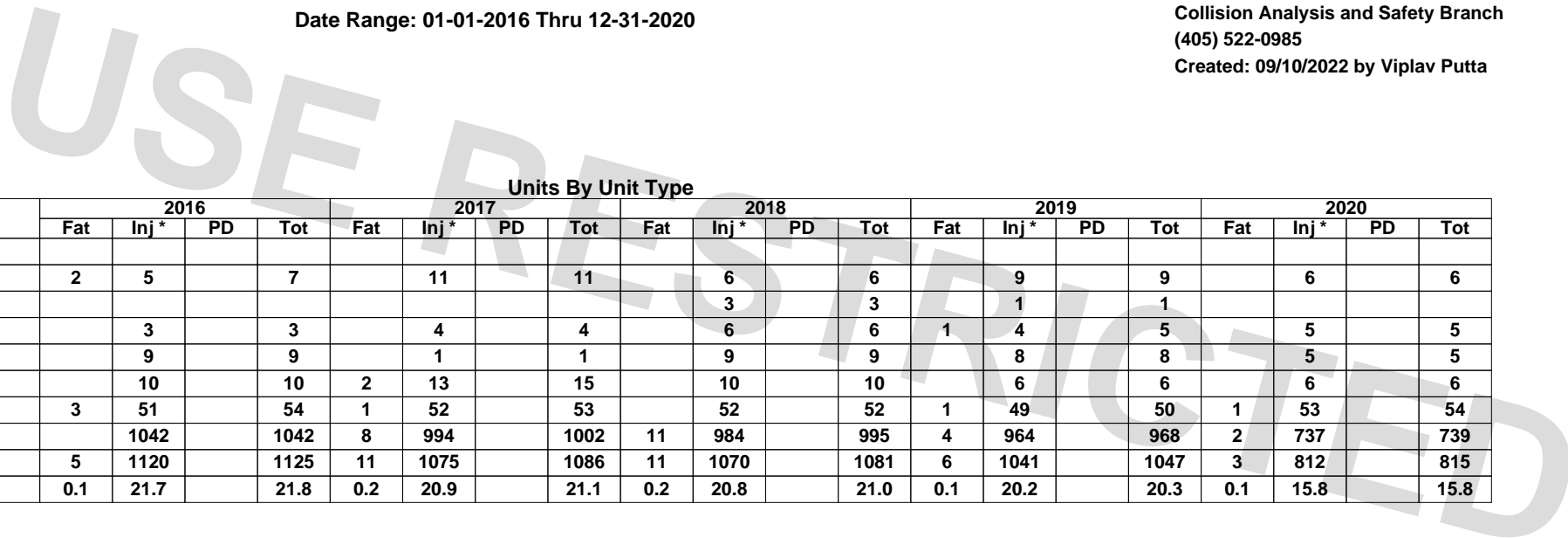




TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta



Units By Unit Type

Unit Type	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Train																				
Pedestrian	2	5		7		11		11	6		6		9		9		6			6
Animal									3		3		1		1					
Pedal Cycle		3		3		4		4	6		6	1	4		5		5			5
Parked Vehicle		9		9		1		1	9		9		8		8		5			5
CMV		10		10	2	13		15	10		10		6		6		6			6
Other Single Vehicle	3	51		54	1	52		53	52		52	1	49		50	1	53			54
Other Multi-Vehicle		1042		1042	8	994		1002	11	984		995	4	964		968	2	737		739
Total	5	1120		1125	11	1075		1086	11	1070		1081	6	1041		1047	3	812		815
Percent	0.1	21.7		21.8	0.2	20.9		21.1	0.2	20.8		21.0	0.1	20.2		20.3	0.1	15.8		15.8

Units By Unit Type

Unit Type	Total				
	Fat	Inj *	PD	Tot	Pct
Train					
Pedestrian	2	37		39	0.8
Animal		4		4	0.1
Pedal Cycle	1	22		23	0.4
Parked Vehicle		32		32	0.6
CMV	2	45		47	0.9
Other Single Vehicle	6	257		263	5.1
Other Multi-Vehicle	25	4721		4746	92.1
Total	36	5118		5154	100
Percent	0.7	99.3		100	



\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

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Vehicles By Vehicle Type

Vehicle Type	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Passenger Vehicle-2 Door		45	19	64		35	24	59		34	18	52		21	23	44		28	14	42
Passenger Vehicle-4 Door		307	163	470	3	287	153	443	2	270	160	432	1	280	163	444		228	116	344
Passenger Vehicle-Convertible						1	4	5		4		4		5	1	6				
Pickup Truck	1	87	123	211	1	84	112	197		58	93	151	1	75	92	168	1	62	66	129
Single-Unit Truck (2 axles)		3	2	5		2	4	6		6	10	16			2	2		1	2	3
Single-Unit Truck (3 or more axles)							2	2		1		1		1		1				
School Bus			1	1			2	2						1		1		1		1
Truck/Trailer										1		1			2	2				
Truck-Tractor (bobtail)																				
Truck-Tractor/Semi-Trailer			2	2		1	5	6			2	2							1	1
Truck-Tractor/Double							1	1												
Truck-Tractor/Triple																				
Bus/Large Van (9-15 seats)		1	1	2															2	2
Bus (16+ seats)			1	1						1		1								
Motorcycle		17		17	1	21		22	1	20		21		19	1	20	1	15	1	17
Motor Scooter/Moped														1		1		1	1	2
Motor Home		1		1																
Farm Machinery														1		1				
ATV														1		1		1		1
Sport Utility Vehicle (SUV)		156	108	264	1	179	105	285	2	184	136	322		172	116	288		127	99	226
Passenger Van		32	22	54		20	9	29		15	19	34		22	7	29		13	7	20
Truck More Than 10,000 lbs.		2	1	3		1		1			2	2			1	1		2	2	4
Van (10,000 lbs. or less)		4	10	14		7	3	10		11	2	13		4	5	9		2	1	3
Other		2	4	6			3	3		5	9	14		3	11	14		3	6	9
<b>Total</b>	<b>1</b>	<b>657</b>	<b>457</b>	<b>1115</b>	<b>6</b>	<b>638</b>	<b>427</b>	<b>1071</b>	<b>5</b>	<b>610</b>	<b>451</b>	<b>1066</b>	<b>2</b>	<b>606</b>	<b>424</b>	<b>1032</b>	<b>2</b>	<b>484</b>	<b>318</b>	<b>804</b>
<b>Percent</b>		<b>12.9</b>	<b>9.0</b>	<b>21.9</b>	<b>0.1</b>	<b>12.5</b>	<b>8.4</b>	<b>21.0</b>	<b>0.1</b>	<b>12.0</b>	<b>8.9</b>	<b>21.0</b>		<b>11.9</b>	<b>8.3</b>	<b>20.3</b>		<b>9.5</b>	<b>6.3</b>	<b>15.8</b>

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

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Vehicles By Vehicle Type

Vehicle Type	Total				
	Fat	Inj *	PD	Tot	Pct
Passenger Vehicle-2 Door		163	98	261	5.1
Passenger Vehicle-4 Door	6	1372	755	2133	41.9
Passenger Vehicle-Convertible		10	5	15	0.3
Pickup Truck	4	366	486	856	16.8
Single-Unit Truck (2 axles)		12	20	32	0.6
Single-Unit Truck (3 or more axles)		2	2	4	0.1
School Bus		2	3	5	0.1
Truck/Trailer		1	2	3	0.1
Truck-Tractor (bobtail)					
Truck-Tractor/Semi-Trailer		1	10	11	0.2
Truck-Tractor/Double			1	1	
Truck-Tractor/Triple					
Bus/Large Van (9-15 seats)		1	3	4	0.1
Bus (16+ seats)		1	1	2	
Motorcycle	3	92	2	97	1.9
Motor Scooter/Moped		2	1	3	0.1
Motor Home		1		1	
Farm Machinery		1		1	
ATV		2		2	
Sport Utility Vehicle (SUV)	3	818	564	1385	27.2
Passenger Van		102	64	166	3.3
Truck More Than 10,000 lbs.		5	6	11	0.2
Van (10,000 lbs. or less)		28	21	49	1.0
Other		13	33	46	0.9
<b>Total</b>	<b>16</b>	<b>2995</b>	<b>2077</b>	<b>5088</b>	<b>100</b>
<b>Percent</b>	<b>0.3</b>	<b>58.9</b>	<b>40.8</b>	<b>100</b>	

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**TABULATION OF COLLISIONS**

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**Day And Time Of Occurrence Of Collisions**

Day	Hour Of The Day																								Tot	Pcnt						
	AM												PM																			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12								
Sunday	2	7	3	2	2		2	1	4	12	13	12	16	8	16	18	15	14	10	4	9	4	5	4	183	7.4						
Monday	2	1				4	19	23	13	19	20	20	23	24	37	25	42	26	13	12	11	5	3	2	346	14.1						
Tuesday	1	1	1		3	13	25	34	14	10	17	21	34	43	29	37	60	35	15	7	6	1	2	5	415	16.9						
Wednesday	1	1	1	3	3	4	37	21	21	22	29	23	16	24	43	45	58	42	13	6	9	4	1	4	431	17.5						
Thursday	2	2		1	5	7	25	17	26	13	25	21	20	34	27	44	52	26	17	13	9	4	6	1	397	16.1						
Friday	2	5	1			2	18	29	19	6	20	27	27	23	45	54	46	41	19	12	9	9	3	4	423	17.2						
Saturday	2	9	1	2	2	1	4	7	15	18	14	21	23	20	16	24	16	17	19	8	12	4	7	3	266	10.8						
	Early Morning - Sunrise						Morning Peak						Mid Morning/Afternoon						PM Peak						Evening - Late Night						Tot	100
Total	99						374						931						737						320						2461	
Percent	4.0						15.2						37.8						29.9						13.0						100	

**Roadway/Lighting**

Roadway Conditions	Lighting Conditions					Total	Percent
	Daylight	Darkness	Twilight	Lighted	Unknown		
Dry	1618	187	52	205	4	2066	83.9
Wet (Water)	283	42	13	39	1	378	15.4
Ice, Snow, or Slush	4	3	1	3		11	0.4
Mud, Dirt, Gravel, or Sand	2	1				3	0.1
Other	2			1		3	0.1
Total	1909	233	66	248	5	2461	100
Percent	77.6	9.5	2.7	10.1	0.2	100	

**Weather Conditions**

Weather Conditions	Total	Percent
Clear	1811	73.6
Clouds Present	352	14.3
Raining/Fog	287	11.7
Snowing/Sleet/Hail	8	0.3
Other	3	0.1
Total	2461	100



**TABULATION OF COLLISIONS**

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**Drivers By Driver Conditions**

Unsafe/Unlawful	Apparently Normal			Alcohol Involved						Sleep Suspected			Drug Use Indicated			Unknown Condition			Total				
				Ability Impaired			Odor Detected																
	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Total	Pcnt
Failed to Yield	1	708			1		1	4					2			17			2	732		734	14.5
Failed to Stop		334			2			3								16				362		362	7.2
Failed to Signal																							
Improper Turn	1	208						3					2		1	7			2	220		222	4.4
Improper Start		1														1				2		2	
Improper Stop		3																		3		3	0.1
Improper Backing		9																		9		9	0.2
Improper Parking		1																		1		1	
Improper Passing		16			1											1				18		18	0.4
Improper Lane Change		32									1		1			2				36		36	0.7
Left of Center		30						1			2		1	2	2	8			3	43		46	0.9
Following Too Close		309						3			1		1			12				326		326	6.4
Unsafe Speed	1	112					1	2					2		2	2			4	118		122	2.4
DWI		6			50		1	8					11		2	1			3	76		79	1.6
Inattention		333						1			12		2		1	19			1	367		368	7.3
Negligent Driving		26						2								1				29		29	0.6
Defective Vehicle		28														2				30		30	0.6
Wrong Way		1														1				2		2	
No Improper Action	11	2497			3								3		4	33			15	2536		2551	50.5
Other		86			2						1				3	24			3	113		116	2.3
<b>Total</b>	<b>14</b>	<b>4740</b>			<b>59</b>		<b>3</b>	<b>27</b>			<b>24</b>		<b>1</b>	<b>26</b>	<b>15</b>	<b>147</b>			<b>33</b>	<b>5023</b>		<b>5056</b>	<b>100</b>
<b>Percent</b>	<b>0.3</b>	<b>93.8</b>			<b>1.2</b>		<b>0.1</b>	<b>0.5</b>			<b>0.5</b>		<b>0.5</b>	<b>0.5</b>	<b>0.3</b>	<b>2.9</b>			<b>0.7</b>	<b>99.3</b>		<b>100</b>	

Severities Indicate Highest Severity in Collision

**Collisions By Special Feature**

Special Feature	Total			
	Fat	Inj *	PD	Tot
Bridge		3		3
Work Zone		26		26
Cross Median		1		1
Train Collision				

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



**STUDY CRITERIA**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

**ROADWAY / REGION**

QUERY OVER		SELECTIONS
1	City	County: 72, City: 60
2	City	County: 73, City: 60

**DATE**

Date Range	01-01-2016 to 12-31-2020
------------	--------------------------

**REPORT SECTIONS**

Collision Map & Study Totals	(Included)
Collision Analysis Tables	(Included)
- Totals By City, Hwy Class	Checked
- Other Analysis Tables	Checked
Rate Analysis	(Included)
Query Criteria	(Included)

**FILTER COLLISIONS**

Roadway Type	City St. Data Only
- Severity	2 - Possible Injury
	3 - Non Incapacitating Injury
	4 - Suspected Serious Injury
	5 - Fatality
Incl. Crashes Assoc. w/ Every Int.	Checked
Environment Fields	

23 USC 409



Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022  
 by Viplav Putta

## Study Map & Totals

### Legend

- ▲ Fatality
- Injury
- Property Damage



Remarks:

NONE

44 NONMAPPABLE COLLISIONS \*\*

Date Range: 01-01-2016 thru 12-31-2020

	2016						2017						2018					
	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot
Collisions		2	15	39		56		5	13	25		43		3	7	35		45
Persons		4	21	59		84		5	16	38		59		3	9	51		63



**STUDY TOTALS (CONT.)**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

	2019						2020					
	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot
<b>Collisions</b>		1	5	17		23		1	10	21		32
<b>Persons</b>		1	8	23		32		1	12	30		43

	Study Total					
	Fatality	Suspected Serious Injury	Non-Incapacitating Injury	Possible Injury	Property Damage	Total
<b>Collisions</b>		12	50	137		199
<b>Persons</b>		14	66	201		281

\*\* NONMAPPABLE COLLISIONS ARE NOT PLOTTED ON THE MAP DUE TO INSUFFICIENT LOCATION INFORMATION.





### STUDY TOTALS - BY CITY AND HWY CLASS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
Traffic Engineering Division  
Collision Analysis and Safety Branch  
(405) 522-0985  
Created: 09/10/2022 by Viplav Putta

#### STUDY TOTALS

Year	CITY STREET COLLISIONS			
	Fat	Inj *	PD	Tot
2016		56		56
2017		43		43
2018		45		45
2019		23		23
2020		32		32
Total:		199		199

#### County: (72) TULSA

	CITY STREET COLLISIONS			
	Fat	Inj *	PD	Tot
(25) JENKS		199		199

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

Collisions By Type Of Collision

Type Of Collision	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Rear-End (front-to-rear)		24		24		18		18		21		21		10		10		12		12
Head-On (front-to-front)		3		3						1		1								
Right Angle (front-to-side)		5		5		8		8		7		7		5		5		7		7
Angle Turning		18		18		9		9		12		12		3		3		8		8
Other Angle																				
Sideswipe Same Direction										1		1								
Sideswipe Opposite Direction		2		2		1		1						1		1				
Fixed Object		1		1		3		3		2		2		3		3		4		4
Pedestrian		2		2		1		1						1		1				
Pedal Cycle						1		1												
Animal																				
Overturn/Rollover		1		1		1		1												
Vehicle-Train																				
Other Single Vehicle Crash										1		1								
Other						1		1										1		1
<b>Total</b>		<b>56</b>		<b>56</b>		<b>43</b>		<b>43</b>		<b>45</b>		<b>45</b>		<b>23</b>		<b>23</b>		<b>32</b>		<b>32</b>
<b>Percent</b>		<b>28.1</b>		<b>28.1</b>		<b>21.6</b>		<b>21.6</b>		<b>22.6</b>		<b>22.6</b>		<b>11.6</b>		<b>11.6</b>		<b>16.1</b>		<b>16.1</b>

Collisions By Type Of Collision

Type Of Collision	Total				
	Fat	Inj *	PD	Tot	Pct
Rear-End (front-to-rear)		85		85	42.7
Head-On (front-to-front)		4		4	2.0
Right Angle (front-to-side)		32		32	16.1
Angle Turning		50		50	25.1
Other Angle					
Sideswipe Same Direction		1		1	0.5
Sideswipe Opposite Direction		4		4	2.0
Fixed Object		13		13	6.5
Pedestrian		4		4	2.0
Pedal Cycle		1		1	0.5
Animal					
Overturn/Rollover		2		2	1.0
Vehicle-Train					
Other Single Vehicle Crash		1		1	0.5
Other		2		2	1.0
<b>Total</b>		<b>199</b>		<b>199</b>	<b>100</b>
<b>Percent</b>		<b>100.0</b>		<b>100</b>	

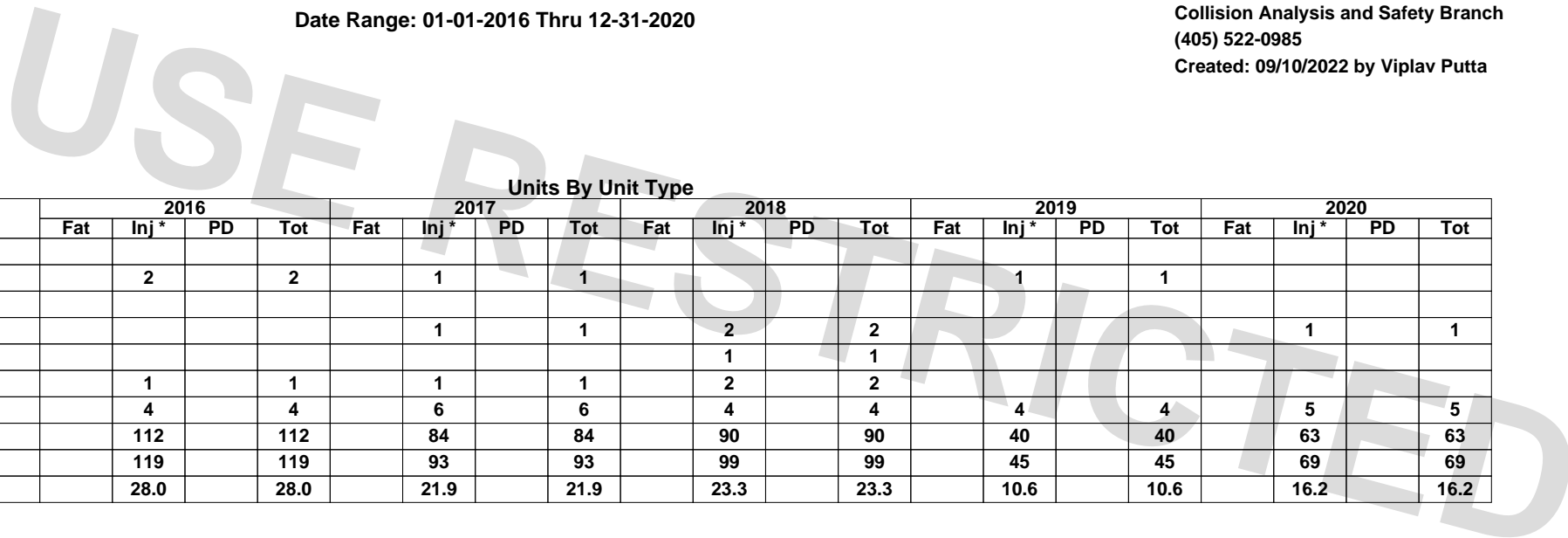
\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



**TABULATION OF COLLISIONS**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta



**Units By Unit Type**

Unit Type	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Train																				
Pedestrian		2		2		1		1						1		1				
Animal																				
Pedal Cycle						1		1		2		2						1		1
Parked Vehicle										1		1								
CMV		1		1		1		1		2		2								
Other Single Vehicle		4		4		6		6		4		4		4		4		5		5
Other Multi-Vehicle		112		112		84		84		90		90		40		40		63		63
<b>Total</b>		<b>119</b>		<b>119</b>		<b>93</b>		<b>93</b>		<b>99</b>		<b>99</b>		<b>45</b>		<b>45</b>		<b>69</b>		<b>69</b>
<b>Percent</b>		<b>28.0</b>		<b>28.0</b>		<b>21.9</b>		<b>21.9</b>		<b>23.3</b>		<b>23.3</b>		<b>10.6</b>		<b>10.6</b>		<b>16.2</b>		<b>16.2</b>

**Units By Unit Type**

Unit Type	Total				
	Fat	Inj *	PD	Tot	Pct
Train					
Pedestrian		4		4	0.9
Animal					
Pedal Cycle		4		4	0.9
Parked Vehicle		1		1	0.2
CMV		4		4	0.9
Other Single Vehicle		23		23	5.4
Other Multi-Vehicle		389		389	91.5
<b>Total</b>		<b>425</b>		<b>425</b>	<b>100</b>
<b>Percent</b>		<b>100.0</b>		<b>100</b>	



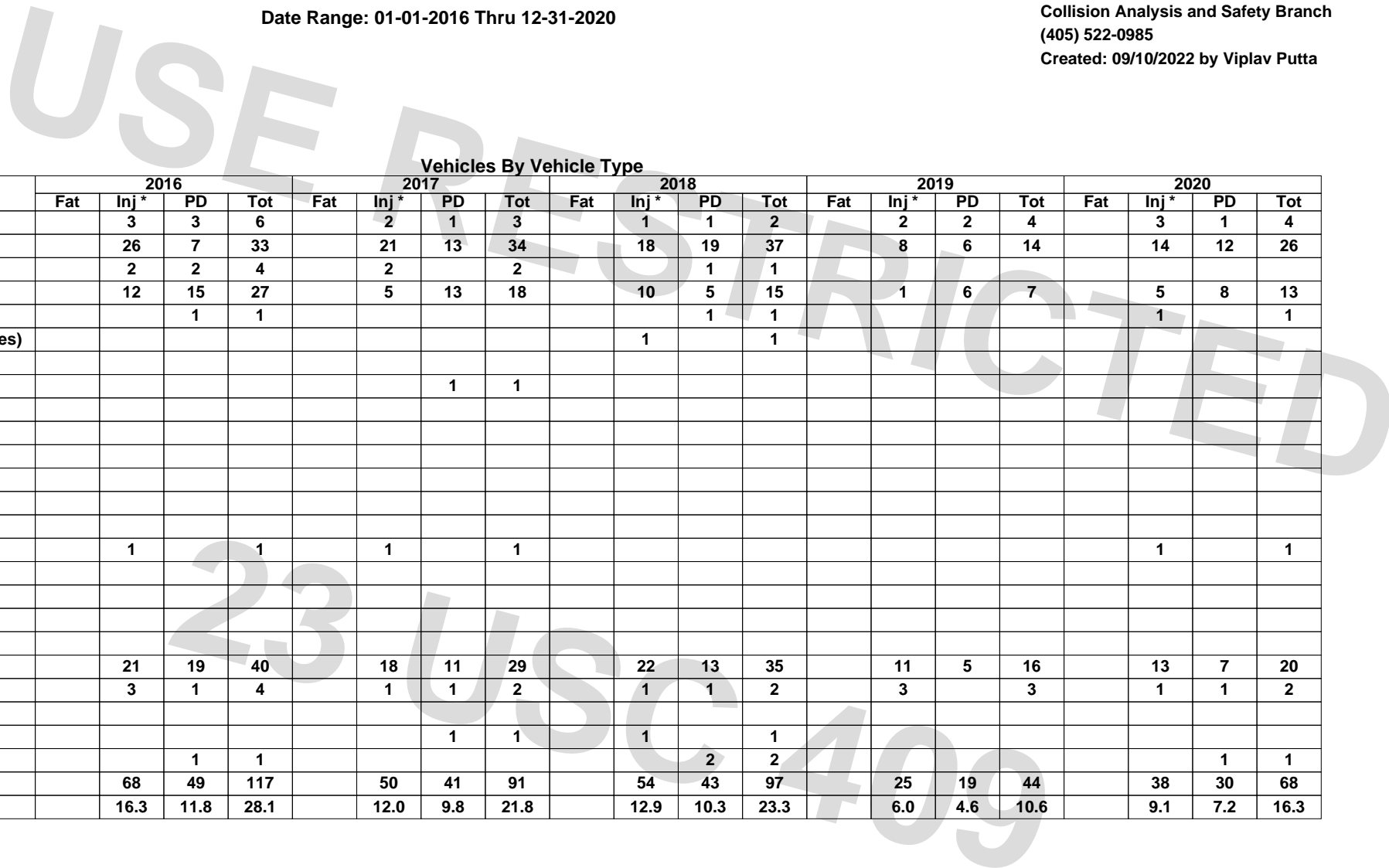
\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta



Vehicles By Vehicle Type

Vehicle Type	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Passenger Vehicle-2 Door		3	3	6		2	1	3		1	1	2		2	2	4		3	1	4
Passenger Vehicle-4 Door		26	7	33		21	13	34		18	19	37		8	6	14		14	12	26
Passenger Vehicle-Convertible		2	2	4		2		2		1	1	1								
Pickup Truck		12	15	27		5	13	18		10	5	15		1	6	7		5	8	13
Single-Unit Truck (2 axles)			1	1							1	1						1		1
Single-Unit Truck (3 or more axles)										1		1								
School Bus																				
Truck/Trailer							1	1												
Truck-Tractor (bobtail)																				
Truck-Tractor/Semi-Trailer																				
Truck-Tractor/Double																				
Truck-Tractor/Triple																				
Bus/Large Van (9-15 seats)																				
Bus (16+ seats)																				
Motorcycle		1		1		1		1										1		1
Motor Scooter/Moped																				
Motor Home																				
Farm Machinery																				
ATV																				
Sport Utility Vehicle (SUV)		21	19	40		18	11	29		22	13	35		11	5	16		13	7	20
Passenger Van		3	1	4		1	1	2		1	1	2		3		3		1	1	2
Truck More Than 10,000 lbs.																				
Van (10,000 lbs. or less)							1	1		1		1								
Other			1	1							2	2							1	1
<b>Total</b>		<b>68</b>	<b>49</b>	<b>117</b>		<b>50</b>	<b>41</b>	<b>91</b>		<b>54</b>	<b>43</b>	<b>97</b>		<b>25</b>	<b>19</b>	<b>44</b>		<b>38</b>	<b>30</b>	<b>68</b>
<b>Percent</b>		<b>16.3</b>	<b>11.8</b>	<b>28.1</b>		<b>12.0</b>	<b>9.8</b>	<b>21.8</b>		<b>12.9</b>	<b>10.3</b>	<b>23.3</b>		<b>6.0</b>	<b>4.6</b>	<b>10.6</b>		<b>9.1</b>	<b>7.2</b>	<b>16.3</b>

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

Vehicles By Vehicle Type

Vehicle Type	Total				
	Fat	Inj *	PD	Tot	Pct
Passenger Vehicle-2 Door		11	8	19	4.6
Passenger Vehicle-4 Door		87	57	144	34.5
Passenger Vehicle-Convertible		4	3	7	1.7
Pickup Truck		33	47	80	19.2
Single-Unit Truck (2 axles)		1	2	3	0.7
Single-Unit Truck (3 or more axles)		1		1	0.2
School Bus					
Truck/Trailer			1	1	0.2
Truck-Tractor (bobtail)					
Truck-Tractor/Semi-Trailer					
Truck-Tractor/Double					
Truck-Tractor/Triple					
Bus/Large Van (9-15 seats)					
Bus (16+ seats)					
Motorcycle		3		3	0.7
Motor Scooter/Moped					
Motor Home					
Farm Machinery					
ATV					
Sport Utility Vehicle (SUV)		85	55	140	33.6
Passenger Van		9	4	13	3.1
Truck More Than 10,000 lbs.					
Van (10,000 lbs. or less)		1	1	2	0.5
Other			4	4	1.0
<b>Total</b>		<b>235</b>	<b>182</b>	<b>417</b>	<b>100</b>
<b>Percent</b>		<b>56.4</b>	<b>43.6</b>	<b>100</b>	

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



**TABULATION OF COLLISIONS**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

USE RESTRICTION 409

**Day And Time Of Occurrence Of Collisions**

Day	Hour Of The Day																								Tot	Pcnt						
	AM												PM																			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12								
Sunday									1			1	3			2	3	1			3					14	7.0					
Monday							1	2	1	1		3	4	3	4	2	3	1		1		1	1	1		29	14.6					
Tuesday							1	3	2	1	1	3	1	2	2	7	7	3	2	1		1		1		38	19.1					
Wednesday						1	4	2	2	1	1	1	1	3	1	1	6	3		3	2			1		33	16.6					
Thursday				1				2	3	1	1	1	1	1	2	4	4	2	1	1				1		26	13.1					
Friday					1			2	2		2		5	1	3	6	5	4	2	1	1	1	2			38	19.1					
Saturday							2			1			1	1	2	2	1		7	1			1	1		21	10.6					
	Early Morning - Sunrise						Morning Peak						Mid Morning/Afternoon						PM Peak						Evening - Late Night						Tot	Pcnt
Total	3						31						67						68						30						199	100
Percent	1.5						15.6						33.7						34.2						15.1						100	

**Roadway/Lighting**

Roadway Conditions	Lighting Conditions					Total	Percent
	Daylight	Darkness	Twilight	Lighted	Unknown		
Dry	130	6	5	23		164	82.4
Wet (Water)	23	5		3		31	15.6
Ice, Snow, or Slush	2	1				3	1.5
Mud, Dirt, Gravel, or Sand				1		1	0.5
Other							
Total	155	12	5	27		199	100
Percent	77.9	6.0	2.5	13.6		100	

**Weather Conditions**

Weather Conditions	Total	Percent
Clear	141	70.9
Clouds Present	31	15.6
Raining/Fog	26	13.1
Snowing/Sleet/Hail	1	0.5
Other		
Total	199	100



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

Drivers By Driver Conditions

Unsafe/Unlawful	Apparently Normal			Alcohol Involved						Sleep Suspected			Drug Use Indicated			Unknown Condition			Total								
				Ability Impaired			Odor Detected																				
	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Total	Pcnt				
Failed to Yield		46																		48		48	11.5				
Failed to Stop		19											1							21		21	5.0				
Failed to Signal																											
Improper Turn		21																1			22		22	5.3			
Improper Start		1																			1		1	0.2			
Improper Stop		1																			1		1	0.2			
Improper Backing		1																			1		1	0.2			
Improper Parking																											
Improper Passing																											
Improper Lane Change																		1				1		0.2			
Left of Center		3																			3		3	0.7			
Following Too Close		39										1		1							2		43	10.3			
Unsafe Speed		15																			1		16	3.8			
DWI		1				3																1		11	2.6		
Inattention		29											1									1		32	7.7		
Negligent Driving		5																					5		5	1.2	
Defective Vehicle		3																					3		3	0.7	
Wrong Way		1																					1		1	0.2	
No Improper Action		198																					4		202	48.6	
Other		5																						5		5	1.2
<b>Total</b>		<b>388</b>				<b>3</b>						<b>2</b>		<b>2</b>									<b>14</b>		<b>416</b>	<b>100</b>	
<b>Percent</b>		<b>93.3</b>				<b>0.7</b>						<b>0.5</b>		<b>0.5</b>									<b>3.4</b>		<b>100.0</b>		

Severities Indicate Highest Severity in Collision

Collisions By Special Feature

Special Feature	Total			
	Fat	Inj *	PD	Tot
Bridge		4		4
Work Zone		4		4
Cross Median				
Train Collision				

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



**STUDY CRITERIA**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
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 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

**ROADWAY / REGION**

QUERY OVER	
1	City

**SELECTIONS**

County: 72, City: 25

**DATE**

Date Range	01-01-2016 to 12-31-2020
------------	--------------------------

**REPORT SECTIONS**

Collision Map & Study Totals	(Included)
Collision Analysis Tables	(Included)
- Totals By City, Hwy Class	Checked
- Other Analysis Tables	Checked
Rate Analysis	(Included)
Query Criteria	(Included)

**FILTER COLLISIONS**

Roadway Type	City St. Data Only
- Severity	2 - Possible Injury
	3 - Non Incapacitating Injury
	4 - Suspected Serious Injury
	5 - Fatality
Incl. Crashes Assoc. w/ Every Int.	Checked
Environment Fields	

23 USC 409





Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022  
 by Viplav Putta

## Study Map & Totals

### Legend

- ▲ Fatality
- Injury
- Property Damage



Remarks:

NONE

210 NONMAPPABLE COLLISIONS \*\*

Date Range: 01-01-2016 thru 12-31-2020

	2016						2017					2018						
	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot
Collisions	2	13	35	49		99	10	34	44		88	1	11	40	61			113
Persons	2	15	51	84		152	10	49	56		115	1	11	55	89			156



**STUDY TOTALS (CONT.)**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

	2019						2020					
	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot	Fat	SRS Inj	Non-Incap Inj	Poss Inj	PD	Tot
<b>Collisions</b>	1	11	42	72		126	2	5	36	60		103
<b>Persons</b>	1	14	55	98		168	2	5	51	99		157

	Study Total					
	Fatality	Suspected Serious Injury	Non-Incapacitating Injury	Possible Injury	Property Damage	Total
<b>Collisions</b>	6	50	187	286		529
<b>Persons</b>	6	55	261	426		748

\*\* NONMAPPABLE COLLISIONS ARE NOT PLOTTED ON THE MAP DUE TO INSUFFICIENT LOCATION INFORMATION.



# STUDY TOTALS - BY CITY AND HWY CLASS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
Traffic Engineering Division  
Collision Analysis and Safety Branch  
(405) 522-0985  
Created: 09/10/2022 by Viplav Putta

## STUDY TOTALS

Year	CITY STREET COLLISIONS			
	Fat	Inj *	PD	Tot
2016	2	97		99
2017		88		88
2018	1	112		113
2019	1	125		126
2020	2	101		103
Total:	6	523		529

### County: (66) ROGERS

	CITY STREET COLLISIONS			
	Fat	Inj *	PD	Tot
(32) OWASSO		22		22

### County: (72) TULSA

	CITY STREET COLLISIONS			
	Fat	Inj *	PD	Tot
(30) OWASSO	6	501		507

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

Collisions By Type Of Collision

Type Of Collision	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Rear-End (front-to-rear)		24		24		28		28		41		41		32		32	1	22		23
Head-On (front-to-front)		3		3		1		1		1		1		3		3		3		3
Right Angle (front-to-side)	1	21		22		19		19	1	23		24		21		21		23		23
Angle Turning	1	29		30		24		24		31		31		39		39		41		41
Other Angle						1		1												
Sideswipe Same Direction		2		2		1		1		1		1		1		1				
Sideswipe Opposite Direction						3		3		1		1		2		2	1			1
Fixed Object		8		8		5		5		5		5	1	10		11		5		5
Pedestrian		4		4						3		3		5		5				
Pedal Cycle						1		1		1		1		3		3				
Animal																		1		1
Overturn/Rollover		1		1		1		1		1		1		2		2		1		1
Vehicle-Train																				
Other Single Vehicle Crash		1		1		1		1						1		1		2		2
Other		4		4		3		3		4		4		6		6		3		3
<b>Total</b>	<b>2</b>	<b>97</b>		<b>99</b>		<b>88</b>		<b>88</b>	<b>1</b>	<b>112</b>		<b>113</b>	<b>1</b>	<b>125</b>		<b>126</b>	<b>2</b>	<b>101</b>		<b>103</b>
<b>Percent</b>	<b>0.4</b>	<b>18.3</b>		<b>18.7</b>		<b>16.6</b>		<b>16.6</b>	<b>0.2</b>	<b>21.2</b>		<b>21.4</b>	<b>0.2</b>	<b>23.6</b>		<b>23.8</b>	<b>0.4</b>	<b>19.1</b>		<b>19.5</b>

Collisions By Type Of Collision

Type Of Collision	Total				
	Fat	Inj *	PD	Tot	Pct
Rear-End (front-to-rear)	1	147		148	28.0
Head-On (front-to-front)		11		11	2.1
Right Angle (front-to-side)	2	107		109	20.6
Angle Turning	1	164		165	31.2
Other Angle		1		1	0.2
Sideswipe Same Direction		5		5	0.9
Sideswipe Opposite Direction	1	6		7	1.3
Fixed Object	1	33		34	6.4
Pedestrian		12		12	2.3
Pedal Cycle		5		5	0.9
Animal		1		1	0.2
Overturn/Rollover		6		6	1.1
Vehicle-Train					
Other Single Vehicle Crash		5		5	0.9
Other		20		20	3.8
<b>Total</b>	<b>6</b>	<b>523</b>		<b>529</b>	<b>100</b>
<b>Percent</b>	<b>1.1</b>	<b>98.9</b>		<b>100</b>	

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

Units By Unit Type

Unit Type	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Train																				
Pedestrian		4		4		1		1		3		3		5		5		2		2
Animal																		1		1
Pedal Cycle		1		1		1		1		1		1		4		4		2		2
Parked Vehicle		1		1		3		3		3		3		1		1		1		1
CMV		2		2		2		2		3		3						2		2
Other Single Vehicle		15		15		8		8		10		10	1	22		23		12		12
Other Multi-Vehicle	4	168		172		166		166	3	226		229		226		226	5	191		196
Total	4	191		195		181		181	3	246		249	1	258		259	5	211		216
Percent	0.4	17.4		17.7		16.5		16.5	0.3	22.4		22.6	0.1	23.5		23.5	0.5	19.2		19.6

Units By Unit Type

Unit Type	Total				
	Fat	Inj *	PD	Tot	Pct
Train					
Pedestrian		15		15	1.4
Animal		1		1	0.1
Pedal Cycle		9		9	0.8
Parked Vehicle		9		9	0.8
CMV		9		9	0.8
Other Single Vehicle	1	67		68	6.2
Other Multi-Vehicle	12	977		989	89.9
Total	13	1087		1100	100
Percent	1.2	98.8		100	

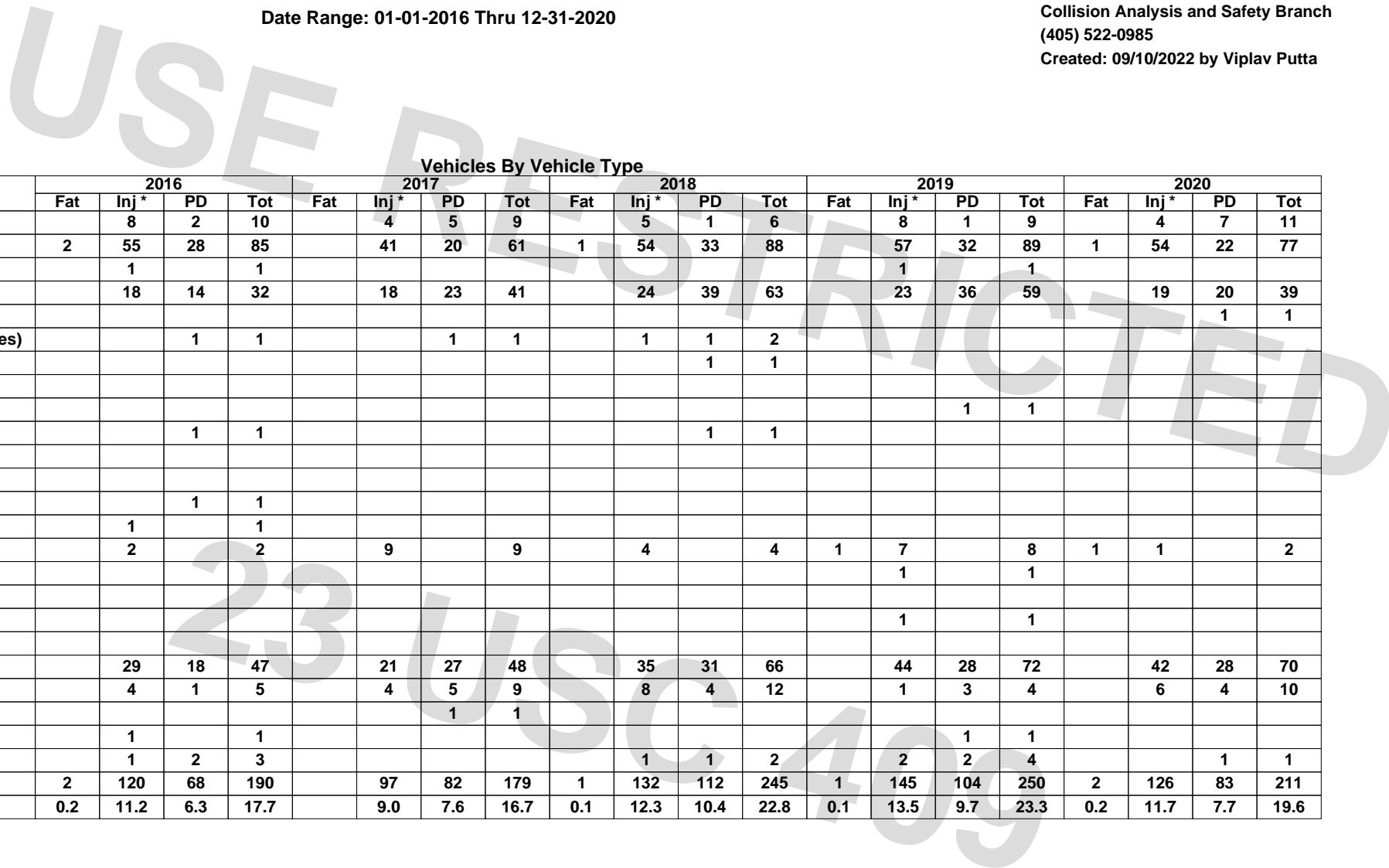
\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
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 (405) 522-0985  
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Vehicles By Vehicle Type

Vehicle Type	2016				2017				2018				2019				2020			
	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot	Fat	Inj *	PD	Tot
Passenger Vehicle-2 Door		8	2	10		4	5	9		5	1	6		8	1	9		4	7	11
Passenger Vehicle-4 Door	2	55	28	85		41	20	61	1	54	33	88		57	32	89	1	54	22	77
Passenger Vehicle-Convertible		1		1										1		1				
Pickup Truck		18	14	32		18	23	41		24	39	63		23	36	59		19	20	39
Single-Unit Truck (2 axles)																			1	1
Single-Unit Truck (3 or more axles)			1	1			1	1		1	1	2								
School Bus											1	1								
Truck/Trailer																				
Truck-Tractor (bobtail)															1	1				
Truck-Tractor/Semi-Trailer			1	1							1	1								
Truck-Tractor/Double																				
Truck-Tractor/Triple																				
Bus/Large Van (9-15 seats)			1	1																
Bus (16+ seats)		1		1																
Motorcycle		2		2		9		9		4		4	1	7		8	1	1		2
Motor Scooter/Moped														1		1				
Motor Home																				
Farm Machinery														1		1				
ATV																				
Sport Utility Vehicle (SUV)		29	18	47		21	27	48		35	31	66		44	28	72		42	28	70
Passenger Van		4	1	5		4	5	9		8	4	12		1	3	4		6	4	10
Truck More Than 10,000 lbs.							1	1												
Van (10,000 lbs. or less)		1		1											1	1				
Other		1	2	3						1	1	2		2	2	4			1	1
<b>Total</b>	<b>2</b>	<b>120</b>	<b>68</b>	<b>190</b>		<b>97</b>	<b>82</b>	<b>179</b>	<b>1</b>	<b>132</b>	<b>112</b>	<b>245</b>	<b>1</b>	<b>145</b>	<b>104</b>	<b>250</b>	<b>2</b>	<b>126</b>	<b>83</b>	<b>211</b>
<b>Percent</b>	<b>0.2</b>	<b>11.2</b>	<b>6.3</b>	<b>17.7</b>		<b>9.0</b>	<b>7.6</b>	<b>16.7</b>	<b>0.1</b>	<b>12.3</b>	<b>10.4</b>	<b>22.8</b>	<b>0.1</b>	<b>13.5</b>	<b>9.7</b>	<b>23.3</b>	<b>0.2</b>	<b>11.7</b>	<b>7.7</b>	<b>19.6</b>

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
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Vehicles By Vehicle Type

Vehicle Type	Total				
	Fat	Inj *	PD	Tot	Pct
Passenger Vehicle-2 Door		29	16	45	4.2
Passenger Vehicle-4 Door	4	261	135	400	37.2
Passenger Vehicle-Convertible		2		2	0.2
Pickup Truck		102	132	234	21.8
Single-Unit Truck (2 axles)			1	1	0.1
Single-Unit Truck (3 or more axles)		1	3	4	0.4
School Bus			1	1	0.1
Truck/Trailer					
Truck-Tractor (bobtail)			1	1	0.1
Truck-Tractor/Semi-Trailer			2	2	0.2
Truck-Tractor/Double					
Truck-Tractor/Triple					
Bus/Large Van (9-15 seats)			1	1	0.1
Bus (16+ seats)		1		1	0.1
Motorcycle	2	23		25	2.3
Motor Scooter/Moped		1		1	0.1
Motor Home					
Farm Machinery		1		1	0.1
ATV					
Sport Utility Vehicle (SUV)		171	132	303	28.2
Passenger Van		23	17	40	3.7
Truck More Than 10,000 lbs.			1	1	0.1
Van (10,000 lbs. or less)		1	1	2	0.2
Other		4	6	10	0.9
<b>Total</b>	<b>6</b>	<b>620</b>	<b>449</b>	<b>1075</b>	<b>100</b>
<b>Percent</b>	<b>0.6</b>	<b>57.7</b>	<b>41.8</b>	<b>100</b>	

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**TABULATION OF COLLISIONS**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

USE RESTRICTED 409

**Day And Time Of Occurrence Of Collisions**

Day	Hour Of The Day																								Tot	Pcnt						
	AM												PM																			
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12								
Sunday	1			1			1		4	2	2	5	5	3	5	6	3	5	5	1	1		2	5	57	10.8						
Monday		1			3	4	5	3	1	3			2	6	6	10	4	6	5		3	2		1	65	12.3						
Tuesday	1				1	2	6	2	1	2	3	5	3	6	2	3	12	10	1	2	2	1		1	66	12.5						
Wednesday				1		3	6	3	2	1	4	4	2	5	10	15	6	5	5	3	3	2	1	1	82	15.5						
Thursday						3	9	4	3	3	4	2	5	9	5	9	13	4	5	5	4			1	89	16.8						
Friday					3	3	4	4	3	2	5	5	7	10	7	13	11	9	2	4	1	2		2	97	18.3						
Saturday		1					2		2	2	4	5	4	9	8	10	8	4	5	3	2	2	2		73	13.8						
	Early Morning - Sunrise						Morning Peak						Mid Morning/Afternoon						PM Peak						Evening - Late Night						Tot	
Total	28						65						182						166						88						529	
Percent	5.3						12.3						34.4						31.4						16.6						100	

**Roadway/Lighting**

Roadway Conditions	Lighting Conditions					Total	Percent
	Daylight	Darkness	Twilight	Lighted	Unknown		
Dry	344	50	19	39		452	85.4
Wet (Water)	48	11	6	9		74	14.0
Ice, Snow, or Slush	3					3	0.6
Mud, Dirt, Gravel, or Sand							
Other							
Total	395	61	25	48		529	100
Percent	74.7	11.5	4.7	9.1		100	

**Weather Conditions**

Weather Conditions	Total	Percent
Clear	418	79.0
Clouds Present	54	10.2
Raining/Fog	53	10.0
Snowing/Sleet/Hail	3	0.6
Other	1	0.2
Total	529	100





TABULATION OF COLLISIONS

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
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Drivers By Driver Conditions

Unsafe/Unlawful	Apparently Normal			Alcohol Involved						Sleep Suspected			Drug Use Indicated			Unknown Condition			Total					
				Ability Impaired			Odor Detected																	
	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Fat	Inj *	PD	Total	Pcnt	
Failed to Yield		141			1									2		7					151		151	14.2
Failed to Stop	2	50												2		3			2		55		57	5.3
Failed to Signal		2																			2		2	0.2
Improper Turn	1	46														3			1		49		50	4.7
Improper Start		6																			6		6	0.6
Improper Stop																								
Improper Backing		1																			1		1	0.1
Improper Parking																								
Improper Passing		3																			3		3	0.3
Improper Lane Change		3																			3		3	0.3
Left of Center		7														1	2		1		9		10	0.9
Following Too Close		45																			45		45	4.2
Unsafe Speed		37							1							1	2		1		40		41	3.8
DWI		2			17				3					1		1					24		24	2.3
Inattention		95							1			5		1		2					104		104	9.8
Negligent Driving		5			1											1					7		7	0.7
Defective Vehicle		9																			9		9	0.8
Wrong Way																								
No Improper Action	5	516			1									1		5		1		6	523		529	49.6
Other		19												1		3		1		2	22		24	2.3
<b>Total</b>	<b>8</b>	<b>987</b>			<b>20</b>				<b>5</b>			<b>5</b>		<b>1</b>	<b>7</b>	<b>4</b>	<b>29</b>		<b>13</b>	<b>1053</b>		<b>1066</b>	<b>100</b>	
<b>Percent</b>	<b>0.8</b>	<b>92.6</b>			<b>1.9</b>				<b>0.5</b>			<b>0.5</b>		<b>0.1</b>	<b>0.7</b>	<b>0.4</b>	<b>2.7</b>		<b>1.2</b>	<b>98.8</b>		<b>100</b>		

Severities Indicate Highest Severity in Collision

Collisions By Special Feature

Special Feature	Total			
	Fat	Inj *	PD	Tot
Bridge		2		2
Work Zone		8		8
Cross Median				
Train Collision				

\* INCLUDES SUSPECTED SERIOUS, NON-INCAPACITATING, AND POSSIBLE INJURIES.



**STUDY CRITERIA**

Date Range: 01-01-2016 Thru 12-31-2020

Program Provided by:  
 Traffic Engineering Division  
 Collision Analysis and Safety Branch  
 (405) 522-0985  
 Created: 09/10/2022 by Viplav Putta

**ROADWAY / REGION**

QUERY OVER		SELECTIONS
1	City	County: 72, City: 30
2	City	County: 66, City: 32

**DATE**

Date Range	01-01-2016 to 12-31-2020
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**REPORT SECTIONS**

Collision Map & Study Totals	(Included)
Collision Analysis Tables	(Included)
- Totals By City, Hwy Class	Checked
- Other Analysis Tables	Checked
Rate Analysis	(Included)
Query Criteria	(Included)

**FILTER COLLISIONS**

Roadway Type	City St. Data Only
- Severity	2 - Possible Injury
	3 - Non Incapacitating Injury
	4 - Suspected Serious Injury
	5 - Fatality
Incl. Crashes Assoc. w/ Every Int.	Checked
Environment Fields	

23 USC 409

<b>Prepared for:</b> INCOG	<b>Date:</b> 9/11/2022
<b>Project:</b> INCOG SS4A - 2022 Grant Application (Version 3)	<b>Prepared By:</b> DCM
	<b>Checked By:</b> LAS

Item Description	Quantity	Unit	Unit Price	Cost
<b>CITY OF TULSA</b>				
Midblock Pedestrian Crossings (Pedestrian Signal)	5	EA	\$175,000.00	\$875,000
Upgrade Traffic Signal Backplates (Reflective Yellow)	3,968	EA	\$400.00	\$1,587,200
Flashing Yellow Arrow Traffic Signal Heads	548	EA	\$1,500.00	\$822,000
Install New Traffic Signal	3	INTRCHNG.	\$800,000.00	\$2,400,000
Traffic Signal Retrofit for Protected Left Turn Movements	4	INT	\$400,000.00	\$1,600,000
Battery Backup Retrofits	50	EA	\$20,000.00	\$1,000,000
Overhead Guide Sign Retrofit	28	EA	\$20,000.00	\$560,000
Overhead Guide Sign Monotube Structure Replacement	1	EA	\$250,000.00	\$250,000
APS Push Button Retrofit at Signalized Intersections	100	EA	\$40,000.00	\$4,000,000
Pedestrian Refuge Islands	12	EA	\$50,000.00	\$600,000
			Subtotal	\$13,694,200
<b>TULSA COUNTY</b>				
Upgrade Stop-Controlled Intersections to LED Stop Signs	50	INT	\$7,500.00	\$375,000
Enhanced Stop-Controlled Intersection Signage	30	INT	\$4,000.00	\$120,000
Post Mounted Speed Feedback Signs	25	EA	\$7,500.00	\$187,500
Advanced Warning Signage for Signalized Intersections	30	INT	\$3,000.00	\$90,000
Flashing Advanced Warning Beacons For Signalized Intersections	12	INT	\$100,000.00	\$1,200,000
			Subtotal	\$1,972,500
<b>CITY OF BROKEN ARROW</b>				
Midblock Pedestrian Crossing with HAWK Beacon	4	EA	\$175,000.00	\$700,000
Upgrade Traffic Signal Backplates (Reflective Yellow)	480	EA	\$400.00	\$192,000
Flashing Yellow Arrow Traffic Signal Heads	42	EA	\$1,500.00	\$63,000
Upgrade Stop-Controlled Intersections to LED Stop Signs	37	INT	\$7,500.00	\$277,500
APS Push Button Retrofit at Signalized Intersections	65	EA	\$40,000.00	\$2,600,000
Install New Traffic Signal	2	INT	\$500,000.00	\$1,000,000
Post Mounted Speed Feedback Signs	10	EA	\$7,500.00	\$75,000
			Subtotal	\$4,907,500
<b>CITY OF JENKS</b>				
Midblock Pedestrian Crossing with HAWK Beacon	2	EA	\$175,000.00	\$350,000
Flashing Yellow Arrow Traffic Signal Heads	20	EA	\$1,500.00	\$30,000
Upgrade Stop-Controlled Intersections to LED Stop Signs	10	EA	\$1,500.00	\$15,000
Upgrade Crosswalk Markings at Intersections and Drive Lanes	1	LS	\$605,000.00	\$605,000
			Subtotal	\$1,000,000
<b>CITY OF OWASSO</b>				
Midblock Pedestrian Crossing with HAWK Beacon	2	EA	\$175,000.00	\$350,000
Flashing Yellow Arrow Traffic Signal Heads	34	EA	\$1,500.00	\$51,000
Upgrade Stop-Controlled Intersections to LED Stop Signs	10	INT	\$1,500.00	\$15,000
Post Mounted Speed Feedback Signs	8	EA	\$7,500.00	\$60,000
Roadway Striping	1	LS	\$524,000.00	\$524,000
			Subtotal	\$1,000,000

Basis for Cost Projection:

- No Design Completed
- Preliminary Design
- Final Design

Subtotal:		\$22,574,200
Project + Inflation Conting (%, +/-)	14	\$3,175,800
<b>Total</b>		<b>\$25,750,000</b>