# **Appendix C: Regional Analysis Supportive Data**

All data analyzed for the Pedestrian Safety Action Plan was derived from Texas Department of Transportation's Crash Records Information System for reports in the Metropolitan Planning Area submitted between 2014-2018.

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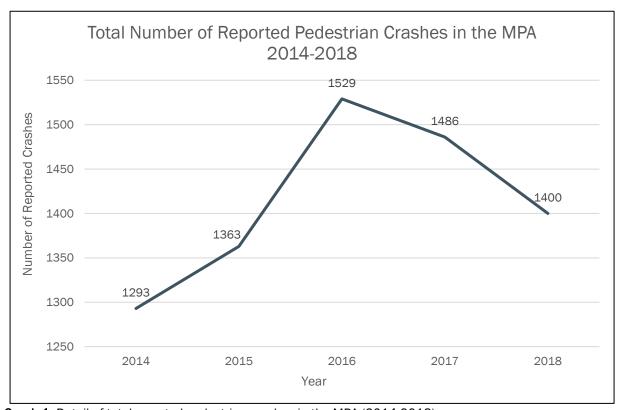
| 1. | Organ | Organized Crash Data for Verification |     |  |  |  |  |
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### 1. Organized Crash Data for Verification

#### 1.1 Total Pedestrian Crashes

|       | Pedestrian Related Crash Severity (2014-2018) |                        |                |                    |                             |                   |       |  |  |  |  |
|-------|---|------------------------|----------------|--------------------|-----------------------------|-------------------|-------|--|--|--|--|
| Year  | Fatality                                      | Non-<br>Incapacitating | Not<br>Injured | Possible<br>Injury | Suspected<br>Serious Injury | Unknown<br>Injury | Total |  |  |  |  |
| 2014  | 95  | 497                    | 48             | 375                | 271                         | 7                 | 1293  |  |  |  |  |
| 2015  | 128   | 529                    | 38             | 365                | 289                         | 14                | 1363  |  |  |  |  |
| 2016  | 147   | 534                    | 64             | 427                | 337                         | 20                | 1529  |  |  |  |  |
| 2017  | 144   | 578                    | 54             | 388                | 304                         | 18                | 1486  |  |  |  |  |
| 2018  | 146   | 425                    | 51             | 461                | 302                         | 15                | 1400  |  |  |  |  |
| Total | 660   | 2563                   | 255            | 2016               | 1503                        | 74                | 7071  |  |  |  |  |

Table 1: Detail of total reported pedestrian crashes by year in the MPA (2014-2018).



**Graph 1:** Detail of total reported pedestrian crashes in the MPA (2014-2018).

#### 1.2 Pedestrian Fatalities

| Total Pedestrian Fatalities Within MPA<br>2014 - 2018 |            |            |           |          |          |       |  |  |  |
|---|------------|------------|-----------|----------|----------|-------|--|--|--|
| County  | 2014       | 2015       | 2016      | 2017     | 2018     | Total |  |  |  |
| Dallas  | 54         | 71         | 84        | 73       | 71       | 353   |  |  |  |
| Tarrant   | 29         | 39         | 40        | 45       | 46       | 199   |  |  |  |
| Denton  | 2          | 7          | 7         | 11       | 7        | 34    |  |  |  |
| Hunt  | 1          | 3          | 1         | 5        | 6        | 16    |  |  |  |
| Collin  | 2          | 3          | 4         | 2        | 4        | 15    |  |  |  |
| Ellis   | 2          | 0          | 4         | 3        | 3        | 12    |  |  |  |
| Kaufman   | 1          | 1          | 6         | 4        | 0        | 12    |  |  |  |
| Johnson   | 1          | 2          | 1         | 3        | 4        | 11    |  |  |  |
| Rockwall  | 2          | 0          | 3         | 1        | 2        | 8     |  |  |  |
| Parker  | 1          | 1          | 0         | 1        | 2        | 5     |  |  |  |
| Wise  | 0          | 4          | 0         | 0        | 0        | 4     |  |  |  |
| Hood  | 0          | 1          | 0         | 1        | 1        | 3     |  |  |  |
| Total   | 95         | 132        | 150       | 149      | 146      | 672   |  |  |  |
| Sources: Fa   | atality An | alysis Rep | orting Sy | stem (FA | RS) 2010 | -2017 |  |  |  |

Final File, 2018 Annual Report File (ARF); Population – Census

Bureau

Individual Pedestrian Fatalities MPA: 2014-2018 400 353 350 Individual Pedestrian Fatalities 300 250 199 200 150 100 34 50 16 15 12 3 Hunt

Table 2: Table shows the reported individual pedestrian fatalities by county in the MPA (2014-2018).

Sources: Fatality Analysis Reporting System (FARS) 2010-2017 Final File, 2018 Annual Report File (ARF); Population - Census Bureau

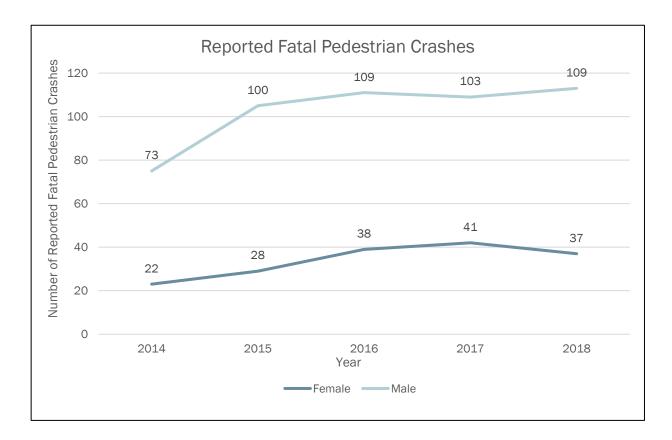
County

Graph 2: Shows individual pedestrian fatalities by county in the MPA (2014-2018).

# 1.3 Reported Crashes by Gender

| Reported Fatal Pedestrian Crashes by<br>Gender: 2014-2018 |                        |     |     |  |  |  |  |  |  |
|---|------------------------|-----|-----|--|--|--|--|--|--|
| Year  | Year Female Male Total |     |     |  |  |  |  |  |  |
| 2014  | 22                     | 73  | 95  |  |  |  |  |  |  |
| 2015  | 28                     | 100 | 128 |  |  |  |  |  |  |
| 2016  | 38                     | 109 | 147 |  |  |  |  |  |  |
| 2017  | 41                     | 103 | 144 |  |  |  |  |  |  |
| 2018  | 37                     | 109 | 146 |  |  |  |  |  |  |
| Total   | 166                    | 494 | 660 |  |  |  |  |  |  |

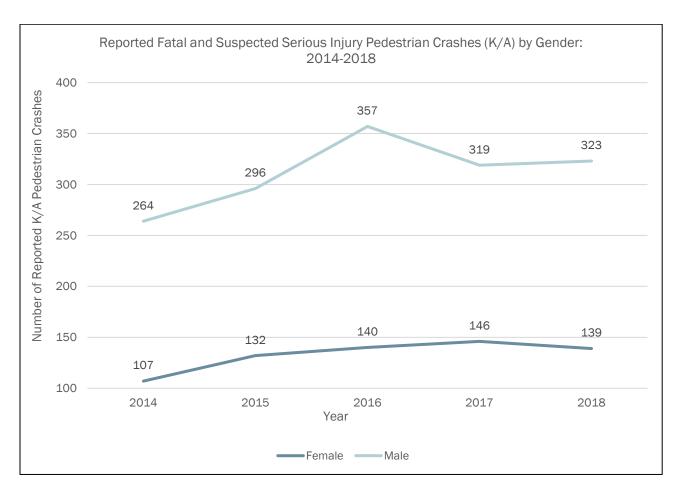
Table 3: Table shows reported crashes in the MPA involving at least one pedestrian fatality (2014-2018).



Graph 3: Graph shows reported crashes in the MPA involving at least one pedestrian fatality (2014-2018).

| Reported F | Reported Fatal and Suspected Serious Injury Pedestrian Crashes (K/A) by Gender: 2014-2018 |      |       |  |  |  |  |  |  |  |
|------------|---|------|-------|--|--|--|--|--|--|--|
| Year       | Female  | Male | Total |  |  |  |  |  |  |  |
| 2014       | 107   | 264  | 371   |  |  |  |  |  |  |  |
| 2015       | 132   | 296  | 428   |  |  |  |  |  |  |  |
| 2016       | 140   | 357  | 497   |  |  |  |  |  |  |  |
| 2017       | 146   | 319  | 465   |  |  |  |  |  |  |  |
| 2018       | 139   | 323  | 462   |  |  |  |  |  |  |  |
| Total      | 664   | 1559 | 2223  |  |  |  |  |  |  |  |

Table 4: Table shows reported fatal and suspected serious injury crashes by gender (2014-2018).

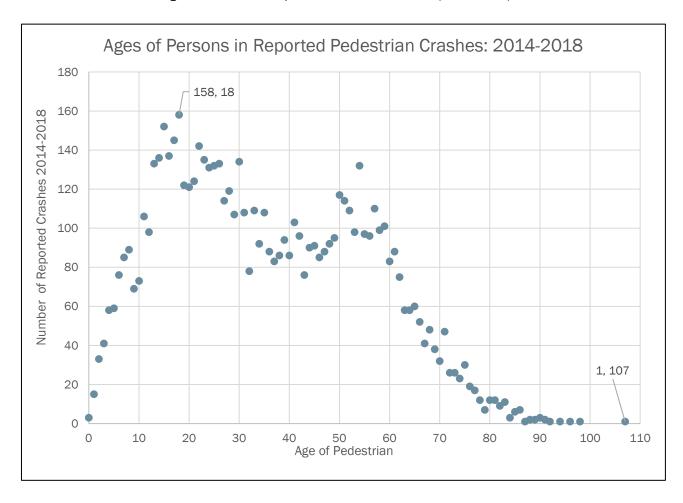


**Graph 4**: Graph shows Fatal and Suspected Serious Injuries sustained Male and Female Pedestrians (2014-2018).

### 1.4 Pedestrian Ages

|       | Age of Persons in Reported Pedestrian Crashes: 2014-2018 |      |       |       |       |       |       |       |       |       |        |             |       |
|-------|--|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------------|-------|
| Year  | <1   | 1-10 | 11-20 | 21-30 | 31-40 | 41-50 | 51-60 | 61-70 | 71-80 | 81-90 | 91-100 | 101-<br>110 | Total |
| 2014  | 32   | 122  | 257   | 229   | 146   | 188   | 188   | 81    | 38    | 12    | 0      | 1           | 1294  |
| 2015  | 30   | 117  | 268   | 259   | 172   | 167   | 196   | 93    | 46    | 12    | 3      | 0           | 1363  |
| 2016  | 35   | 122  | 286   | 268   | 205   | 204   | 222   | 129   | 44    | 13    | 1      | 0           | 1529  |
| 2017  | 34   | 138  | 248   | 270   | 205   | 192   | 217   | 123   | 43    | 14    | 2      | 0           | 1486  |
| 2018  | 28   | 99   | 249   | 245   | 204   | 182   | 216   | 124   | 48    | 5     | 0      | 0           | 1400  |
| Total | 159  | 598  | 1308  | 1271  | 932   | 933   | 1039  | 550   | 219   | 56    | 6      | 1           | 7072  |

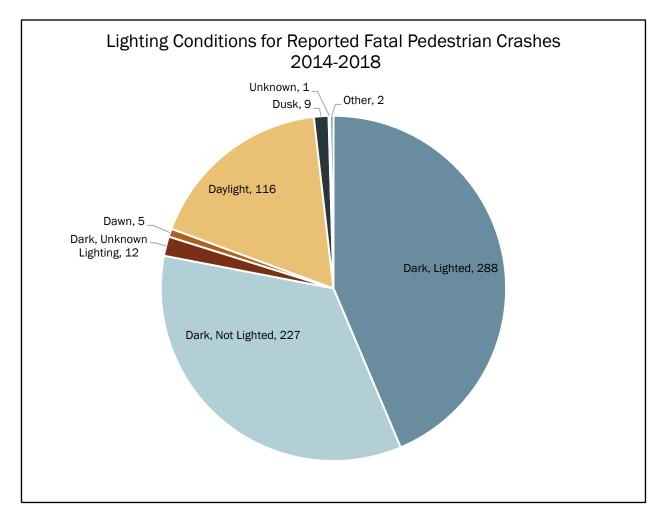
Table 5: Table shows the Age Distribution of Reported Pedestrian Crashes (2014-2018).



**Graph 5**: Graph shows visualization of Age Distribution for Reported Pedestrian Crashes (2014-2018).

| Urban vs. R | Urban vs. Rural Areas for Reported Pedestrian Crashes: 2014-2018 |       |       |  |  |  |  |  |  |
|-------------|--|-------|-------|--|--|--|--|--|--|
| Year        | Urban  | Rural | Total |  |  |  |  |  |  |
| 2014        | 1266   | 28    | 1294  |  |  |  |  |  |  |
| 2015        | 1326   | 37    | 1363  |  |  |  |  |  |  |
| 2016        | 1493   | 36    | 1529  |  |  |  |  |  |  |
| 2017        | 1439   | 47    | 1486  |  |  |  |  |  |  |
| 2018        | 1361   | 39    | 1400  |  |  |  |  |  |  |
| Total       | 6885   | 187   | 7072  |  |  |  |  |  |  |
| Total %     | 97%  | 3%    | 100%  |  |  |  |  |  |  |

**Table 6**: Chart shows Pedestrian Crashes in Urban vs. Rural Areas from 2014-2018. When converted to a percentage, **Urban** areas saw **97 percent** of reported crashes vs. **3 percent** in **Rural** areas.



**Graph 6**: Pie chart shows lighting conditions associated with reported pedestrian fatalities (total 672) 2014-2018.

|                             | Lighting Condition<br>Other Than Dark | Dark Lighting Condition |
|-----------------------------|---------------------------------------|-------------------------|
| Reported Pedestrian Crashes | 145                                   | 527                     |
| Crash %                     | 21.58%                                | 78.42%                  |

**Table 7**: Shows Reported Pedestrian Crashes and percentage of Light (44.22 percent) vs. Dark Lighting Conditions (55.87 percent) from 2014-2018.

### 1.5 Intersection vs. Non-Intersection

| Intersection Related Reported Pedestrian Crashes: 2014-2018 |          |                |             |          |                |         |       |  |  |
|---|----------|----------------|-------------|----------|----------------|---------|-------|--|--|
|   |          | Non-           |             | Possible | Suspected      | Unknown |       |  |  |
| Row Labels  | Fatality | Incapacitating | Not Injured | Injury   | Serious Injury | Injury  | Total |  |  |
| Driveway Access   | 14       | 135            | 12          | 140      | 58             | 2       | 361   |  |  |
| Intersection  | 30       | 161            | 17          | 148      | 108            |         | 464   |  |  |
| Intersection Related  | 78       | 993            | 72          | 852      | 420            | 7       | 2422  |  |  |
| Non-Intersection  | 440      | 974            | 108         | 687      | 737            | 2       | 2948  |  |  |
| Non-Intersection  | 121      | 316            | 35          | 185      | 220            |         | 877   |  |  |
| Grand Total   | 683      | 2579           | 244         | 2012     | 1543           | 11      | 7072  |  |  |

**Table 8:** Shows Intersection-Related Reported Pedestrian Crashes (2014-2018).

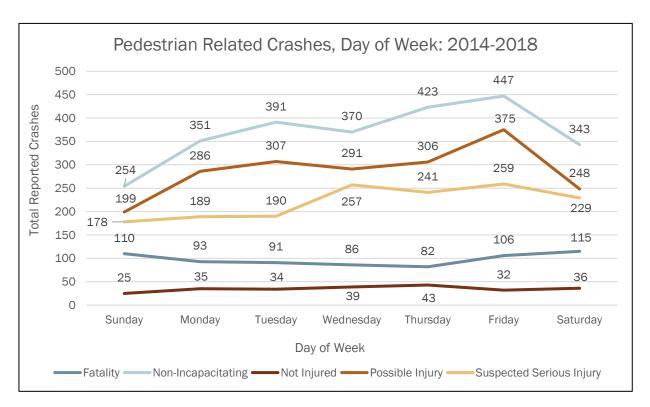
| Injury Level                 | Non-<br>Intersection | Intersection | Total |
|------------------------------|----------------------|--------------|-------|
| Fatal (K)                    | 594                  | 66           | 660   |
| Suspected Serious Injury (A) | 1178                 | 325          | 1503  |
| Total                        | 1772                 | 391          | 2163  |

Table 9: Shows K-A crash totals at intersections and non-intersections.

# 1.6 Day of Week

| Pedestrian Related Crashes, Day of Week: 2014-2018 |          |                |         |          |                |         |       |  |  |  |
|--|----------|----------------|---------|----------|----------------|---------|-------|--|--|--|
|  |          | Non-           | Not     | Possible | Suspected      | Unknown |       |  |  |  |
| Day of Week  | Fatality | Incapacitating | Injured | Injury   | Serious Injury | Injury  | Total |  |  |  |
| Sunday   | 110      | 254            | 25      | 199      | 178            | 2       | 768   |  |  |  |
| Monday   | 93       | 351            | 35      | 286      | 189            | 1       | 955   |  |  |  |
| Tuesday  | 91       | 391            | 34      | 307      | 190            | 2       | 1015  |  |  |  |
| Wednesday  | 86       | 370            | 39      | 291      | 257            | 2       | 1045  |  |  |  |
| Thursday   | 82       | 423            | 43      | 306      | 241            | 2       | 1097  |  |  |  |
| Friday   | 106      | 447            | 32      | 375      | 259            |         | 1219  |  |  |  |
| Saturday   | 115      | 343            | 36      | 248      | 229            | 2       | 973   |  |  |  |
| Total  | 683      | 2579           | 244     | 2012     | 1543           | 11      | 7072  |  |  |  |

**Table 10**: Table shows Pedestrian Related Crashes and their occurrence by Day of Week (2014-2018).

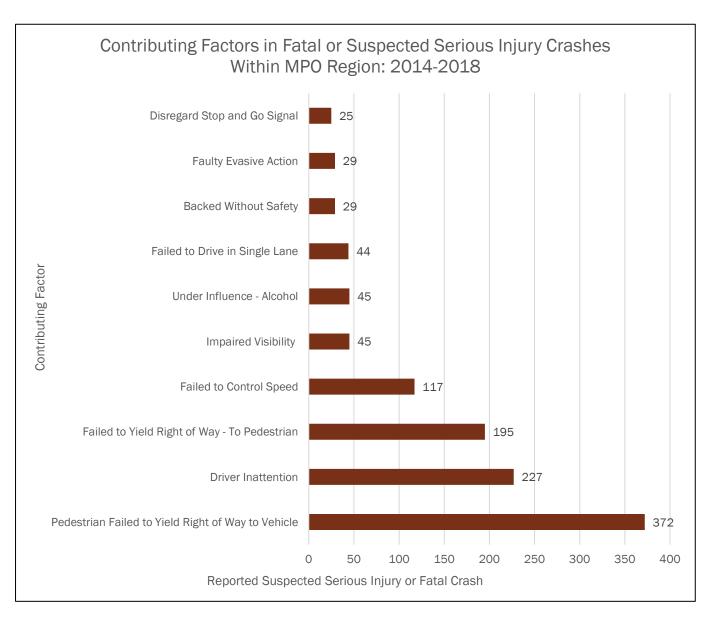


Graph 7: Graph shows Pedestrian Related Crashes and their occurrence by Day of Week (2014-2018).

# 1.7 Contributing Factors

| Top 10 Contributing Factors in Fatal or Suspected Serious Injury Crashes Within MPA Region: 2014-2018 |          |                          |       |  |  |  |  |  |  |
|---|----------|--------------------------|-------|--|--|--|--|--|--|
| Factor  | Fatality | Suspected Serious Injury | Total |  |  |  |  |  |  |
| Pedestrian Failed to Yield Right of Way to Vehicle  | 72       | 102                      | 372   |  |  |  |  |  |  |
| Driver Inattention  | 14       | 54                       | 227   |  |  |  |  |  |  |
| Failed to Yield Right of Way - To Pedestrian  | 8        | 29                       | 195   |  |  |  |  |  |  |
| Failed to Control Speed   | 14       | 36                       | 117   |  |  |  |  |  |  |
| Impaired Visibility   | 4        | 10                       | 45    |  |  |  |  |  |  |
| Under Influence - Alcohol   | 7        | 17                       | 45    |  |  |  |  |  |  |
| Failed to Drive in Single Lane  | 7        | 9                        | 44    |  |  |  |  |  |  |
| Backed Without Safety   | 3        | 3                        | 29    |  |  |  |  |  |  |
| Faulty Evasive Action   | 2        | 9                        | 29    |  |  |  |  |  |  |
| Disregard Stop and Go Signal  | 4        | 7                        | 25    |  |  |  |  |  |  |
| Total   | 135      | 276                      | 1128  |  |  |  |  |  |  |

**Table 11**: Table shows top 10 Contributing Factors in Fatal or Suspected Serious Injury Crashes within the MPA (2014-2018).



**Graph 8:** Graph shows top 10 Contributing Factors in Fatal or Suspected Serious Injury Crashes within the MPA (2014-2018).