



Village Traffic Report

Photo Courtesy of: Village of Bellevue Website

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Directed Enforcement Officer**



Village of Bellevue

Traffic Report

Prepared for:

Village of Bellevue

Purpose:

The Bellevue Village Board of Trustees requested a literature review of the overall traffic conditions as it relates to speeding motorists traveling on the roadways within the Village of Bellevue, Brown County, Wis. to help determine if there is a speeding problem.

Introduction

Existing traffic conditions along Bellevue Village roads were evaluated in this collection. This report was to collect sporadic, brief, limited traffic speed data, volume data, and travel pattern data at random locations throughout the village. This section summarizes findings and information collected. The information does not represent the full extent of a traffic study unless additional, in-depth, detailed engineering data is collected.

A. Roadway Overview

The Village of Bellevue currently consists of 72.63 miles of roadway. In addition, there are 12.8 miles of Interstate and Freeway traveling through the Village of Bellevue. The village roadways consist of a variety of functional classification types such as local roads, collector roads, arterial roads, and freeways as shown in **Appendix A** while **Appendix B** illustrates annual new street construction.

B. Origin & Destination

Vehicle traffic patterns through Bellevue were not extensively researched. Due to the variety of roadways and lack of license plate recognition technology it is undetermined what percentage is cut-through traffic. However, the denser the roadway is categorized, the more than likely those roadways contain cut-through traffic as motorists enter and exit the Village at key strategic locations.

C. Roadway Traffic Characteristics (Speed and Volume)

Speed data was collected along Allouez Avenue, Bellevue Street, Hazen Road, Lime Kiln Road (south), Lime Kiln Road (north), Main Street, Manitowoc Road, Ontario Road, and Willow Road. At all locations, the 85th percentile speed was within traffic engineering practice limits except for Allouez Avenue (25mph zone), Hazen Road, and Lime Kiln Road (north). These three streets showed the 85th percentile speed more than 5 miles per hour (mph) above the posted, suggested speeding was an issue.

Based on speed and volume studies, the following traffic measures for discussions may include the following:

- **Allouez Avenue** – further speed studies and neighborhood meetings to gauge neighborhood interest in addressing vehicle speeds.
- **Lime Kiln Road (north)** – dynamic speed monitoring displays and enforcement.

I. Speed

Figure 1 compares speed data against posted speed limits for eight random locations throughout the village. The speed data represents the 85th percentile speed recorded on these streets. This means that approximately 85 percent of vehicles are traveling at or under this speed while the remaining 15 percent are traveling over this speed. Standard traffic engineering practice is to determine the 85th percentile speed when evaluating speed conditions along a roadway. As shown in Figure 1, the speed data shows that 85th percentile speeds exceed the posted speed limit by 1 to 9 mph.

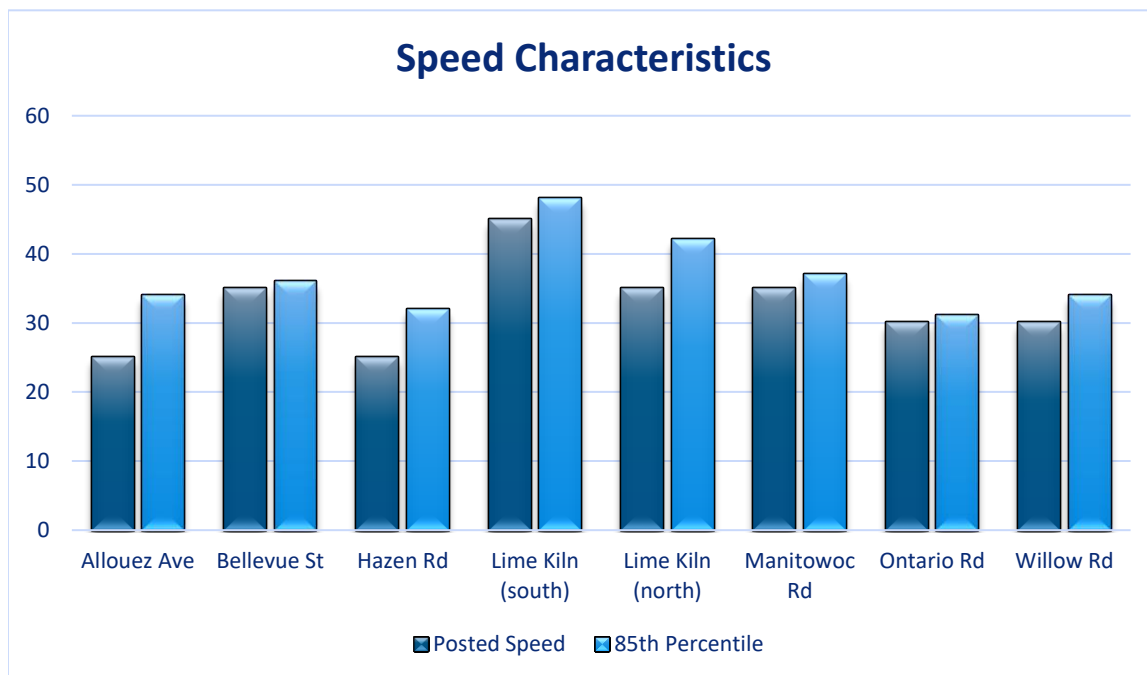


Figure 1: Posted Speed vs. 85th Percentile Speed

The common practice when defining whether a street has a speeding issue is to consider more than just whether the 85th percentile speed exceeds the posted speed limit. Many jurisdictions have established minimum threshold criteria before they will consider

measures to implement traffic calming on a street. Common criteria that are applicable to Bellevue Village streets could be:

- Road must be classified as a local or residential street.
- The 85th percentile speed must be greater than 5 mph.
- The average daily traffic should exceed a certain number of vehicles per day.
- Roadway design (i.e.: sidewalks, curb/gutter, drainage features, etc.)
- Pedestrian usage

Several variables play into the role of traffic patterns on roadways that consist of three major components when attempting to establish if there is a traffic issue. They are Engineering, Education, and Enforcement. Measures fall into two general categories: non-physical measures such as enforcement and education, and physical or engineered measures.

Table 2 provides an assessment of whether a street has an issue with speeding. Based on the initial data, Allouez Ave, Hazen Rd, and Lime Kiln Rd (north) most likely have a speeding issue while the other streets do not.

Street and Location	Local or Residential Street	Exceeds 85 th Percentile by 5mph	Speed Issue
Allouez Ave w/b	Yes	Yes	Yes
Bellevue St	No	No	No
Hazen Rd	Yes	Yes	Yes
Lime Kiln –(south)	No	No	No
Lime Kiln –(north)	No	Yes	Yes
Manitowoc Rd	Yes	No	No
Ontario Rd	Yes	No	No
Willow Rd	Yes	No	No

Table 2: Traffic and Speed Characteristics

Based on Table 2, the following discussion describes preliminary recommendations for next steps and implementations along impacted streets.

- Speed Monitoring Display
- Speed Enforcement

- Organized Saturation Patrol during Grant work
- Possible meetings with residents and Village council

II. Accident Statistics

Appendix C provides accident maps for January 2020 through December 2020 prepared by the Brown County Sheriff’s Office. A total of 233 accidents were reported in the Village of Bellevue for 2020. Table 3 shows that out of 233 accidents reported, 180 accidents (77.25%) occurred on the roadways within the Village of Bellevue. Only 33 accidents (14.16%) were reported due to speed being a contributing factor. Of those 33 speed-related accidents, 12 accidents (15.21%) were along the major arterial roadways in the Village (**Figure 2**).

Location	Number
Accidents on Village Roadways	180
Accidents on Private Property / Parking Lots	53
Total Accidents	233

Table 3: Reported Accidents (Jan.20-Dec.20)

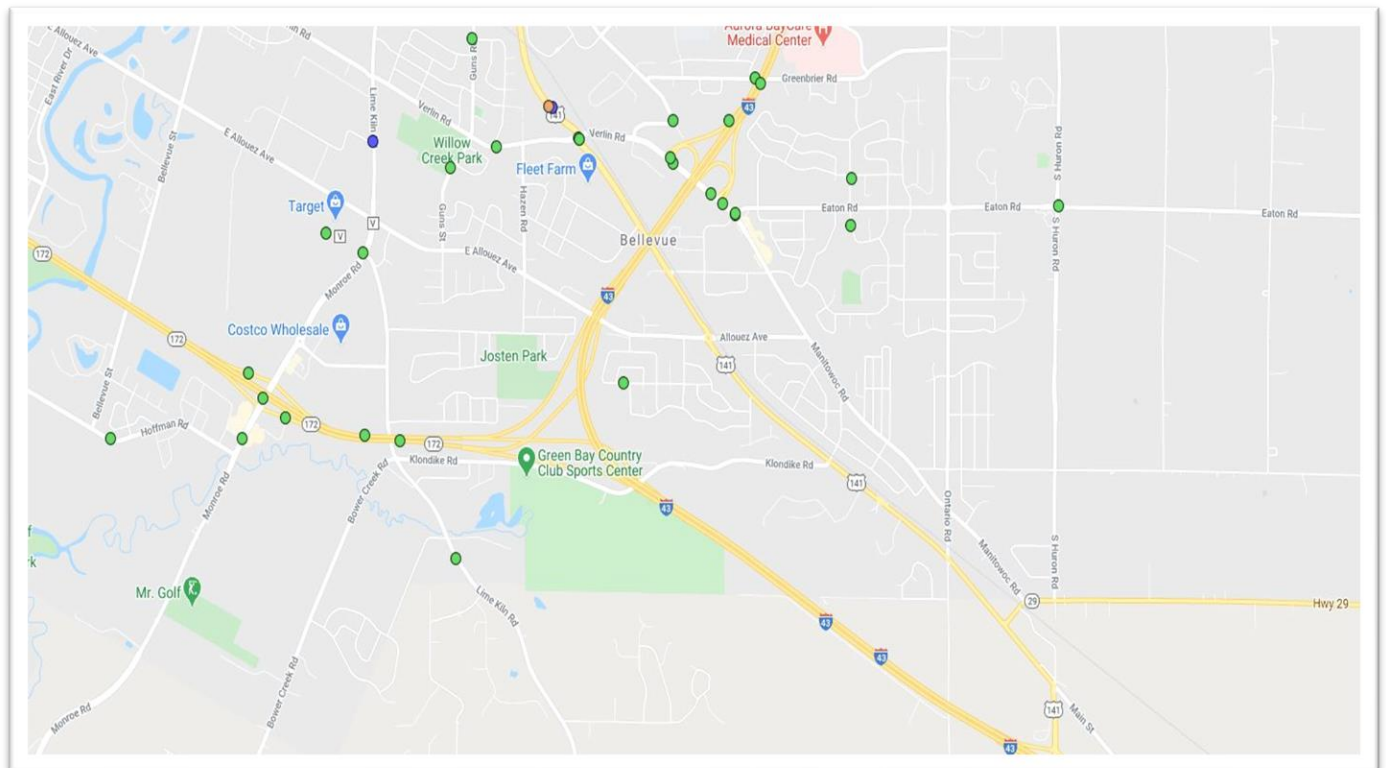


Figure 2: Speed-Related Accidents 2020

Crash numbers do not tell the full story. Conditions such as curves, adverse weather, and nighttime are associated with higher percentages of speeding-related crashes suggesting drivers often do not perceive or otherwise fail to slow sufficiently in order to maintain control or avoid a crash. Some speeding-related crashes are also highly associated with driving too fast for conditions. Determination of speeding involvement is based on officer's judgement after the crash, not based on scientific investigations.

III. Speed Statistics

Speeding is legally defined in Wisconsin as exceeding the posted speed limit or driving too fast for existing conditions with similar definitions found in most U.S. states. WI statute governing speed (WI §346.57) states:

“No person shall drive a vehicle at a speed greater than is reasonable and prudent under the conditions and having regard for the actual and potential hazards then existing. The speed of a vehicle shall be so controlled as may be necessary to avoid colliding with any object, person, vehicle or other conveyance on or entering the highway in compliance with legal requirements and using due care.”

“In addition to complying with the speed restrictions imposed ..., no person shall drive a vehicle at a speed in excess of the (statutory) limits unless different limits are indicated by official traffic signs.”

Appendix D provides traffic citations issued last year from January 2020 through December 2020 prepared by the Brown County Sheriff's Office. A total of 914 citations were issued in the Village of Bellevue for various traffic-related incidents. **Appendix E** provides warnings issued from last year prepared by the Brown County Sheriff's Office in which a total of 611 warnings for various offenses had been issued.

Figure 3 shows 682 traffic related citations were written to the Bellevue Municipal court.

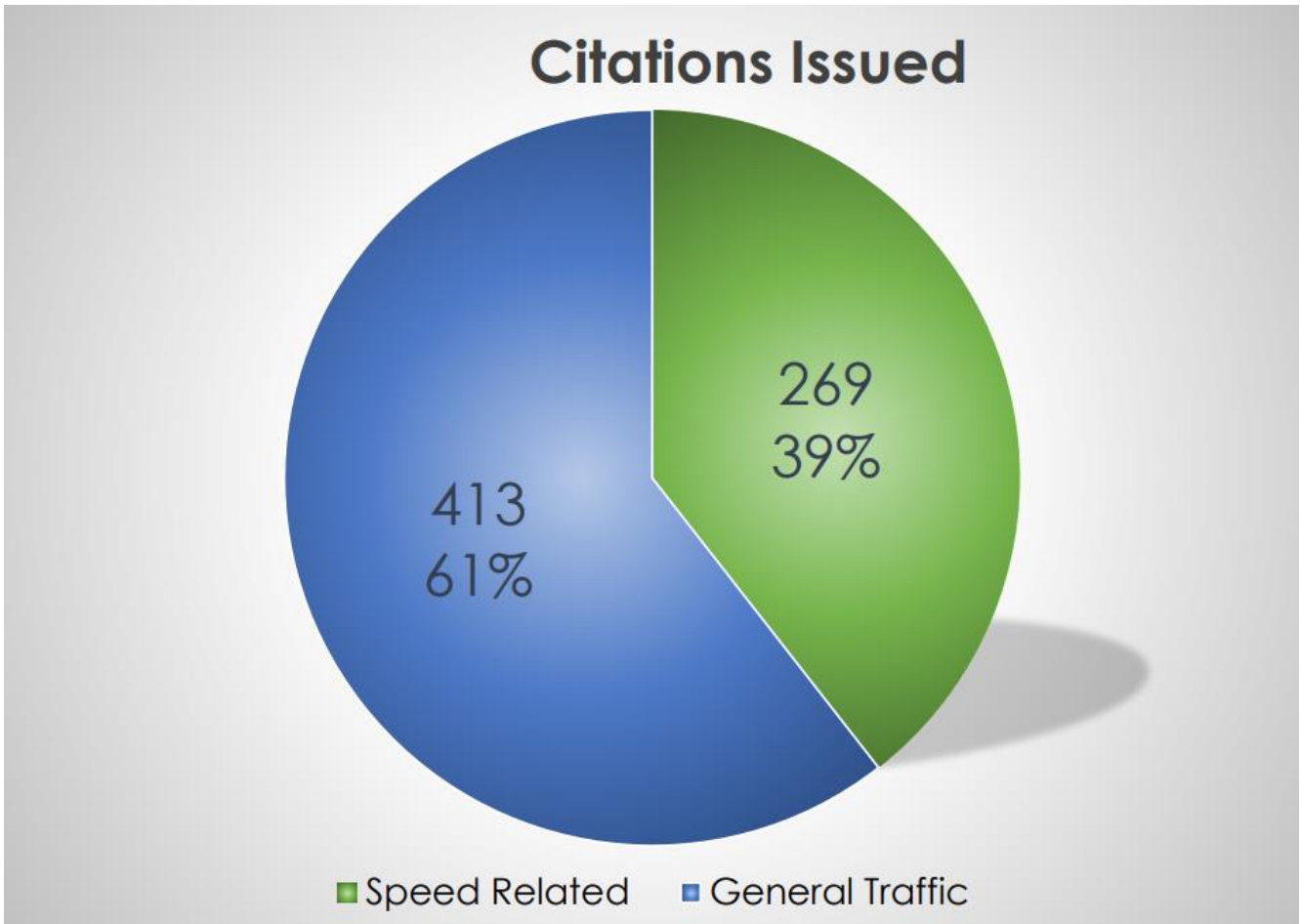


Figure 3: Bellevue Municipal Citations

Of those 682 traffic citations issued, 269 citations were issued for speeding related incidents including Failure to Keep Vehicle Under Control, Driving Too Fast for Conditions, Reckless Driving, and Disorderly Conduct with a Motor Vehicle. The remaining 413 citations were other infractions unrelated to speed. **Figure 4** provides a breakdown of speed related citations issued through enforcement.

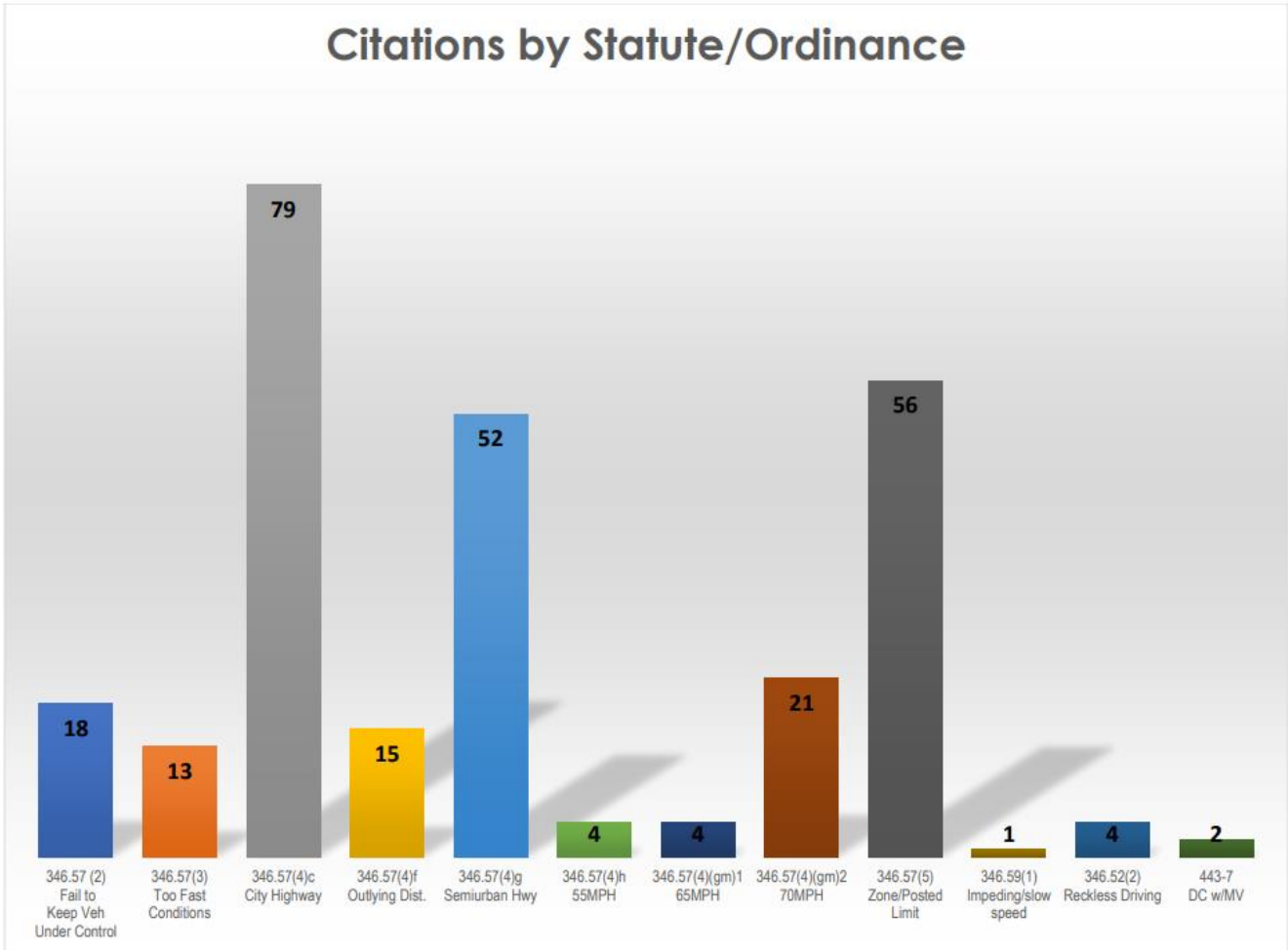
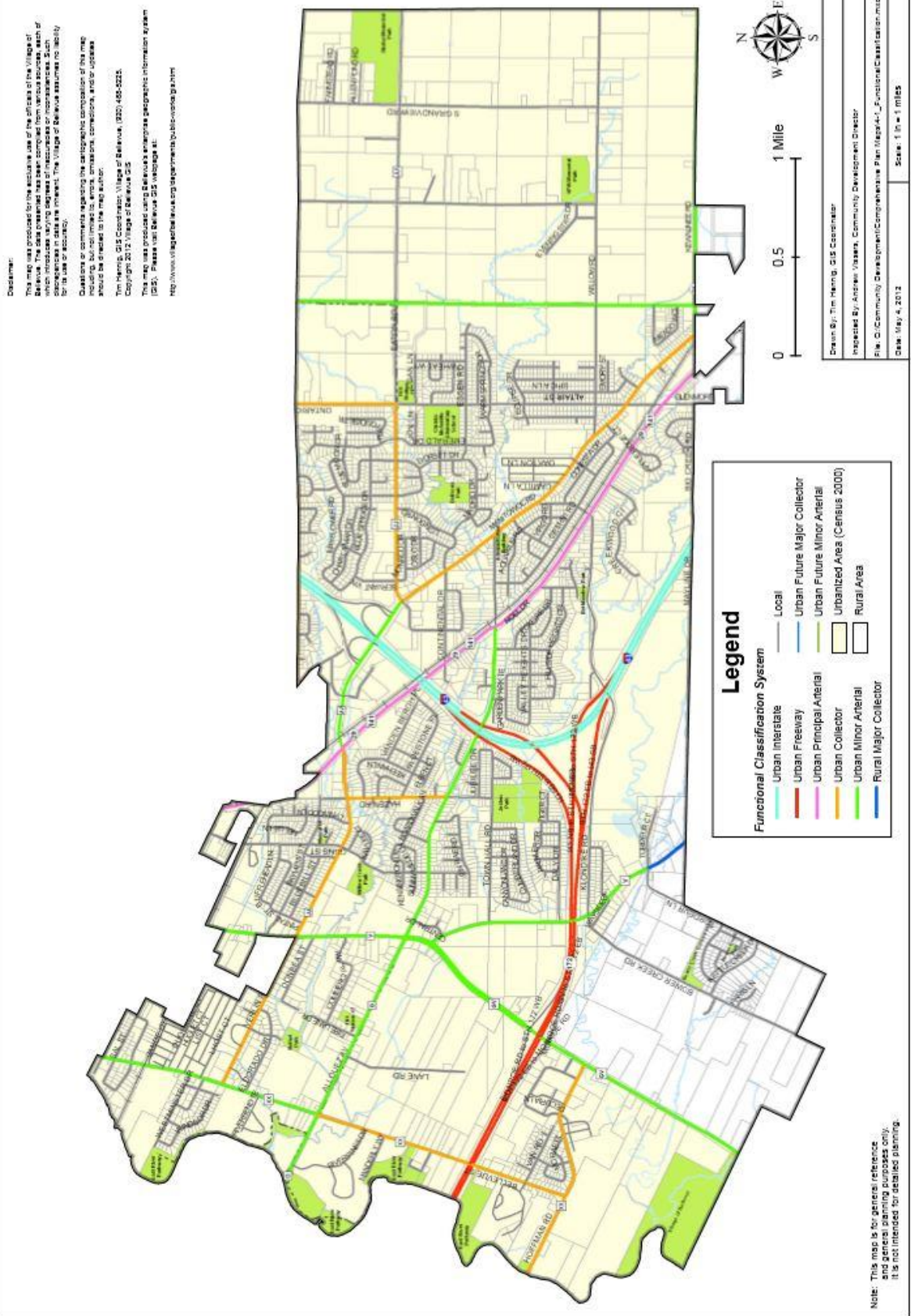


Figure 4: Citations by Statute

Conclusion

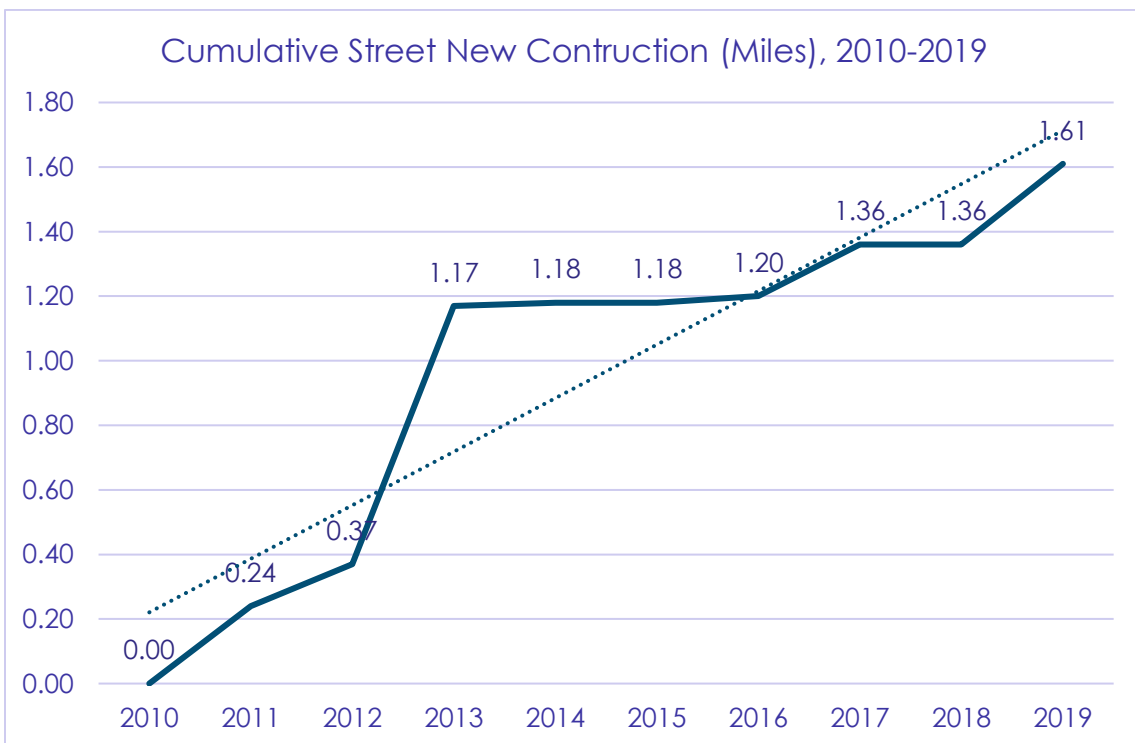
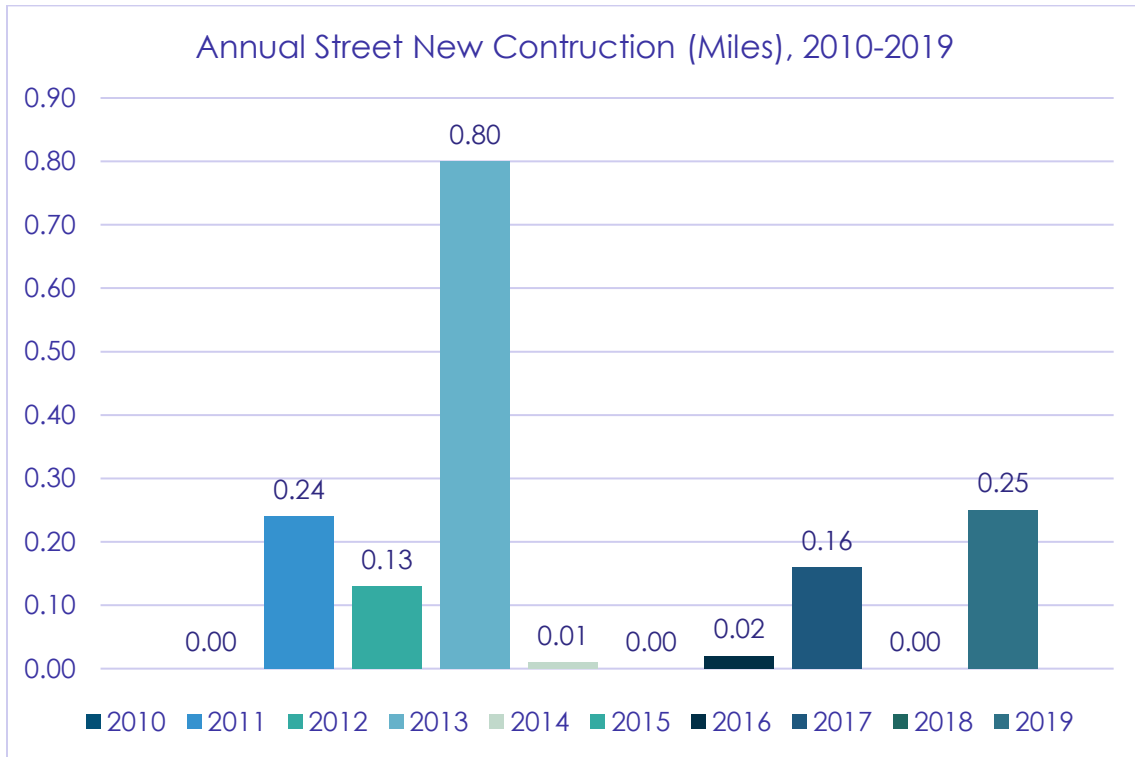
Speeding contributes to a significant portion of complaints every year, not only for the Village of Bellevue, but for the entire nation and remains as one of the top chief complaints world-wide. Managing speed is an integral aspect of developing a transportation network through Education, Engineering, and Enforcement. Commitment and engagement are needed by all stakeholders. Even if all roads could be made to be “perfectly safe” as possible, managing speeds will be a never-ending process as developments are ever changing. Speeding is also a matter of driver intent, and one that Education, Engineering, and Enforcement can not solve alone. Speed enforcement will likely be needed as long as people are behind the wheel of vehicles.

Figure 4-2
Functional Classification



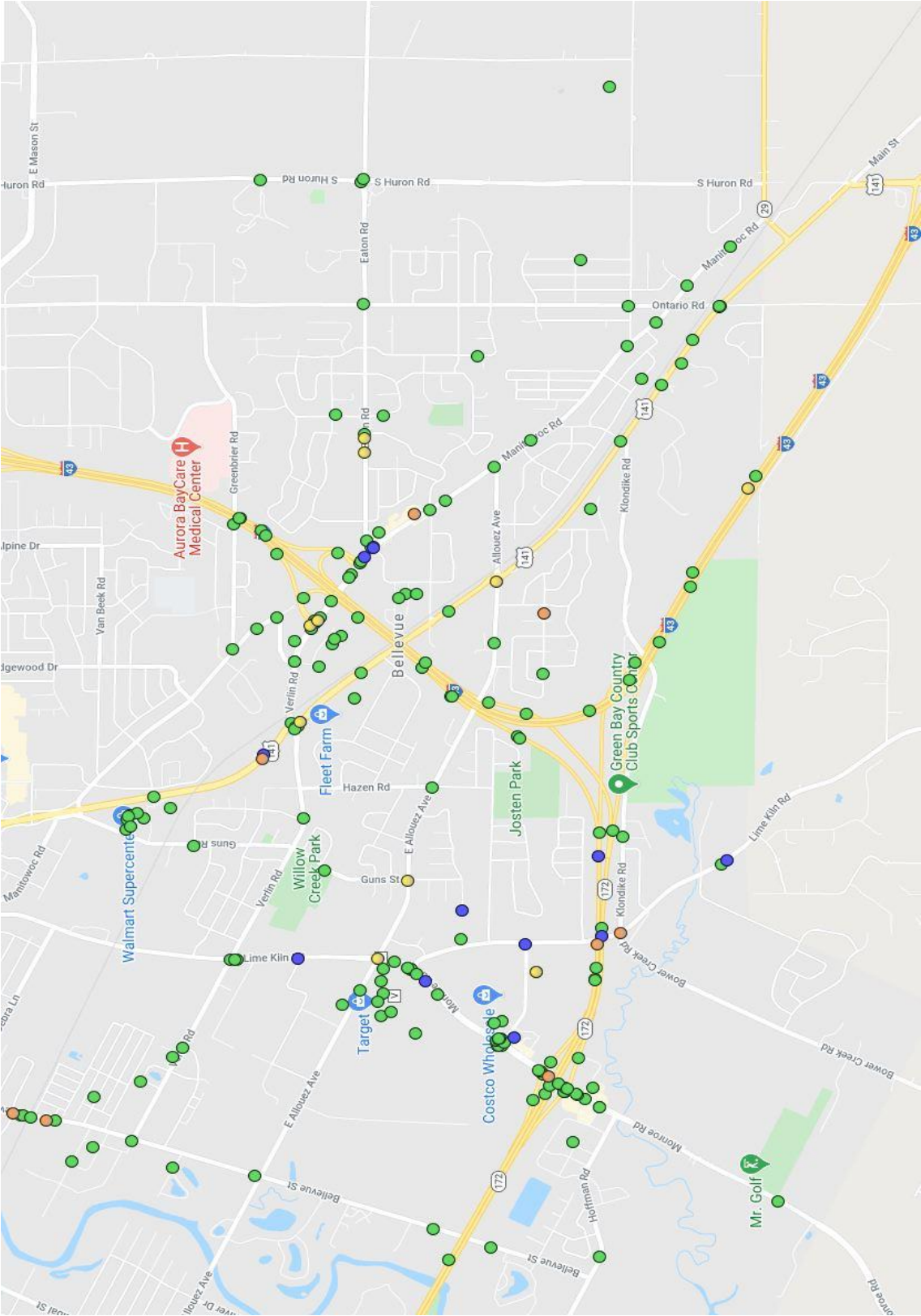
APPENDIX B ANNUAL NEW STREET CONSTRUCTION

2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
0.00	0.24	0.13	0.80	0.01	0.00	0.02	0.16	0.00	0.25	1.61
0.00	0.24	0.37	1.17	1.18	1.18	1.20	1.36	1.36	1.61	



APPENDIX C

2020 VILLAGE OF BELLEVUE ACCIDENT MAP



APPENDIX D 2020 BELLEVUE TRAFFIC CITATIONS

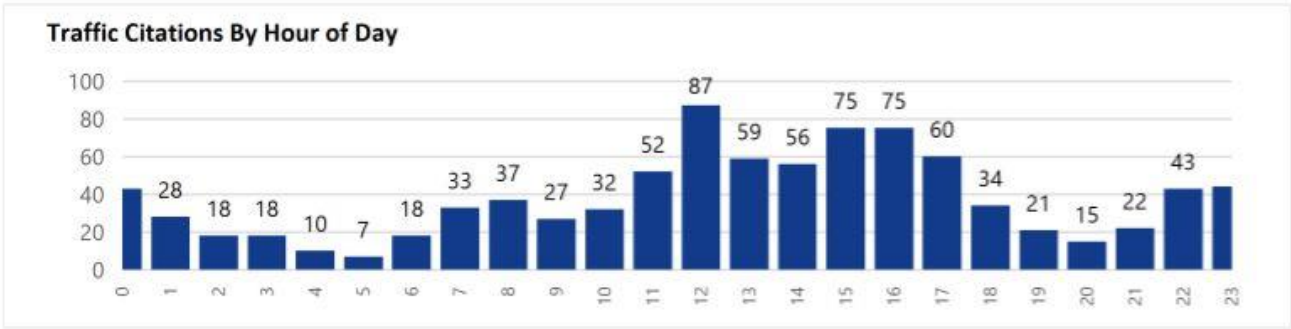
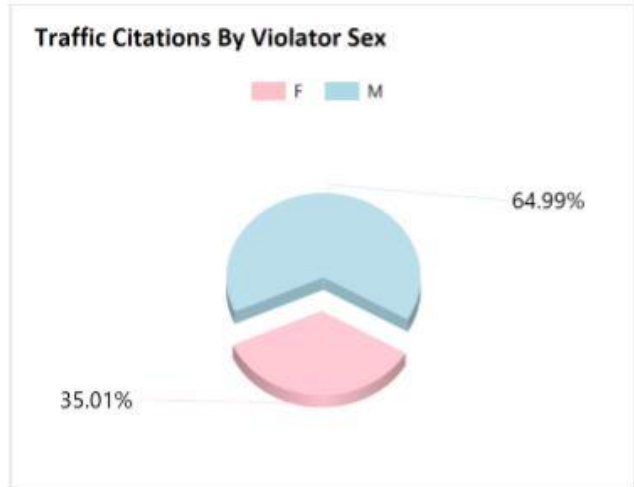
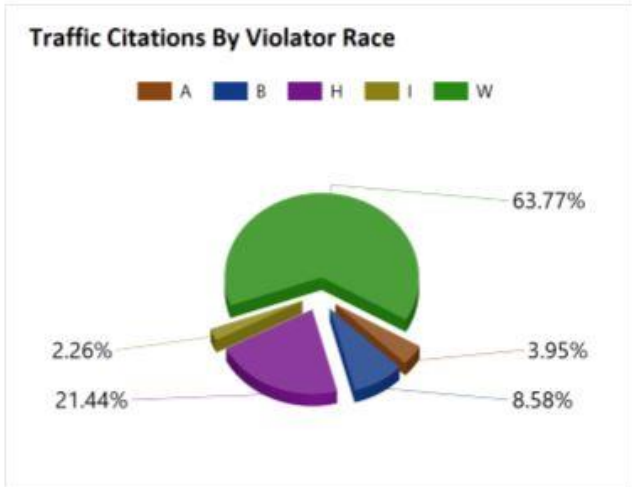


BROWN COUNTY
SHERIFF'S OFFICE

Summary - Traffic Citations

Traffic Citations

Top 10 Traffic Violations			Traffic Violation Statistics	
Statute	Description	Citations	Total # Issued:	914
346.57(4)(e)	SPEEDING ON CITY HIGHWAY (1-10 MPH)	72	Avg Offender Age:	36
343.44(1)(a)	OPERATING WHILE SUSPENDED	71	Oldest Offender:	85
346.57(5)	EXCEEDING SPEED ZONES, ETC. (16-19 MPH)	63	Youngest Offender:	16
344.62(1)	OPERATE MOTOR VEHICLE W/O INSURANCE	63		
346.63(1)(a)	OPERATING WHILE UNDER THE INFLUENCE(2ND)	59		
346.57(4)(g)	SPEEDING ON SEMIURBAN HIGHWAY (11-15 MPH)	56		
343.05(3)(a)	OPERATE W/O VALID LICENSE (3RD+ W/IN 3YRS)	47		
343.44(1)(b)	OPERATING WHILE REVOKED (FORFEITURE)	39		
347.48(2m)(b)	VEHICLE OPERATOR FAIL/WEAR SEAT BELT	27		
346.63(1)(b)	OPERATING W/PAC (1ST)	27		



APPENDIX E 2020 BELLEVUE WARNINGS

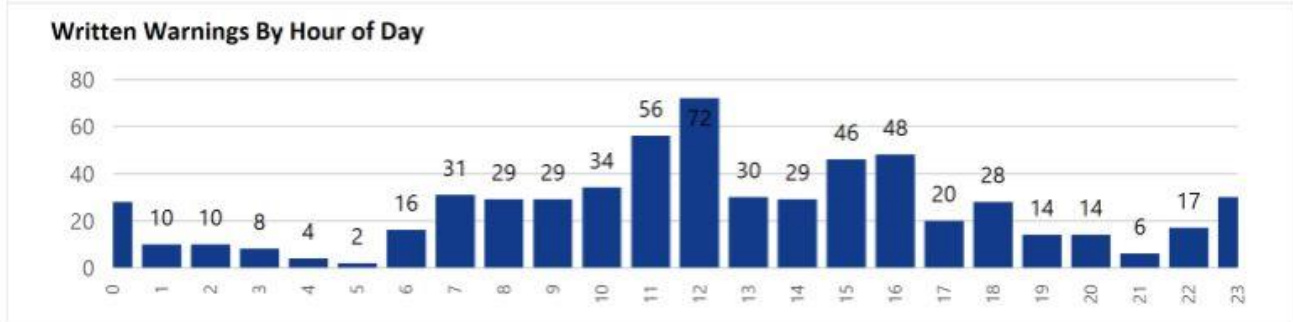
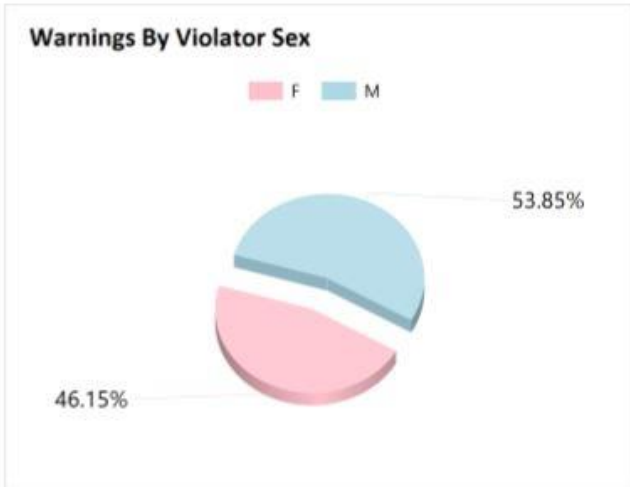
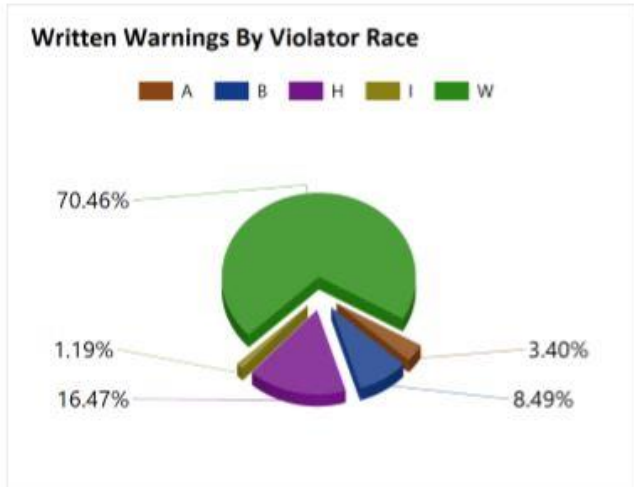


BROWN COUNTY
SHERIFF'S OFFICE

Summary - Written Warnings

Warnings

Top 10 Written Warning Offenses			Written Warning Statistics	
Statute	Description	Warnings	Total # Issued	611
346.57(5)	EXCEEDING SPEED ZONES, ETC. (11-15 MPH)	95	Average Age	37
341.04(1)	NON-REGISTRATION OF AUTO, ETC	68	Oldest Offender	96
344.62(2)	OPERATE MOTOR VEHICLE W/O PROOF OF INSURANCE	59	Youngest Offender	17
344.62(1)	OPERATE MOTOR VEHICLE W/O INSURANCE	41		
346.57(2)	UNREASONABLE AND IMPRUDENT SPEED	37		
346.57(4)(e)	SPEEDING ON CITY HIGHWAY (1-10 MPH)	21		
341.03(1)	OPERATE AFTER REV/SUSP OF REGISTRATION	19		
346.46(1)	FAIL/STOP AT STOP SIGN	15		
347.06(1)	OPERATION W/O REQUIRED LAMPS LIGHTED	14		
343.18(1)	OPERATE W/O CARRYING LICENSE	12		
343.05(3)(a)	OPERATE W/O VALID LICENSE (1ST VIOLATION)	12		
347.14(1)	OPERATE VEHICLE W/O STOPPING LIGHTS	12		





Disclaimer:

This report is not all-inclusive and the author(s) are not responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Brown County Sheriff's Office. Consideration of many changing variables shall be taken into account and this report does not constitute a standard, specification, or regulation.