CARE IMPACT Study COVID vs Normal Times (v06)

2018-2020 (to Date) Data

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This version v06 is the first with the COVID period that includes through part of July 2020. V06 and subsequent versions have been updated with the more recent data.

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1. Introduction

It was early in the first week (March 4-10, 2020) that the COVID pandemic began to be recognized as a major sociological issue. The original questions that arose involved the extent to which people were observing the various governmental recommendations and mandates attempting to reduce its effects. It was surmised that one way to establish the conformance would be to determine the effects that it was having on motor vehicle traffic volume. This is difficult to monitor directly on a weekly basis, other than through some sampling plan. However, the correlation between traffic volume and crash frequency has been well established for decades. It was further validated with crash and volume information within Alabama. See Section 6 of: http://www.safehomealabama.gov/wp-content/uploads/2020/06/Response-to-COVID-Wk15.pdf

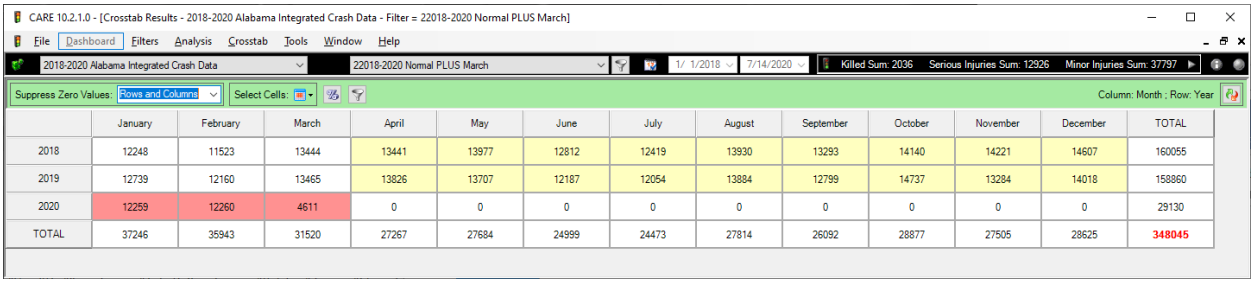
Crash reduction would provide an overall measure of the reduction in the number of vehicles on the road. However, it was also postulated that considerable behavioral characteristics could be determined by looking at how the various crash types changed from the pre-COVID (also called the normal) period to the days and weeks after the COVID crisis was recognized to be in effect. These various crash type and the number of confirmed COVID cases in Alabama have been plotted on a weekly basis, and these reports are readily available on http://www.safehomealabama by considering the COVID topic.

This current report considers the data in a different way, giving a more complete look at the summary of pre- and post-COVID effects, as opposed to a weekly view. The pre-COVID time period was January 1, 2018 through March 10, 2020. The COVID time period was March 11, 2020 through June 15, 2020, which was the most recent data we had at the time this report was assembled. These are the two time periods that create the subsets of data that are being compared in the IMPACT displays below.

The tables on the next page indicate the number of crashes per month in the two periods of time that are being compared. More detail on the numbers by severity are given in C025 in Section 3. The two filters were created by first assigning the applicable whole months to either the Normal or the COVID time periods. The March was partitioned and the first ten days were assigned to the Normal period, while the remainder of the month was assigned to the COVID period.

This report continues by presenting the major findings organized by attributes that are in the CARE data ordering. A final section gives more concentrated attention to the ID/DUI proportionate increase that was experienced in the COVID time period.

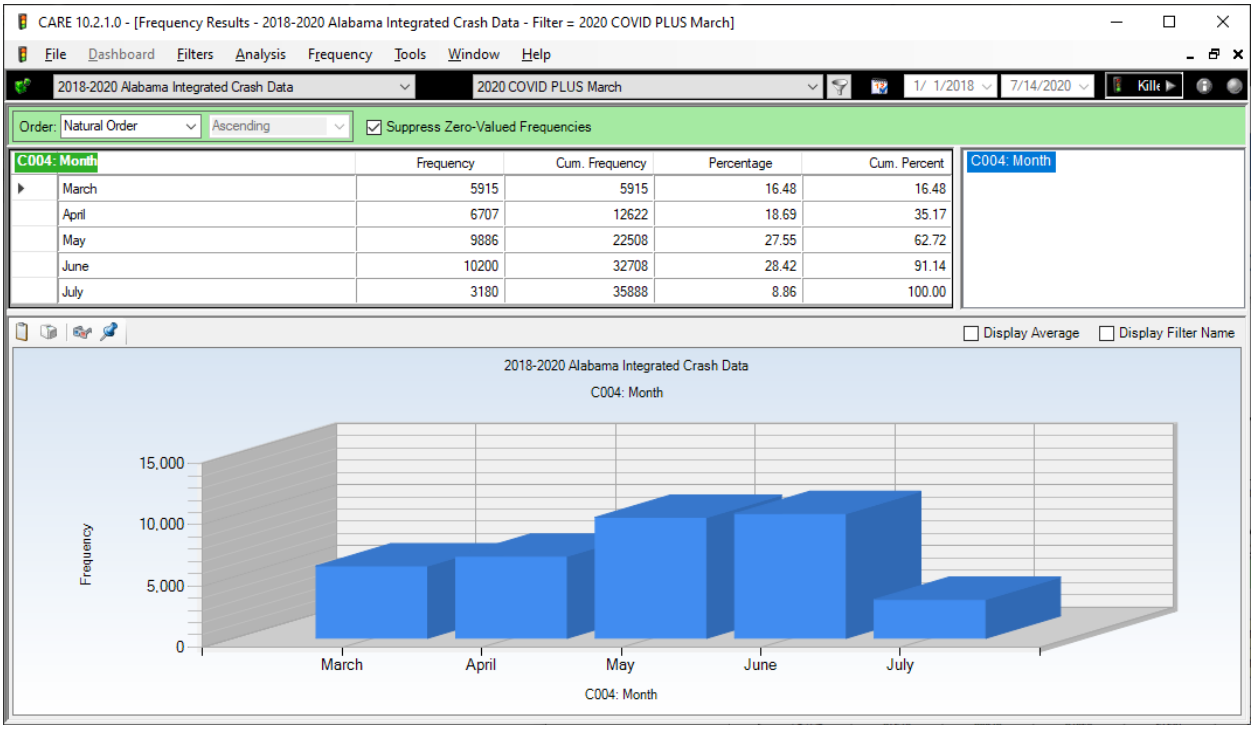
Frequency Distribution of Months in the Before Period



	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
2018	12248	11523	13444	13441	13977	12812	12419	13930	13293	14140	14221	14607	160055
2019	12739	12160	13465	13826	13707	12187	12054	13884	12799	14737	13284	14018	158860
2020	12259	12260	4611	0	0	0	0	0	0	0	0	0	29130
TOTAL	37246	35943	31520	27267	27684	24999	24473	27814	26092	28877	27505	28625	348045

Note: March is for the first ten days (March 1-10)

Frequency Distribution of Months in the After Period (2020)



C004: Month	Frequency	Cum. Frequency	Percentage	Cum. Percent
March	5915	5915	16.48	16.48
April	6707	12622	18.69	35.17
May	9886	22508	27.55	62.72
June	10200	32708	28.42	91.14
July	3180	35888	8.86	100.00

Notes: (1) March is for March 11-31 (21 days inclusive), the first weeks of the COVID period
(2) April, May and June are full months
(3) July is for July 1-14 (14 days inclusive, with 12-14 being only the early reports)

2. Major Findings and Recommendations

The details for the summaries in this section are given in the several subsections of Sections 3 and 4 that follow. These are referenced by general classification and crash attribute numbers (Cnnn). The names we have assigned to the two subsets are *Normal* and *COVID*. An asterisk (*) on the Odds Ratio value indicates that there is a significant difference in this item between the COVID and the Normal periods.

2.1 Geographical Findings (Section 3.1)

- C011 Highway Classification. This reflects the rural/urban findings in C020 below. About 35% of the COVID crashes were on County and State roadways. For the most part, there was little deviation in most of the roadways, with the possible exception of County roads, which had a significant increase of nearly 15%.
- C020 Rural or Urban. Rural areas were significantly over-represented probably because of the requirement for obtaining groceries and other necessities from the rural areas.
- C033 Locale. As expected, Shopping or Business, School and Manufacturing/Industrial locales were significantly under-represented. Relative increases were observed in Residential and Open Country travel. This reflects that major redistribution in traffic volumes during the COVID period.

2.2 Time and Weather Findings (Section 3.2)

- C006 Day of the Week. Saturday and Sunday are the only two days that have significant over-representations. As is usual, traffic volume decreases on these weekend days, but they have not dropped as much in the COVID time period than in the Normal times. While it does not seem reasonable that weekends would be over-represented in the COVID time frame, perhaps it is more the reduction in travel for work during the week that is the causes this difference.
- C008 Time of Day. Over-represented times are primarily week-days from 10 AM through 4 PM, with the largest over-representations being before the afternoon rush hours (3:00 to 5:59 PM). This shows a major shift of traffic in the COVID period to earlier in the afternoon. Compare this with the DUI findings for C008 in Section 4.
- C032 Weather. Chances are good that the same reasoning that applies to darkness also applies to bad weather. Since sight is limited there is a reluctance to take a chance on any illegal behavior. This might tend to confirm the reasons given above for the relative drop off in the proportion of COVID crashes in darkness.

2.3 Driver Related Findings (Section 3.3)

- C015 Primary Contributing Circumstance. The most significant over-representations are seen in Speed, DUI and Aggressive Operation, which is consistent with the graphs in the *Response of Various Crash Types to COVID Quarantine* documents. There were 12 items that showed significant over-representations, the top three were Speed, DUI and

Aggressive Operation followed by several others that account for the large number of crashes.

- C023 Manner of Crash. Collectively, how do those items that are over-represented reflect some change in driver attitude indicated by the COVID crashes? The very much higher (about 25%) proportion of single vehicle crashes is indicative of there being fewer "second vehicles" on the road to crash into. Side impacts are fairly typical of Failure to Yield issues. The Sideswipe – Opposite Direction and Head Ons probably go together in showing the crossing of the centerline. This can be indicative of a loss of control due to excessive speed.
- C107 CU Driver Raw Age. The youngest drivers (aged 16-20) were all under-represented, with the 16-17s significantly so. Very few of the other ages showed any pattrns for either over- or under-representation.
- C109 CU Driver Gender. Males were over-represented above that which is typically seen. We suspect that the liberties that some are taking due to the roads being relatively empty might be a male as opposed to a female characteristic.
- C120 CU Driver Employment Status. The fact that the unemployed were over-represented is clearly due to their increased number and proportion in the COVID period. While, significant (about 14% higher than in the Normal period), the degree of Unemployment is not as large as might be expected, probably because this would curtail their driving.
- C122 CU Officer Opinion Alcohol. The COVID period DUI crashes have a proportion that is 25% higher than the Normal crashes. This is statistically significant at the highest levels, and it is obvious that both drugs and alcohol have increased with COVID, and/or there is a much lower expectation of apprehension.
- C123 CU Officer Opinion Drugs. (Non-alcohol) drugs have about twice the over-representation as that found for alcohol. The proportion of COVID crash causal drivers who were under the influence of drugs was about 50% higher a proportion than that found for Normal drivers.
- C214 CU Emergency Status. The first two items are significantly over-represented, including On an Emergency Call, and In Police Pursuit, indicating that the COVID period required more emergency details.
- C225 CU Citation Issued. The citations given generally reflect the attributes discussed above. Note that there are three ID/DUI categories.

2.4 Severity Findings (Section 3.4)

- C025 Crash Severity. All of the more severe (top three) injury categories were over-represented at from about 10% to 25% more than the proportion for the Normal period. The two lowest severities, Possible Injury and Property Damage Only are significantly under-represented. Two possible reasons for these results may be: (1) higher impact speeds – see C224 below, and (2) rural locations where EMS is not s readily available (see C038 below).
- C038 Adjusted EMS Arrival Delay Time. While no one category shows statistical significance, the combined three lowest arrival times are all under-represented, while most of

the others are over-represented. So, collectively we would conclude that the COVID period had longer ambulance delay times, which could be caused by ambulances dispatched for other COVID-related emergencies.

- C052 Number of Vehicles. COVID period crashes are over-represented in single-vehicle crashes, with an Odds Ratio of 1.245. We expect the major proportionate increase in single vehicle crashes to be the result of fewer vehicles on the roads. Considering all crashes from 2018 to the most recently available in 2020, single vehicle crashes have about a one in 70 chance of being fatal, while those involving two vehicles have a one in 350 chance – so the probability of a fatality in single vehicle crashes is five times that of two vehicle crashes. This would tend to explain some of the relative fatality increases in the COVID period. Multi-vehicle crashes tend to occur more in the urban areas where speeds are lower.
- C057 Number of Pedestrians. The proportion of crashes that involve pedestrians is virtually the same in the COVID as in the Normal time periods.
- C058 Number of Pedalcycles (Bicycles). Clearly, many people have chosen to either exercise or travel by bicycle in the COVID time frame. The proportion of bicycle crashes is about 42% higher in the COVID period than in the Normal period that we are using for a control.
- C224 CU Estimated Speed at Impact. All speeds 45 and above are over-represented in the COVID period, and generally, the higher the speed, the higher the proportionate over-representation. The causes for this in no particular order: (1) fewer vehicles on the road, (2) increased rural driving, and (3) a perception that the police are not giving speeding tickets (although we see no evidence of this).
- C323 CU Driver Safety Equipment. The "None Used" category is significantly higher for the COVID time period, but an Odds Ratio of 1.478. This is related to the ID/DUI findings in that those who drive while drunk are notorious for not being buckled up. For more information on this factor, see C323 in Section 4.5.

2.5 Vehicle Related Findings (Section 3.5)

- C080 CMV Involved. There was no measurable difference in the Commercial Motor Vehicle involvement between COVID and Normal times.
- C101 Causal Unit (CU) Type. The vast majority of COVID crashes (almost 70%) are caused by the drivers of Passenger cars (49.28%) and Pick-Ups (19.59%). However, only the Pick-Ups are significantly over-represented when compared to their expected proportion in the Normal population. Others that had significant over-representations (Odds Ratios) were Motorcycles (1.522), Single Unit (2 Axle) Trucks (1.236), and 4-Wheel Off Road All Terrain Vehicles (2.235).
- C208 CU Model Year. Vehicle years that are over-represented start at 2018 and later. All previous model year are under-represented. This indicates that the owners of such vehicles may have had more of a tendency to ignore the COVID quarantine rules than owners of older vehicles.

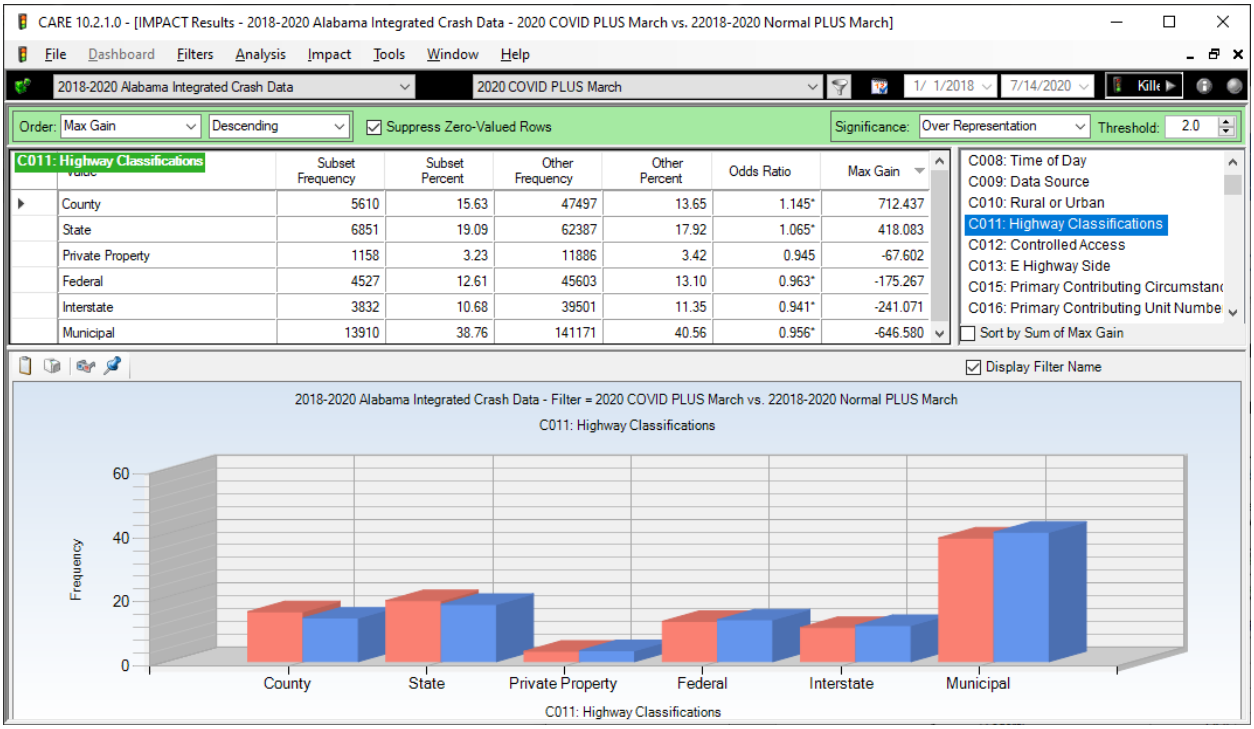
2.6 COVID ID/DUI Findings (Section 4)

- COVID vs Normal C008 Time of Day for DUI Crashes. Times are generally earlier in the evening (but not necessarily afternoons) for the COVID DUI crashes. Note the lack of COVID DUI crashes in the early morning hours. ID/DUI is typically over-represented in these hours.
- COVID vs Normal C025 Severity for DUI Crashes. There were fewer fatalities (proportionally) here than in the general comparison. Fewer DUI fatalities for the COVID crashes could be due to their not occurring very early morning. Also, this indicates that the problem is DUI itself and not COVID, with the exception that DUI was over-represented in the COVID time period.
- COVID vs Normal C033 Locale for DUI Crashes. Open Country and Residential are over-represented for the COVID DUI crashes as they were in general.
- COVID vs Normal C052 Number of Vehicles for DUI Crashes. A significantly larger proportion of Single Vehicle crashes for the COVID DUIs indicates more "unforced" errors during this time. This could be from people who typically do not use drugs or alcohol indulging due to their additional free time.
- COVID vs Normal C323 Safety Equipment - Driver for DUI Crashes. The None Used for drivers under the influence of alcohol was 19.03%, and another 19.59% of the ID/DUI cases were listed as Unknown seatbelt use. Confirmed Shoulder and Lap Belt Used was 58.20%, indicating over 40% were not properly restrained. The differences for the Normal time period were not significantly different where both time periods were constrained to be DUI. This shows that the problem was DUI and not COVID; however it appears that COVID did play a large part in increasing the use of drugs and alcohol in persons who were driving.

3. 2020 COVID vs 2018-2020 Normal

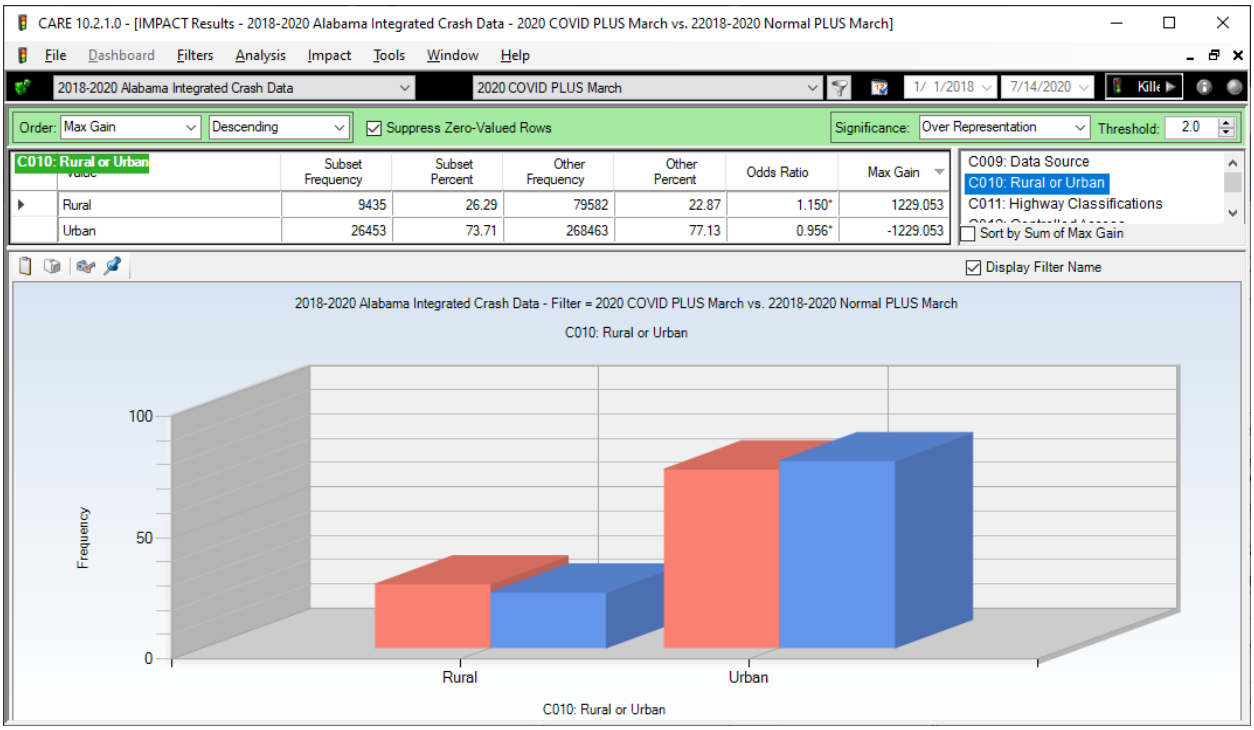
3.1 Geographical Findings

C011 Highway Classification



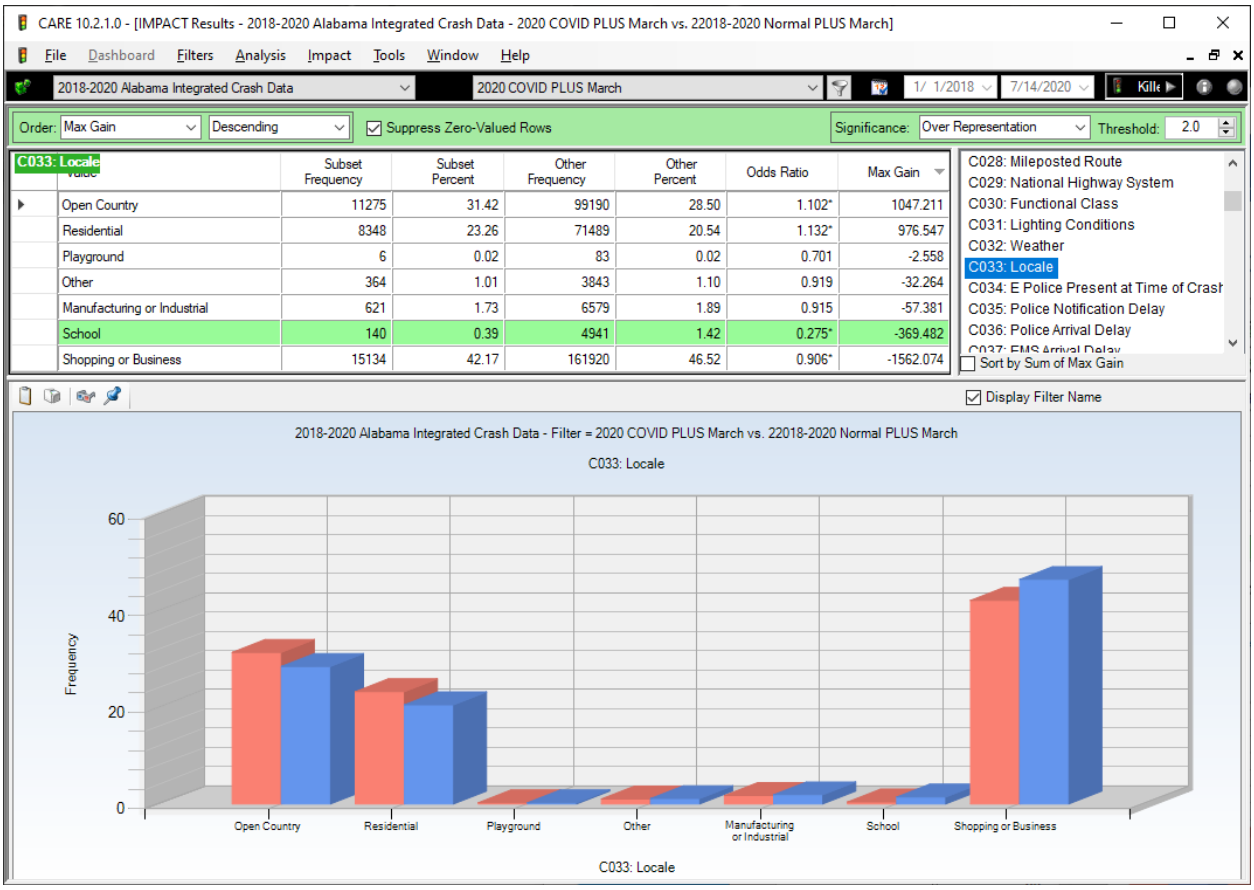
Mainly County, but also to some extent State. Interstates are generally lower, with a greater reduction than all crashes in the COVID times, consistent with the graphs.

C020 Rural or Urban



Rural over-representation is consistent with the graphs that show urban travel diminished more than rural in the COVID time period.

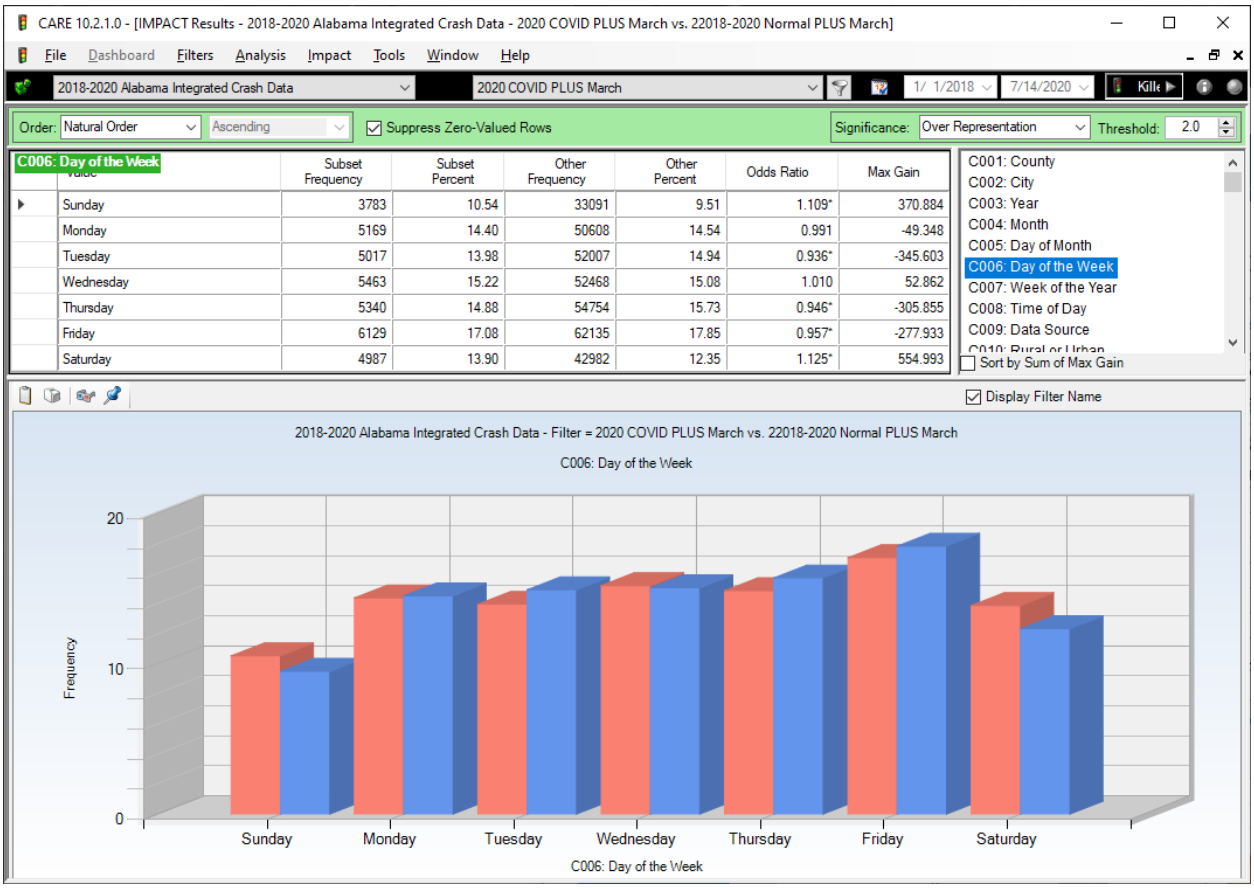
C033 Locale



Changes in location of traffic flow reflects the trend toward driving only for necessities.

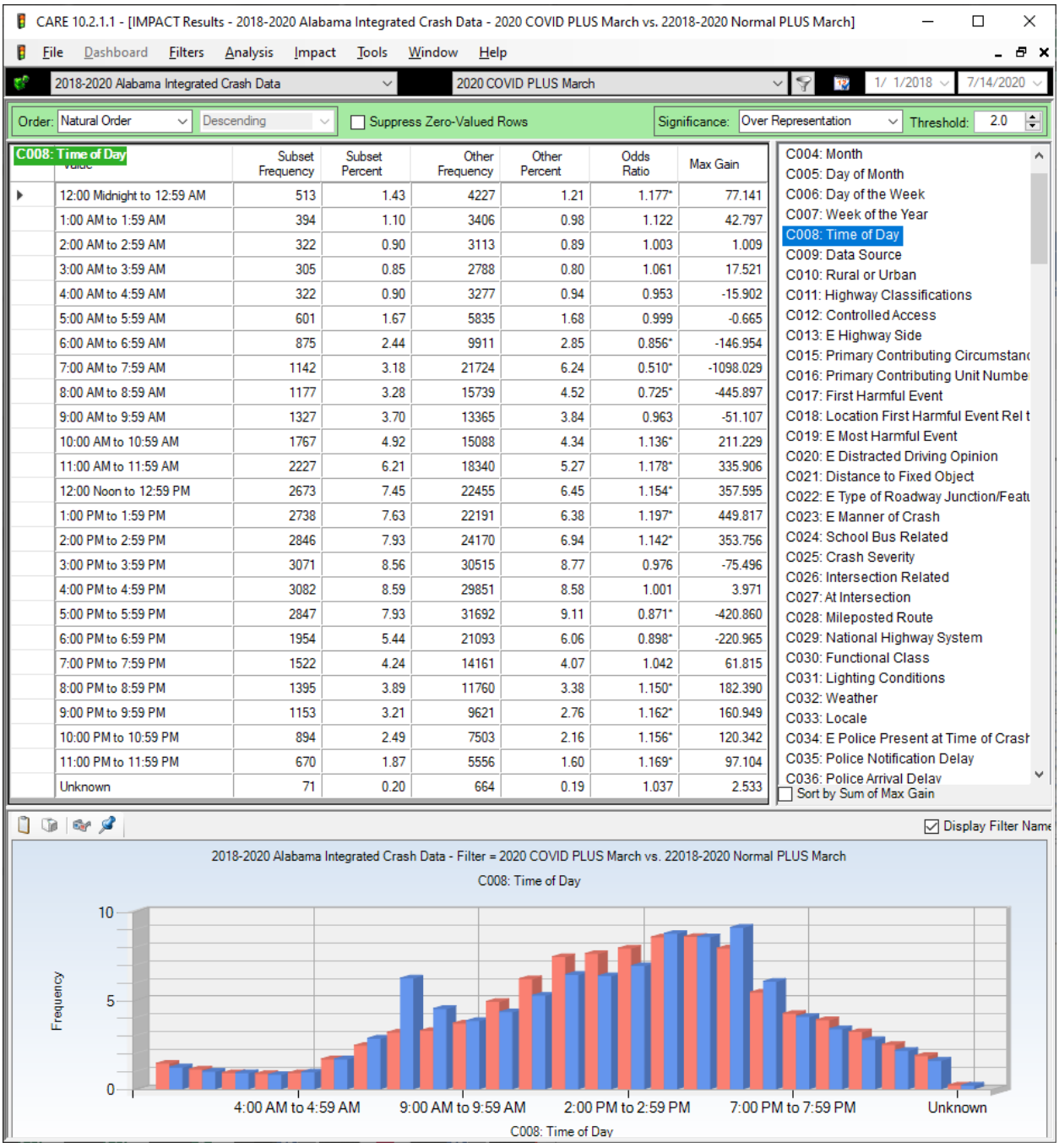
3.2 Time and Weather Findings

C006 Day of the Week



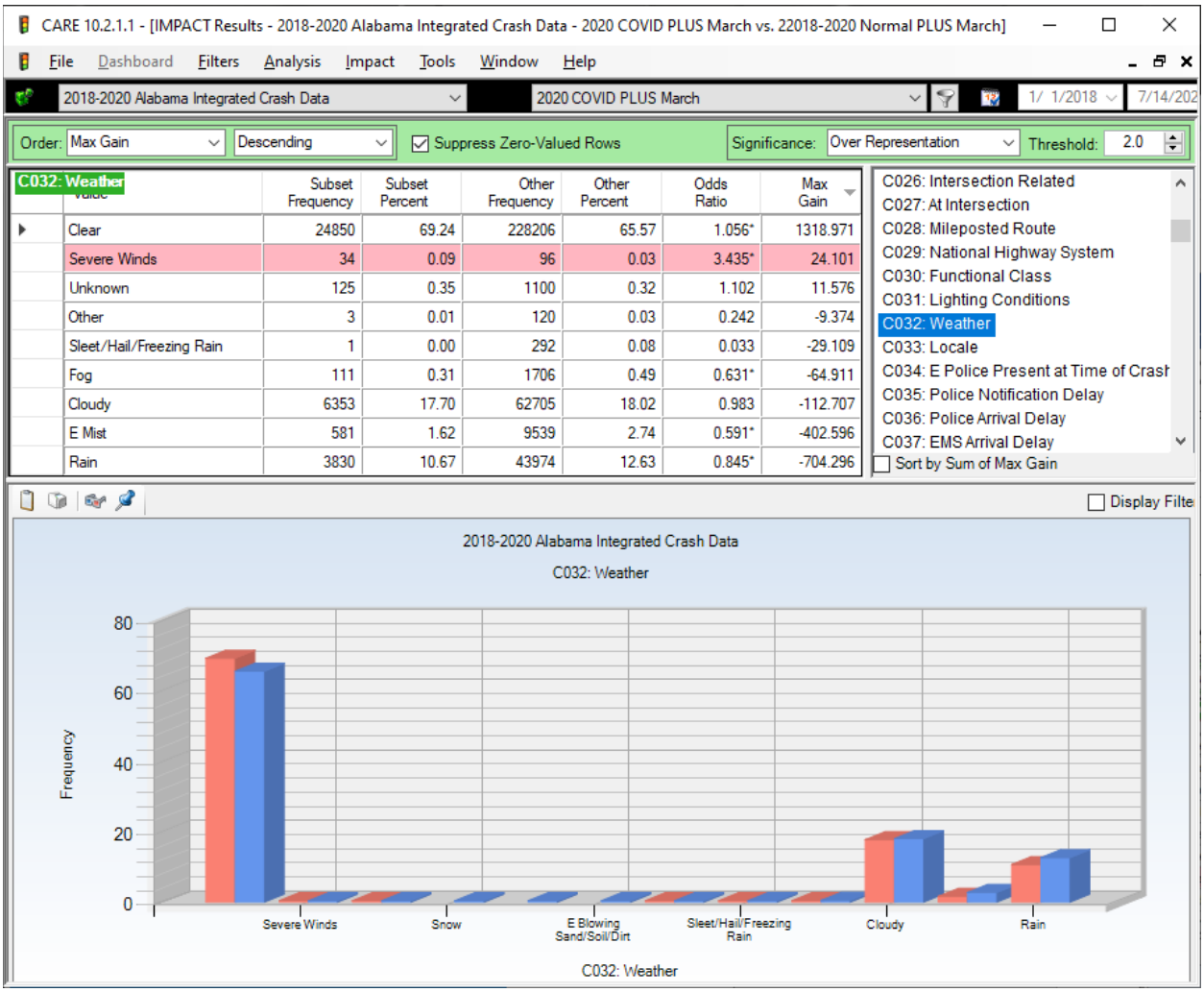
It does not seem reasonable that weekends would be over-represented in the COVID time frame. Perhaps it is more the reduction in travel for work during the week that is the cause.

C008 Time of Day



COVID period crashes seem to have moved away from the morning rush hours and into the late morning and early afternoon. Morning rush hours are under-represented.

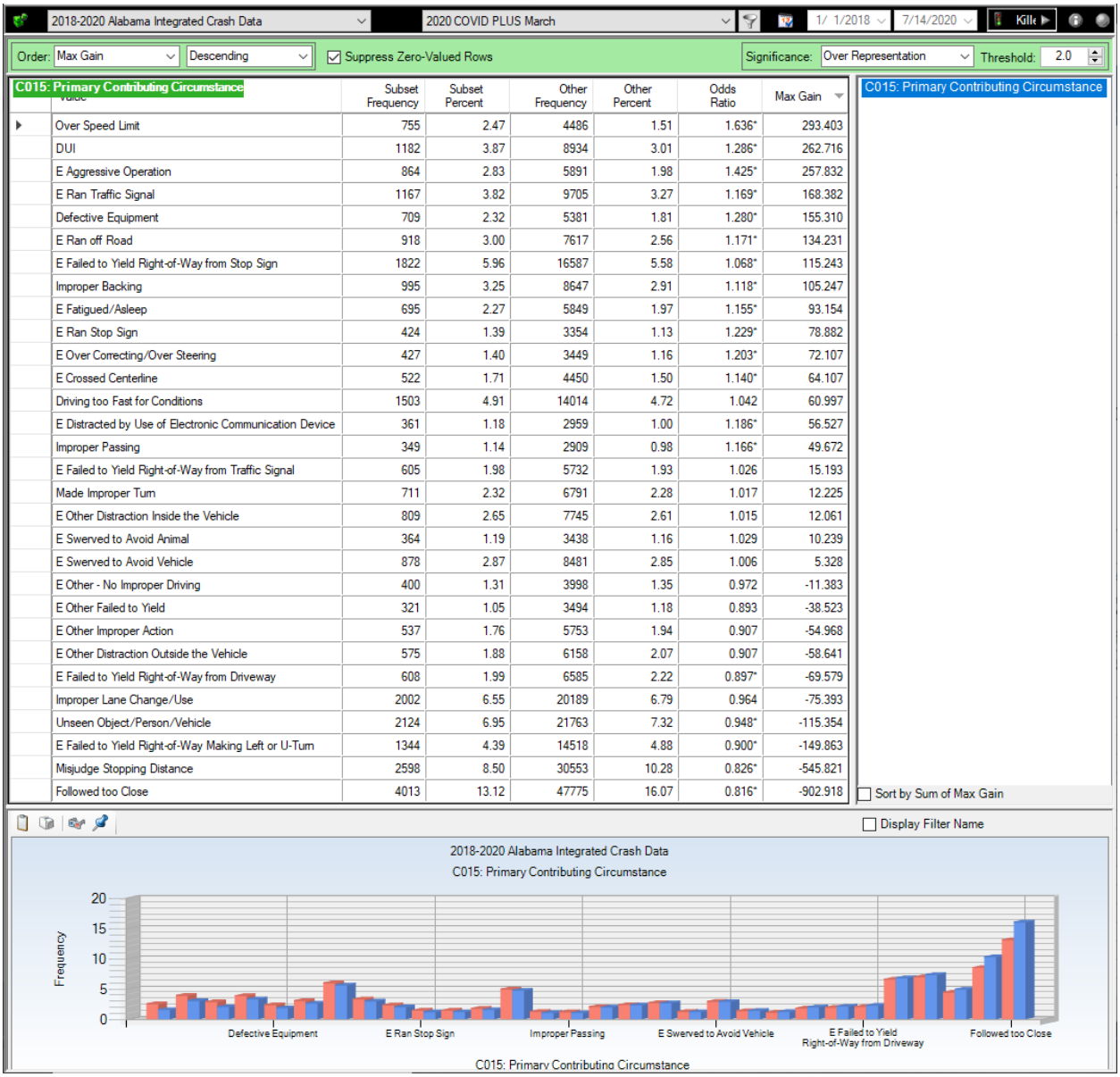
C032 Weather



Significantly higher proportion of clearer weather would facilitate higher speeds, which are further documented in C224 below.

3.3 Driver Related Findings

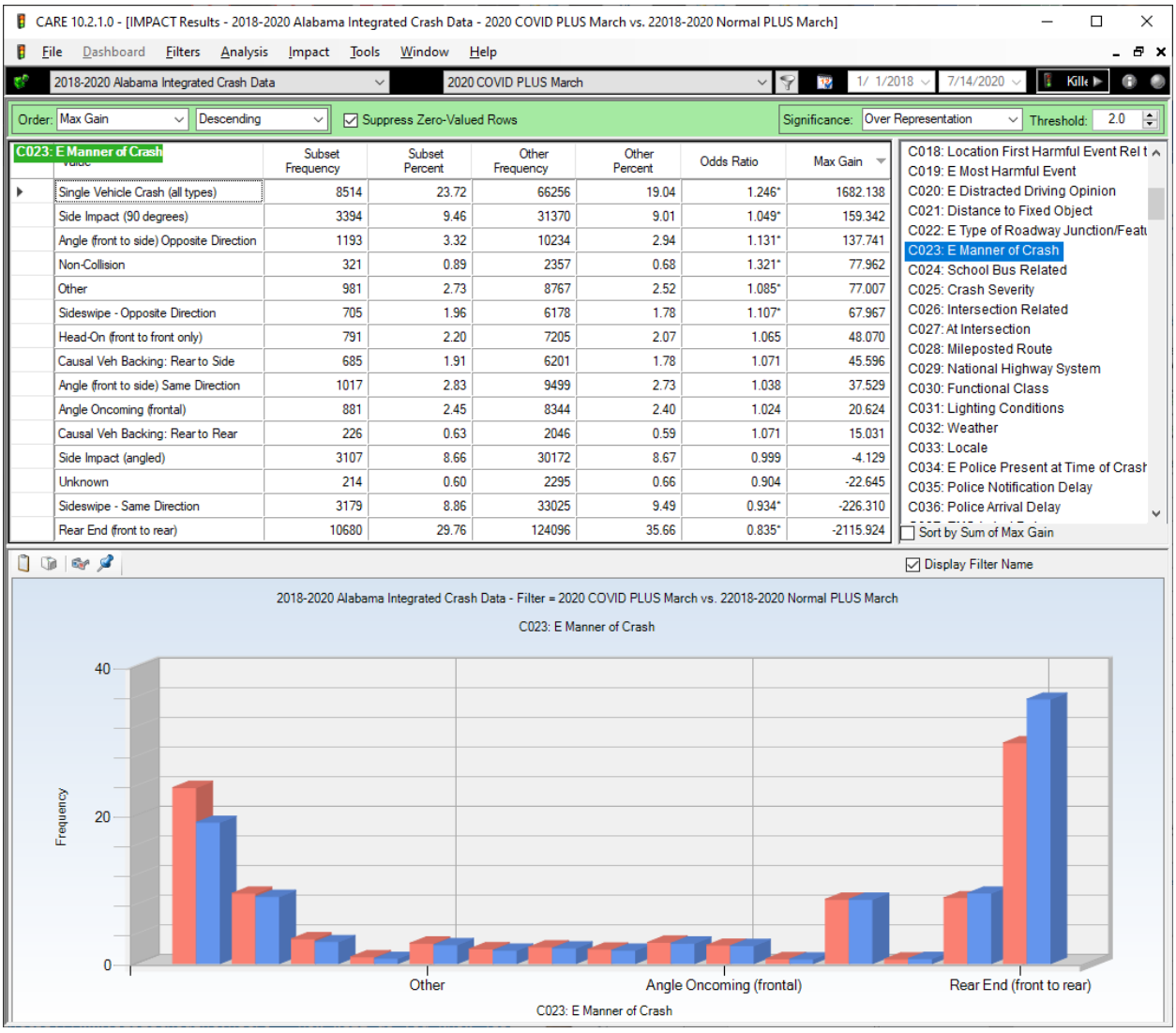
C015 Primary Contributing Circumstances (PCC)



C015: Primary Contributing Circumstance	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Over Speed Limit	755	2.47	4486	1.51	1.636*	293.403
DUI	1182	3.87	8934	3.01	1.286*	262.716
E Aggressive Operation	864	2.83	5891	1.98	1.425*	257.832
E Ran Traffic Signal	1167	3.82	9705	3.27	1.169*	168.382
Defective Equipment	709	2.32	5381	1.81	1.280*	155.310
E Ran off Road	918	3.00	7617	2.56	1.171*	134.231
E Failed to Yield Right-of-Way from Stop Sign	1822	5.96	16587	5.58	1.068*	115.243
Improper Backing	995	3.25	8647	2.91	1.118*	105.247
E Fatigued/Asleep	695	2.27	5849	1.97	1.155*	93.154
E Ran Stop Sign	424	1.39	3354	1.13	1.229*	78.882
E Over Correcting/Over Steering	427	1.40	3449	1.16	1.203*	72.107
E Crossed Centerline	522	1.71	4450	1.50	1.140*	64.107
Driving too Fast for Conditions	1503	4.91	14014	4.72	1.042	60.997
E Distracted by Use of Electronic Communication Device	361	1.18	2959	1.00	1.186*	56.527
Improper Passing	349	1.14	2909	0.98	1.166*	49.672
E Failed to Yield Right-of-Way from Traffic Signal	605	1.98	5732	1.93	1.026	15.193
Made Improper Turn	711	2.32	6791	2.28	1.017	12.225
E Other Distraction Inside the Vehicle	809	2.65	7745	2.61	1.015	12.061
E Swerved to Avoid Animal	364	1.19	3438	1.16	1.029	10.239
E Swerved to Avoid Vehicle	878	2.87	8481	2.85	1.006	5.328
E Other - No Improper Driving	400	1.31	3998	1.35	0.972	-11.383
E Other Failed to Yield	321	1.05	3494	1.18	0.893	-38.523
E Other Improper Action	537	1.76	5753	1.94	0.907	-54.968
E Other Distraction Outside the Vehicle	575	1.88	6158	2.07	0.907	-58.641
E Failed to Yield Right-of-Way from Driveway	608	1.99	6585	2.22	0.897*	-69.579
Improper Lane Change/Use	2002	6.55	20189	6.79	0.964	-75.393
Unseen Object/Person/Vehicle	2124	6.95	21763	7.32	0.948*	-115.354
E Failed to Yield Right-of-Way Making Left or U-Turn	1344	4.39	14518	4.88	0.900*	-149.863
Misjudge Stopping Distance	2598	8.50	30553	10.28	0.826*	-545.821
Followed too Close	4013	13.12	47775	16.07	0.816*	-902.918

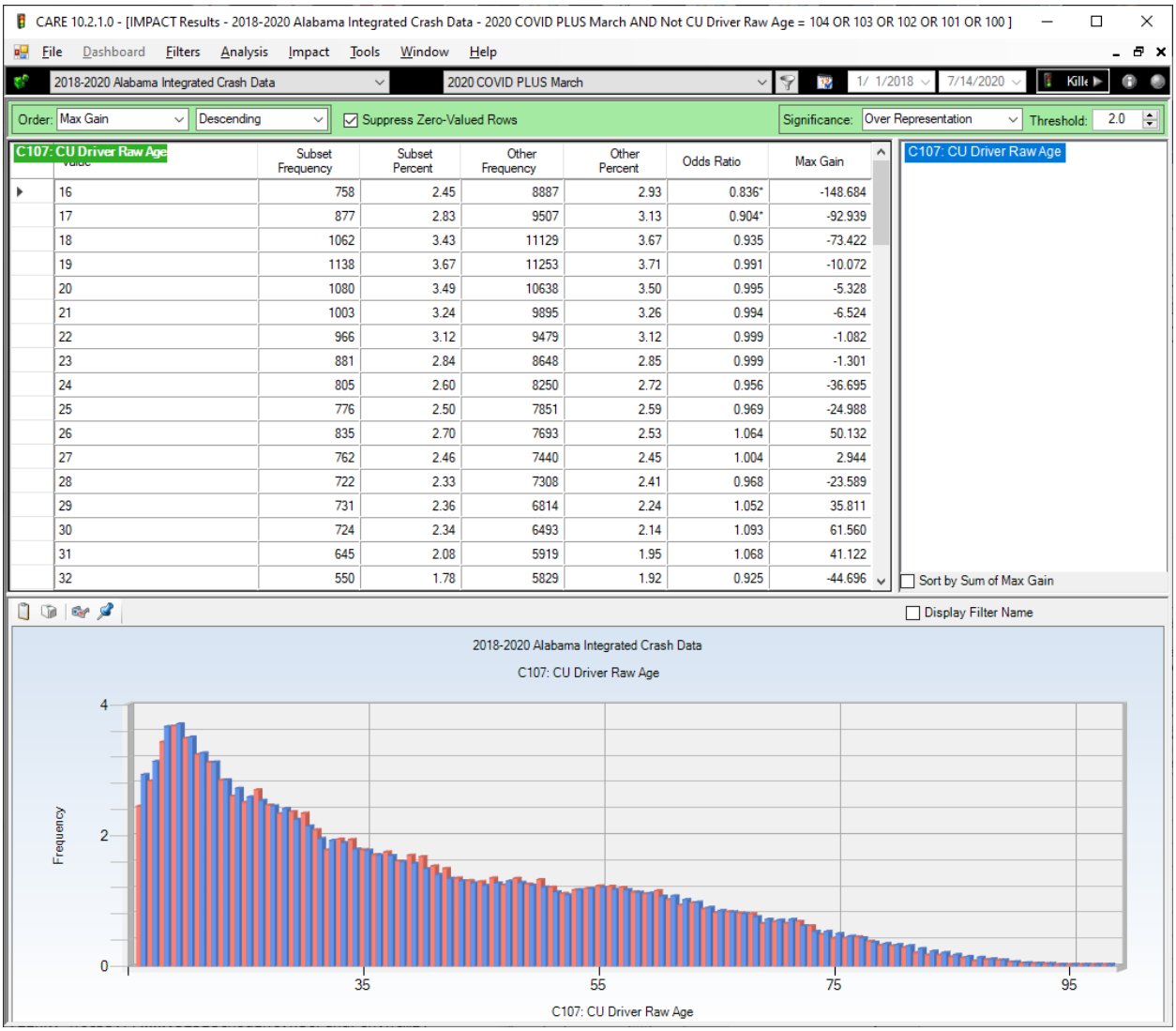
All items with less than 300 crashes were removed. Speed, DUI and Aggressive Operation are all consistent with the COVID time graphs in the Response of Various Crash Types to COVID Quarantine documents.

C023 Manner of Crash

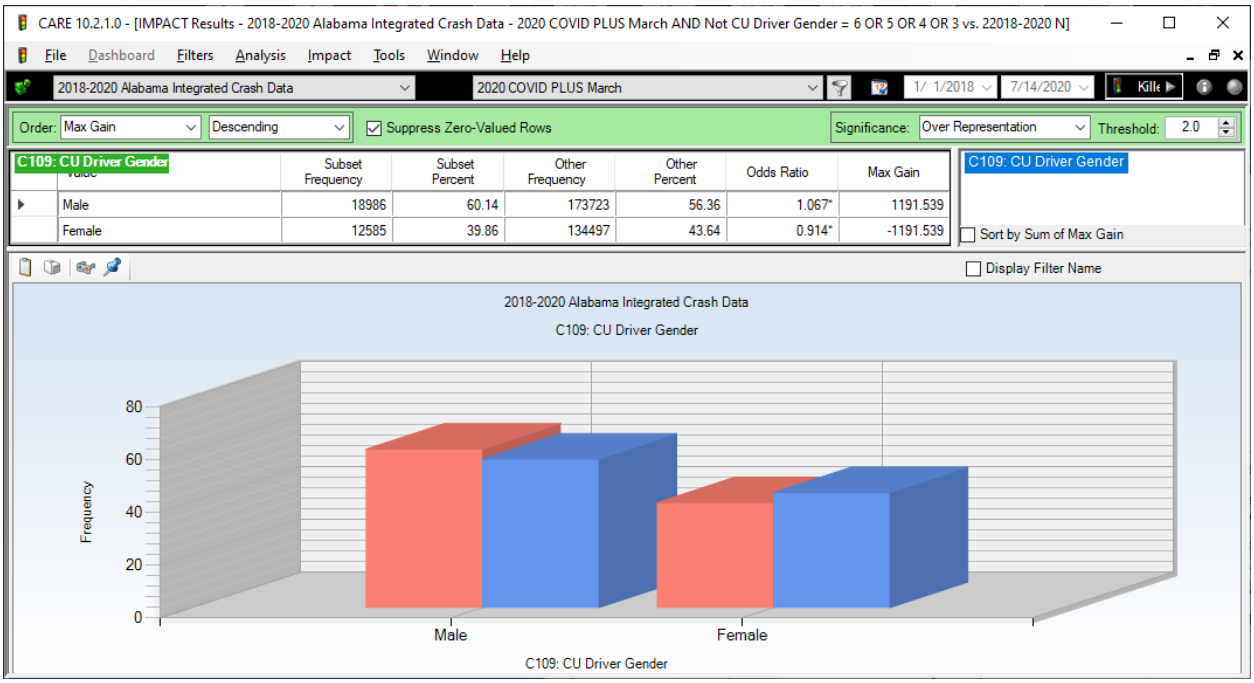


Very much higher proportion of single vehicle crashes is indicative of there being fewer “second vehicles” on the road to crash into.

C107 CU Driver Raw Age

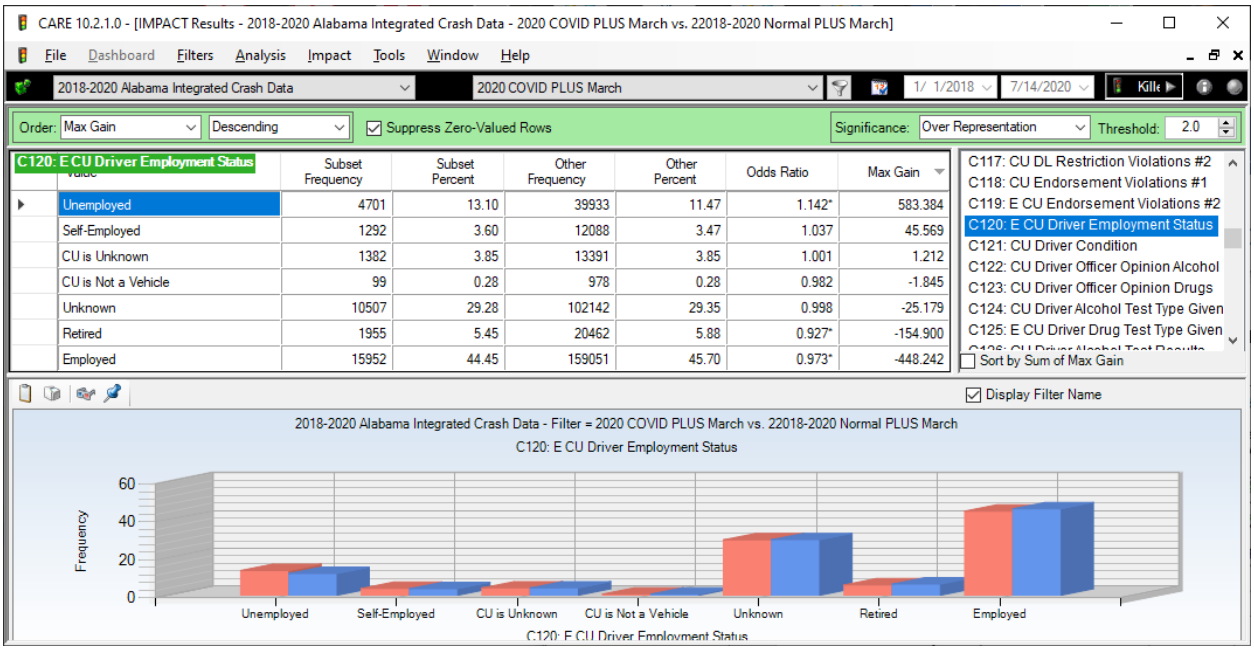


C109 CU Driver Gender



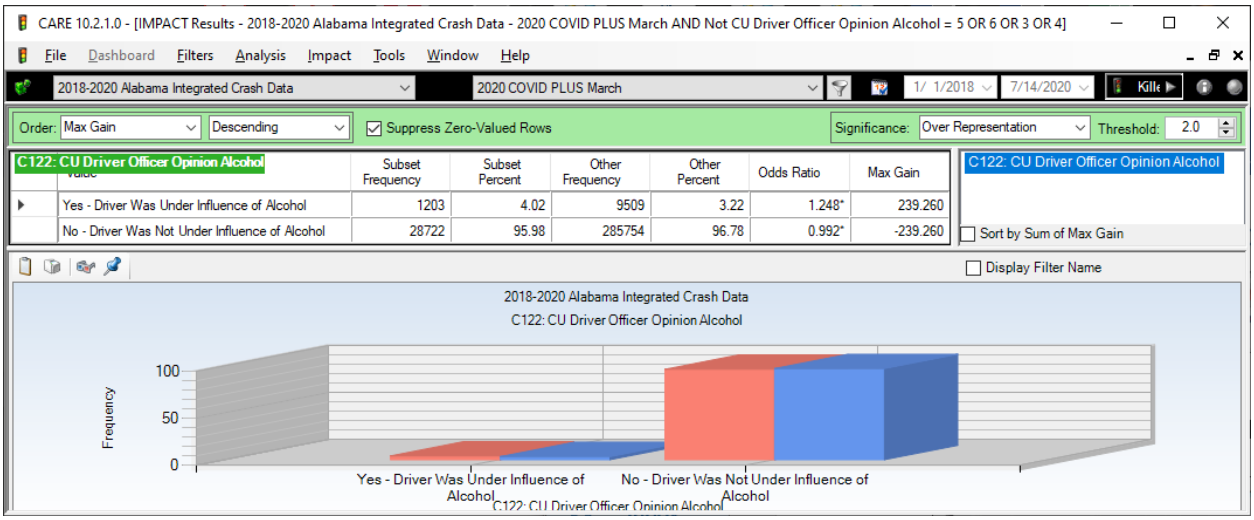
Potential cause could be that more males are on the road due to the necessities of their jobs.

C120 CU Driver Employment Status

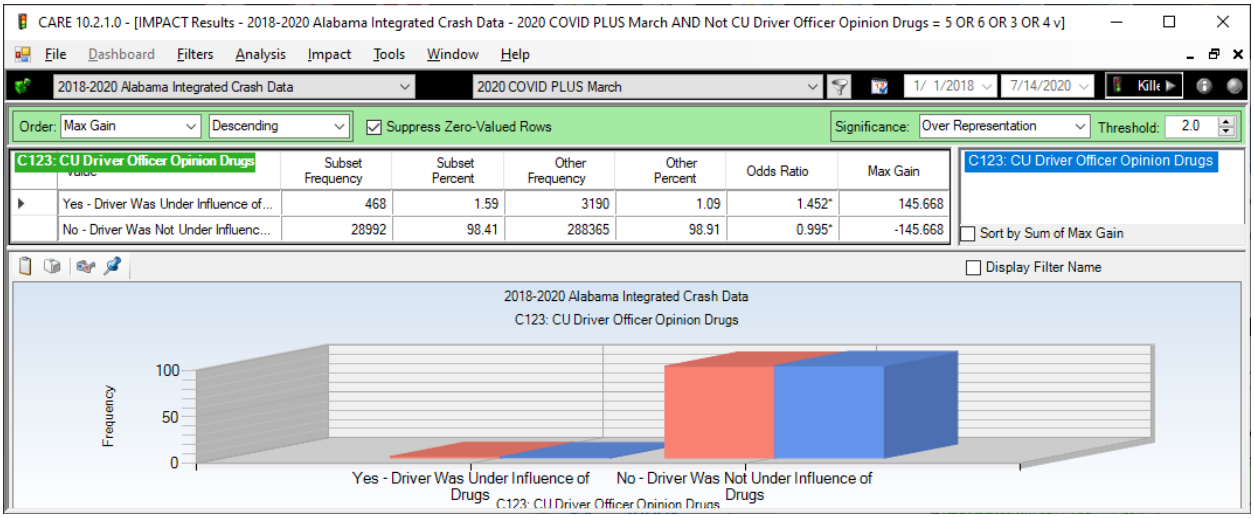


With the downturn in the economy, we would expect the unemployed to have an even greater proportion. This demonstrates that a large proportion of unemployed may be staying off the road.

C122 CU Driver Officer's Opinion Alcohol

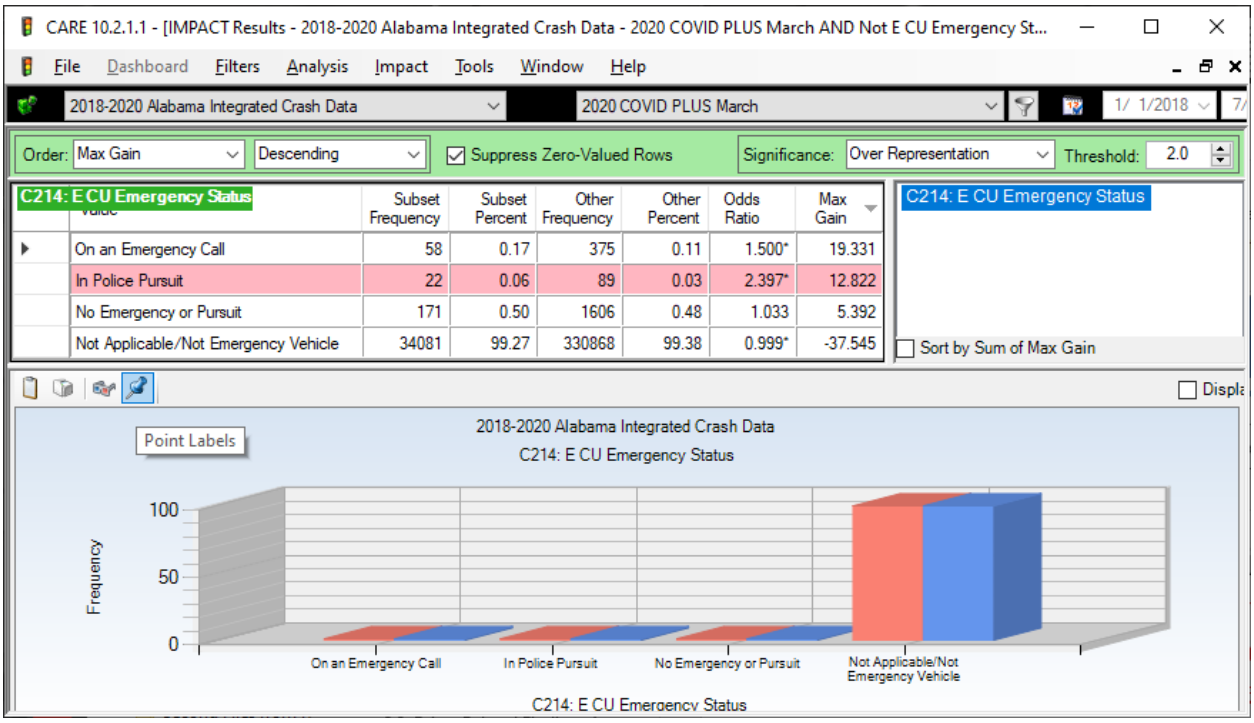


C123 CU Driver Officer's Opinion Drugs



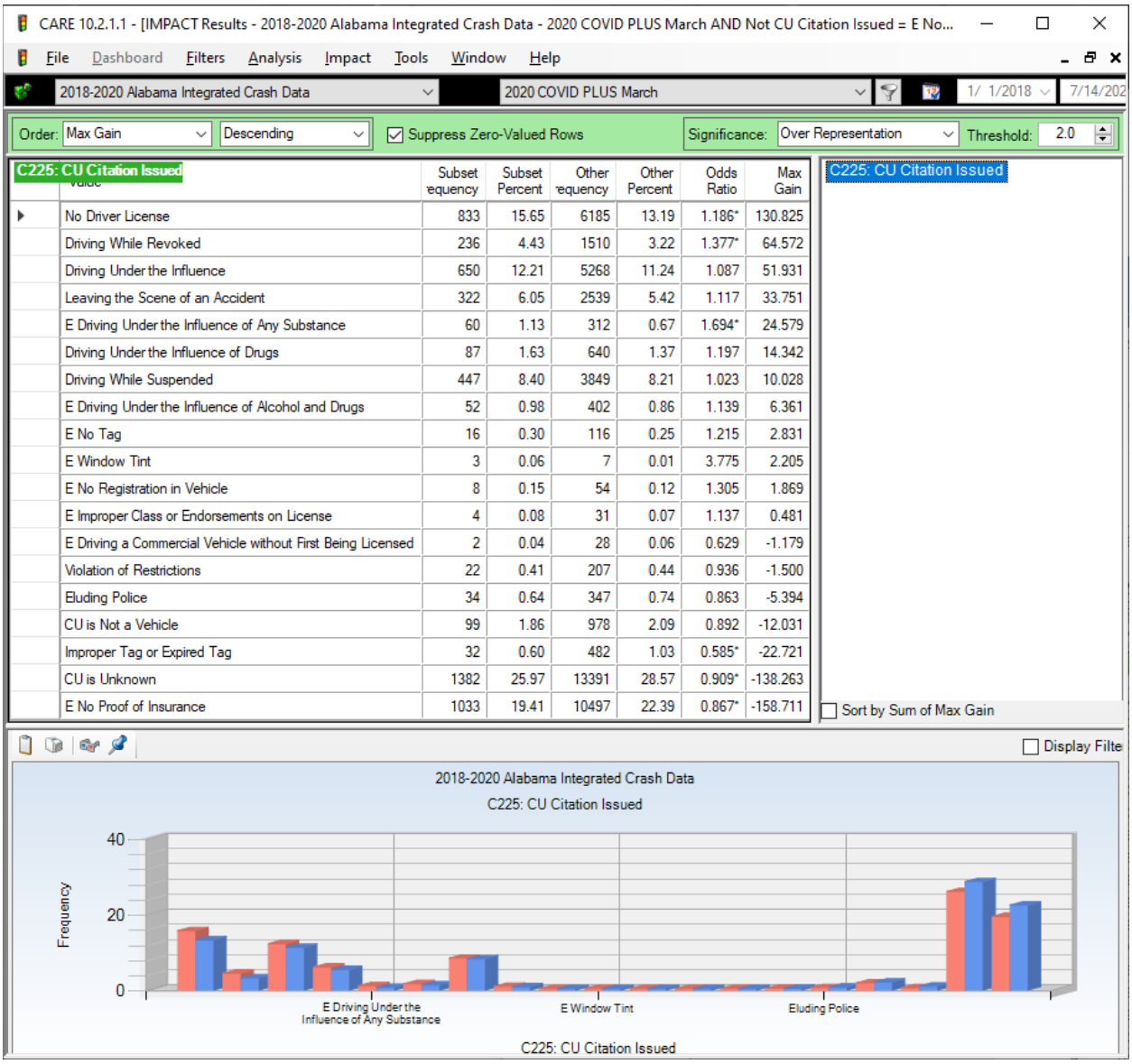
Both Alcohol and non-alcohol Drugs were over-represented in the COVID period. While there were over twice the number of alcohol as opposed to drugs, the proportion of drug involvement was higher as evidenced by the Odds Ratio.

C214 CU Emergency Status



The police pursuit category is in red background because its Odds Ratio is greater than twice that expected.

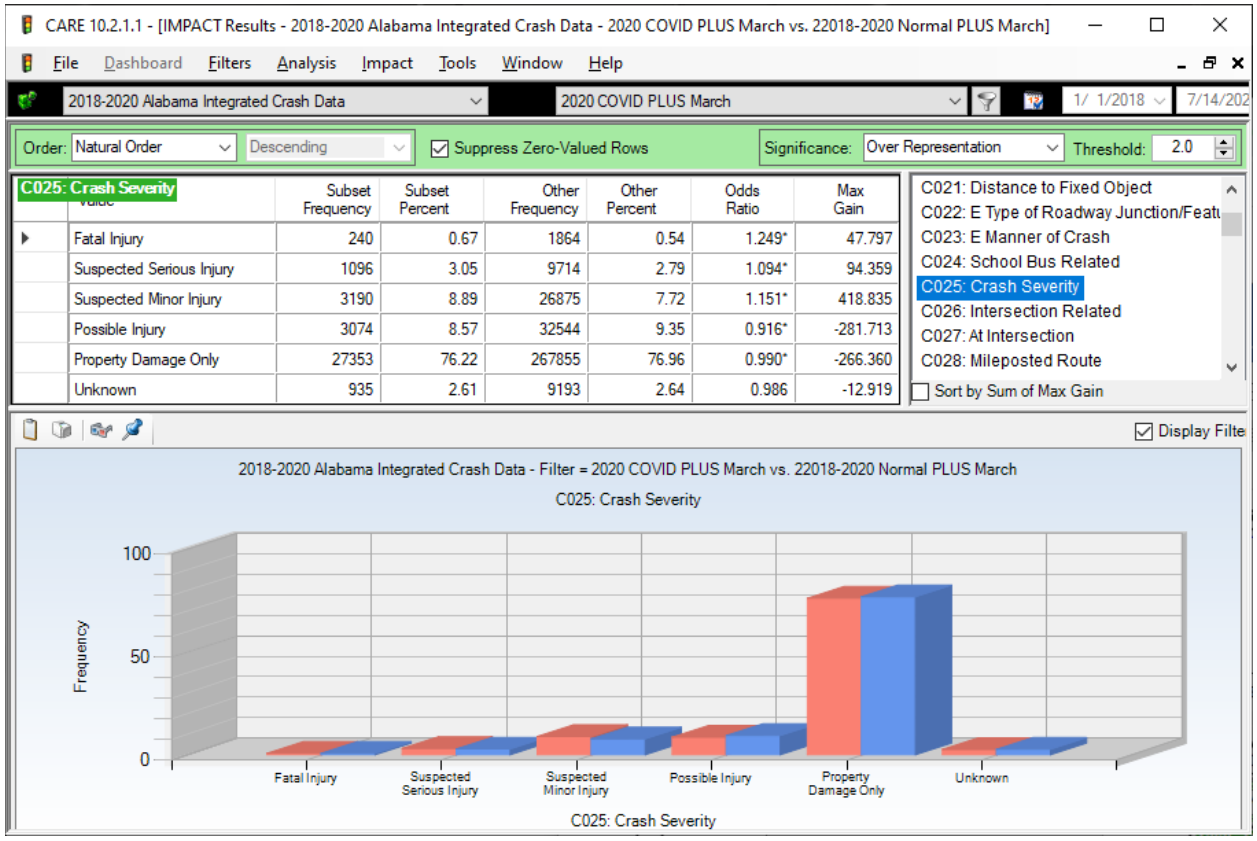
C225 CU Citation Issued



Speeding citations are not listed here because they are not issued as part of the crash investigation. The issuing officer has to witness the speeding. The No Citation Issued item was removed to get a better picture of the distribution. This amounted to 30,018 cases in the COVID period, which was 84.94% of the crashes during this period that we not given citations. The citations reflect the general characteristics that are discussed for the other attributes.

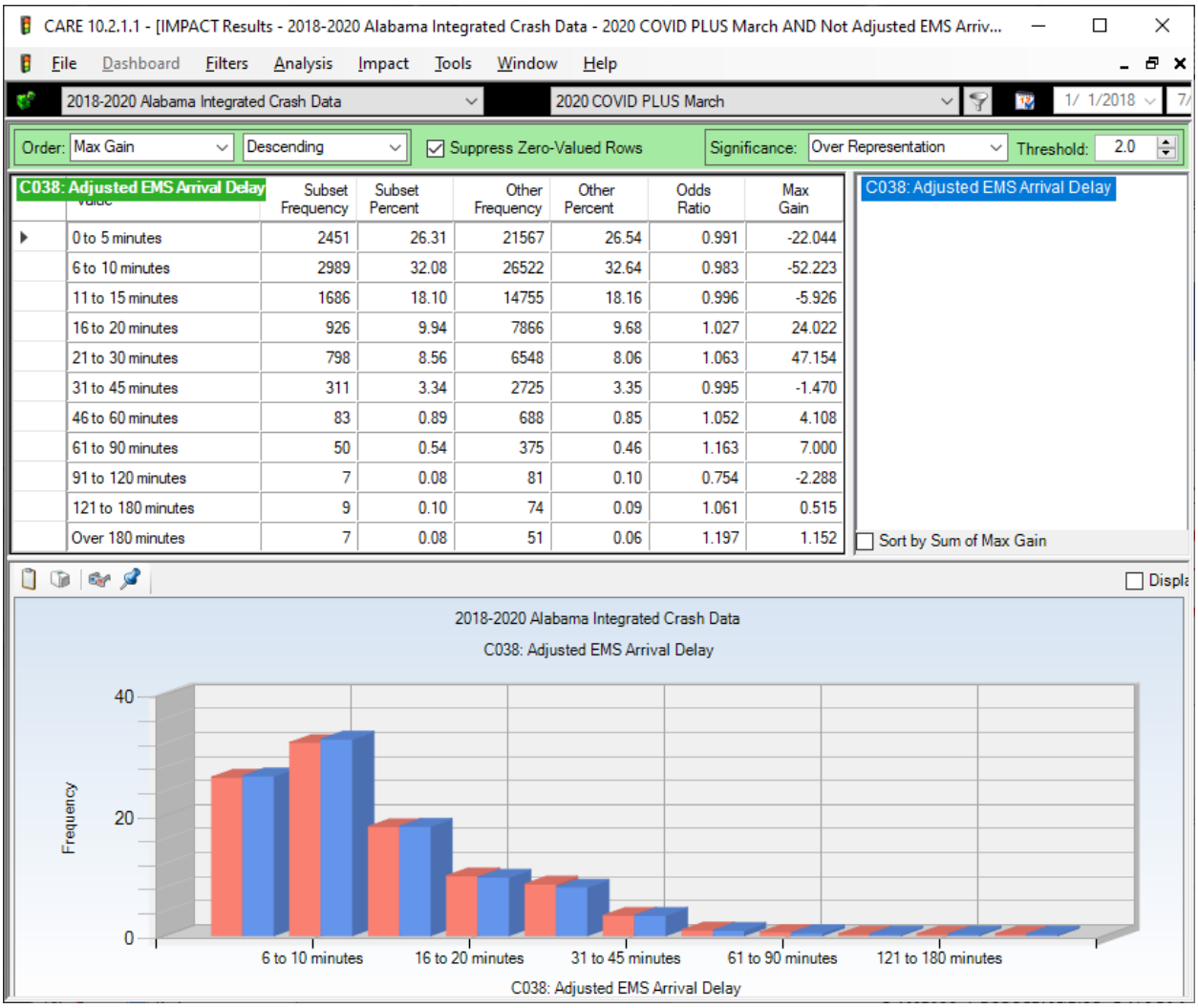
3.4 Severity Findings

C025 Crash Severity



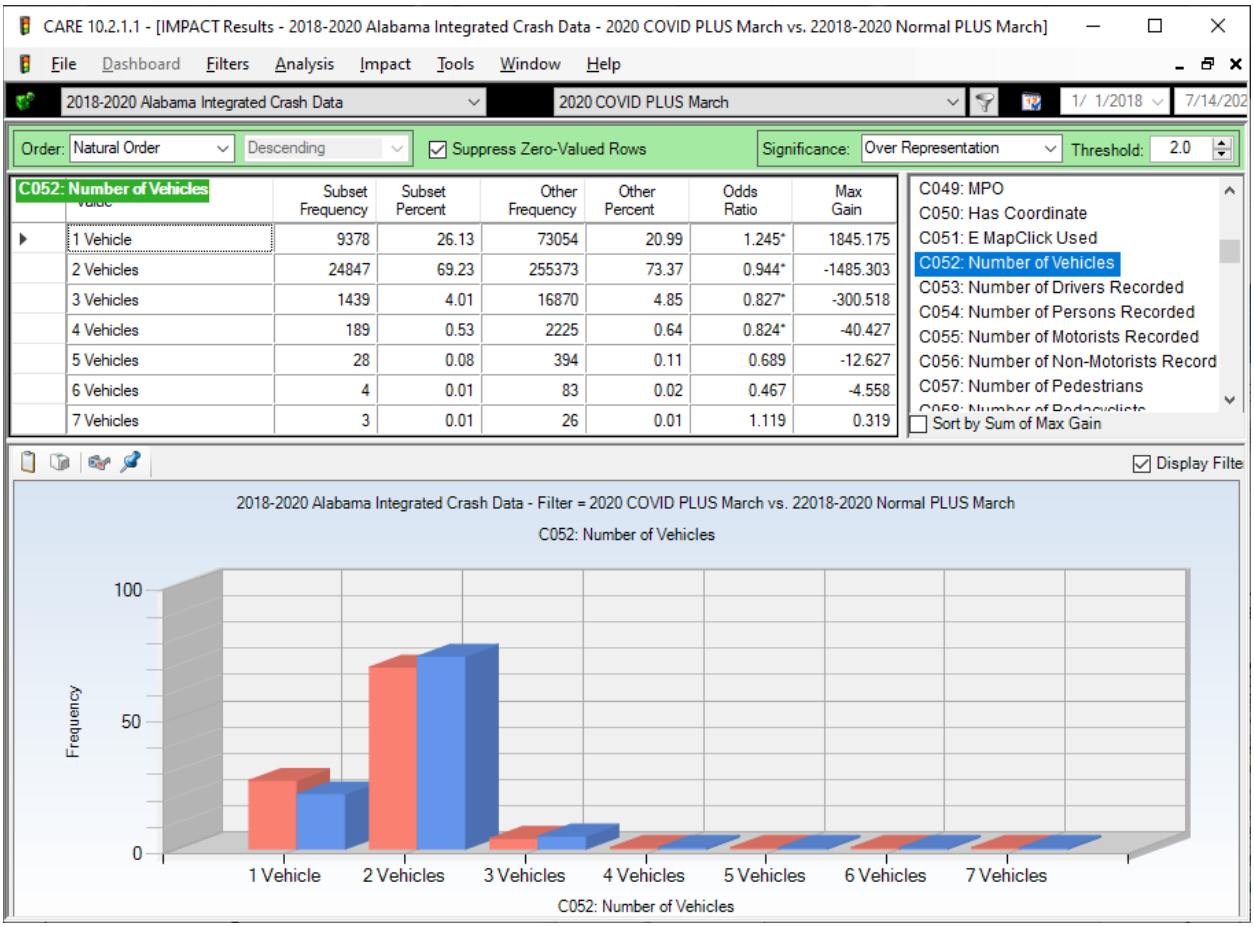
The fatal crash result contrasts to the DUI crashes that recorded a proportionate reduction in fatal crashes (we speculated due to their not occurring as much in the early morning hours). However, the higher proportion (many un-recorded as such) ID/DUI crashes, lack of constraints in ID/DUI crashes and the increases in speed, collectively, contribute to the increased fatal crash proportion.

C038 Adjusted EMS Arrival Delay Time



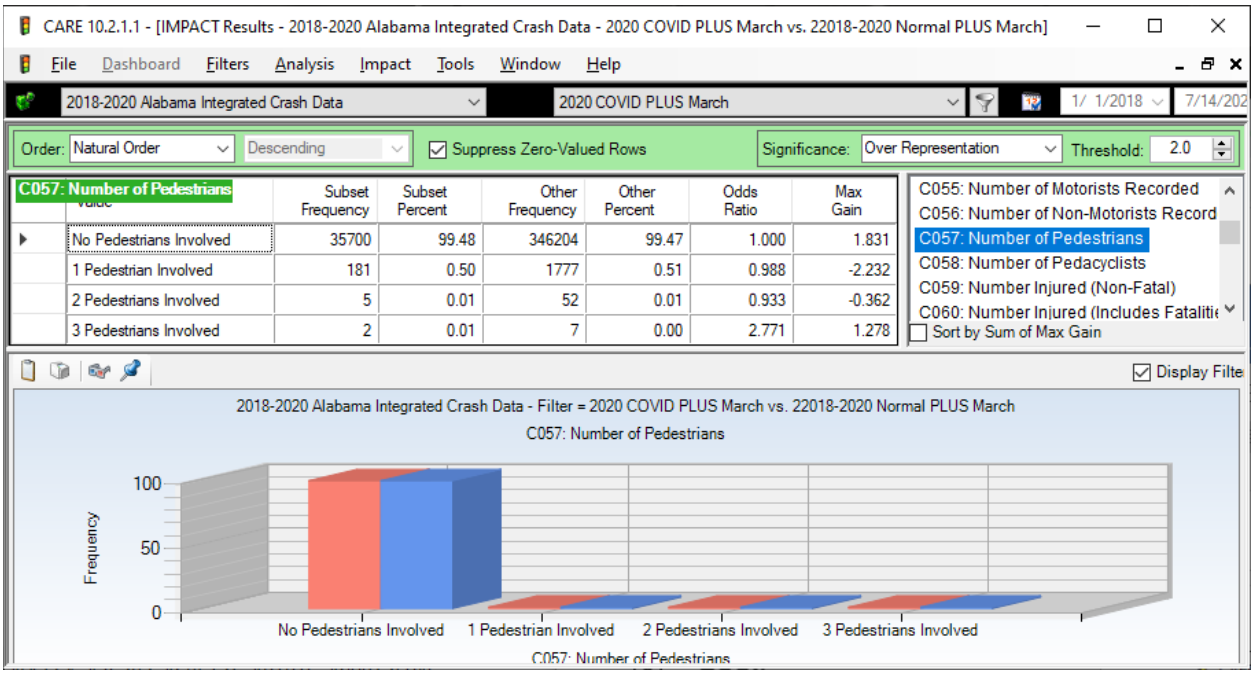
C038: Adjusted EMS Arrival Delay	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
0 to 5 minutes	2451	26.31	21567	26.54	0.991	-22.044
6 to 10 minutes	2989	32.08	26522	32.64	0.983	-52.223
11 to 15 minutes	1686	18.10	14755	18.16	0.996	-5.926
16 to 20 minutes	926	9.94	7866	9.68	1.027	24.022
21 to 30 minutes	798	8.56	6548	8.06	1.063	47.154
31 to 45 minutes	311	3.34	2725	3.35	0.995	-1.470
46 to 60 minutes	83	0.89	688	0.85	1.052	4.108
61 to 90 minutes	50	0.54	375	0.46	1.163	7.000
91 to 120 minutes	7	0.08	81	0.10	0.754	-2.288
121 to 180 minutes	9	0.10	74	0.09	1.061	0.515
Over 180 minutes	7	0.08	51	0.06	1.197	1.152

C052 Number of Vehicles

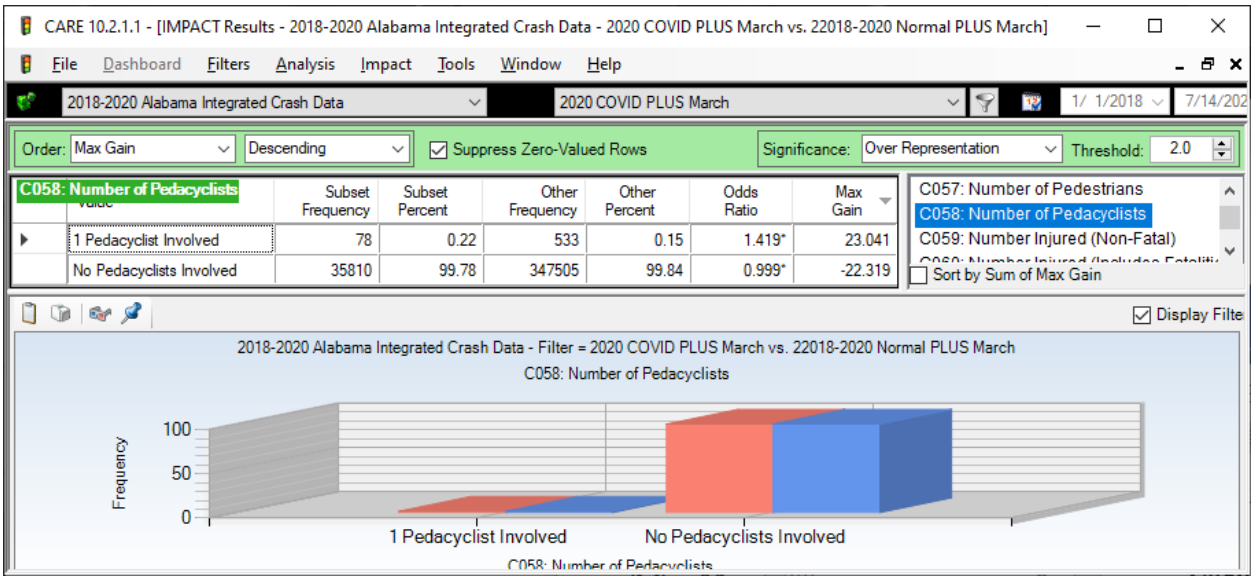


We expect the major proportionate increase in single vehicle crashes to be the result of fewer vehicles on the roads. Considering all crashes in 2018 to the most recently available in 2020, single vehicle crashes have about a one in 70 chance of being fatal, while those involving two vehicles have a one in 350 chance – so the probability of a fatality in single vehicle crashes is five times that of two vehicle crashes. This would tend to explain some of the relative fatality increases in the COVID period.

C057 Number of Pedestrians

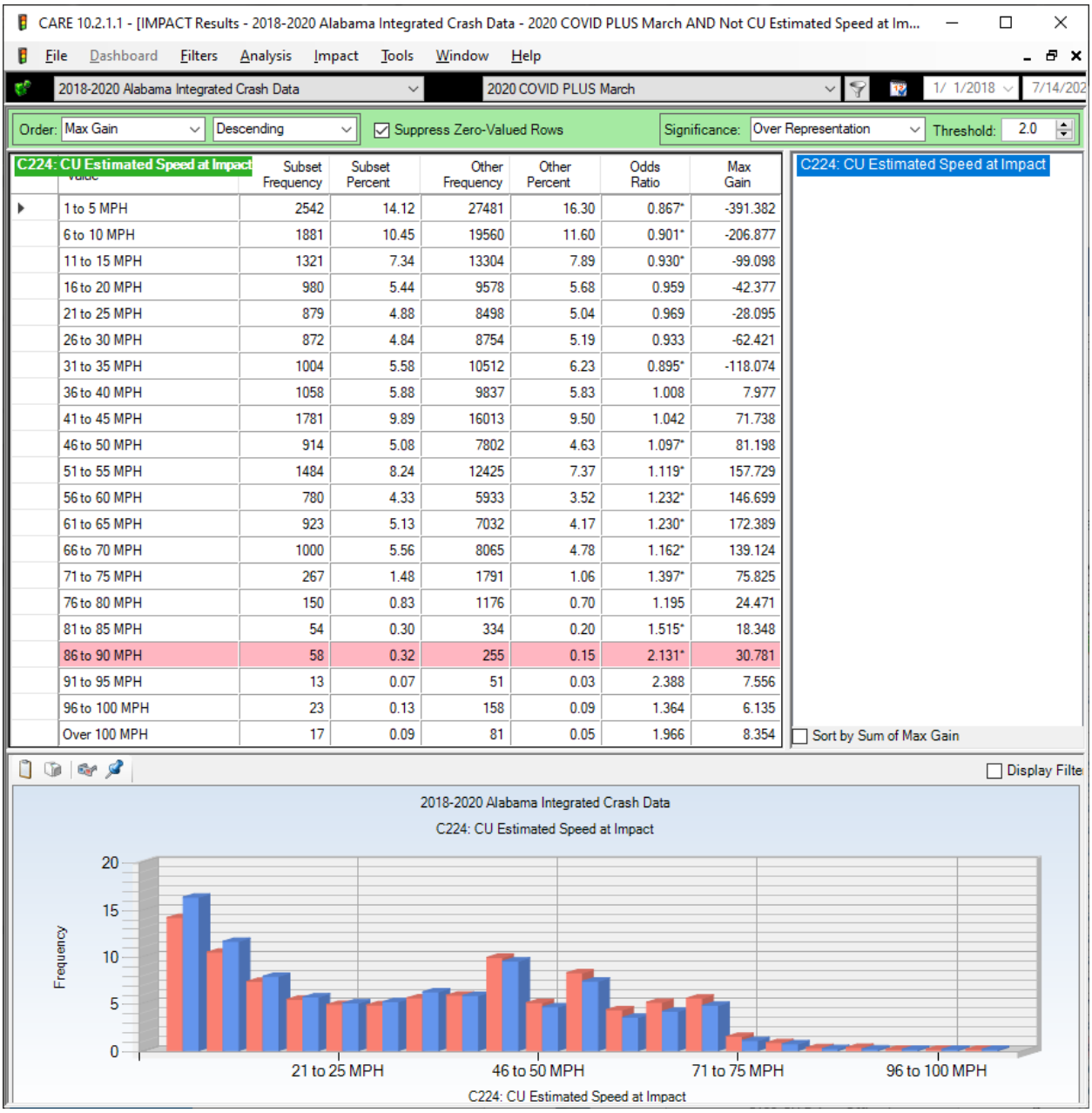


C058 Number of Pedalcyclists



Bicycles had a much greater proportionate increase than did pedestrians.

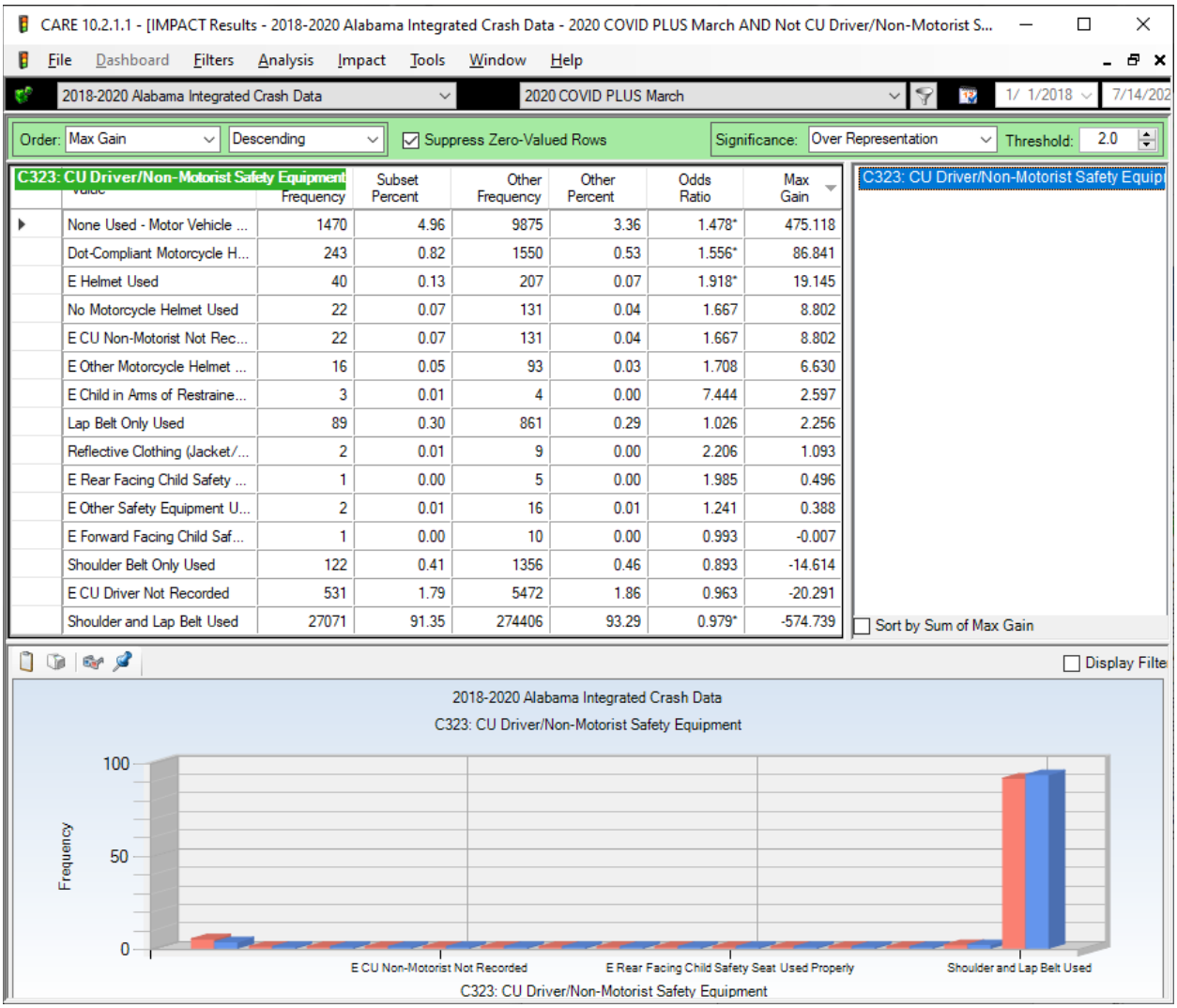
C224 CU Estimated Speed at Impact



C224: CU Estimated Speed at Impact	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
1 to 5 MPH	2542	14.12	27481	16.30	0.867*	-391.382
6 to 10 MPH	1881	10.45	19560	11.60	0.901*	-206.877
11 to 15 MPH	1321	7.34	13304	7.89	0.930*	-99.098
16 to 20 MPH	980	5.44	9578	5.68	0.959	-42.377
21 to 25 MPH	879	4.88	8498	5.04	0.969	-28.095
26 to 30 MPH	872	4.84	8754	5.19	0.933	-62.421
31 to 35 MPH	1004	5.58	10512	6.23	0.895*	-118.074
36 to 40 MPH	1058	5.88	9837	5.83	1.008	7.977
41 to 45 MPH	1781	9.89	16013	9.50	1.042	71.738
46 to 50 MPH	914	5.08	7802	4.63	1.097*	81.198
51 to 55 MPH	1484	8.24	12425	7.37	1.119*	157.729
56 to 60 MPH	780	4.33	5933	3.52	1.232*	146.699
61 to 65 MPH	923	5.13	7032	4.17	1.230*	172.389
66 to 70 MPH	1000	5.56	8065	4.78	1.162*	139.124
71 to 75 MPH	267	1.48	1791	1.06	1.397*	75.825
76 to 80 MPH	150	0.83	1176	0.70	1.195	24.471
81 to 85 MPH	54	0.30	334	0.20	1.515*	18.348
86 to 90 MPH	58	0.32	255	0.15	2.131*	30.781
91 to 95 MPH	13	0.07	51	0.03	2.388	7.556
96 to 100 MPH	23	0.13	158	0.09	1.364	6.135
Over 100 MPH	17	0.09	81	0.05	1.966	8.354

All speeds 45 and above are over-represented in the COVID period, and generally, the higher the speed, the higher the proportionate over-representation. The causes for this in no particular order: (1) fewer vehicles on the road, (2) increased rural driving, and (3) a perception that the police are not giving speeding tickets (we see no evidence of this).

C323 CU Driver Safety Equipment

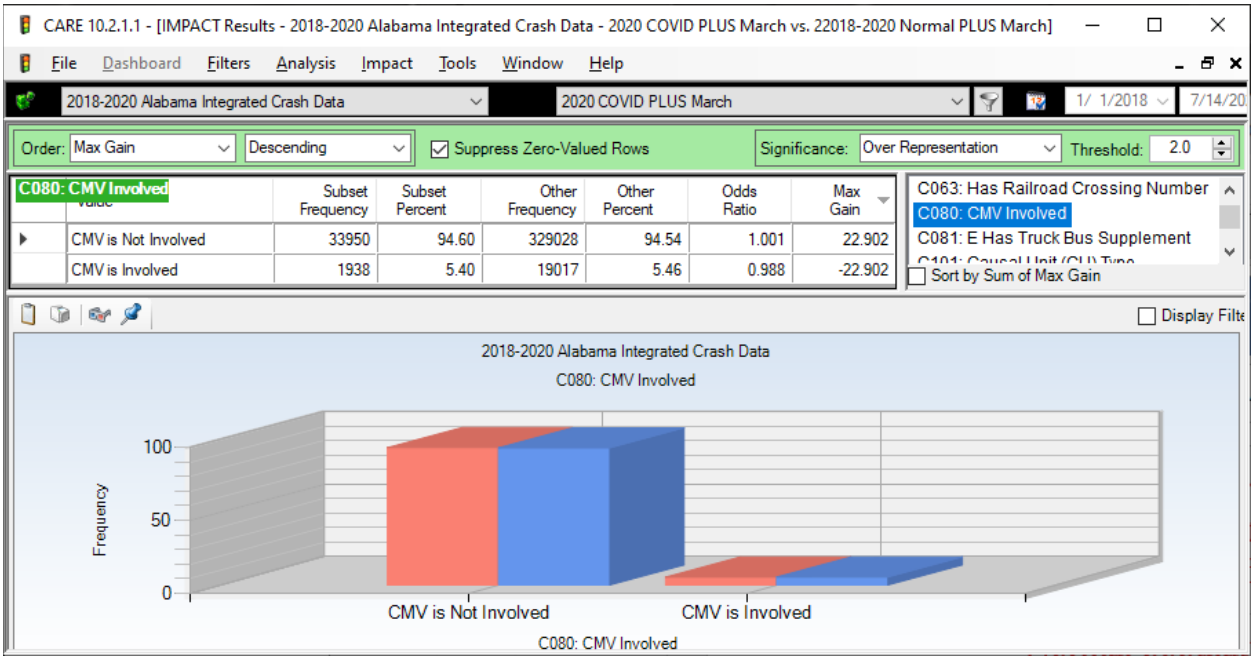


C323: CU Driver/Non-Motorist Safety Equipment	Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
None Used - Motor Vehicle ...	1470	4.96	9875	3.36	1.478*	475.118
Dot-Compliant Motorcycle H...	243	0.82	1550	0.53	1.556*	86.841
E Helmet Used	40	0.13	207	0.07	1.918*	19.145
No Motorcycle Helmet Used	22	0.07	131	0.04	1.667	8.802
E CU Non-Motorist Not Rec...	22	0.07	131	0.04	1.667	8.802
E Other Motorcycle Helmet ...	16	0.05	93	0.03	1.708	6.630
E Child in Arms of Restraine...	3	0.01	4	0.00	7.444	2.597
Lap Belt Only Used	89	0.30	861	0.29	1.026	2.256
Reflective Clothing (Jacket/...	2	0.01	9	0.00	2.206	1.093
E Rear Facing Child Safety ...	1	0.00	5	0.00	1.985	0.496
E Other Safety Equipment U...	2	0.01	16	0.01	1.241	0.388
E Forward Facing Child Saf...	1	0.00	10	0.00	0.993	-0.007
Shoulder Belt Only Used	122	0.41	1356	0.46	0.893	-14.614
E CU Driver Not Recorded	531	1.79	5472	1.86	0.963	-20.291
Shoulder and Lap Belt Used	27071	91.35	274406	93.29	0.979*	-574.739

See Section 4.5 for the same comparison where both subsets are DUI. The None Used for drivers under the influence of alcohol was 19.03%, and another 19.59% of the ID/DUI cases were listed as Unknown seatbelt use. Confirmed Shoulder and Lap Belt Used was 58.20%, indicating over 40% were not properly restrained. The differences for the Normal time period were not significantly different where both time periods were constrained to be DUI.

3.5 Vehicle Related Findings

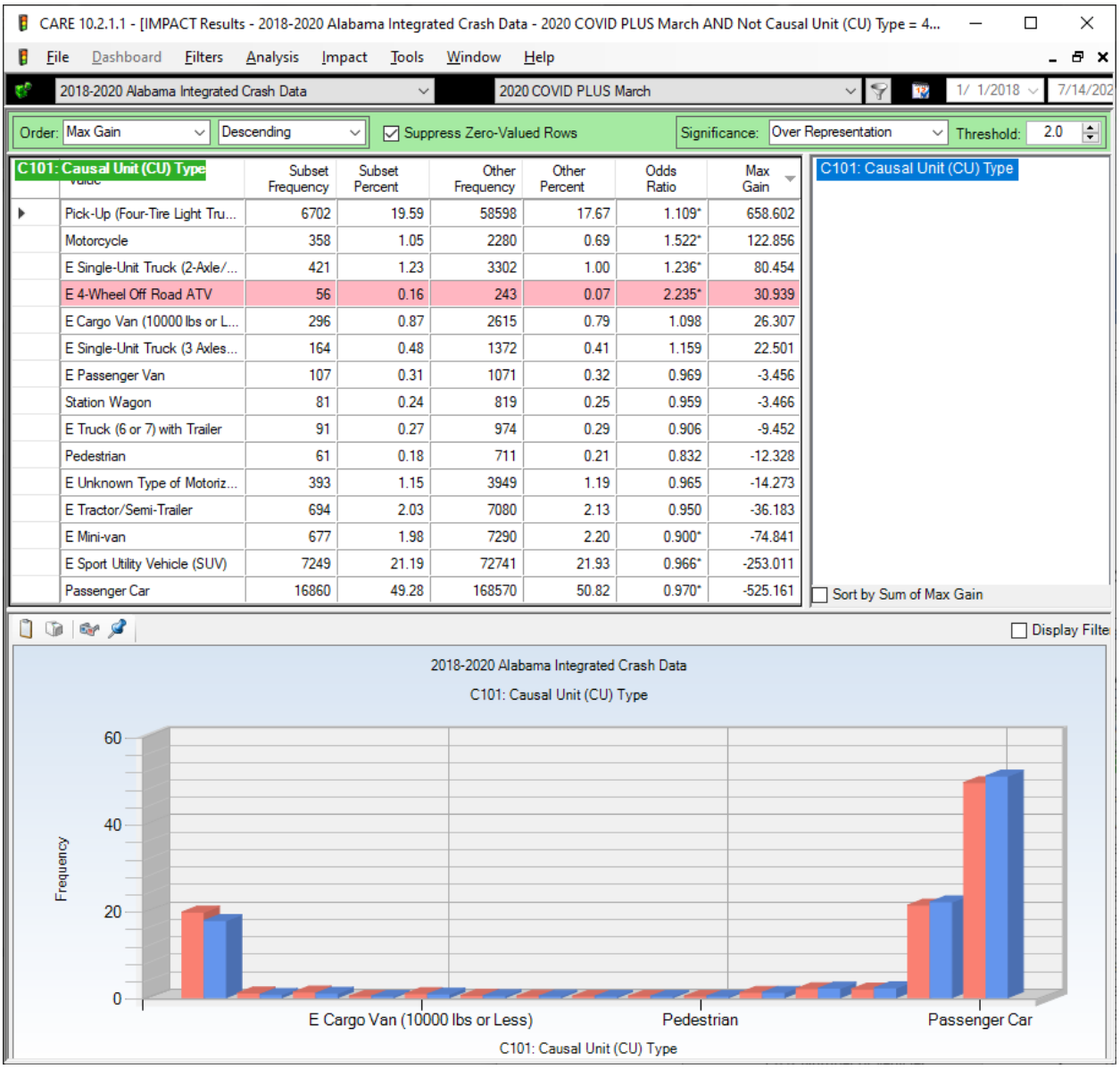
C080 CMV Involved



No measurable difference in the CMV involvement between COVID and Normal times.

C101 Causal Unit (CU) Type

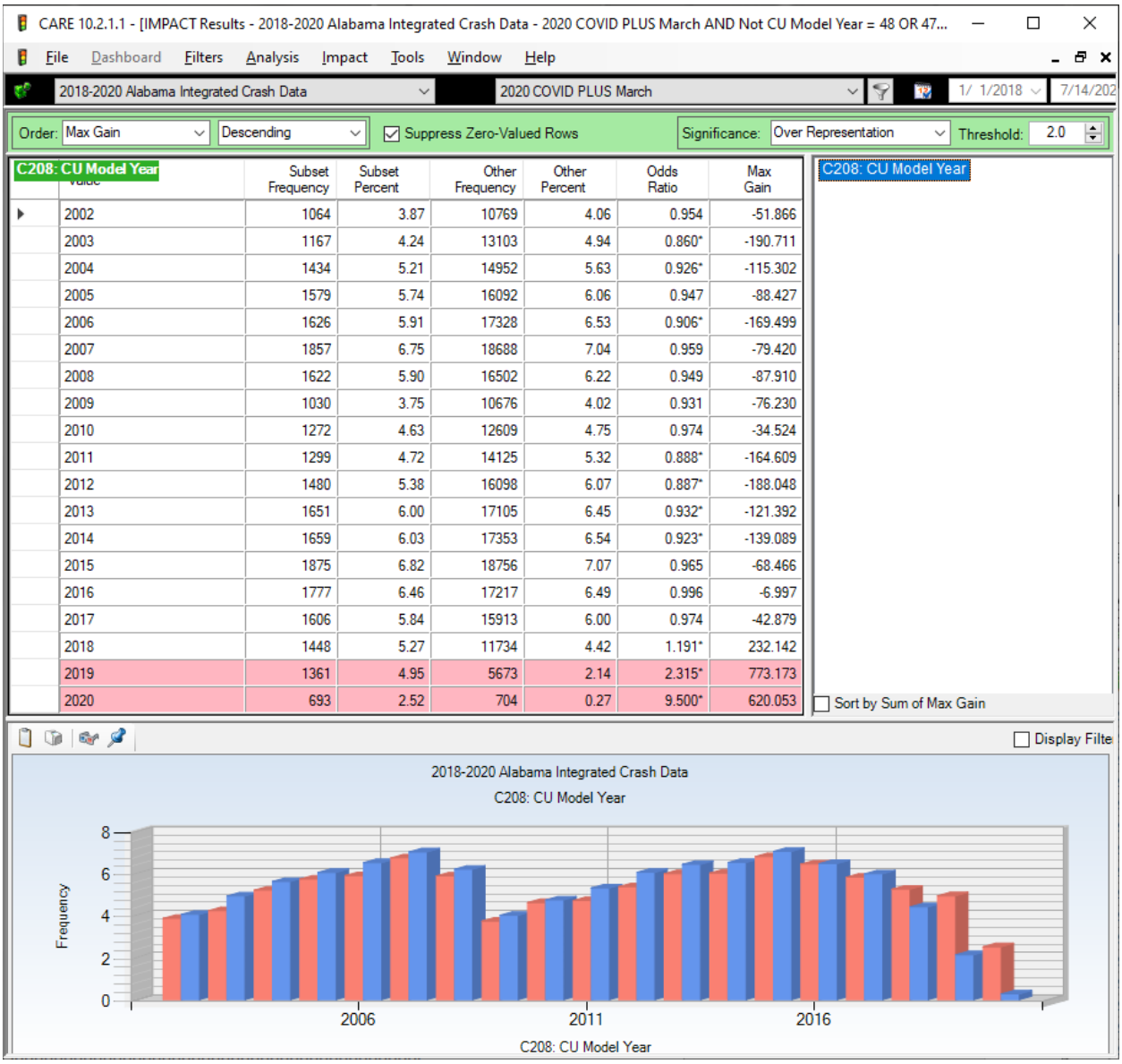
Removed all items with less than 50 crashes.



There was a significant increase in pick-ups and motorcycles; a reduction in SUVs and passenger cars.

C208 CU Model Year

Excluded model years with less than 1000 vehicles, i.e., those 2001 and older.

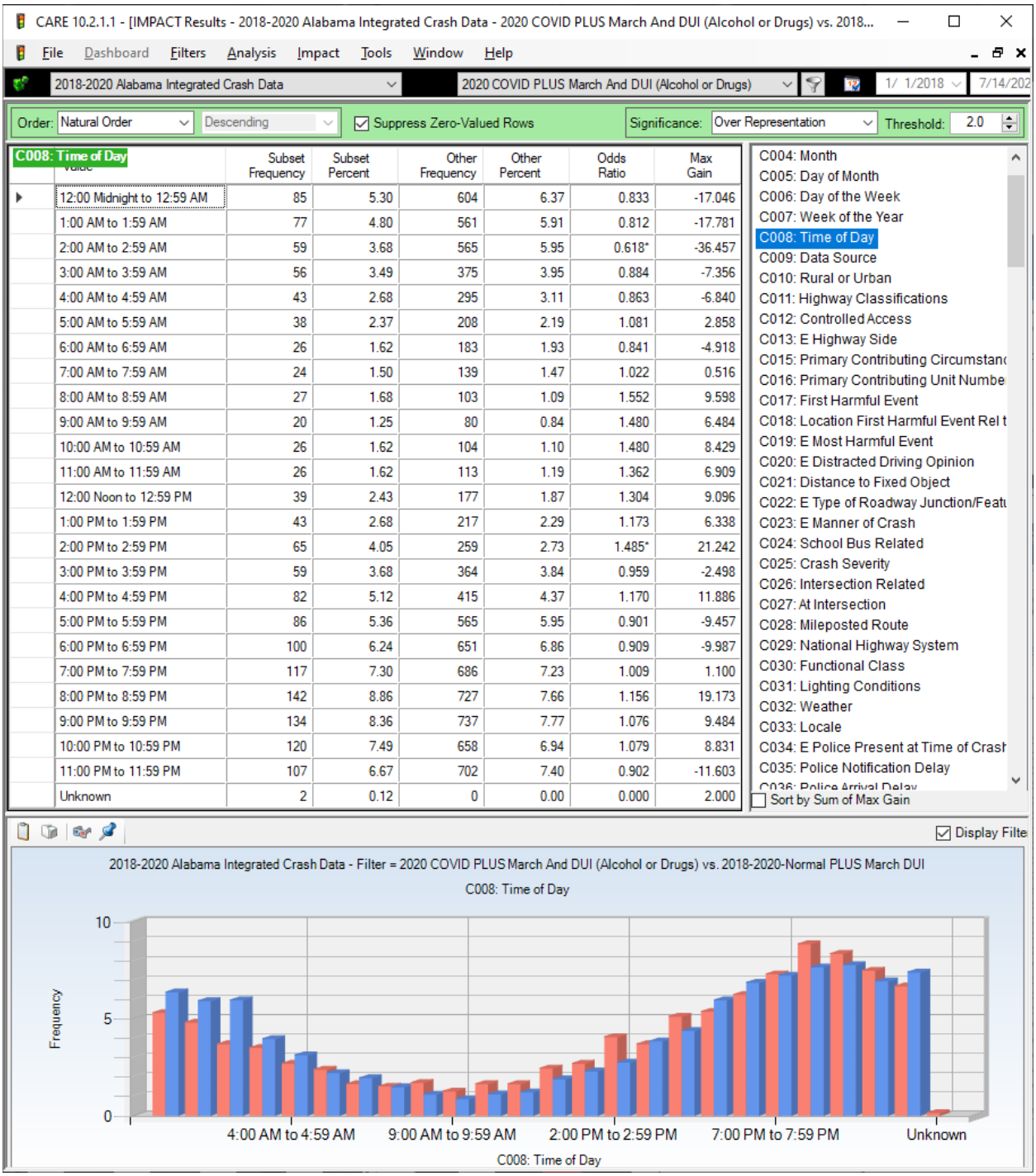


The only model years that were over-represented were the most recent: 2018, 2019 and 2020. This would indicate that the owners of such vehicles may have had more of a tendency to ignore the COVID quarantine rules than owners of older vehicles.

4. COVID DUI vs. Normal DUI Crashes

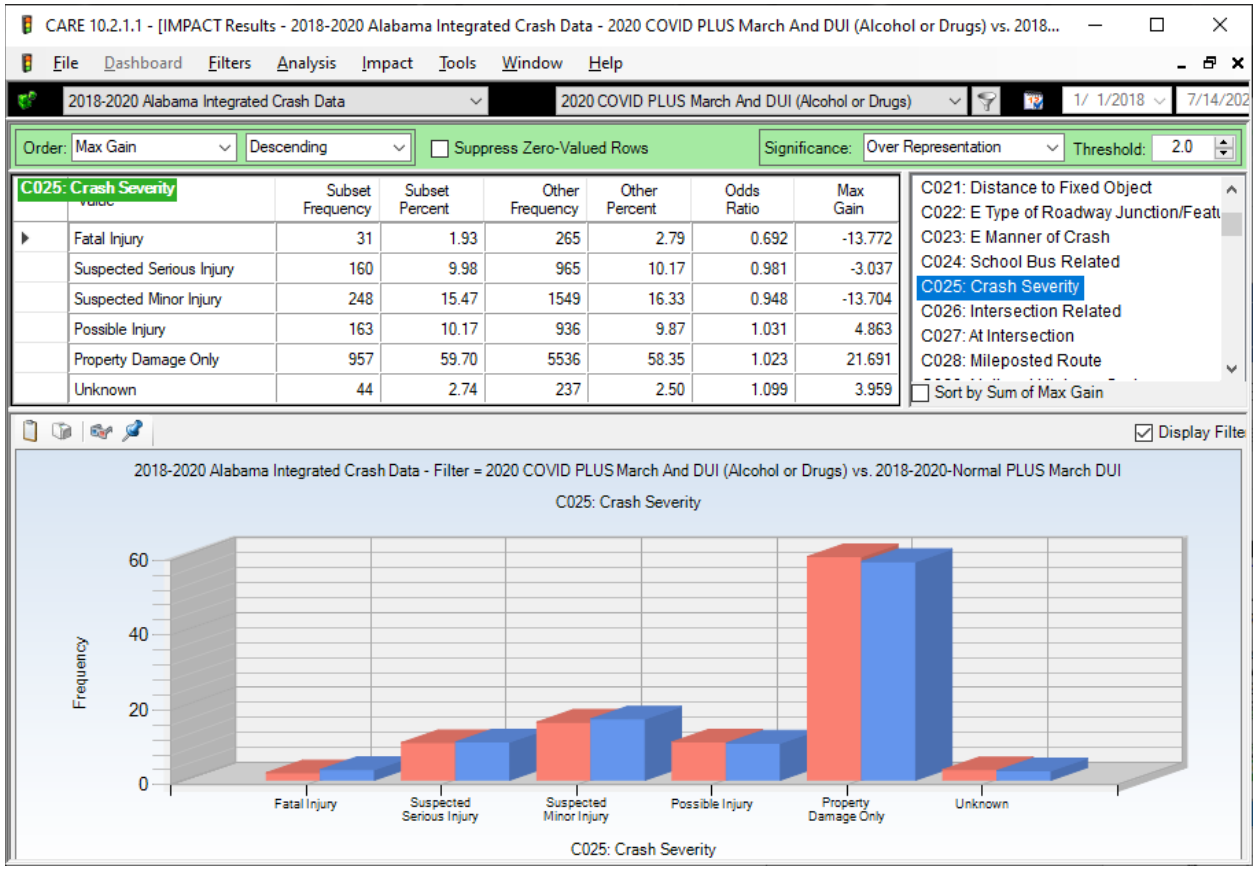
The following IMPACT displays were further restricted DUI (Alcohol or Drugs) for both the COVID and the control (Normal) subsets. These were run to establish if there were differences in behavior with regard to Impaired Driving (ID) in the COVID time as opposed to the normal time, since DUI showed such an proportionate increase after the COVID procedures went into effect.

4.1 C vs Normal C008 Time of Day for DUI Crashes



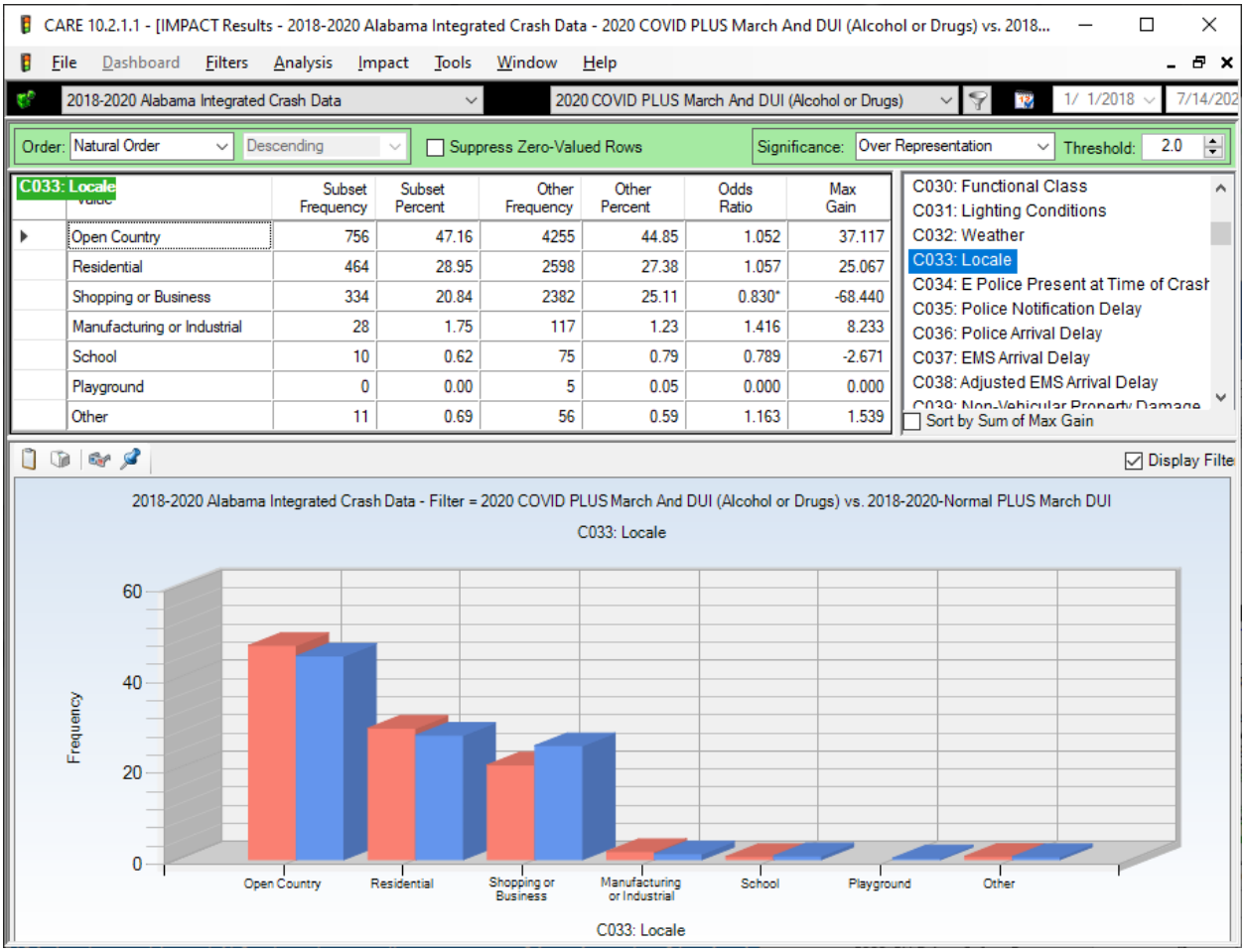
Times are generally earlier in the evening (but not necessarily afternoons) for the COVID crashes. Note lack of COVID DUI crashes in the early morning hours.

4.2 C vs Normal C025 Severity for DUI Crashes



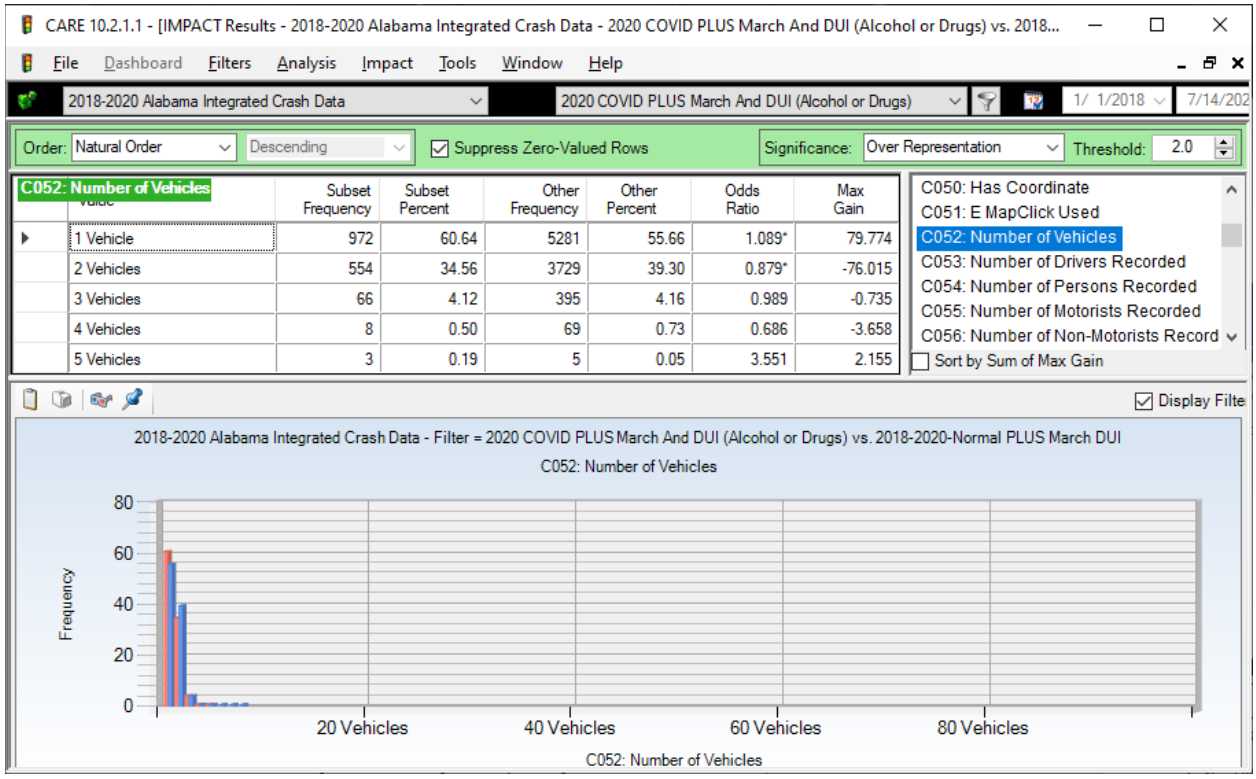
Fewer fatalities for the COVID crashes could be due to their not occurring very early morning.

4.3 C vs Normal C033 Locale for DUI Crashes



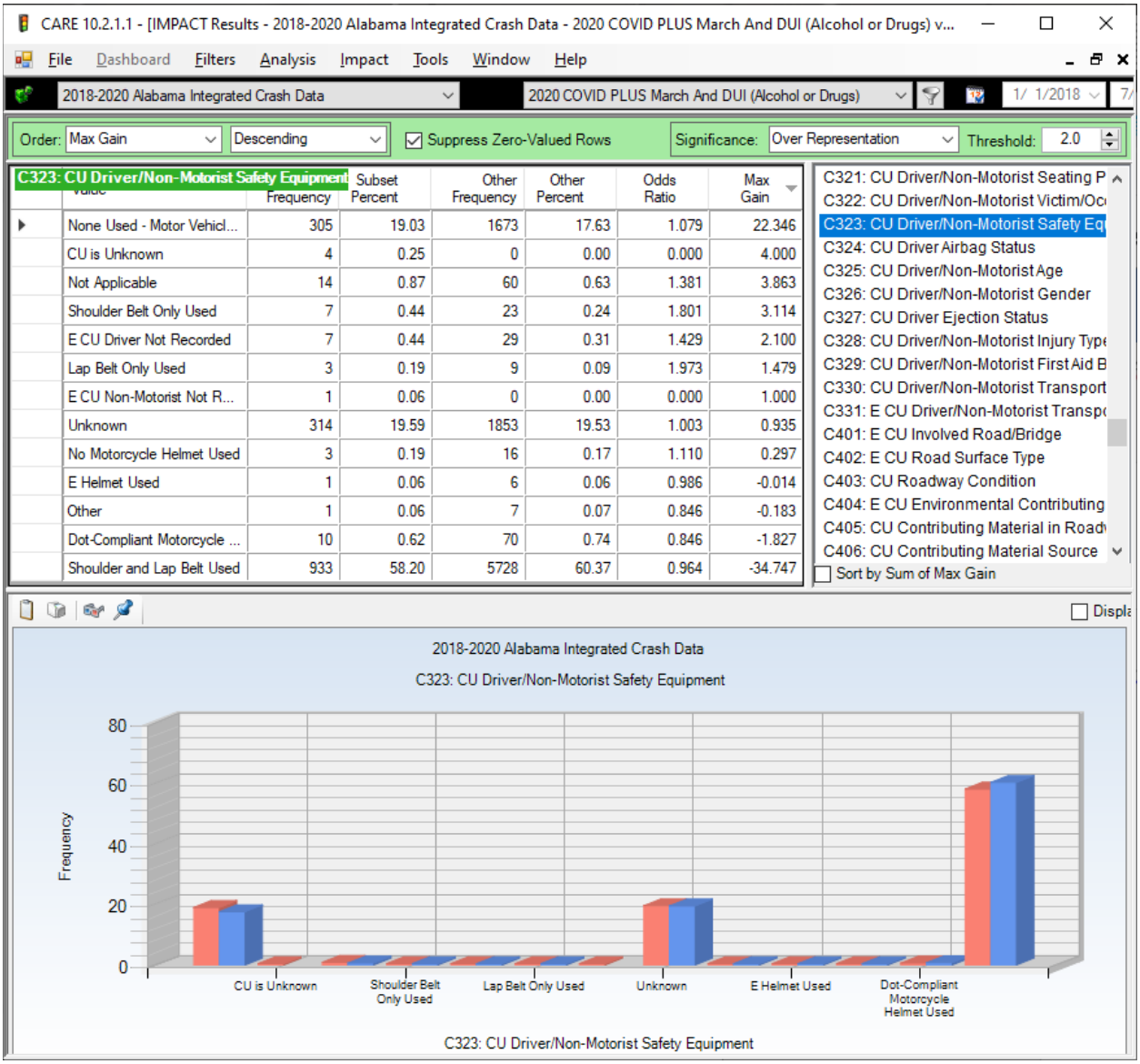
Open Country is over-represented for the COVID DUI crashes.

4.4 C vs Normal C052 Number of Vehicles for DUI Crashes



A significantly larger proportion of Single Vehicle crashes for the COVID DUIs indicates more "unforced" errors during this time. This could be from people who typically do not use drugs or alcohol indulging due to their free time.

4.5 C vs Normal C323 Safety Eqip Driver for DUI Crashes



The None Used for drivers under the influence of alcohol was 19.03%, and another 19.59% of the ID/DUI cases were listed as Unknown seatbelt use. Confirmed Shoulder and Lap Belt Used was 58.20%, indicating over 40% were not properly restrained. The differences for the Normal time period were not significantly different where both time periods were constrained to be DUI.