Question:
Overall Weather Effects

Multiple Choice

What proportion of crashes in Alabama occur in **rainy weather**?

a. 10%

b. 20%

c. 30%

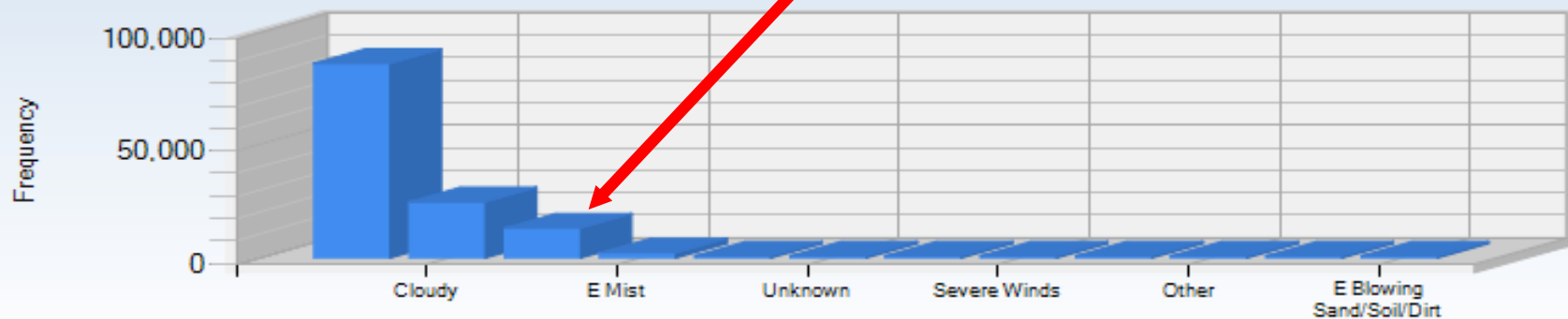| Value	Frequency	Cum. Frequency	Percentage	Cum. Percent
Clear	86480	86480	67.44	67.44
Cloudy	24980	111460	19.48	86.92
Rain	13310	124770	10.38	97.30
E Mist	2247	127017	1.75	99.05
Fog	845	127862	0.66	99.71
Unknown	209	128071	0.16	99.87
Sleet/Hail/Freezing Rain	57	128128	0.04	99.92
Severe Winds	43	128171	0.03	99.95
Snow	34	128205	0.03	99.98
Other	24	128229	0.02	99.99

C032: Weather

C032 = Rain

2012 Alabama Integrated Crash Data

C032: Weather

Definitions for the Comparison

- **Wet Pavement (WP) – from C403 and C583**
- **Wet Day (WD) == 200 or More "WP" Crashes**
  - Daily average for all crashes is 352
  - 200/352 = 57% minimum to be a wet day
- **Dry Day == Zero WP Crashes Occurred**
- **Comparison is on a Crash-Per-Day Basis**

Question:
Specific Weather Effects

Multiple Choice

What is the **crash frequency increase** correlated to **wet days** as defined above?

a. 20%

b. 40%

c. 60%

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Comparison of Wet and Dry Days
(Overall: 352 crashes per day)

- **Wet: 13,423 Crashes in 29 Days (463 C/Day)**
- **Dry: 14,869 Crashes in 46 Days (323 C/Day)**
- **Increase of 463-323 = 140 Crashes per Day**
- **Over 40% (43.2%) More Crashes per Day**
- **Conclusion: Rain is a Major Factor**
  - In crash causation
  - What about severity?

Question:
Wet weather Crash Severity?

True of False:

.

The severity of wet crashes is about the same as that for dry weather crashes.

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Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Fatal Injury	113	0.55	699	0.65	0.845	-20.683
Incapacitating Injury	1046	5.08	5882	5.46	0.930	-78.929
Non-Incapacitating Injury	1659	8.05	8611	7.99	1.007	12.152
Possible Injury	1660	8.06	8672	8.05	1.001	1.485
Property Damage Only	15642	75.93	81208	75.39	1.007	111.021
Unknown	481	2.33	2646	2.46	0.951	-25.046

C015: Primary Contributing Circumstan
C016: Primary Contributing Unit Numbe
C017: First Harmful Event
C018: Location First Harmful Event Rel
C019: E Most Harmful Event
C020: E Distracted Driving
C021: Distance to Fixed Object
C022: E Type of Roadway Junction/Fea

Sort by Sum of Max Gain

Display Filter Name

2012 Alabama Integrated Crash Data

C025: Crash Severity

For all IMPACT comparisons:
Red is proportion of wet pavement
Blue is proportion of dry pavement
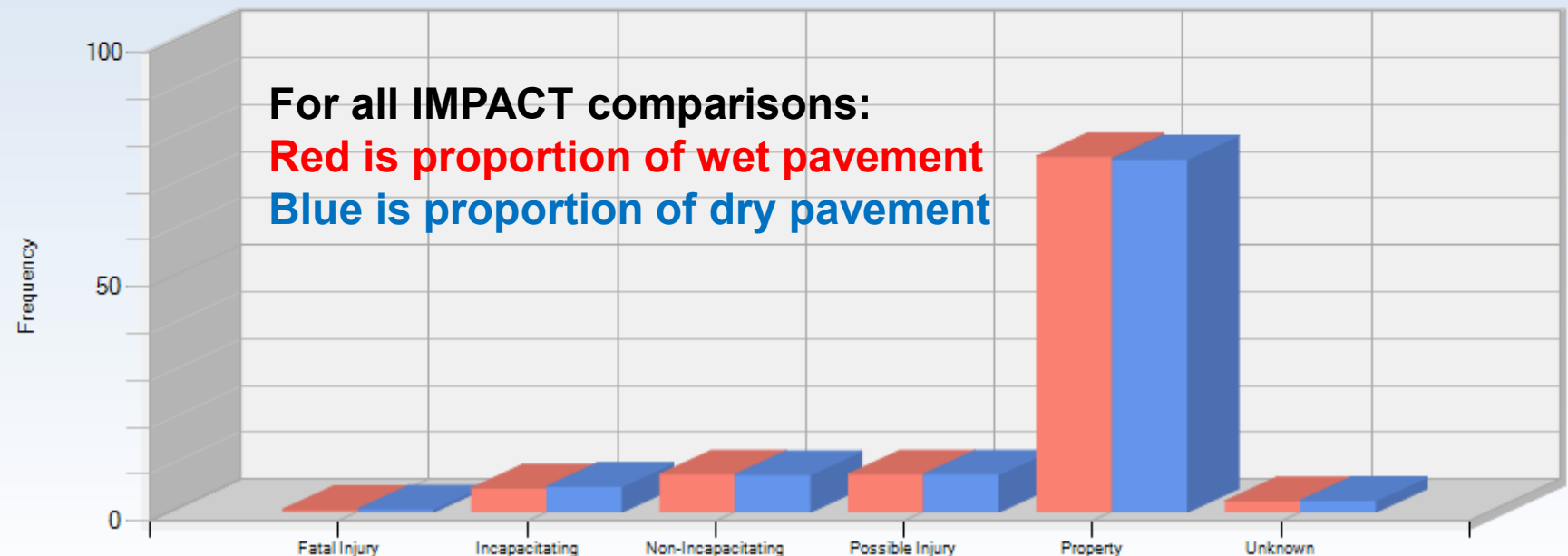
Question:
EMS Response Time

Multiple Choice:

Average response time for wet weather

injury EMS crash increases by ...

a. Less than a Minute

b. 1-5 Minutes

c. 5-10 Minutes

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Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
0 to 5 minutes	822	18.84	4777	21.47	0.877*	-114.848
6 to 10 minutes	1101	25.23	5803	26.08	0.967	-37.063
11 to 15 minutes	693	15.88	3451	15.51	1.024	16.203
16 to 20 minutes	399	9.15	1977	8.89	1.029	11.278
21 to 30 minutes	383	8.78	1721	7.74	1.135*	45.484
31 to 45 minutes	158	3.62	713	3.20	1.130	18.169

Sort by Sum of Max Gain

Display Filter Name

2012 Alabama Integrated Crash Data

C601: Adjusted EMS Arrival Delay
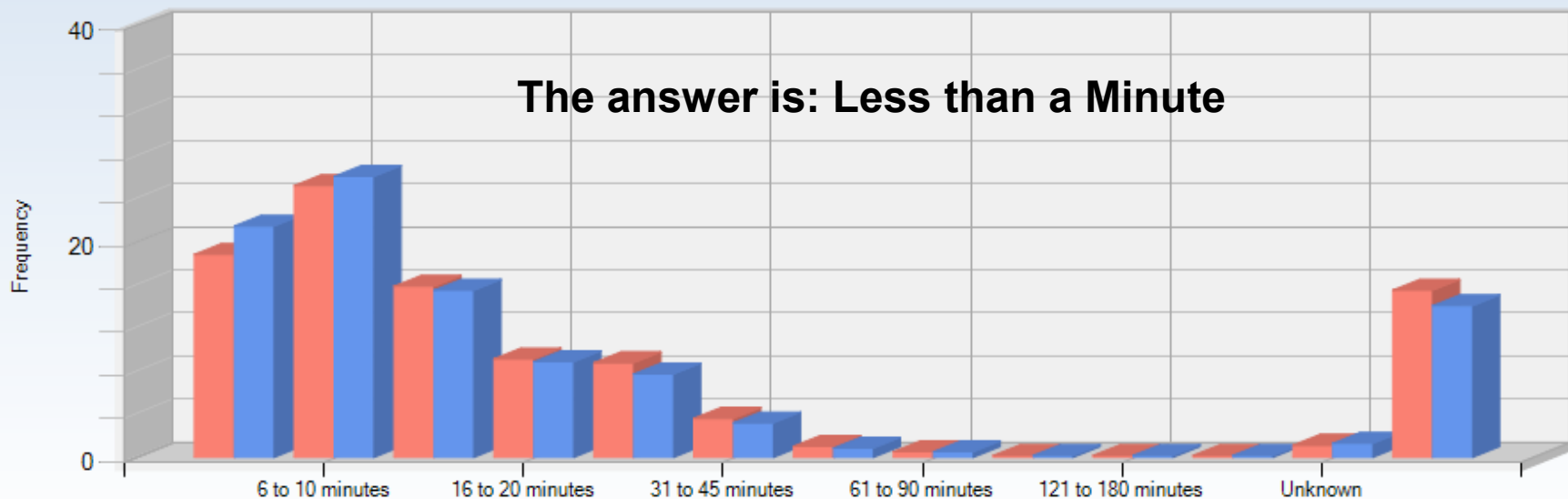
The answer is: Less than a Minute

C601: Adjusted EMS Arrival Delay

Question:
Wettest Months?

True of False:

.

October and November are among some of Alabama's wettest months.

Sort by Sum of Max Gain

Display Filter Name

2012 Alabama Integrated Crash Data

C004: Month

C004: Month
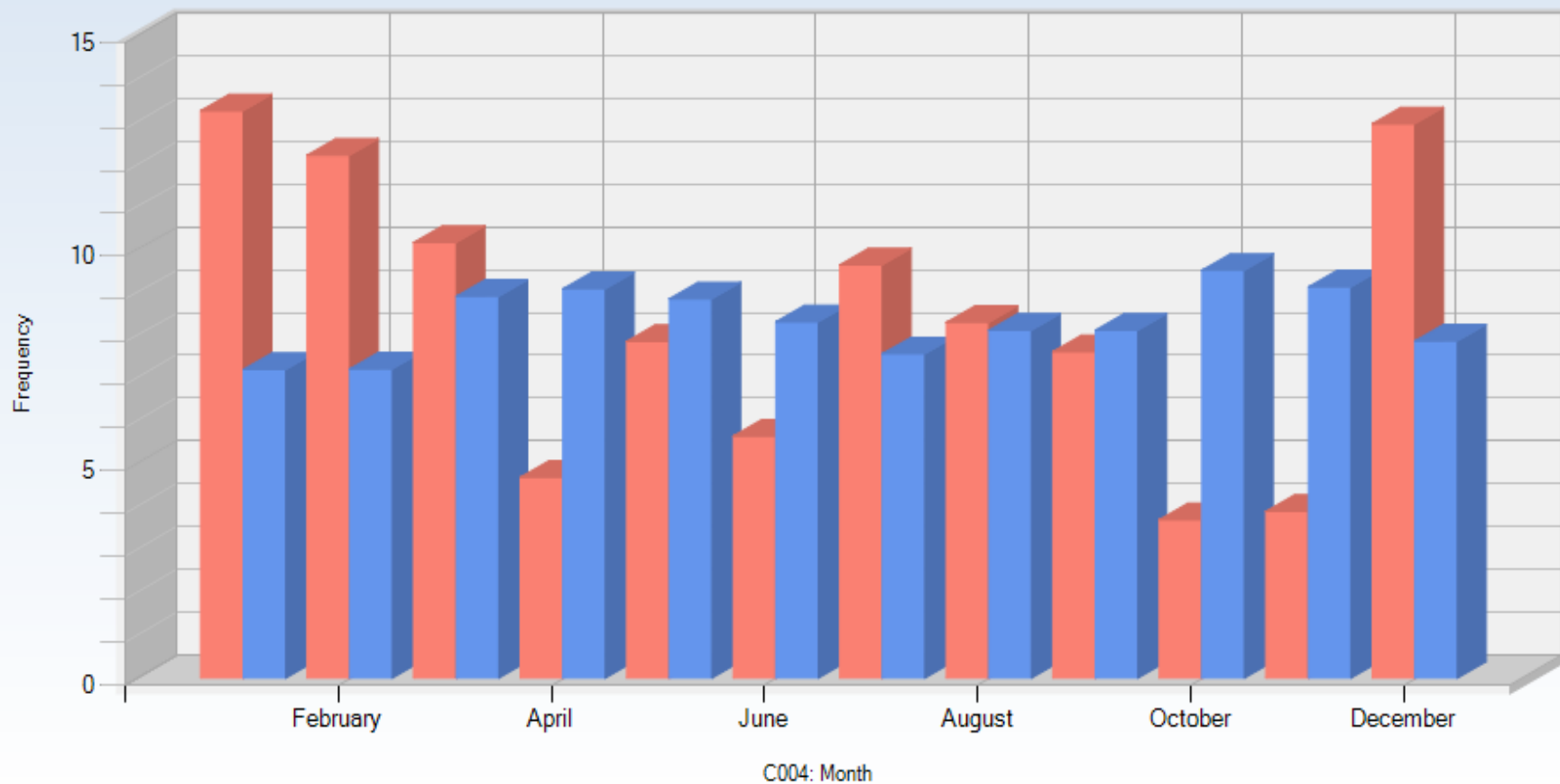
Question:
Time of Day

True of False:

.

Wet weather crashes tend to be most over-represented during rush hours as opposed to night-time.

☐ Display Filter Name

2012 Alabama Integrated Crash Data

C008: Time of Day

C008: Time of Day
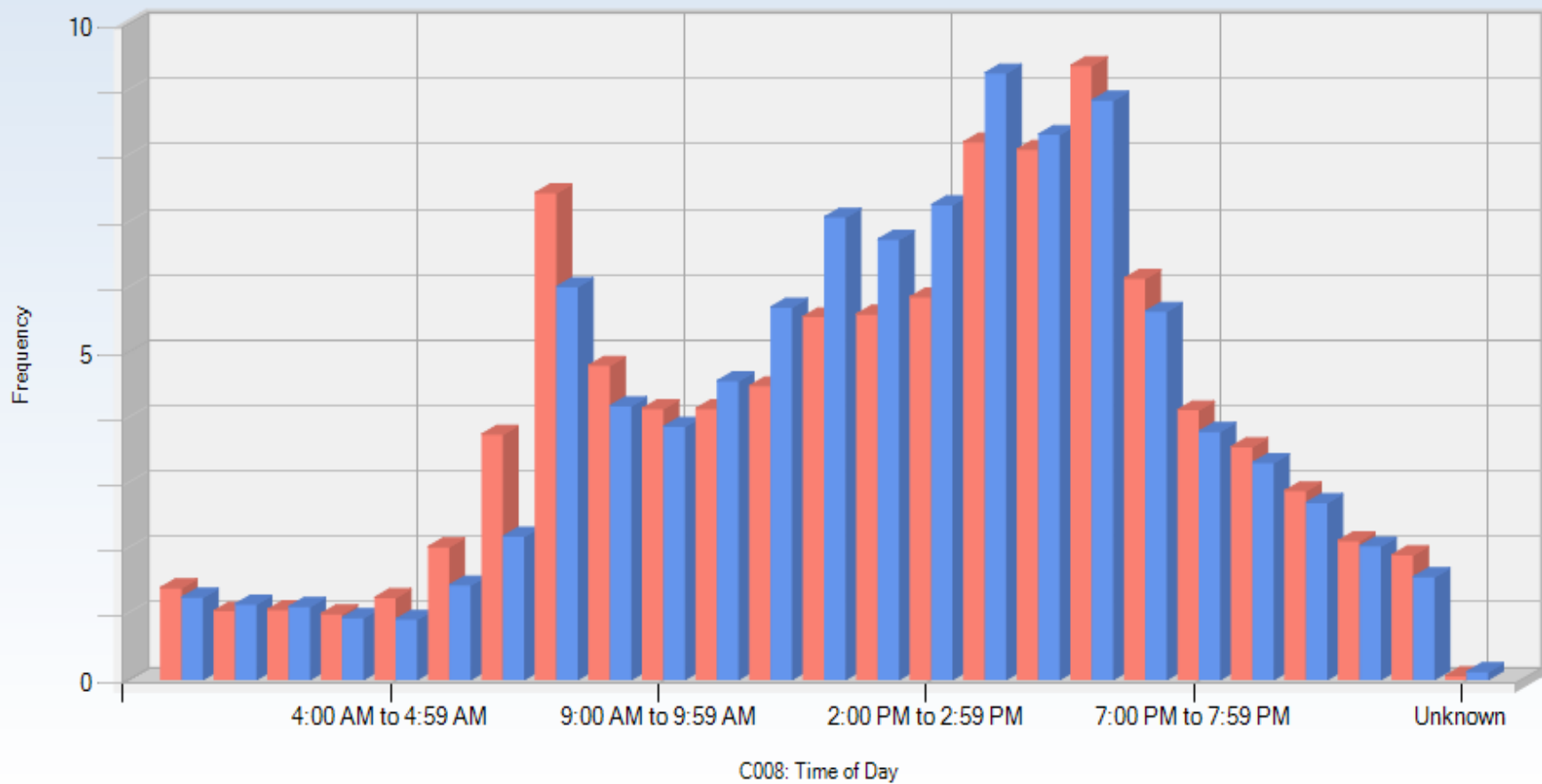
Question:
Rural or Urban

True of False:

.

Rural crashes seem to be more sensitive to increases caused by wet weather than those in the urban areas.

C010: Rural or Urban

Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Rural	5838	28.34	25527	23.70	1.196*	955.977
Urban	14763	71.66	82191	76.30	0.939*	-955.977

C001: County
C002: City
C003: Year

☐ Sort by Sum of Max Gain

☐ Display Filter Name

2012 Alabama Integrated Crash Data

C010: Rural or Urban
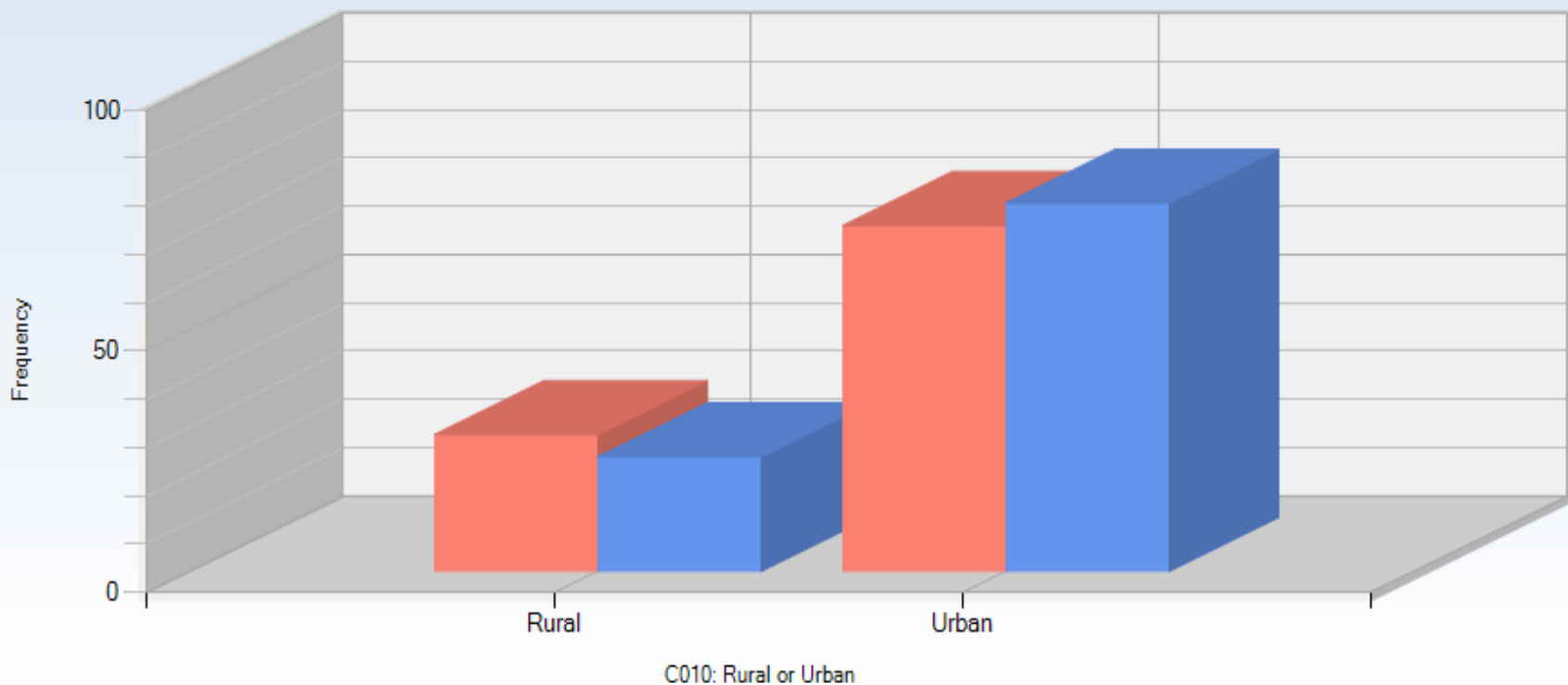
C010: Rural or Urban

Question:
Highway Classification

True of False:

.

Interstate highways have higher sensitivity to wet weather than state routes.

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C011: Highway Classifications

Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Interstate	2626	12.75	9180	8.52	1.496*	870.331
County	3700	17.96	16954	15.74	1.141*	457.558
Federal	3305	16.04	17330	16.09	0.997	-9.352
State	3754	18.22	20066	18.63	0.978	-83.610
Private Property	21	0.10	2079	1.93	0.053*	-376.607
Municipal	7195	34.93	42094	39.08	0.894*	-855.451

C008: Time of Day
C009: Data Source
C010: Rural or Urban
C011: Highway Classifications
C012: Controlled Access
C013: E Highway Side
C014: Distance from Node 1
C015: Primary Contributing Circumstan

☐ Sort by Sum of Max Gain

☐ Display Filter Name

2012 Alabama Integrated Crash Data
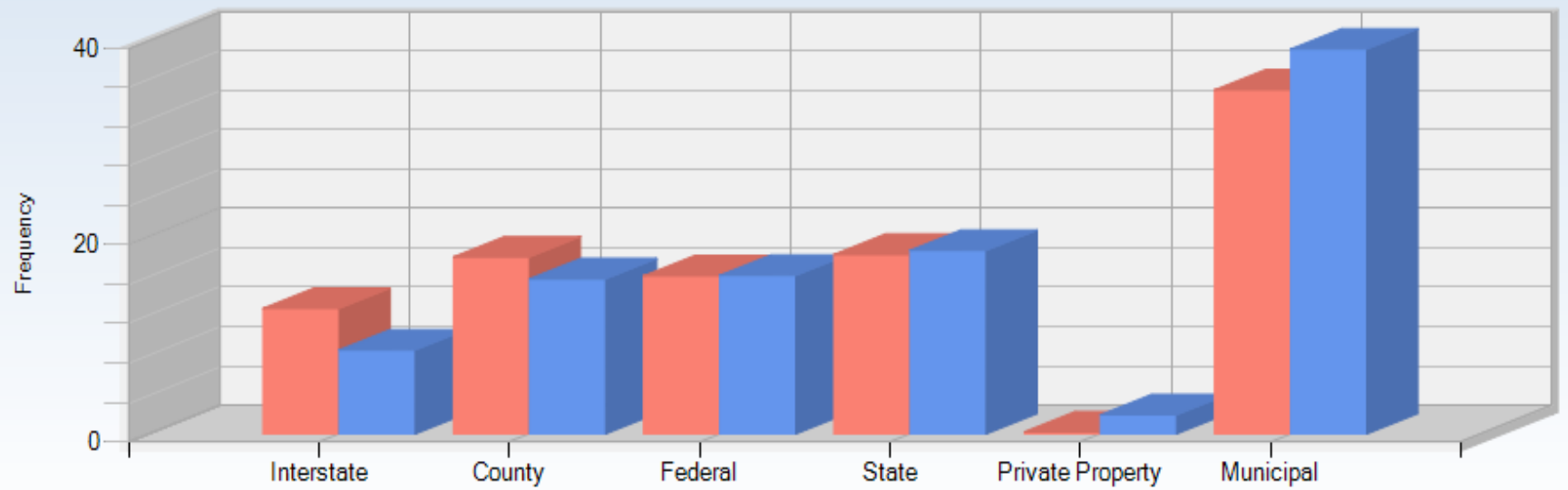
C011: Highway Classifications

Question:
Contributing Circumstances

True of False:

.

Following too closely is reported to be more of a problem in causing wet weather crashes than dry weather crashes.

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C015: Primary Contributing Circumstance

Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Driving too Fast for Conditions	3624	17.59	793	0.74	23.895*	3472.339
Misjudge Stopping Distance	2252	10.93	10164	9.44	1.159*	308.141
P Driver Not in Control	400	1.94	1138	1.06	1.838*	182.358
E Ran off Road	601	2.92	2303	2.14	1.365*	160.553
E Over Correcting/Over Steering	274	1.33	749	0.70	1.913*	130.754
E Other - No Improper Driving	303	1.47	1103	1.02	1.436*	92.052
E Swerved to Avoid Vehicle	543	2.64	2537	2.36	1.119*	57.800

C009: Data Source
C010: Rural or Urban
C011: Highway Classifications
C012: Controlled Access
C013: E Highway Side
C014: Distance from Node 1
C015: Primary Contributing Circumstan
C016: Primary Contributing Unit Numbe
C017: First Harmful Event

☐ Sort by Sum of Max Gain

☐ Display Filter Name

2012 Alabama Integrated Crash Data

C015: Primary Contributing Circumstance

Following Too Closely

Frequency axis (0 to 20)

X-axis labels: E Ran Stop Sign, Over Speed Limit, E Failed to Yield Right-of-Way from Driveway
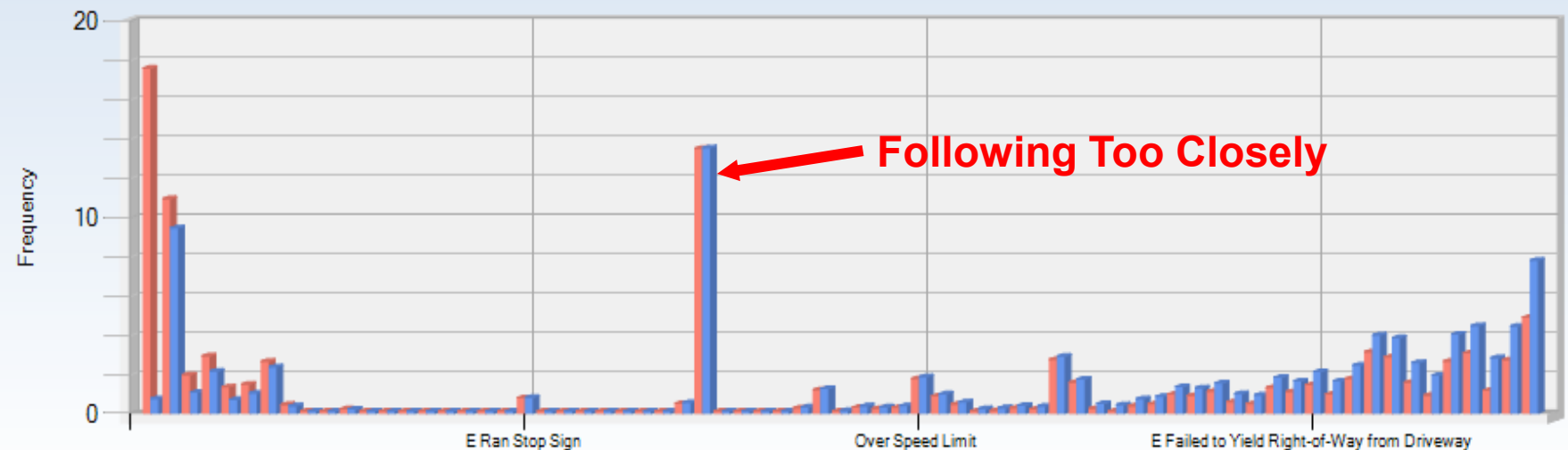
C015: Primary Contributing Circumstance

Question:
First Harmful Event

True of False:

.

While "collisions with other vehicles" account for the majority of wet weather

harmful events, it is under-represented

compared to dry-weather crashes.

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C017: First Harmful Event

Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Collision with Ditch	1104	5.36	2838	2.64	2.033*	560.920
Collision with Tree	876	4.25	2125	1.97	2.154*	469.359
E Ran Off Road Right	962	4.67	2890	2.69	1.740*	408.969
E Ran Off Road Left	597	2.90	1480	1.38	2.108*	313.787
E Collision with Concrete Barrier	300	1.46	304	0.28	5.157*	241.826
E Collision with Guardrail Face	271	1.32	519	0.48	2.729*	171.684
E Evasive Action (Swerve/Bra...	239	1.16	690	0.64	1.810*	106.961
E Collision with Embankment	190	0.92	574	0.53	1.730*	80.159
Collision with Sign Post	206	1.00	661	0.61	1.629*	79.511
Collision with Bridge Abutment/...	115	0.56	234	0.22	2.568*	70.222
Collision with Utility Pole	252	1.22	959	0.89	1.373*	68.486

C010: Rural or Urban
C011: Highway Classifications
C012: Controlled Access
C013: E Highway Side
C014: Distance from Node 1
C015: Primary Contributing Circumstan
C016: Primary Contributing Unit Numbe
C017: First Harmful Event
C018: Location First Harmful Event Rel
C019: E Most Harmful Event
C020: E Distracted Driving
C021: Distance to Fixed Object
C022: E Type of Roadway Junction/Fea
C023: E Manner of Crash

☐ Sort by Sum of Max Gain

☐ Display Filter Name

2012 Alabama Integrated Crash Data

C017: First Harmful Event

Collision with another vehicle ➡

E Collision with Cable Barrier   P Collision with Boulder   Collision with Non-Motorist: Pedalcycle

C017: First Harmful Event
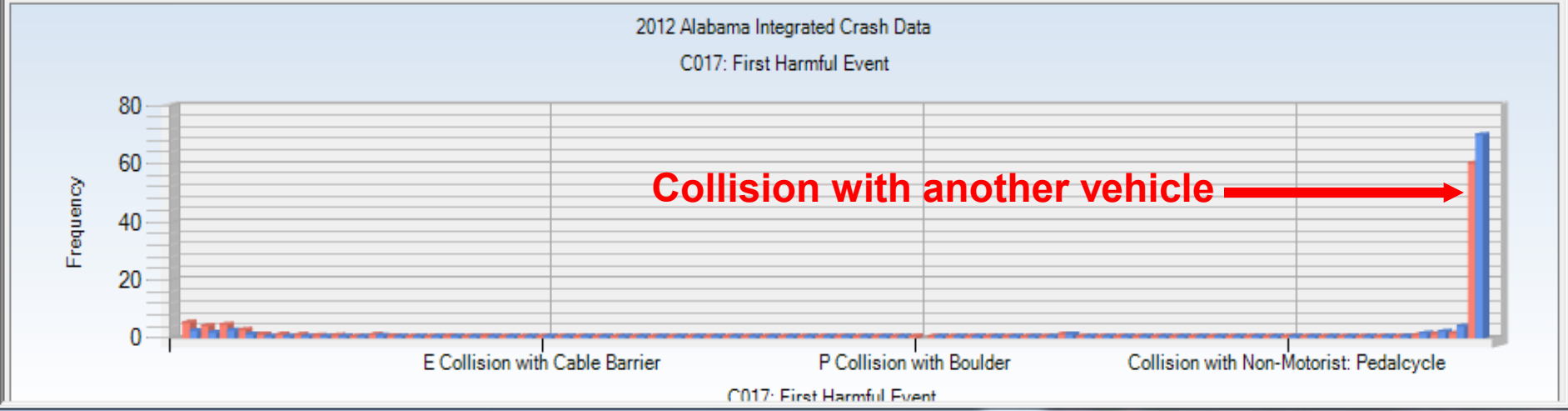
C051: Number of Vehicles

Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
1 Vehicle	7180	34.85	23608	21.92	1.590*	2664.985
2 Vehicles	12326	59.83	78450	72.83	0.822*	-2677.513
3 Vehicles	953	4.63	4856	4.51	1.026	24.293
4 Vehicles	119	0.58	680	0.63	0.915	-11.050

C046: HasRTMP
C049: ALDOT Division
C050: ADECA CTSP Region
C051: Number of Vehicles
C052: Number of Drivers Recorded

☐ Sort by Sum of Max Gain

☐ Display Filter Name

2012 Alabama Integrated Crash Data

C051: Number of Vehicles

Over 1/3 of Wet Weather Crashes are Single Vehicle

Frequency

C051: Number of Vehicles
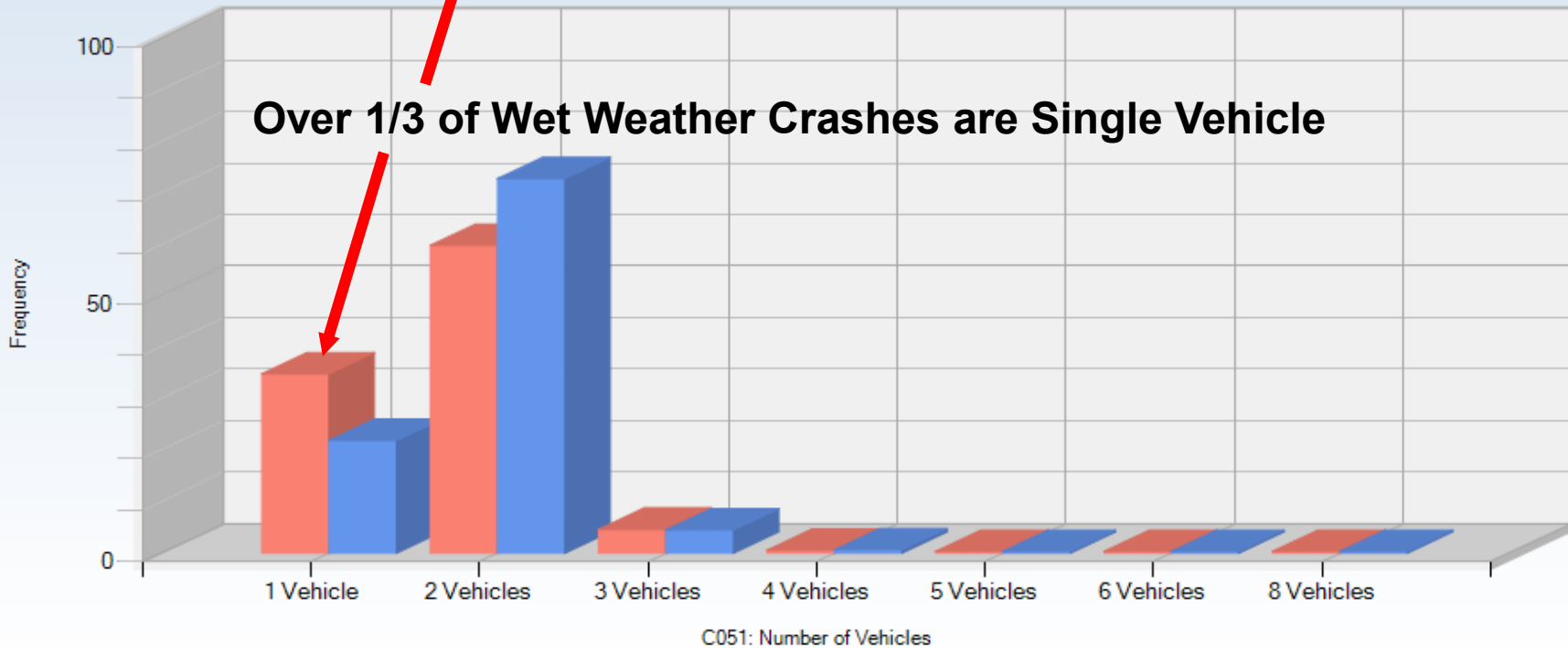
Question:
Intersection Involvement

True of False:

.

Relatively fewer wet (than dry) weather crashes occur at intersections.

C027: At Intersection

Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain ▼
No, Crash Did Not Occur at an I...	9389	45.58	42512	39.47	1.155*	1258.607
No Node Distance Specified	943	4.58	3869	3.59	1.274*	203.056
No Nodes Specified	621	3.01	5882	5.46	0.552*	-503.929
Yes, Crash Occurred at an Inter...	9648	46.83	55455	51.48	0.910*	-957.734

C024: School Bus Related
C025: Crash Severity
C026: Intersection Related
C027: At Intersection
C028: Mileposted Route
C031: Lighting Conditions

☐ Sort by Sum of Max Gain

☐ Display Filter Name

2012 Alabama Integrated Crash Data

C027: At Intersection

Non-Intersection

At Intersection

Frequency

C027: At Intersection
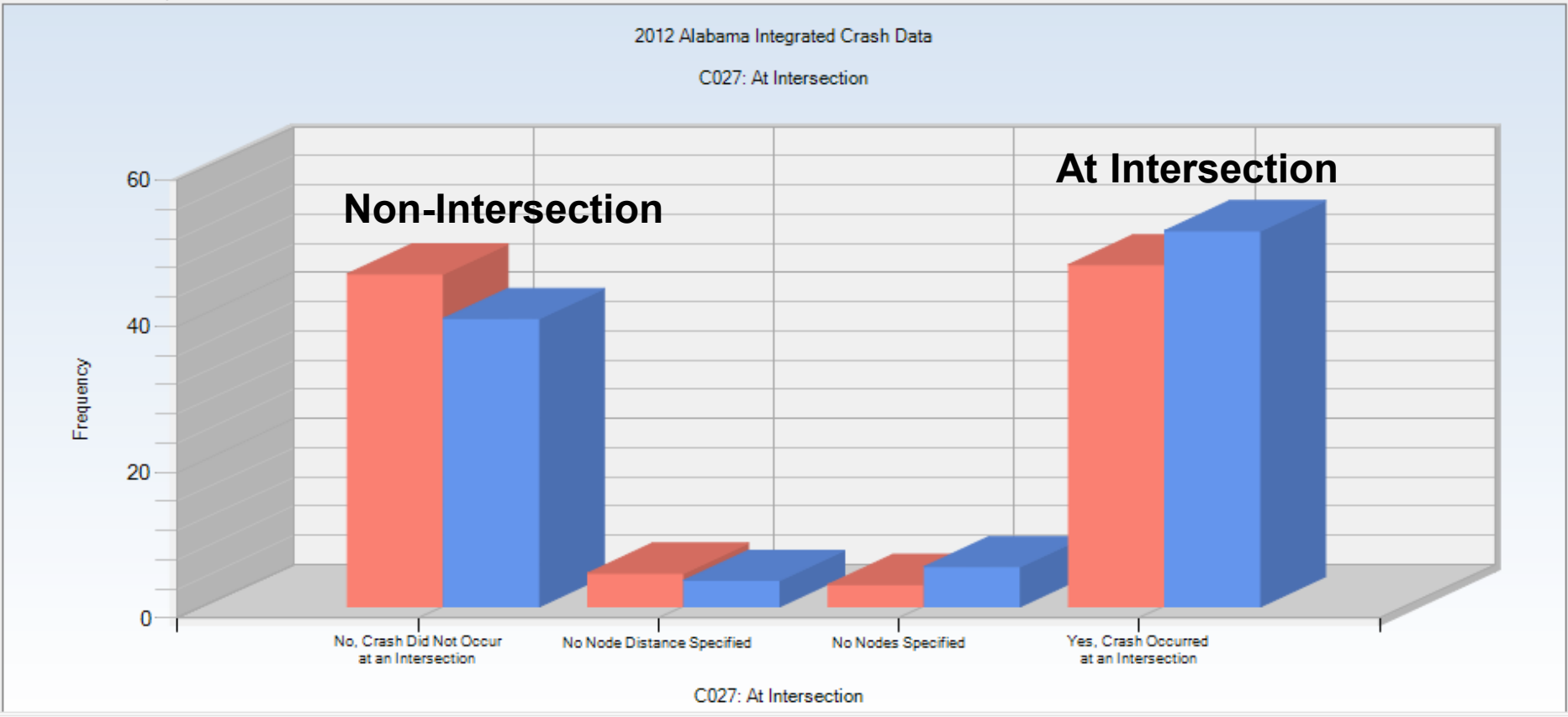
Question:
Commercial Motor Vehicles (CMV)

True of False:

.

Commercial Motor Vehicles (CMVs) are involved in about the same proportion of wet weather crashes as private vehicles.

C450: CU CMV Indicator

Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
No - CU is Not CMV	20020	97.18	99941	92.79	1.047*	905.282
CU is Not a Vehicle	33	0.16	424	0.39	0.407*	-48.094
Yes - CU is a CMV	548	2.66	3742	3.47	0.766*	-167.695

C450: CU CMV Indicator

☐ Sort by Sum of Max Gain

☐ Display Filter Name

2012 Alabama Integrated Crash Data

C450: CU CMV Indicator

Small but Significantly Higher for NON-CMVs

C450: CU CMV Indicator
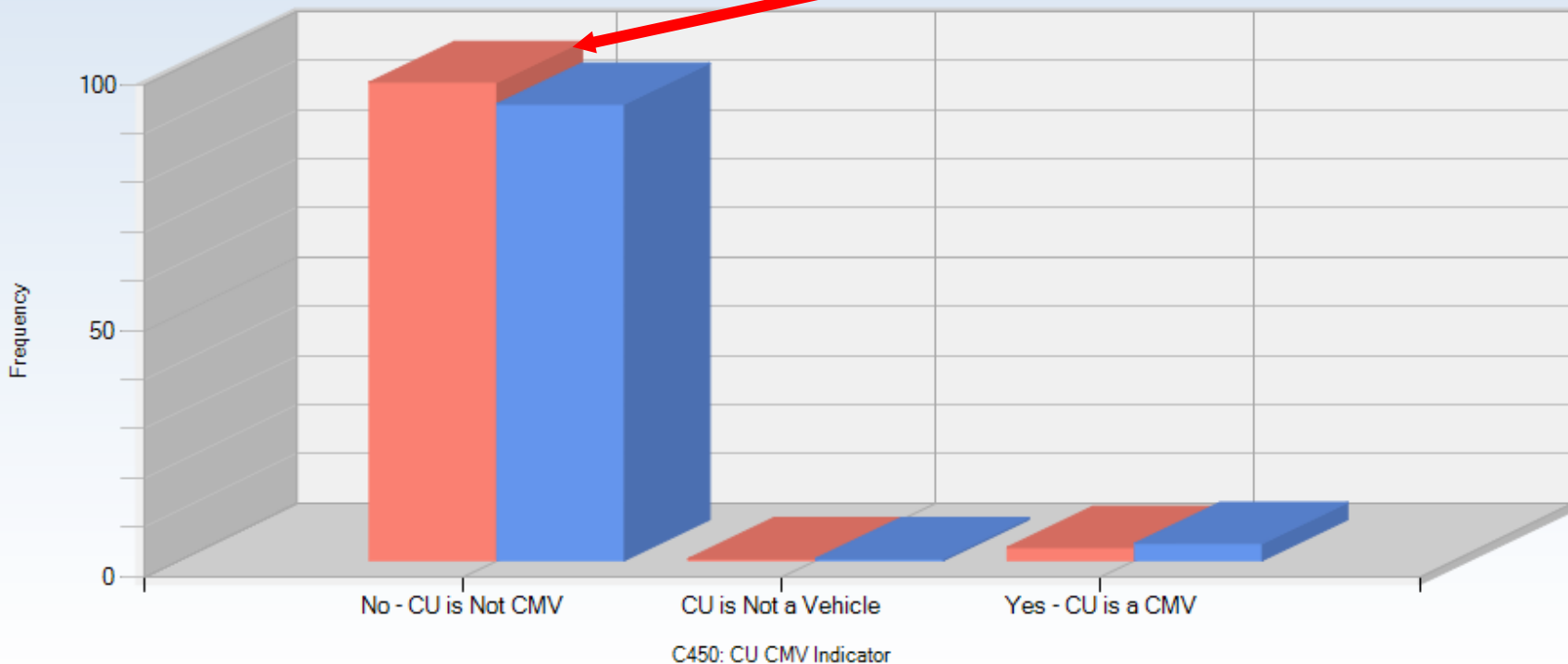
Question: Motorcycles

True of False:

.

Motorcycles cause more than their share of wet weather crashes.

C101: Causal Unit (CU) Type

Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
E 4-Wheel Off Road ATV	5	0.02	99	0.09	0.264	-13.934
E Other Heavy Truck (Cannot ...	12	0.06	150	0.14	0.418	-16.688
E Single-Unit Truck (3 Axles or ...	34	0.17	293	0.27	0.607*	-22.037
Pedestrian	20	0.10	275	0.26	0.380*	-32.594
E Single-Unit Truck (2-Axle/6-T...	103	0.50	789	0.73	0.683*	-47.898
E Unknown Type of Motorized ...	68	0.33	677	0.63	0.525*	-61.477
E Tractor/Semi-Trailer	295	1.43	1864	1.73	0.828*	-61.493
E Van or Mini-Van	572	2.78	3625	3.37	0.825*	-121.287
Motorcycle	100	0.49	1207	1.12	0.433*	-130.841

C060: Number Killed
C080: CMV Involved
C101: Causal Unit (CU) Type
C102: CU Non-Motorist Indicator
C103: CU Commercial Motor Vehicle In
C105: CU Left Scene
C106: CU Driver Age
C107: CU Driver Raw Age
C108: CU Driver Race
C109: CU Driver Gender
C110: CU Driver Residence Distance
C111: CU Driver License State

☐ Sort by Sum of Max Gain

☐ Display Filter Name

Less than Half of Expected

All the Usual Suspects
Cars, Pickups, CMVs, respectively

Motorcycles

2012 Alabama Integrated Crash Data
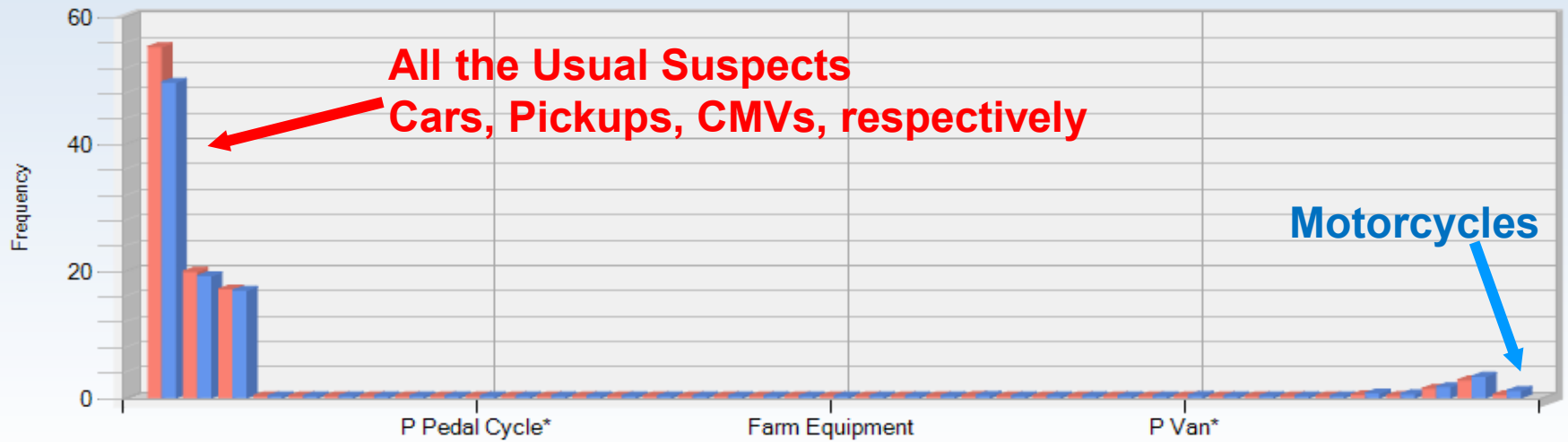
C101: Causal Unit (CU) Type

Question:
Causal Driver

True of False:

.

Compared to younger drivers, older drivers have greater problems in wet weather.

Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
16	739	3.80	2886	3.05	1.245*	145.304
17	852	4.38	3164	3.35	1.309*	201.115
18	940	4.83	3542	3.75	1.290*	211.354
19	921	4.73	3731	3.94	1.200*	153.474
20	816	4.19	3334	3.53	1.190*	130.143
21	782	4.02	3153	3.33	1.206*	133.378
22	767	3.94	3032	3.21	1.230*	143.269
23	639	3.28	2746	2.90	1.131*	74.104
24	556	2.86	2463	2.60	1.097	49.322
25	542	2.79	2384	2.52	1.105	51.573
26	498	2.56	2222	2.35	1.089	40.899

C107: CU Driver Raw Age

☐ Sort by Sum of Max Gain

☐ Display Filter Name

2012 Alabama Integrated Crash Data

C107: CU Driver Raw Age
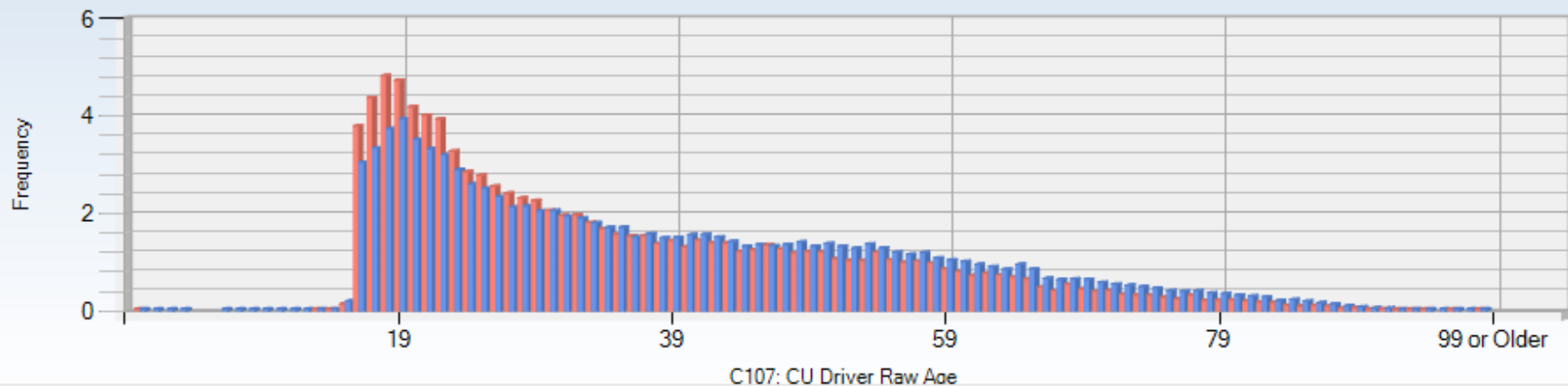
Question:
Driver Gender

True of False:

.

Men have more of a problem with wet weather than women do.

C109: CU Driver Gender

	Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
▶	Male	11039	56.25	52820	55.20	1.019*	206.746
	Female	8586	43.75	42875	44.80	0.976*	-206.746

C109: CU Driver Gender

☐ Sort by Sum of Max Gain

☐ Display Filter Name

2012 Alabama Integrated Crash Data

C109: CU Driver Gender

Only about 2% more than expected, but still significant.
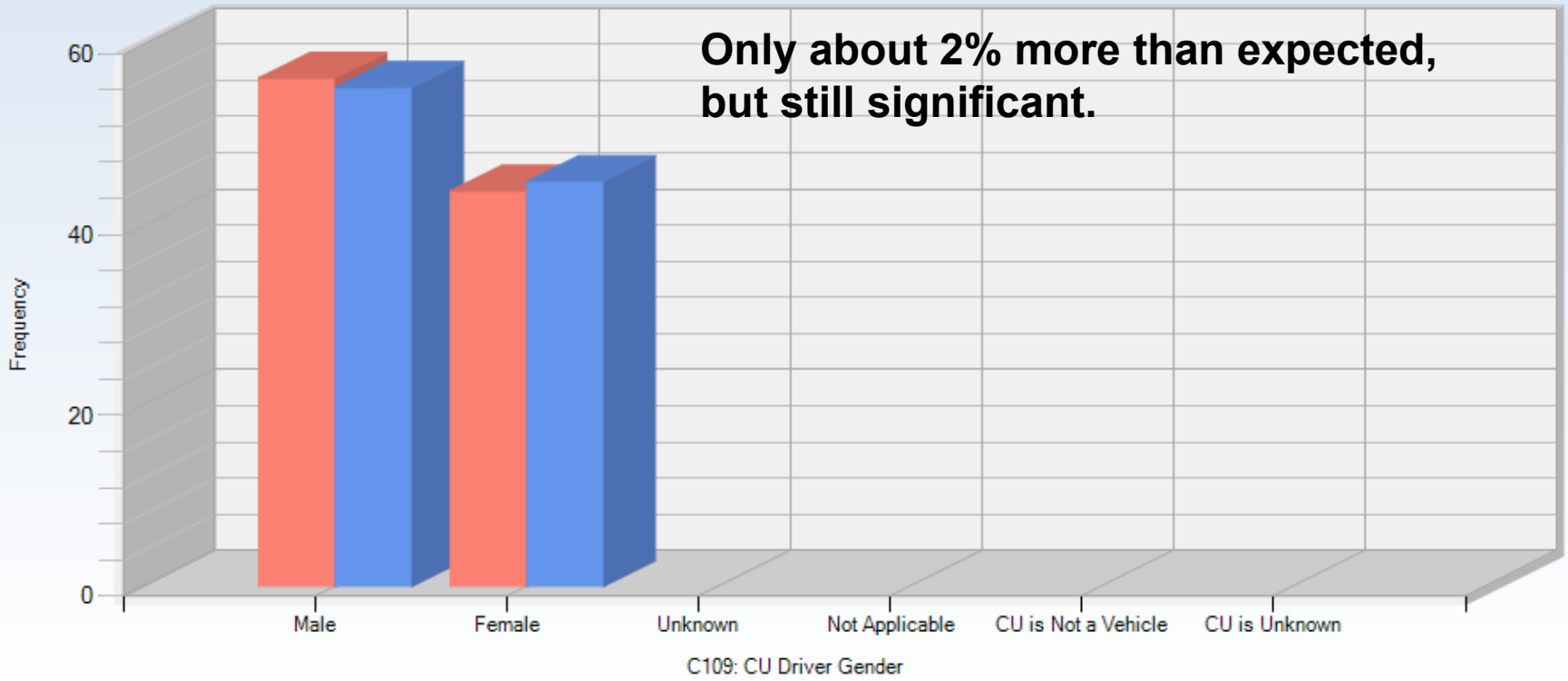
Question:
Model Year

True of False:

.

Newer vehicles have fewer problems with wet weather.

Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
2002	1312	6.42	6236	5.86	1.096*	114.650
2003	1391	6.81	6689	6.29	1.083*	106.671
2004	1501	7.35	6773	6.37	1.154*	200.543
2005	1452	7.11	7000	6.58	1.080*	107.957
2006	1314	6.43	6851	6.44	0.999	-1.434
2007	1294	6.34	6811	6.40	0.989	-13.753
2008	1065	5.22	5639	5.30	0.984	-17.722
2009	622	3.05	3477	3.27	0.922	-44.695

C130: E CU Non-Motorist Maneuvers
C201: CU Vehicle Most Harmful Event
C202: CU Contributing Circumstance
C203: CU First Harmful Event Location
C204: E CU Sequence of Events #1
C205: E CU Sequence of Events #2
C206: E CU Sequence of Events #3
C207: E CU Sequence of Events #4
C208: CU Model Year
C209: CU Make

Sort by Sum of Max Gain

Display Filter Name

2012 Alabama Integrated Crash Data

C208: CU Model Year

Possible reasons:
Front wheel drive
Differential locks
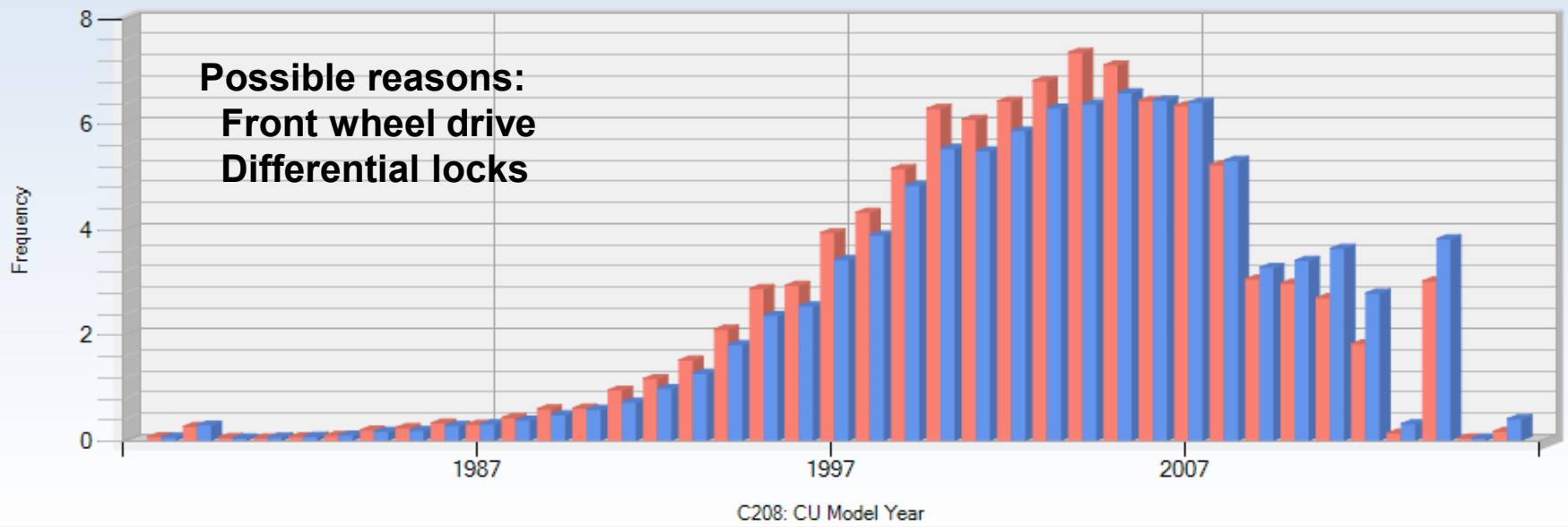
Question:
Grade and Curvature

True of False:

.

Grade and curvature do not have much of an impact on wet weather crashes.

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C407: CU Roadway Curvature and Grade

Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Straight with Down Grade	2542	12.34	9756	9.07	1.361*	674.096
E Curve Right and Down Grade	749	3.64	1551	1.44	2.522*	452.042
E Curve Left and Down Grade	712	3.46	1697	1.58	2.191*	387.089
E Curve Left and Level	702	3.41	2433	2.26	1.507*	236.173
E Curve Right and Up Grade	370	1.80	1128	1.05	1.713*	154.031
E Curve Right and Level	700	3.40	2871	2.67	1.273*	150.312
E Curve Left and Up Grade	316	1.53	943	0.88	1.750*	135.451
P Curve with Down Grade*	116	0.56	216	0.20	2.805*	74.644
P Curve and Level*	128	0.62	383	0.36	1.746*	54.670
P Curve with Up Grade*	59	0.29	150	0.14	2.054*	30.281

C330: CU Driver/Non-Motorist Transpor
C331: E CU Driver/Non-Motorist Transp
C401: E CU Involved Road/Bridge
C402: E CU Road Surface Type
C403: CU Roadway Condition
C404: E CU Environmental Contributing
C405: CU Contributing Material in Road
C406: CU Contributing Material Source
C407: CU Roadway Curvature and Grad
C408: CU Vision Obscured By
C409: CU Traffic Control
C410: CU Traffic Control Functioning
C411: CU Opposing Lane Separation

☐ Sort by Sum of Max Gain

2012 Alabama Integrated Crash Data

C407: CU Roadway Curvature and Grade

Straight and Level

C407: CU Roadway Curvature and Grade
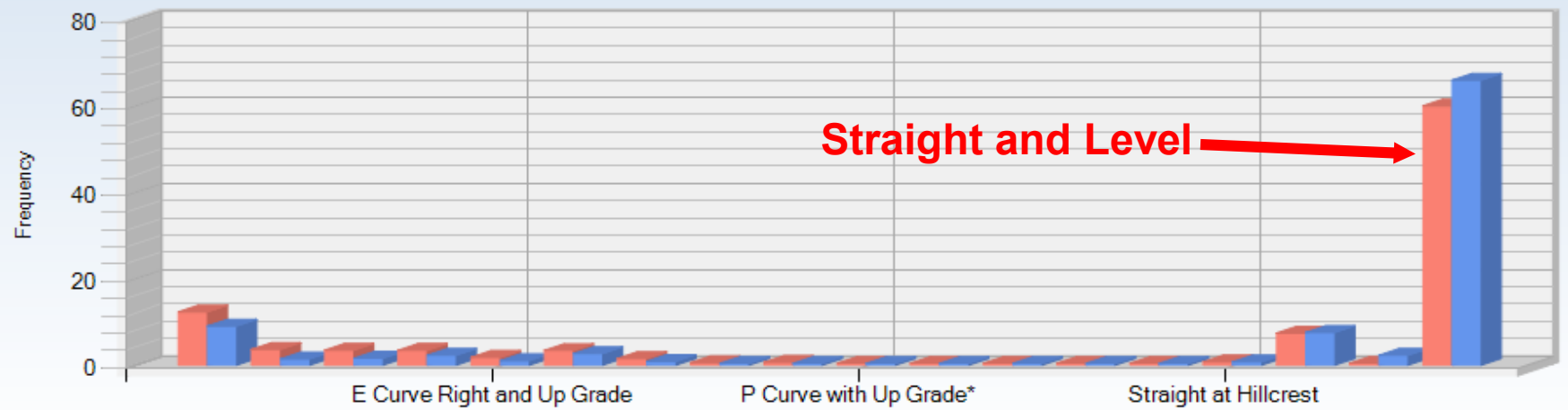
☐ Display Filter Name

Question:
Workzone Effects

True of False:

.

Workzone related crashes are reduced when the weather is wet.

C415: CU Workzone Related

Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Not In/Related to Workzone	20073	97.44	99316	92.24	1.056*	1070.939
E In Termination Area of Workz...	17	0.08	64	0.06	1.388	4.755
E Involving Roadway Condition...	10	0.05	44	0.04	1.188	1.582
E On Temporary Detour	2	0.01	15	0.01	0.697	-0.870
E Not Involving Workers/Condi...	63	0.31	347	0.32	0.949	-3.391
E Outside of the Workzone Wa...	16	0.08	114	0.11	0.734	-5.812
E Other Workzone Area	2	0.01	45	0.04	0.232	-6.610
P In/Related to Workzone*	6	0.03	75	0.07	0.418	-8.350

C413: E CU Turn Lanes
C414: CU One-Way Street
C415: CU Workzone Related
C416: E CU Workzone Type
C417: E CU Workers Present
C418: E CU Law Enforcement Present
C450: CU CMV Indicator
C451: E CU CMV Weight
C452: CU CMV Hazard Materials Involve
C453: E CU CMV Hazard Materials Rele

☐ Sort by Sum of Max Gain

☐ Display Filter Name

2012 Alabama Integrated Crash Data

C415: CU Workzone Related

Wet Dry

Crash was <u>not</u> in a Workzone

Frequency

C415: CU Workzone Related

(x-axis categories: E In Termination Area of Workzone, E On Temporary Detour, E Outside of the Workzone Warning Signs, P In/Related to Workzone*, E Involving Workers/Eqpmt in Activity Area, E Between Warning Signs and Work Area)

Roundtable Input and Questions
Thank You!

Introduction

This study was conducted because a large disparity in weather related crashes occurred in 2013 as opposed to 2012. The comparison is between what is defined in Slide 3 to be "bad" weather for 2013 (red bars) vs. 2012 (blue bars).

Unfortunately, a large portion of the weather occurred at the late-night weekend hours, which is concurrent with the heavy drinking hours. These effects tended to mask each other – that is, it is impossible to tell whether the effects were due to DUI or the bad weather. A further analysis determined that the bad weather non-DUI crashes had the same basic characteristics as the entire population. Thus, the results obtained for the entire comparison are valid.

There was little new over previous studies revealed in the comparison. See:
http://www.technolytix.com/uploads/2/2/7/6/22761914/weather_impacts_trcc_feb_11_2014-v01.pdf
and it is not recommended that further work be done to publish these results. It is recommended that an IMPACT be done the snow-sleet-icy weather of 2013 to determine if there are any surprises to be found in that comparison.

File   Dashboard   Filters   Analysis   Impact   Locations   Tools   Window   Help

Data Source: | 2012-2014 Alabama Integrated Crash Data ▼ | Filter: | Weather Issues And 2013 ▼ | 1/ 1/2012 ▼   7/27/2014 ▼

Order: | Odds Ratio ▼ | | Descending ▼ | ☑ Suppress Zero-Valued Rows   Significance: | Over Representation ▼ | Threshold: | 2.0 ▲▼ |

C032: Weather Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Snow	301	1.51	34	0.22	6.960*	257.750
E Blowing Snow	26	0.13	6	0.04	3.407	18.368
Sleet/Hail/Freezing Rain	211	1.06	57	0.36	2.910*	138.493
E Mist	3251	16.32	2247	14.35	1.137*	392.682
Rain	16134	80.98	13318	85.03	0.952*	-807.292

C001: County
C031: Lighting Conditions
C028: Mileposted Route
C032: Weather
C008: Time of Day
C015: Primary Contributing Circumstance
C204: E CU Sequence of Events #1

☑ Sort by Sum of Max Gain

☐ Display Filter Name

2012-2014 Alabama Integrated Crash Data

C032: Weather

C032: Weather

File   Dashboard   Filters   Analysis   Impact   Locations   Tools   Window   Help

Data Source: | 2012-2014 Alabama Integrated Crash Data ▼ | Filter: | Weather Issues And 2013 ▼ | | 1/ 1/2012 ▼ | 7/27/2014 ▼ |
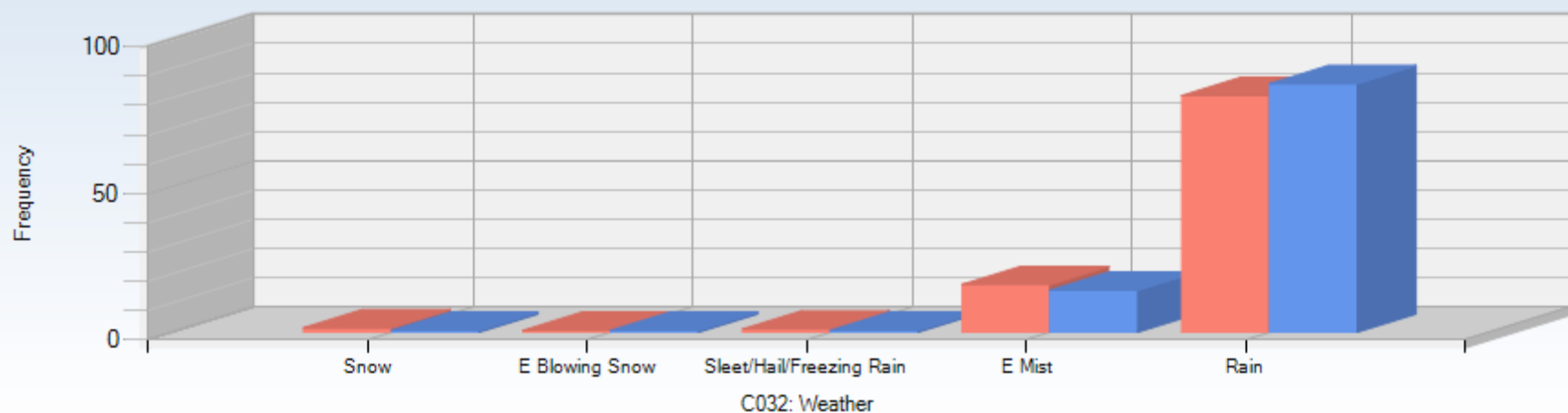
Order: | Max Gain ▼ | | Descending ▼ | ☑ Suppress Zero-Valued Rows   Significance: | Over Representation ▼ | Threshold: | 2.0 ⬍ |

C403: CU Roadway Condition Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Ice	155	0.83	29	0.20	4.223*	118.293
E Slush	82	0.44	2	0.01	32.392	79.469
E Snow	83	0.44	7	0.05	9.368	74.140
P Snow or Slush*	33	0.18	0	0.00	0.000	33.000
E Water Buildup	133	0.71	130	0.88	0.808	-31.547
Wet	18242	97.40	14627	98.86	0.985*	-272.089

C403: CU Roadway Condition

☐ Sort by Sum of Max Gain

☐ Display Filter Name

2012-2014 Alabama Integrated Crash Data

C403: CU Roadway Condition

C403: CU Roadway Condition

	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
1	181 5.59%	1 0.05%	48 3.79%	13 0.87%	99 7.78%	46 4.12%	23 1.11%	42 3.11%	12 1.41%	0 0.00%	99 5.27%	4 0.17%	568 2.85%
2	24 0.74%	102 4.75%	61 4.82%	1 0.07%	59 4.64%	21 1.88%	5 0.24%	0 0.00%	41 4.81%	22 2.46%	0 0.00%	188 8.05%	524 2.63%
3	29 0.90%	6 0.28%	10 0.79%	266 17.85%	253 19.89%	20 1.79%	171 8.23%	17 1.26%	57 6.68%	7 0.78%	0 0.00%	147 6.29%	983 4.93%
4	1 0.03%	17 0.79%	1 0.08%	289 19.40%	199 15.64%	13 1.16%	219 10.54%	10 0.74%	5 0.59%	5 0.56%	2 0.11%	70 3.00%	831 4.17%
5	85 2.63%	58 2.70%	61 4.82%	26 1.74%	78 6.13%	146 13.07%	223 10.74%	37 2.74%	6 0.70%	0 0.00%	0 0.00%	136 5.82%	856 4.30%
6	33 1.02%	6 0.28%	0 0.00%	0 0.00%	145 11.40%	26 2.33%	326 15.70%	112 8.29%	0 0.00%	186 20.76%	18 0.96%	271 11.60%	1123 5.64%
7	1 0.03%	165 7.68%	0 0.00%	0 0.00%	5 0.39%	144 12.89%	106 5.10%	66 4.89%	1 0.12%	10 1.12%	73 3.88%	34 1.46%	605 3.04%
8	0 0.00%	78 3.63%	0 0.00%	0 0.00%	1 0.08%	8 0.72%	72 3.47%	44 3.26%	0 0.00%	0 0.00%	0 0.00%	226 9.67%	429 2.15%
9	207 6.40%	0 0.00%	0 0.00%	0 0.00%	0 0.00%	95 8.50%	26 1.25%	42 3.11%	14 1.64%	0 0.00%	10 0.53%	139 5.95%	533 2.68%
10	208 6.43%	193 8.98%	1 0.08%	0 0.00%	74 5.82%	113 10.12%	80 3.85%	47 3.48%	6 0.70%	0 0.00%	1 0.05%	34 1.46%	757 3.80%
11	254 7.85%	330 15.36%	278 21.96%	151 10.13%	36 2.83%	0 0.00%	67 3.23%	27 2.00%	1 0.12%	0 0.00%	0 0.00%	0 0.00%	1144 5.74%
12	47 1.45%	335 15.59%	2 0.16%	6 0.40%	0 0.00%	0 0.00%	21 1.01%	48 3.55%	24 2.81%	0 0.00%	0 0.00%	1 0.04%	484 2.43%
13	144 4.45%	82 3.82%	0 0.00%	3 0.20%	0 0.00%	13 1.16%	28 1.35%	95 7.03%	6 0.70%	0 0.00%	0 0.00%	1 0.04%	372 1.87%
14	329 10.17%	0 0.00%	1 0.08%	141 9.46%	0 0.00%	4 0.36%	39 1.88%	116 8.59%	0 0.00%	0 0.00%	0 0.00%	204 8.73%	834 4.19%
15	353 10.91%	4 0.19%	0 0.00%	3 0.20%	1 0.08%	2 0.18%	30 1.44%	50 3.70%	1 0.12%	0 0.00%	491 26.12%	4 0.17%	939 4.71%
16	347 10.72%	2 0.09%	0 0.00%	2 0.13%	3 0.24%	21 1.88%	1 0.05%	34 2.52%	9 1.06%	133 14.84%	34 1.81%	0 0.00%	586 2.94%
17	444 13.72%	0 0.00%	0 0.00%	6 0.40%	204 16.04%	115 10.30%	5 0.24%	141 10.44%	4 0.47%	184 20.54%	184 9.79%	0 0.00%	1287 6.46%
18	36 1.11%	6 0.28%	126 9.95%	0 0.00%	70 5.50%	90 8.06%	17 0.82%	178 13.18%	2 0.23%	7 0.78%	37 1.97%	0 0.00%	569 2.86%
19	1 0.03%	43 2.00%	3 0.24%	218 14.63%	17 1.34%	16 1.43%	19 0.91%	52 3.85%	0 0.00%	79 8.82%	0 0.00%	0 0.00%	448 2.25%
20	0 0.00%	9 0.42%	0 0.00%	0 0.00%	1 0.08%	9 0.81%	50 2.41%	29 2.15%	51 5.98%	0 0.00%	1 0.05%	21 0.90%	171 0.86%
21	0 0.00%	121 5.63%	1 0.08%	0 0.00%	0 0.00%	11 0.98%	75 3.61%	23 1.70%	309 36.23%	3 0.33%	7 0.37%	170 7.28%	720 3.61%
22	0 0.00%	263 12.24%	179 14.14%	0 0.00%	17 1.34%	0 0.00%	102 4.91%	47 3.48%	15 1.76%	6 0.67%	215 11.44%	257 11.00%	1101 5.52%

Day	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
11	254 7.85%	330 15.36%	276 21.96%	151 10.13%	50 2.83%	0 0.00%	67 3.23%	27 2.00%	0.12%	0.00%	0.00%	0.00%	1144 5.74%
12	47 1.45%	335 15.59%	2 0.16%	6 0.40%	0 0.00%	0 0.00%	21 1.01%	48 3.55%	24 2.81%	0 0.00%	0 0.00%	1 0.04%	484 2.43%
13	144 4.45%	82 3.82%	0 0.00%	3 0.20%	0 0.00%	13 1.16%	28 1.35%	95 7.03%	6 0.70%	0 0.00%	0 0.00%	1 0.04%	372 1.87%
14	329 10.17%	0 0.00%	1 0.08%	141 9.46%	0 0.00%	4 0.36%	39 1.88%	116 8.59%	0 0.00%	0 0.00%	0 0.00%	204 8.73%	834 4.19%
15	353 10.91%	4 0.19%	0 0.00%	3 0.20%	1 0.08%	2 0.18%	30 1.44%	50 3.70%	1 0.12%	0 0.00%	491 26.12%	4 0.17%	939 4.71%
16	347 10.72%	2 0.09%	0 0.00%	2 0.13%	3 0.24%	21 1.88%	1 0.05%	34 2.52%	9 1.06%	133 14.84%	34 1.81%	0 0.00%	586 2.94%
17	444 13.72%	0 0.00%	0 0.00%	6 0.40%	204 16.04%	115 10.30%	5 0.24%	141 10.44%	4 0.47%	184 20.54%	184 9.79%	0 0.00%	1287 6.46%
18	36 1.11%	6 0.28%	126 9.95%	0 0.00%	70 5.50%	90 8.06%	17 0.82%	178 13.18%	2 0.23%	7 0.78%	37 1.97%	0 0.00%	569 2.86%
19	1 0.03%	43 2.00%	3 0.24%	218 14.63%	17 1.34%	16 1.43%	19 0.91%	52 3.85%	0 0.00%	79 8.82%	0 0.00%	0 0.00%	448 2.25%
20	0 0.00%	9 0.42%	0 0.00%	0 0.00%	1 0.08%	9 0.81%	50 2.41%	29 2.15%	51 5.98%	0 0.00%	1 0.05%	21 0.90%	171 0.86%
21	0 0.00%	121 5.63%	1 0.08%	0 0.00%	0 0.00%	11 0.98%	75 3.61%	23 1.70%	309 36.23%	3 0.33%	7 0.37%	170 7.28%	720 3.61%
22	0 0.00%	263 12.24%	179 14.14%	0 0.00%	17 1.34%	0 0.00%	102 4.91%	47 3.48%	15 1.76%	6 0.67%	215 11.44%	257 11.00%	1101 5.53%
23	1 0.03%	91 4.23%	171 13.51%	2 0.13%	0 0.00%	21 1.88%	178 8.57%	18 1.33%	39 4.57%	0 0.00%	34 1.81%	38 1.63%	593 2.98%
24	1 0.03%	7 0.33%	65 5.13%	140 9.40%	0 0.00%	54 4.83%	55 2.65%	20 1.48%	143 16.76%	0 0.00%	1 0.05%	1 0.04%	487 2.44%
25	117 3.62%	168 7.82%	2 0.16%	2 0.13%	0 0.00%	11 0.98%	3 0.14%	3 0.22%	53 6.21%	0 0.00%	156 8.30%	1 0.04%	516 2.59%
26	8 0.25%	60 2.79%	6 0.47%	12 0.81%	0 0.00%	5 0.45%	0 0.00%	1 0.07%	1 0.12%	0 0.00%	504 26.81%	0 0.00%	597 3.00%
27	2 0.06%	2 0.09%	0 0.00%	37 2.48%	0 0.00%	19 1.70%	22 1.06%	0 0.00%	0 0.00%	24 2.68%	13 0.69%	1 0.04%	120 0.60%
28	7 0.22%	0 0.00%	0 0.00%	135 9.06%	1 0.08%	63 5.64%	11 0.53%	0 0.00%	0 0.00%	79 8.82%	0 0.00%	308 13.18%	604 3.03%
29	41 1.27%	0 0.00%	0 0.00%	18 1.21%	6 0.47%	21 1.88%	3 0.14%	0 0.00%	2 0.23%	0 0.00%	0 0.00%	40 1.71%	131 0.66%
30	334 10.32%	0 0.00%	138 10.90%	19 1.28%	0 0.00%	10 0.90%	20 0.96%	26 1.92%	51 5.98%	0 0.00%	0 0.00%	17 0.73%	615 3.09%
31	1 0.03%	0 0.00%	112 8.85%	0 0.00%	3 0.24%	0 0.00%	80 3.85%	26 1.92%	0 0.00%	151 16.85%	0 0.00%	23 0.98%	396 1.99%
TOTAL	3236 16.24%	2149 10.79%	1266 6.35%	1490 7.48%	1272 6.38%	1117 5.61%	2077 10.43%	1351 6.78%	853 4.28%	896 4.50%	1880 9.44%	2336 11.73%	19923 100.00%

File Dashboard Filters Analysis Impact Locations Tools Window Help

Data Source: 2012-2014 Alabama Integrated Crash Data Filter: Weather Issues And 2013 1/ 1/2012 7/27/2014

Order: Natural Order Descending ☐ Suppress Zero-Valued Rows Significance: Over Representation Threshold: 2.0

C007: Week of the Year Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
44	353	1.77	8	0.05	34.688	342.824
45	103	0.52	175	1.12	0.463*	-119.610
46	526	2.64	222	1.42	1.863*	243.603
47	478	2.40	0	0.00	0.000	478.000
48	674	3.38	227	1.45	2.334*	385.242
49	850	4.27	364	2.32	1.836*	386.970

C003: Year
C020: E Distracted Driving
C007: Week of the Year
C005: Day of Month
C004: Month
C006: Day of the Week
C125: E CU Driver Drug Test Type Given
C127: E CU Driver Drug Test Results

☑ Sort by Sum of Max Gain

☐ Display Filter Name

2012-2014 Alabama Integrated Crash Data

C007: Week of the Year

Frequency

C007: Week of the Year

File   Dashboard   Filters   Analysis   Impact   Locations   Tools   Window   Help

Data Source: | 2012-2014 Alabama Integrated Crash Data ▼ | Filter: | Weather Issues And 2013 ▼ | | 1/ 1/2012 ▼ | 7/27/2014 ▼ |

Order: | Natural Order ▼ | | Descending ▼ | ☐ Suppress Zero-Valued Rows   Significance: | Over Representation ▼ | Threshold: | 2.0 |

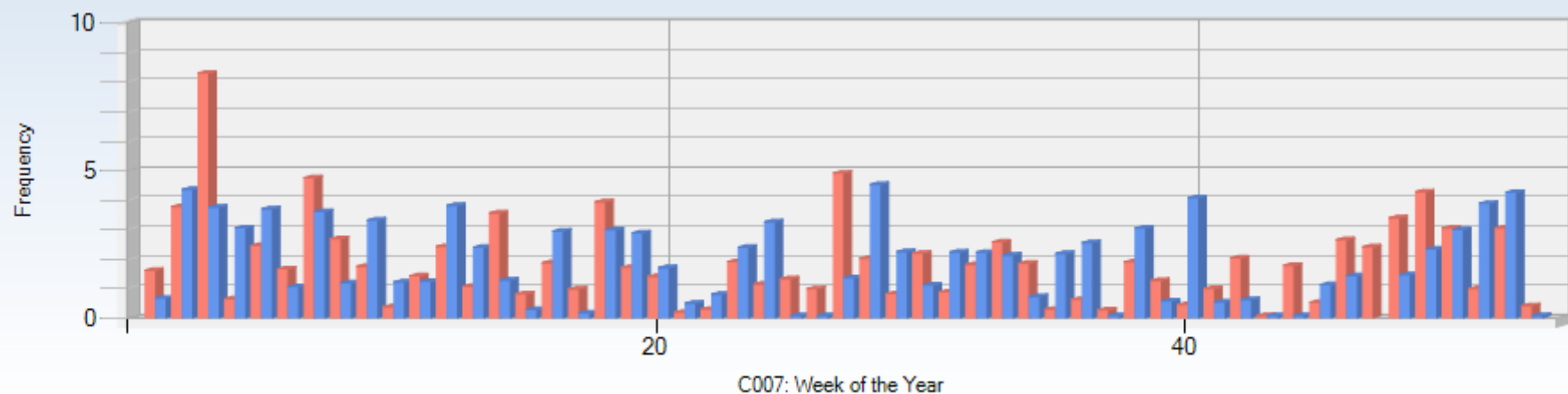| C004: Month	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
January	3236	16.24	1852	11.82	1.374*	880.145
February	2149	10.79	1804	11.52	0.936	-145.796
March	1266	6.35	1550	9.90	0.642*	-705.693
April	1490	7.48	726	4.64	1.613*	566.485
May	1272	6.38	1349	8.61	0.741*	-444.009
June	1117	5.61	933	5.96	0.941	-69.832

C003: Year
C020: E Distracted Driving
C007: Week of the Year
C005: Day of Month
C004: Month
C006: Day of the Week
C125: E CU Driver Drug Test Type Given
C127: E CU Driver Drug Test Results

☑ Sort by Sum of Max Gain

☐ Display Filter Name

2012-2014 Alabama Integrated Crash Data

C004: Month

C004: Month

File   Dashboard   Filters   Analysis   Impact   Locations   Tools   Window   Help

Data Source: | 2012-2014 Alabama Integrated Crash Data ▼ | Filter: | Weather Issues And 2013 ▼ | 1/ 1/2012 ▼   7/27/2014 ▼

Order: | Max Gain ▼ | | Descending ▼ | ☐ Suppress Zero-Valued Rows   Significance: | Over Representation ▼ | Threshold: | 2.0 ⇕ |

C002: City

Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Homewood	298	1.50	186	1.19	1.260*	61.414
Montgomery	1093	5.49	815	5.20	1.054	56.347
Opelika	256	1.29	158	1.01	1.274*	55.029
Anniston	243	1.22	149	0.95	1.282*	53.477
Tuscaloosa	617	3.10	445	2.84	1.090	50.975
Gadsden	241	1.21	154	0.98	1.230	45.117
Mountain Brook	100	0.50	50	0.32	1.572*	36.402
Prattville	138	0.69	80	0.51	1.356	36.243
Gardendale	64	0.32	22	0.14	2.287*	36.017
Oxford	149	0.75	90	0.57	1.302	34.523
Rural Etowah	128	0.64	79	0.50	1.274	27.515
Boaz	64	0.32	30	0.19	1.677*	25.841
Auburn	201	1.01	138	0.88	1.145	25.469
Rural Marshall	95	0.48	55	0.35	1.358	25.042
Vestavia Hills	185	0.93	127	0.81	1.145	23.460
Trussville	139	0.70	92	0.59	1.188	21.979
Chelsea	33	0.17	9	0.06	2.883	21.552
Rural Houston	67	0.34	36	0.23	1.463	21.209
Bessemer	256	1.29	185	1.18	1.098	20.696

C005: Day of Month
C004: Month
C006: Day of the Week
C125: E CU Driver Drug Test Type Given
C127: E CU Driver Drug Test Results
C043: Agency ORI
C002: City
C124: CU Driver Alcohol Test Type Given
C126: CU Driver Alcohol Test Results
C112: CU Driver First License Class
C113: CU Driver Second License Class
C208: CU Model Year
C001: County
C031: Lighting Conditions
C028: Mileposted Route
C032: Weather
C008: Time of Day
C015: Primary Contributing Circumstance
C204: E CU Sequence of Events #1
C224: CU Estimated Speed at Impact
C107: CU Driver Raw Age
C404: E CU Environmental Contributing
C511: V2 Driver License State
C202: CU Contributing Circumstance

☑ Sort by Sum of Max Gain

☐ Display Filter Name

File   Dashboard   Filters   Analysis   Impact   Locations   Tools   Window   Help

Data Source: 2012-2014 Alabama Integrated Crash Data   Filter: Weather Issues And 2013   1/ 1/2012   7/27/2014

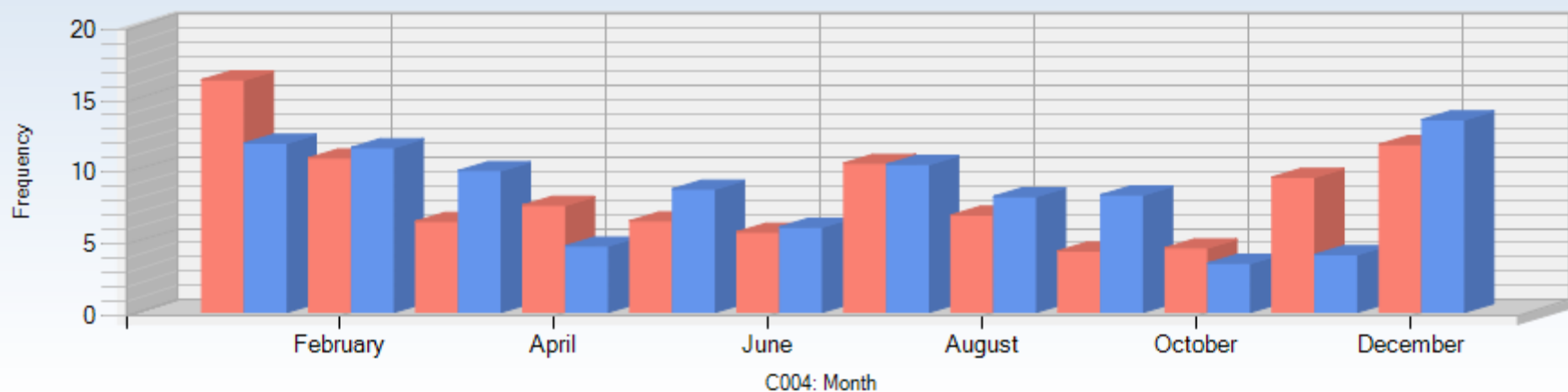Order: Max Gain   Descending   ☐ Suppress Zero-Valued Rows   Significance: Over Representation   Threshold: 2.0

C002: City

Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Decatur	263	1.32	220	1.40	0.940	-16.833
Moody	25	0.13	33	0.21	0.596	-16.975
Dothan	405	2.03	336	2.15	0.948	-22.381
Irondale	17	0.09	31	0.20	0.431	-22.431
Rural St. Clair	146	0.73	133	0.85	0.863	-23.172
Rural Limestone	123	0.62	116	0.74	0.834	-24.548
Hoover	472	2.37	393	2.51	0.944	-27.883
Troy	75	0.38	83	0.53	0.710	-30.573
Fort Payne	45	0.23	61	0.39	0.580*	-32.590
Phenix City	247	1.24	220	1.40	0.883	-32.833
Madison	187	0.94	173	1.10	0.850	-33.050
Saraland	58	0.29	73	0.47	0.625*	-34.854
Rural Morgan	138	0.69	136	0.87	0.798	-34.987
Rural Tuscaloosa	180	0.90	181	1.16	0.782*	-50.226
Rural Mobile	253	1.27	248	1.58	0.802*	-62.448
Rural Jefferson	504	2.53	452	2.89	0.877	-70.929
Birmingham	1375	6.90	1247	7.96	0.867*	-211.143
Mobile	1441	7.23	1304	8.33	0.869*	-217.645

C005: Day of Month
C004: Month
C006: Day of the Week
C125: E CU Driver Drug Test Type Given
C127: E CU Driver Drug Test Results
C043: Agency ORI
C002: City
C124: CU Driver Alcohol Test Type Given
C126: CU Driver Alcohol Test Results
C112: CU Driver First License Class
C113: CU Driver Second License Class
C208: CU Model Year
C001: County
C031: Lighting Conditions
C028: Mileposted Route
C032: Weather
C008: Time of Day
C015: Primary Contributing Circumstance
C204: E CU Sequence of Events #1
C224: CU Estimated Speed at Impact
C107: CU Driver Raw Age
C404: E CU Environmental Contributing
C511: V2 Driver License State
C202: CU Contributing Circumstance

☑ Sort by Sum of Max Gain

☐ Display Filter Name

File   Dashboard   Filters   Analysis   Impact   Locations   Tools   Window   Help

Data Source: | 2012-2014 Alabama Integrated Crash Data | Filter: | Weather Issues And 2013 | 1/ 1/2012 | 7/27/2014

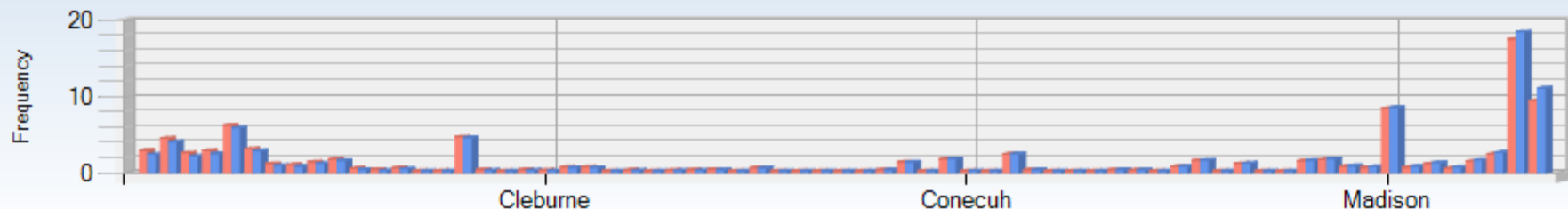Order: | Max Gain | Descending | ☐ Suppress Zero-Valued Rows   Significance: | Over Representation | Threshold: | 2.0

C001: County Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Calhoun	583	2.93	379	2.42	1.209*	100.889
Shelby	900	4.52	633	4.04	1.118	94.786
Etowah	519	2.61	345	2.20	1.183*	80.139
Lee	575	2.89	394	2.52	1.147	73.808
Montgomery	1239	6.22	922	5.89	1.056	66.161
Baldwin	625	3.14	449	2.87	1.094	53.845
Colbert	236	1.18	150	0.96	1.237	45.191
Autauga	210	1.05	134	0.86	1.232	39.544
Elmore	281	1.41	191	1.22	1.157	38.037
Marshall	357	1.79	252	1.61	1.114	36.441

C043: Agency ORI
C002: City
C124: CU Driver Alcohol Test Type Given
C126: CU Driver Alcohol Test Results
C112: CU Driver First License Class
C113: CU Driver Second License Class
C208: CU Model Year
C001: County
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C028: Mileposted Route
C032: Weather
C008: Time of Day
C015: Primary Contributing Circumstance

☑ Sort by Sum of Max Gain

☐ Display Filter Name

2012-2014 Alabama Integrated Crash Data

C001: County

C001: County

File   Dashboard   Filters   Analysis   Impact   Locations   Tools   Window   Help

Data Source: | 2012-2014 Alabama Integrated Crash Data ▼ | Filter: | Weather Issues And 2013 ▼ | 1/ 1/2012 ▼   7/27/2014 ▼

Order: | Max Gain ▼ | | Descending ▼ | ☐ Suppress Zero-Valued Rows   Significance: | Over Representation ▼ | Threshold: | 2.0 |

C001: County Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Coffee	165	0.83	145	0.93	0.895	-19.449
Chambers	136	0.68	124	0.79	0.862	-21.735
Madison	1681	8.44	1342	8.57	0.985	-26.104
Blount	141	0.71	132	0.84	0.840	-26.912
Limestone	232	1.16	205	1.31	0.890	-28.772
Pike	120	0.60	117	0.75	0.806	-28.831
St Clair	299	1.50	260	1.66	0.904	-31.736
Morgan	490	2.46	421	2.69	0.915	-45.537
Jefferson	3484	17.49	2889	18.45	0.948*	-190.981
Mobile	1878	9.43	1735	11.08	0.851*	-329.024

C043: Agency ORI
C002: City
C124: CU Driver Alcohol Test Type Given
C126: CU Driver Alcohol Test Results
C112: CU Driver First License Class
C113: CU Driver Second License Class
C208: CU Model Year
C001: County
C031: Lighting Conditions
C028: Mileposted Route
C032: Weather
C008: Time of Day
C015: Primary Contributing Circumstance

☑ Sort by Sum of Max Gain

☐ Display Filter Name

2012-2014 Alabama Integrated Crash Data
C001: County

C001: County

File   Dashboard   Filters   Analysis   Impact   Locations   Tools   Window   Help

Data Source: | 2012-2014 Alabama Integrated Crash Data ▼ | Filter: | Weather Issues And 2013 ▼ | 1/ 1/2012 ▼   7/27/2014 ▼

Order: | Max Gain ▼ | | Descending ▼ | ☐ Suppress Zero-Valued Rows   Significance: | Over Representation ▼ | Threshold: | 2.0 |

C031: Lighting Conditions Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Dark - Roadway Not Lighted	2985	14.99	2084	13.31	1.126*	334.052
E Dark - Spot Illumination Bot...	1485	7.46	972	6.21	1.201*	248.569
E Dark - Spot Illumination One...	833	4.18	520	3.32	1.259*	171.535
E Dark - Continuous Lighting ...	690	3.46	500	3.19	1.085	53.976
E Dark - Continuous Lighting ...	111	0.56	63	0.40	1.385	30.861
Dawn	316	1.59	233	1.49	1.066	19.613
E Dark - Unknown Roadway ...	69	0.35	44	0.28	1.233	13.030

C112: CU Driver First License Class
C113: CU Driver Second License Class
C208: CU Model Year
C001: County
C031: Lighting Conditions
C028: Mileposted Route
C032: Weather
C008: Time of Day
C015: Primary Contributing Circumstanc
C204: E CU Sequence of Events #1

☑ Sort by Sum of Max Gain

☐ Display Filter Name

2012-2014 Alabama Integrated Crash Data

C031: Lighting Conditions

C031: Lighting Conditions

File Dashboard Filters Analysis Impact Locations Tools Window Help

Data Source: 2012-2014 Alabama Integrated Crash Data   Filter: Weather Issues And 2013   1/ 1/2012   7/27/2014

Order: Max Gain   Descending   ☐ Suppress Zero-Valued Rows   Significance: Over Representation   Threshold: 2.0
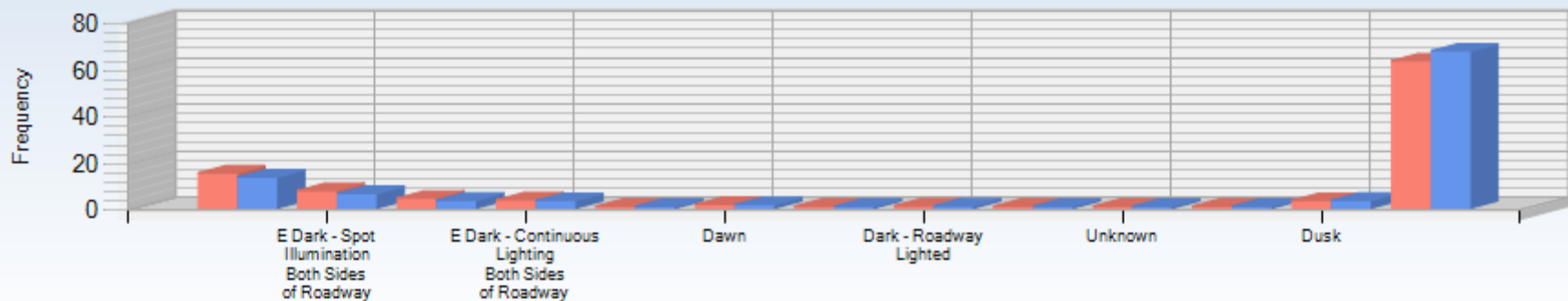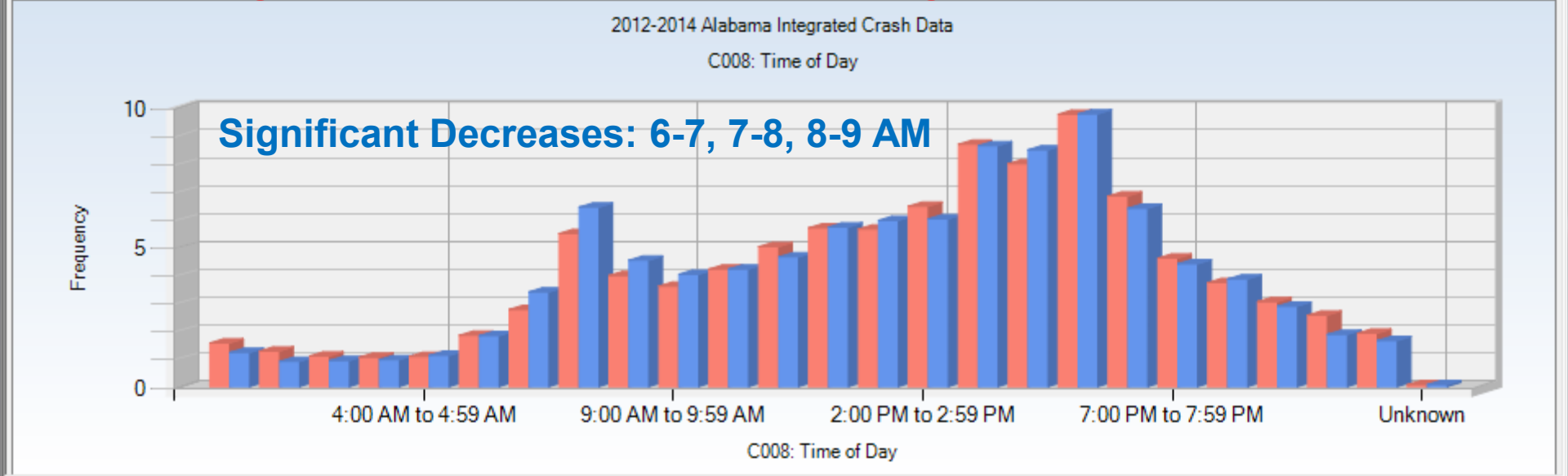
C006: Day of the Week Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Sunday	2518	12.64	1698	10.84	1.166*	358.043
Monday	2938	14.75	3113	19.88	0.742*	-1021.922
Tuesday	2678	13.44	2819	18.00	0.747*	-907.936
Wednesday	2630	13.20	1605	10.25	1.288*	588.344
Thursday	2621	13.16	2474	15.80	0.833*	-526.076
Friday	3550	17.82	2225	14.21	1.254*	719.667
Saturday	2988	15.00	1728	11.03	1.359*	789.881

C003: Year
C020: E Distracted Driving
C007: Week of the Year
C005: Day of Month
C004: Month
C006: Day of the Week
C125: E CU Driver Drug Test Type Given
C127: E CU Driver Drug Test Results
C043: Agency ORI

☑ Sort by Sum of Max Gain
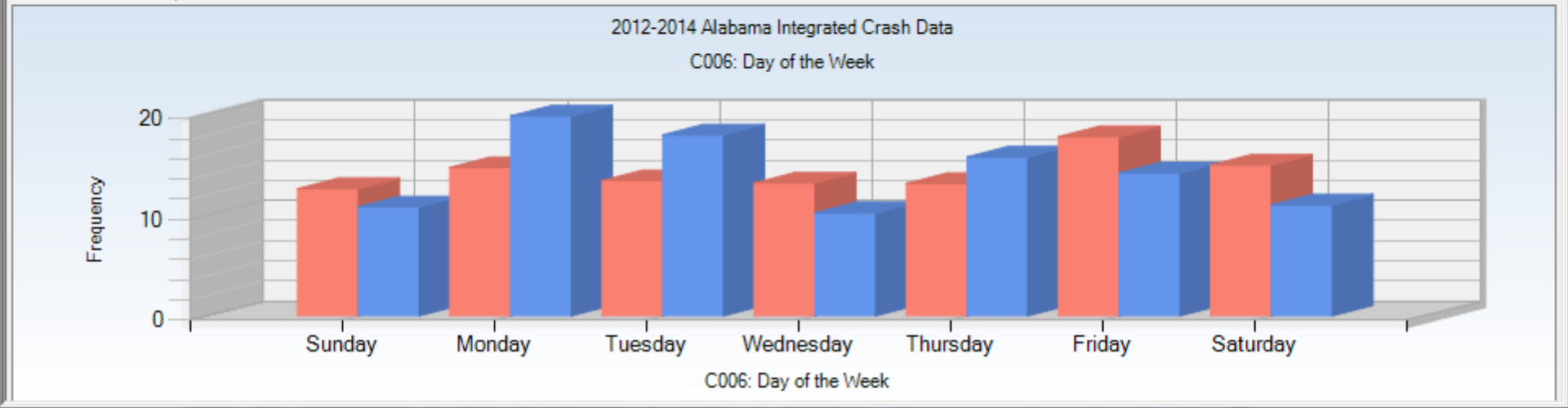
☐ Display Filter Name

2012-2014 Alabama Integrated Crash Data

C006: Day of the Week

C006: Day of the Week

File   Dashboard   Filters   Analysis   Impact   Locations   Tools   Window   Help

Data Source: 2012-2014 Alabama Integrated Crash Data ▼   Filter: Weather Issues And 2013 ▼   1/ 1/2012 ▼   7/27/2014 ▼

Order: Max Gain ▼   Descending ▼   ☑ Suppress Zero-Valued Rows   Significance: Over Representation ▼   Threshold: 2.0 ⇅

| C202: CU Contributing Circumstance Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain ▼
DUI	439	2.20	284	1.81	1.215*	77.707
Misjudge Stopping Distance	1653	8.30	1254	8.01	1.036	57.713
Improper Lane Change/Use	373	1.87	256	1.63	1.145	47.327
CU is Unknown	482	2.42	351	2.24	1.079	35.472
E Fatigued/Asleep	149	0.75	90	0.57	1.301	34.506

C107: CU Driver Raw Age
C404: E CU Environmental Contributing Cir
C511: V2 Driver License State
C202: CU Contributing Circumstance
C101: Causal Unit (CU) Type
C324: CU Driver Airbag Status
C209: CU Make

☑ Sort by Sum of Max Gain

☐ Display Filter Name

2012-2014 Alabama Integrated Crash Data

C202: CU Contributing Circumstance
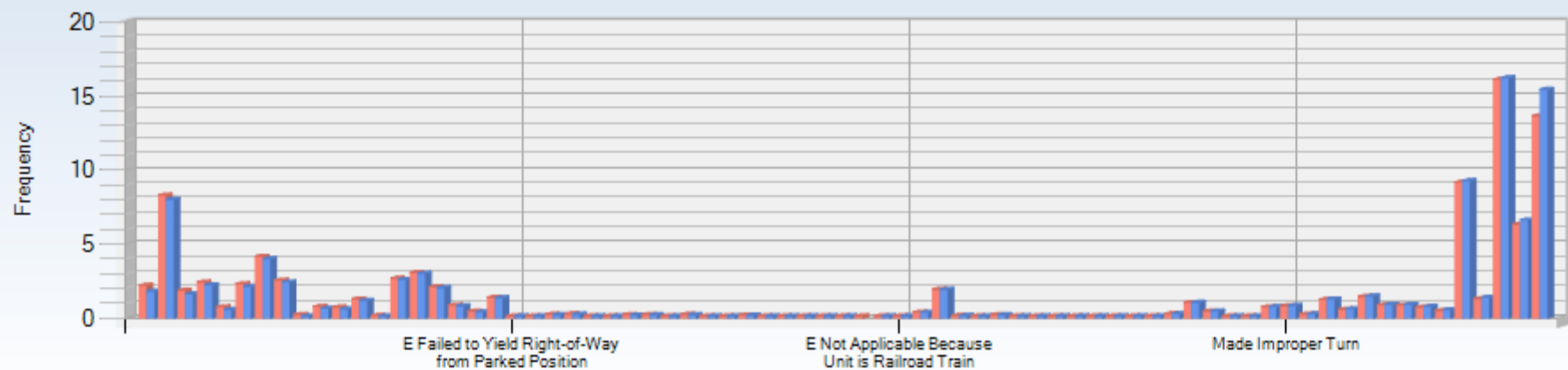
C202: CU Contributing Circumstance

File   Dashboard   Filters   Analysis   Impact   Locations   Tools   Window   Help

Data Source: 2012-2014 Alabama Integrated Crash Data   Filter: Weather Issues And 2013   1/ 1/2012   7/27/2014

Order: Max Gain   Descending   ☑ Suppress Zero-Valued Rows   Significance: Over Representation   Threshold: 2.0

C026: Intersection Related Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Yes, Crash Was Intersection ...	3746	18.80	2793	17.83	1.054*	193.137
No, Crash Was Not Intersecti...	16177	81.20	12869	82.17	0.988*	-193.137

C528: V2 Vehicle Initial Travel Direction
C026: Intersection Related
C522: V2 Driver Officer Opinion Alcohol
C037: EMS Arrival Delay
C523: V2 Driver Officer Opinion Drugs
C510: V2 Driver Residence Distance

☑ Sort by Sum of Max Gain

☐ Display Filter Name

2012-2014 Alabama Integrated Crash Data

C026: Intersection Related

C026: Intersection Related
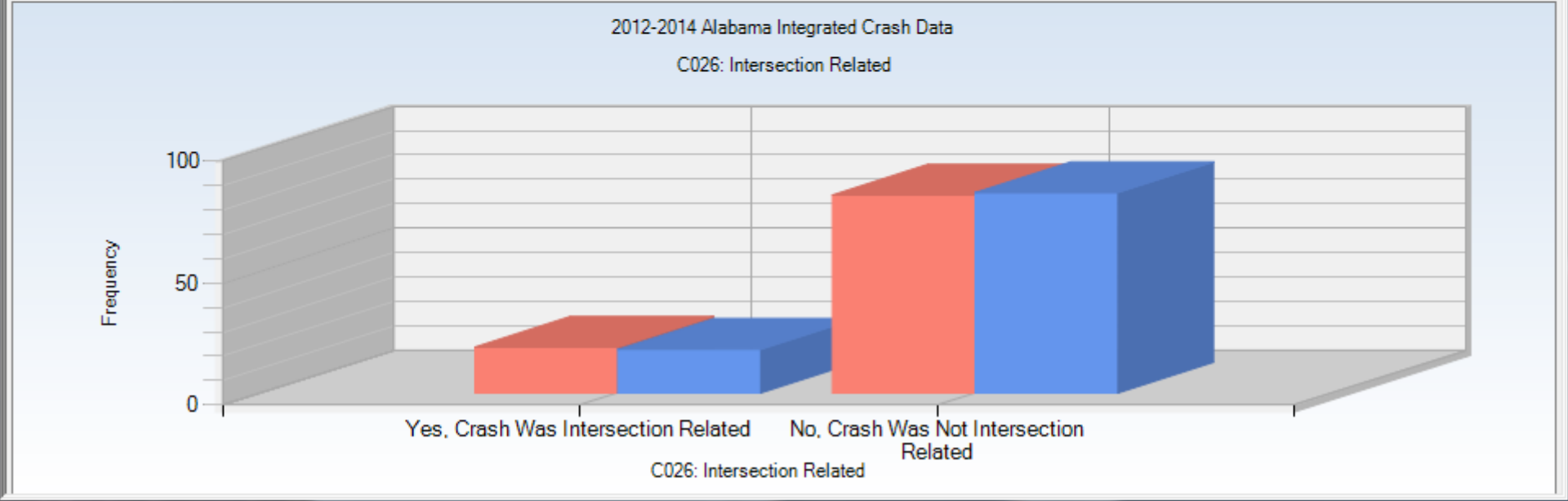
No Significant Differences

Weather Involved 2012 vs. 2013 ...

- **Rural/Urban and Highway Classification**
- **Ambulance and Police Delay Times**
- **Location of First Harmful Event (on/off Road)**
- **Crash Severity; CMV Involvement**
- **Number of Vehicles Involved**
- **Driver Aspects – Age, Gender, etc.**

Resolving the Dilemma

- ## The Question:
    - ### Did DUI cause the time concentration?
    - ### Or, did the time concentrations cause the DUI?
- ## The Solution:
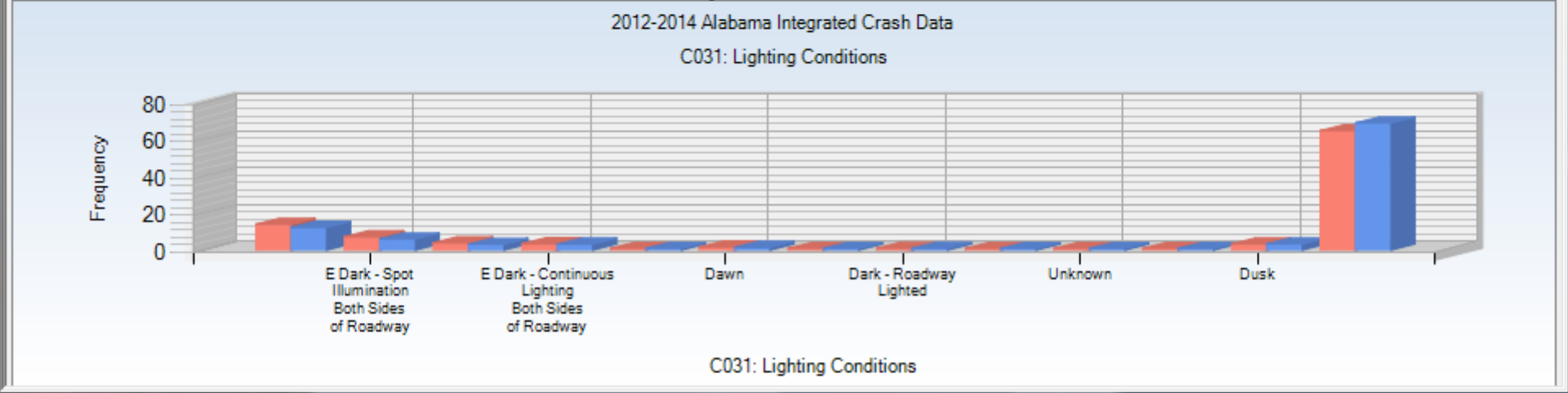   - ### Remove DUI from both the subsets
    - ### Re-run the time analyses

CARE 10.0.0.31 - [IMPACT Results - 2012-2014 Alabama Integrated Crash Data - Weather Issues And 2013 And Not DUI (Alcohol or Drugs) vs. Weather Issu...]

File   Dashboard   Filters   Analysis   Impact   Locations   Tools   Window   Help

Data Source: 2012-2014 Alabama Integrated Crash Data   Filter: Weather Issues And 2013 And Not DUI (Alcohol or Drugs)   1/ 1/2012   7/27/2014

Order: Max Gain   Descending   ☐ Suppress Zero-Valued Rows   Significance: Over Representation   Threshold: 2.0

C031: Lighting Conditions Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Dark - Roadway Not Lighted	2670	13.98	1849	12.28	1.138*	324.364
E Dark - Spot Illumination Bot...	1381	7.23	903	6.00	1.206*	235.457
E Dark - Spot Illumination One...	744	3.90	472	3.13	1.243*	145.222
E Dark - Continuous Lighting ...	650	3.40	475	3.15	1.079	47.416
E Dark - Continuous Lighting ...	98	0.51	58	0.39	1.332	24.421
Dawn	308	1.61	227	1.51	1.070	20.028
E Dark - Unknown Roadway ...	60	0.31	36	0.24	1.314	14.330

C126: CU Driver Alcohol Test Results
C113: CU Driver Second License Class
C112: CU Driver First License Class
C208: CU Model Year
C001: County
C028: Mileposted Route
C031: Lighting Conditions
C032: Weather
C008: Time of Day
C015: Primary Contributing Circumstan
☑ Sort by Sum of Max Gain

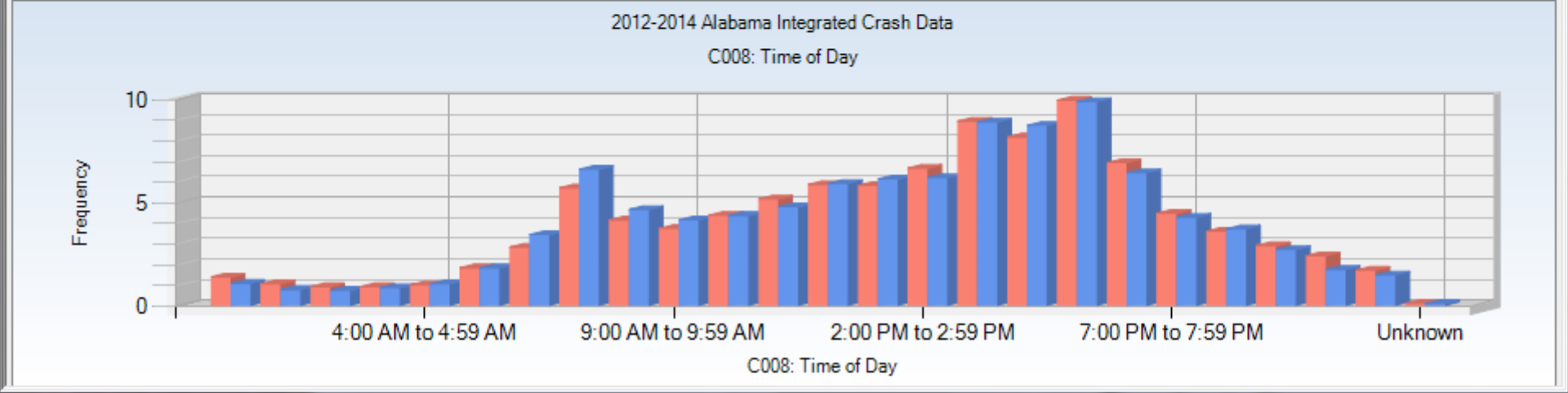**Dark odds ratios practically identical to when DUI included.**   ☐ Display Filter Name

2012-2014 Alabama Integrated Crash Data

C031: Lighting Conditions

File   Dashboard   Filters   Analysis   Impact   Locations   Tools   Window   Help

Data Source: 2012-2014 Alabama Integrated Crash Data ▼   Filter: Weather Issues And 2013 And Not DUI (Alcohol or Drugs) ▼   1/ 1/2012 ▼   7/27/2014 ▼

Order: Natural Order ▼   Descending ▼   ☐ Suppress Zero-Valued Rows   Significance: Over Representation ▼   Threshold: 2.0

C008: Time of Day Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
12:00 Midnight to 12:59 AM	261	1.37	159	1.06	1.294*	59.278
1:00 AM to 1:59 AM	198	1.04	114	0.76	1.369*	53.369
2:00 AM to 2:59 AM	171	0.90	108	0.72	1.248	33.981
3:00 AM to 3:59 AM	171	0.90	128	0.85	1.053	8.607
4:00 AM to 4:59 AM	187	0.98	156	1.04	0.945	-10.916
5:00 AM to 5:59 AM	345	1.81	272	1.81	1.000	-0.085
6:00 AM to 6:59 AM	536	2.81	514	3.41	0.822*	-116.109

C001: County
C028: Mileposted Route
C031: Lighting Conditions
C032: Weather
C008: Time of Day
C015: Primary Contributing Circumstanc
C204: E CU Sequence of Events #1
C107: CU Driver Raw Age
C224: CU Estimated Speed at Impact
C511: V2 Driver License State
☑ Sort by Sum of Max Gain

**Overrepresented hours are the same.**

☐ Display Filter Name

2012-2014 Alabama Integrated Crash Data
C008: Time of Day

C008: Time of Day

File   Dashboard   Filters   Analysis   Impact   Locations   Tools   Window   Help

Data Source: 2012-2014 Alabama Integrated Crash Data   Filter: Weather Issues And 2013 And Not DUI (Alcohol or Drugs)   1/ 1/2012   7/27/2014

Order: Natural Order   Descending   ☐ Suppress Zero-Valued Rows   Significance: Over Representation   Threshold: 2.0

C006: Day of the Week Value	Subset Frequency	Subset Percent	Other Frequency	Other Percent	Odds Ratio	Max Gain
Sunday	2348	12.29	1569	10.42	1.180*	357.419
Monday	2873	15.04	3042	20.20	0.744*	-986.368
Tuesday	2601	13.61	2746	18.24	0.747*	-882.835
Wednesday	2553	13.36	1544	10.25	1.303*	594.136
Thursday	2531	13.25	2410	16.00	0.828*	-526.553
Friday	3412	17.86	2139	14.21	1.257*	698.263
Saturday	2786	14.58	1608	10.68	1.366*	745.939

C001: County
C002: City
C003: Year
C004: Month
C005: Day of Month
C006: Day of the Week
C007: Week of the Year
C008: Time of Day
C009: Data Source
C010: Rural or Urban

☐ Sort by Sum of Max Gain

☐ Display Filter Name

2012-2014 Alabama Integrated Crash Data

C006: Day of the Week

C006: Day of the Week
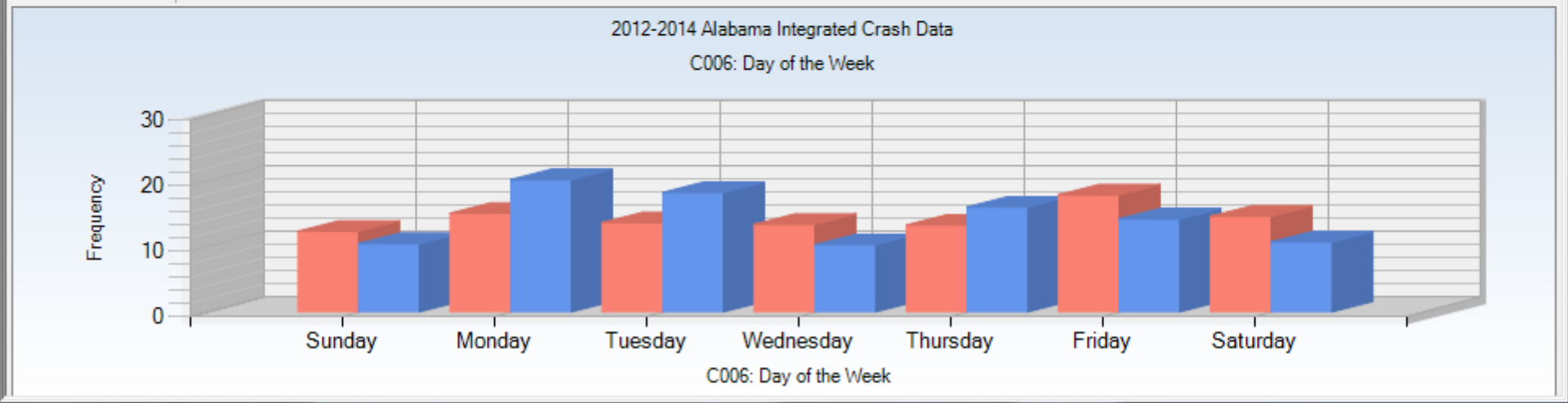
Resolving the Dilemma

- **The Question:**
  - **Did DUI cause the time concentration?**
  - **Answer: No!**
  - **Unfortunate timing of bad weather in 2013**
  - **Coincided with DUI over-represented times**
- **Conclusion: All Other Findings are Applicable**

Roundtable Input and Questions

Thank You!!!

For more information on weather and traffic safety, see
http://www.safehomealabama.gov/tag/weather/