



A Look at Impaired Driving and Blood Alcohol Concentration Reporting Rates in Texas

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Outline

- Introduction
- Methods
- Results
 - Crash Overview
 - BAC and Reporting Statistics
- Conclusion

Introduction

- Why is reporting of blood alcohol concentrations (BACs) for fatal crashes critical?



Introduction

- Accurate and Complete Blood Alcohol Concentration (BAC) Reporting is Critical (NHTSA, 2012):
 - Monitoring Alcohol-impaired Driving Rates
 - Developing Impaired Driving Programs, Task Forces, And Other Countermeasures
 - Evaluation
 - Resource Allocation

Methods: Data Collection

- Crash data was extracted from TxDOT's CRIS system on June 19th, 2018 for crashes from January 1, 2010 to December 31, 2017 to determine the number of fatal crashes statewide, number of DWI-related fatal crashes, as well as crash information (e.g., BAC values) of DWI crashes.

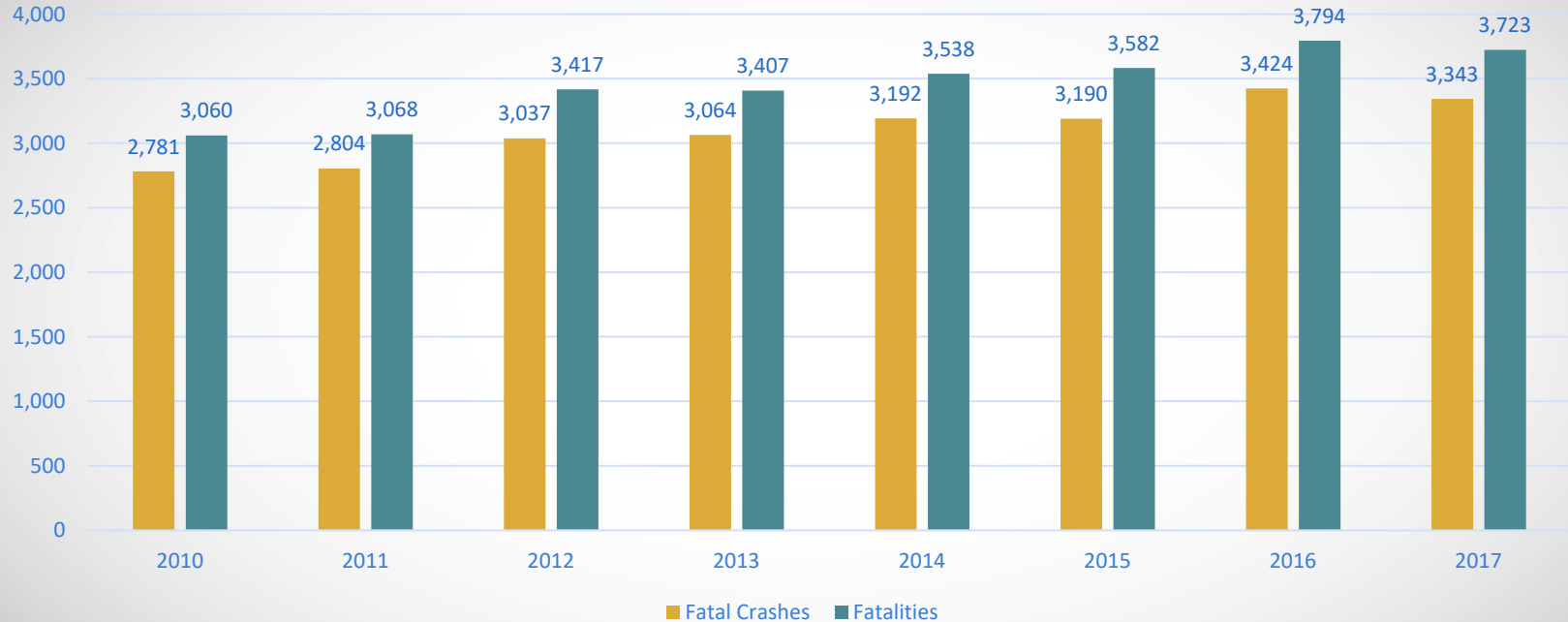
Methods: DWI Definition

- DWI Contributing Factors-DWI-All
 - DWI-Alcohol
 - Had Been Drinking (45)
 - Under the Influence (alcohol) (67)
 - DWI-Drugs
 - Taking Medication (62)
 - Under the Influence (drugs) (68)

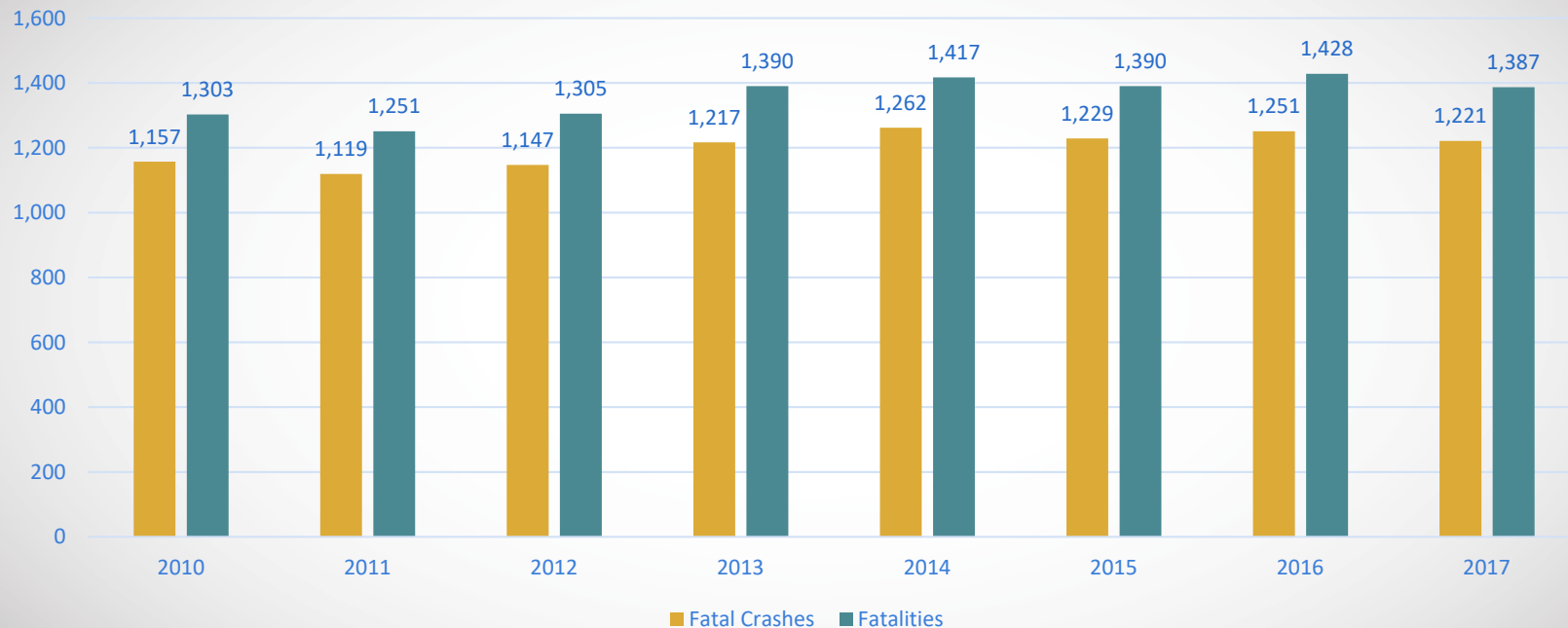
Methods: Data Analysis

- Descriptive Statistics and Maps Were Generated For DWI Crashes
 - Fatal Crash and Fatalities Statistics
 - Fatality Rate per Fatal Crash
 - DWI Crashes with DWI-Driver Fatalities
 - Contributing Factors
 - BAC Levels and Reporting Statistics
 - Substance Test Results

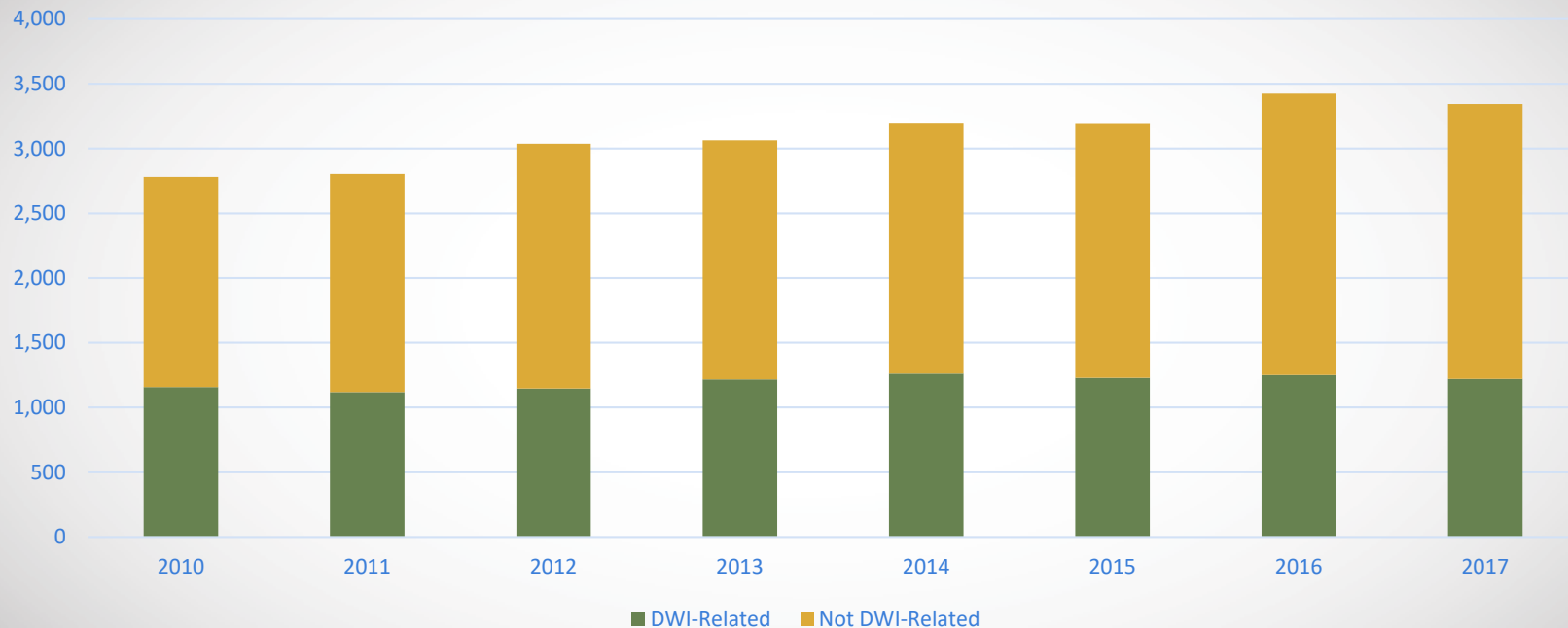
Fatal Crashes and Fatalities, 2010-2017



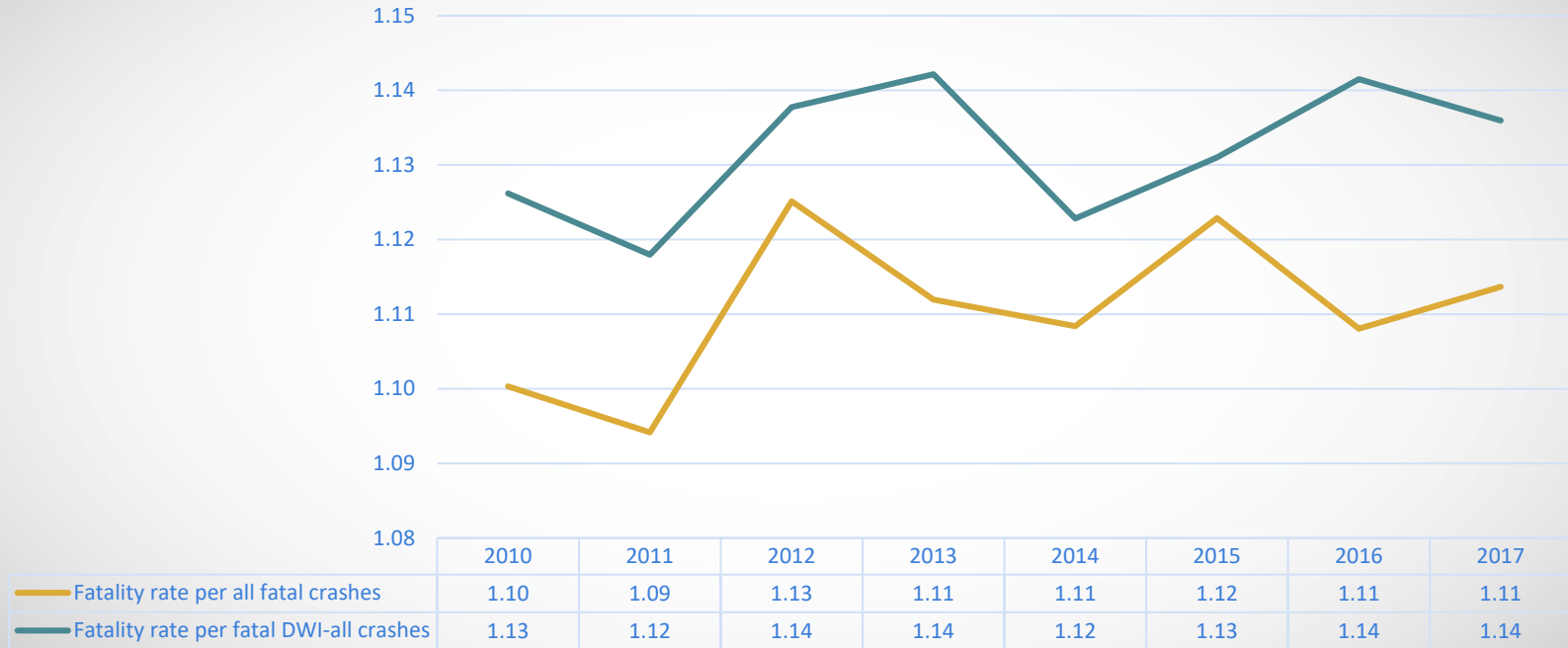
DWI Fatal Crashes and Fatalities, 2010-2017



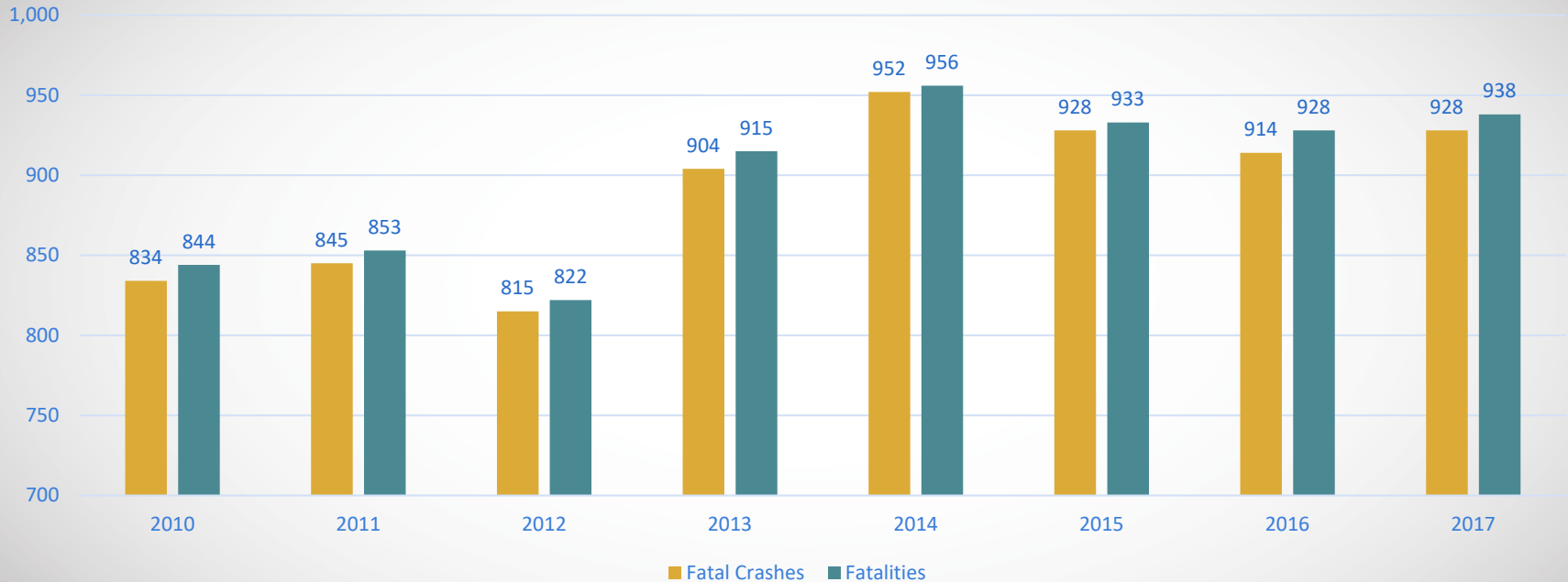
Fatalities by DWI-Status in Texas, 2010-2017



Fatality Rate per Fatal Crashes in Texas, 2010-2017



DWI Crashes with DWI-Driver Fatality



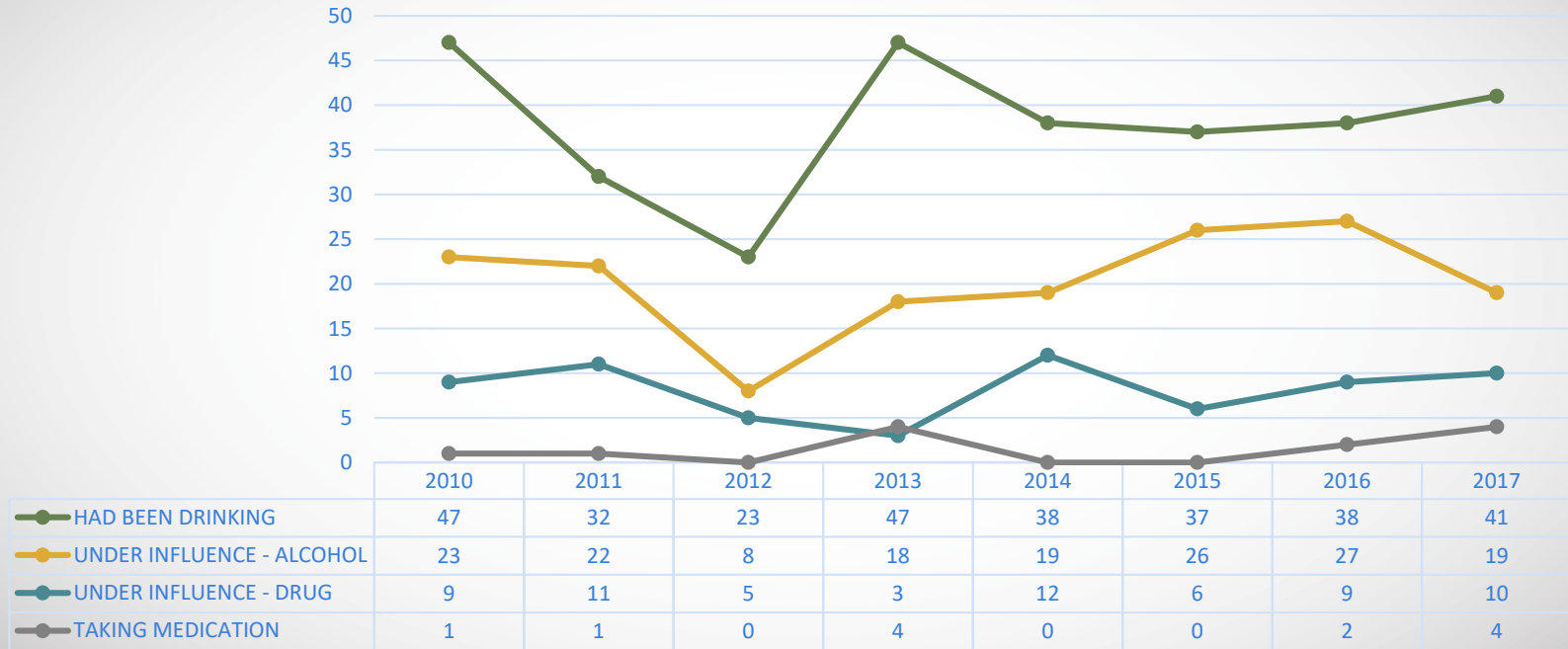
DWI Crashes with DWI Driver Fatality in Texas, 2017



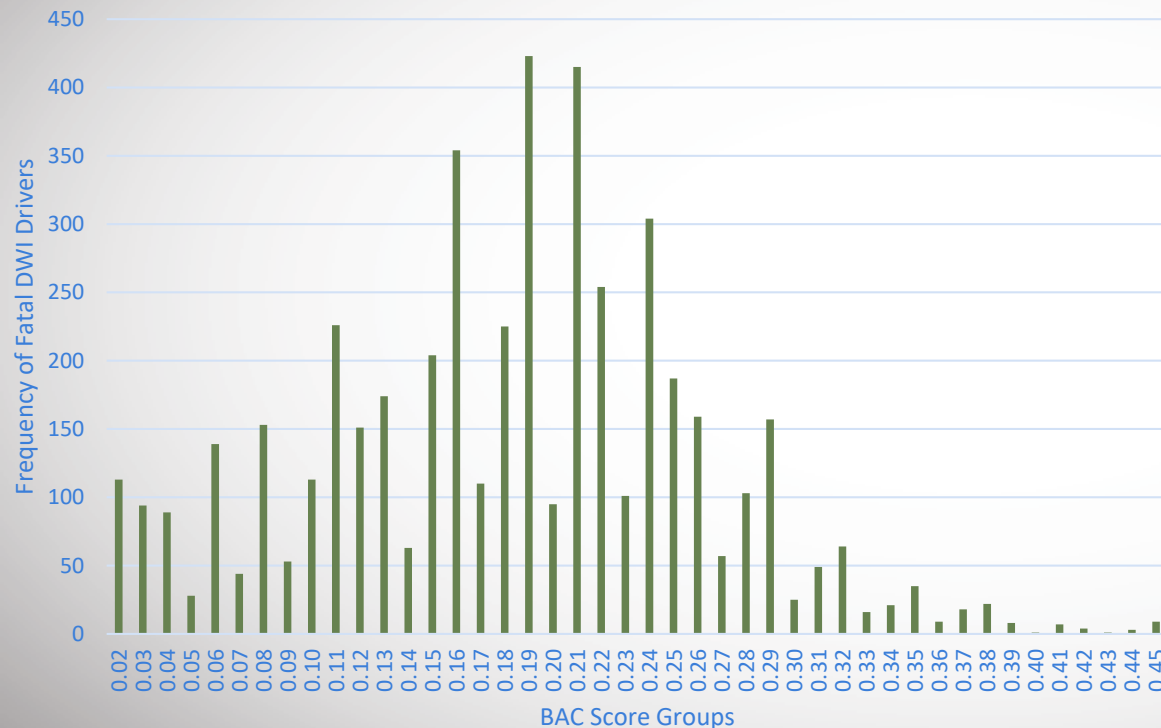
DWI Crashes with DWI Driver Fatality Crash Rate per 100,000 Driving-Aged Population. 2017



Occurrence of Contributing Factors with DWI Fatal Drivers



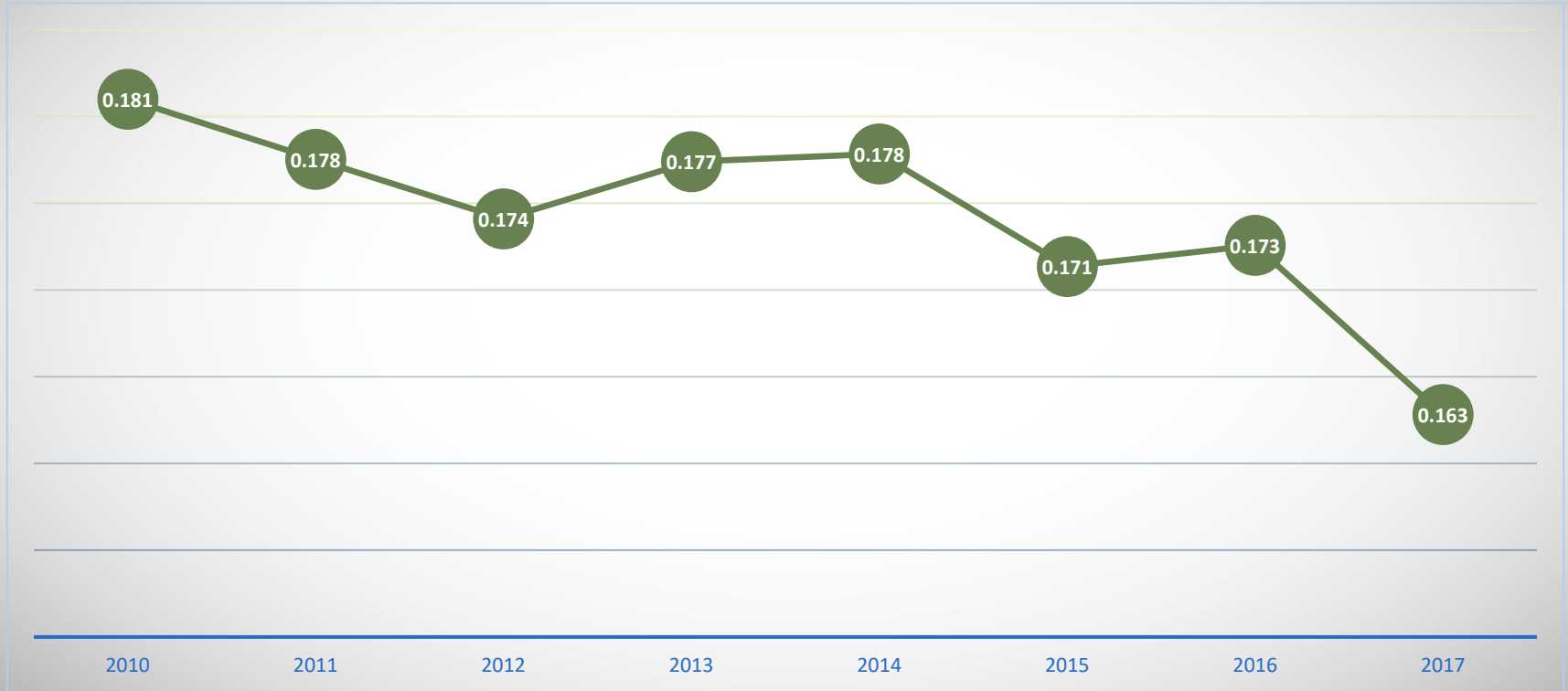
BAC Levels of Fatal Drivers, 2010-2017



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The average reported BAC for fatally injured drivers was 0.174 g/dL from 2010-2017.

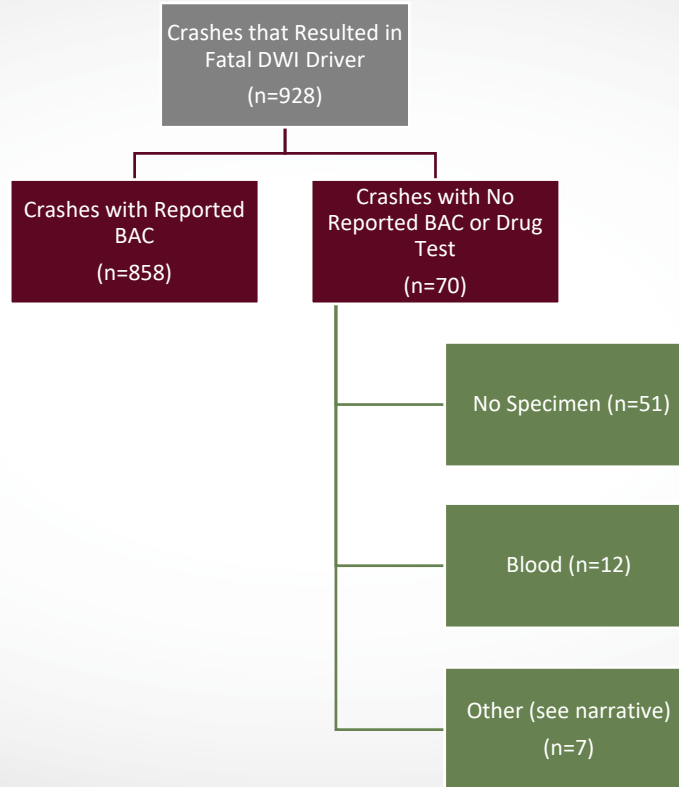
Average BAC of Fatal Drivers, 2010-2017



Substance Test Results of Fatal DWI Drivers, 2017

- 64.29% Tested for Both Alcohol and Drugs
- 22.60% Tested for Only Alcohol
- 5.65% Tested for Only Drugs
- **7.46% Did Not Have a Drug Test or an Alcohol Test**

BAC Reporting Statistics, 2017



Fatal DWI Drivers with No Substance Test in Texas, 2017



Percent Unreported BACs for Fatal DWI Drivers, 2017



Counties with Greater than 50% Unreported BAC Percentages, 2017

County	DWI Crashes	DWI Crashes with no BAC	Non-Reported Percentage
Austin	1	1	100.00%
Duval	1	1	100.00%
Live Oak	2	2	100.00%
Robertson	1	1	100.00%
Camp	1	1	100.00%
Parker	2	2	100.00%
Roberts	1	1	100.00%
Rusk	3	2	66.67%
Guadalupe	2	1	50.00%
Bandera	2	1	50.00%
San Jacinto	2	1	50.00%
Madison	2	1	50.00%
Freestone	2	1	50.00%
Hale	2	1	50.00%
Haskell	2	1	50.00%
Marion	2	1	50.00%
Palo Pinto	2	1	50.00%
Wilbarger	2	1	50.00%

TTI Next Steps for BAC Reporting Analysis

- 1 Update TxDOT with BAC Values Identified in Crash Narratives
- 2 Send Letters To JPs and MEs For Specimens With No Data
- 3 Submit Final BAC Reporting Tech Memo

What can you do?

- Timely And Accurate BAC Reporting to TxDOT
 - TxDOT CR-1001
 - **Full Autopsy/Toxicology Results**
 - In-house Generated Form, Approved By TxDOT
- Establish a BAC Reporting Procedure for Your Office
- Attend Presentations, Conferences, and Educational Opportunities on BAC Reporting

What can you do?

- Timely And Accurate BAC Reporting to TxDOT
 - TxDOT CR-1001



Robert Gilbert

Duty of the Medical Examiner and
Justice of the Peace to Report Blood
Alcohol Concentration Results

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- tations, Conferences, and Educational
Opportunities on BAC Reporting

References

1. NHTSA. 2012. State Blood Alcohol Concentration Testing and Reporting for Drivers Involved in Fatal Crashes. Report Number DOT HS 811 662. Available at:
<https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/811662.pdf>
2. TTI. 2018. Extract from the Texas Department of Transportation Crash Records Information System.



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