



Heads up, Texas

TALK / TEXT CRASH

Don't  
mess with  
Texas

IF YOU  
LOVE IT,

CLICK IT

BE SAFE. DRIVE SMART. TDOT

# A Sober Discussion of DUI Crash Data

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## #EndTheStreakTX

End the streak of daily deaths  
on Texas Roadways.



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- This is a discussion
  - NOT death by PowerPoint
  - Not me talking for 75 minutes
  - Active – If you have questions or comments, please don't worry about holding them until the end!
- This is the right group to have this discussion
  - Texas professionals who work day in and day out in the traffic safety space
  - Multiple perspectives from law enforcement, EMS, testing, engineering, analysis, etc.
  - You're here, which means you have at least an inclination to help

**YOU are the experts in your field, please help us get this right**



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# Definitions: Why talk about definitions?



- Words have meanings: Pick the right ones
  - I'm not being pedantic... we really need to know what we're talking about
- TxDOT and other agencies across the state utilize the 3(4) E's and Safe Systems approach to get after the problem of DUI crashes
  - Engineering, Education, and Enforcement are the primary ways by which we attempt to shape the traffic environment
    - EMS is considered by some to be a '4<sup>th</sup> E', but could also be considered a means under Engineering, in that it is the *system of critical care* put in place and utilized, and varies across the state similar to other *attributes* of the roadway
  - Safe Systems looks at Safer People, Roads, Vehicles, Speeds, and Post-Crash Care
    - The first element is where we apply both Education and Enforcement, and the other 4 are enhanced through Engineering



- **Traffic Unit:** A traffic unit is a land vehicle or a pedestrian.
  - **Motorist:** A motorist is any occupant of a motor vehicle.
  - **Non-motorist:** A non-motorist is any person other than a motorist.
- **Occupant:** An occupant is any person who is part of a transport vehicle.
  - **Driver:** A driver is an occupant who is in actual physical control of a transport vehicle or, for an out-of-control vehicle, an occupant who was in control until control was lost.
  - **Passenger:** A passenger is any occupant of a road vehicle other than its driver.
  - **Pedalcyclist:** A pedalcyclist is any occupant of a pedalcycle in-transport.
  - **Pedestrian:** A pedestrian is any person who is not an occupant.
    - Note: Includes persons on foot, walking, running, jogging, in buildings, on personal conveyances or those who were ejected from a transport vehicle during one unstabilized situation subsequently struck in a secondary unstabilized situation



## Texas Penal Code

- **Sec. 49.01. (2) "Intoxicated"** means:

- (A) not having the *normal use of mental or physical faculties* by reason of the introduction of alcohol, a controlled substance, a drug, a dangerous drug, a combination of two or more of those substances, or any other substance into the body; or

- (B) having an alcohol concentration of 0.08 or more.

- **Sec. 49.02. PUBLIC INTOXICATION.**

- (a) A person commits an offense if the person appears in a public place while intoxicated to the degree that the *person may endanger the person or another*.

- **Sec. 49.04. DRIVING WHILE INTOXICATED.**

- (a) A person commits an offense if the person is intoxicated while *operating* a motor vehicle in a public place.



Texas reporting architecture is *unit* based:

- **Unit descriptions**

- Motor Vehicle, Train, Pedalcyclist, Pedestrian, Motorized Conveyance, Towed/Pushed/Trailer, Non-Contact, Other

- **Persons**

- **Primary Persons**

- Driver, Pedalcyclist, Pedestrian, Driver of Motorcycle type vehicle, Autonomous, Other, Unknown
- *This is where the bulk of the intoxication data lives*

- **Other Persons**

- Passenger/Occupant, Passenger/Occupant on Motorcycle type vehicle, Other, Unknown, (Witness?)



Texas reporting architecture is *unit* based:

- **Crash attributes**

- Apply to all units, persons, vehicles, etc. across the crash
- Examples: Location data, roadway surface, weather conditions

- **Unit attributes**

- Apply to specific units
- Examples: Body style, Damage rating, CMV attributes, Contributing factors (note, these are assigned to units and by association with drivers/operators/persons attached to that unit)

- **Person Attributes**

- Apply individually to persons associated with units in the crash
- Examples: Gender, Age, DoB, Ethnicity, Seat position, etc.





Disparate data sets:

- **Fatal Accident Reporting System (FARS)**

- A nationwide census providing NHTSA, Congress and the American public yearly data regarding fatal injuries suffered in motor vehicle traffic crashes
- NHTSA uses multiple imputation method to estimate BAC for all individuals w/o one specifically listed

- **Crash Records Information System (CRIS)**

- Live repository of crash records sent electronically by Law Enforcement Officers (LEOs) across Texas
- LIVE. Again, the data is never 'final'. TxDOT accepts reports as long as they occurred within the retention period (current year plus 10 years). Reports are able to be supplemented as long as they are in the system, and data in the background can be corrected (e.g. toxicology report can be used to update test result fields)

- **Local Deep-dive studies**

- Efforts like those at Vision Zero Austin look at compiling higher-resolution, more complete data sets for local areas
  - Capturing ALL data from Medical Examiner data is extremely helpful in discovering where crash data is missing the mark

Differences in methodology (counting passengers in the 'alcohol involvement' category, etc) run counter to safety messaging and standards for traffic safety – **this is why we looked at definitions earlier**

# What are we missing with our current filters?



## DUI-All

- Crashes where a driver had...
  - A BAC over zero
  - A positive drug test result
  - “Had been drinking”, “Under Influence – Alcohol”, or “Under Influence – Drugs” as a contributing factor

## Alcohol / Drug Involved

- Any primary person had a BAC over zero, “Had Been Drinking”, or “Intoxicated – Alcohol” contributing factors
- Or
- Any primary person had a positive drug test, or “Taking Medication” or “Intoxicated – Drugs” contributing factors

## Intoxicated Pedestrians?

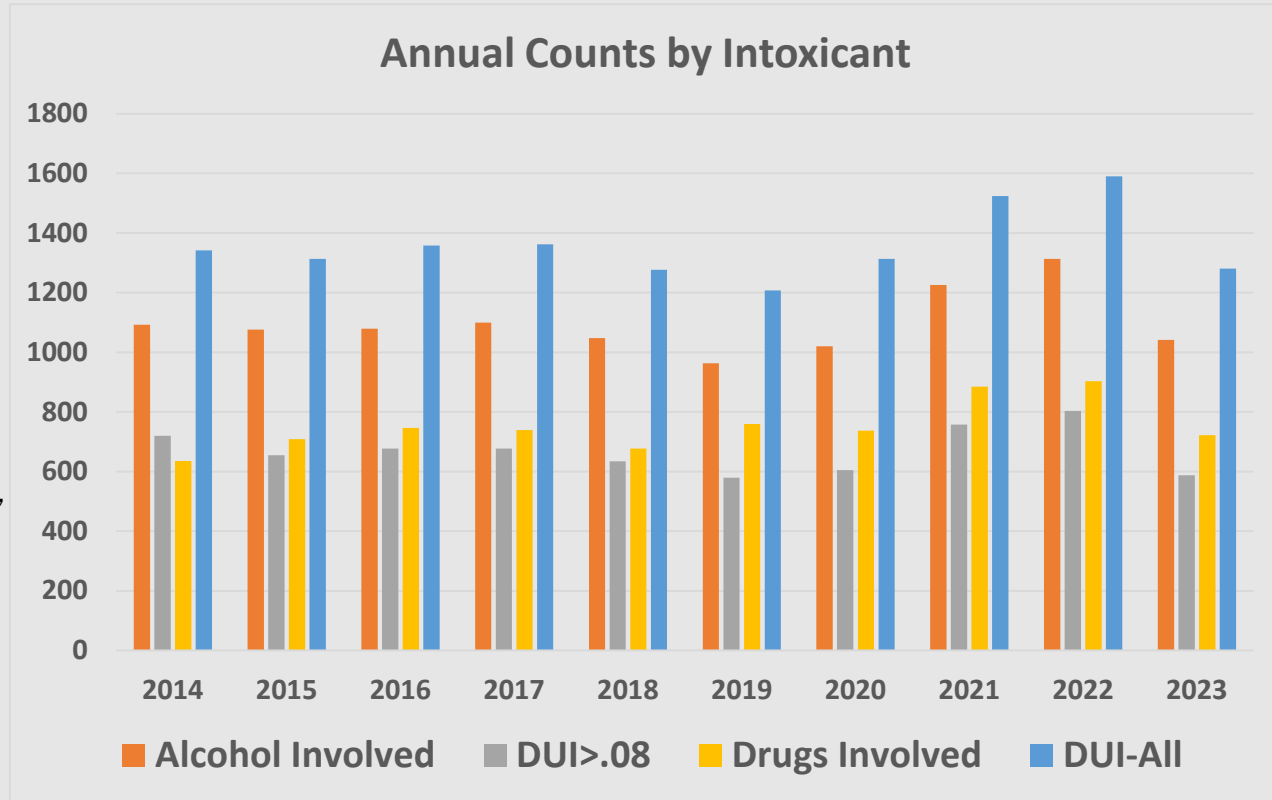
- No current standard filter
- Overlap with Alcohol involved, but drug involvement not currently captured

## We’re capturing the data, but...

- Emphasis on drivers causes a pedestrian ‘blind spot’
- Toxicology report lag is a *significant* problem for all categories.

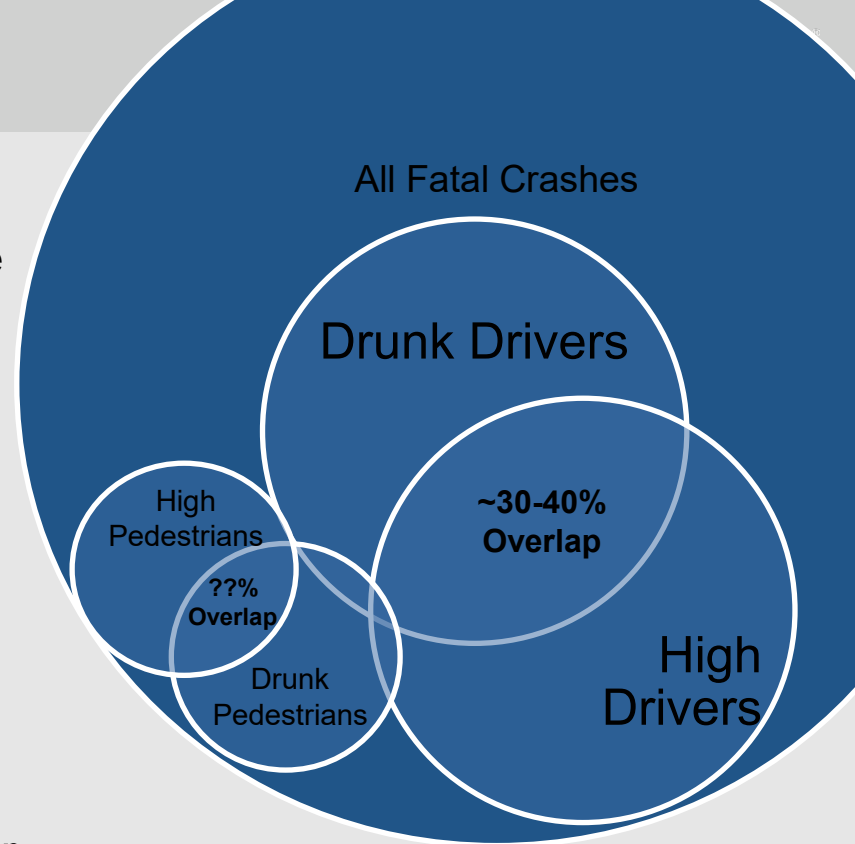


- Types of intoxicant data tracks with annual overall numbers, save for the most recent ~18 months due to reporting lag
  - General decline leading up to the 2019/2020 COVID timeframe
  - 'A year alone' with regard to 2020 data when the increases in unsafe behaviors kicked off
  - While all-cause fatal crashes have waned since their peak in 2021, DUI numbers have continued to stay high, akin to other behavior-related emphasis areas like unrestrained fatalities
  - Note: There is a significant difference between DUI>.08, Alcohol Involved, and the FARS estimates



# What does the overlap actually look like?

- Based on discussions with TX state toxicology lab personnel at last year's TXIDF, they're seeing ~40% of the DUI drivers also having illicit drugs onboard
  - CRIS data shows at least 30% of Alcohol-involved crashes also involve drugs
- Pedestrian data is not currently tracked the same way
  - No historical filter set because they're not **DUI**
  - Some of the data is captured in CRIS, but not as reliably as DUI data
  - CRIS data shows 21+% of pedestrian-involved fatal crashes were drug or alcohol related, but NOT DUI-related, which indicates the pedestrian *may have been* intoxicated



Full disclosure: Referencing 'choosing the right words' statement from earlier – "Drunk" and "High" were the simplest terms I could come up with for the 'flavors' of intoxication



- Notes:
  - Fields TxDOT is looking at adding to the crash report
    - ‘Law Enforcement Suspects Alcohol Involvement’ – Yes/No/Unknown – Primary Persons only
    - ‘Law Enforcement Suspects Drug Involvement’ – Yes/No/Unknown – Primary Persons only
  - Are there filters or analysis you’d like to see?
    - Intoxicated Pedestrians is already a near-term target
    - Annual year-to-date comparing crashes we know to be intoxicant-involved to crashes we *knew* were intoxicant-involved at the same time last year
    - Overall lag calculations between initial report date and the date the report becomes ‘intoxicant involved’



# HELP #EndTheStreakTX

End the streak of daily deaths on Texas roadways.

[TxDOT.gov](https://www.txdot.gov) (Keyword: #EndTheStreakTX)



#EndTheStreakTX Toolkit

