# Data Conversion

After over 16 years of use, the current crash report form no longer meets the needs of the transportation community.

The new electronic crash report in 2021/2022, named "Louisiana eCrash", was based on the latest Model Minimum Uniform Crash Criteria (MMUCC) guidelines and will generate the data necessary to improve highway safety in Louisiana. New report is nearly 100% aligned with MMUCC 5.

The data from 2005 – 2021 was updated to adhere to the new crash report format and standards.

# Updated Calculations

While updating the state's crash report form, stakeholders used this time to review and update existing calculations as needed.

The updated definitions help stakeholders capture more accurate data and perform more meaningful data analysis.

# Updated Crash Definition

## Driver

A driver of a motorized vehicle, including a motorcycle.

**Note:**
- Previous model included drivers of a pedalcycle/bicycle.

# Driver

There is a minor decrease in the number of drivers. The new data structure considers a driver of a bicycle to be a non-motorist and not a driver. This means the overall number of drivers decreased.

# Updated Crash Definition

## Distracted Driver

A driver or motorcyclist having either a driver condition of "distracted/inattentive" or a driver distraction of "cell phone," "other electronic device," "other inside the vehicle," or "other outside the vehicle" as determined by the police officer.

## Distracted Driver

There is a minor decrease (about 0.3%) in the number of crashes involving a distracted driver. The new data structure considers a driver of a bicycle to be a non-motorist and not a driver. This means previous crashes involving a bicyclist identified as distracted are no longer counted.

## Inattentive Driver

A driver or motorcyclist having either a driver action of (108) Operated motor vehicle in inattentive, careless, negligent, or erratic manner.

**Note:**
- Officer can select up to 4 driver actions.

## Inattentive Driver

There is a major increase (about 22%) in the number of crashes involving an inattentive driver. The new data structure considers a driver of a bicycle to be a non-motorist and not a driver.  This means previous crashes involving a bicyclist identified as inattentive are no longer counted.  However, the increase is due to inattentive being grouped with careless operation in the new data structure.  In the previous report the officer could identify a driver condition as inattentive.  In the new report, the condition is now "Operated motor vehicle in inattentive, careless, negligent, or erratic manner".  This broader category is causing the number of inattentive crashes to increase.

# Updated Crash Definition

## Aggressive Driver

A driver or motorcyclist with a Driver Action of (109) Operated Motor Vehicle in Reckless or Aggressive Manner.

**Note:**

- New crash report has new attribute of Operated Motor Vehicle in Reckless or Aggressive Manner.
- Officer can select 1 -4 different Driver Action codes.
- Previous report did not attribute of Reckless or Aggressive Manner.

## Aggressive Driver

There is a minor decrease (about 0.2%) in the number of crashes involving an aggressive driver. The new data structure considers a driver of a bicycle to be a non-motorist and not a driver. This means previous crashes involving a bicyclist identified as aggressive are no longer counted.

NOTE: This number may change in the future since the way drivers are identified as aggressive on the new crash report is different.  In the previous report it is based on violation of either (A) Exceeding Stated Speed Limit, (B) Exceeding Safe Speed Limit, (C) Failure to Yield, (D) Following too Closely, (E) Driving Left of Center, (F) Cutting in, Improper Passing, (L) Disregarded Traffic Control, or (S) Careless operation.

However, in the new report there is a driver action of (109) Operated Motor Vehicle in Reckless or Aggressive Manner.  This means it is up to the officer to use this field to identify aggressive drivers.

## Predicted Alcohol

A crash involving at least one driver or motorcyclist is predicted to have a blood alcohol content (BAC) greater than or equal to 0.02%. A Louisiana-specific regression equation is used to predict alcohol BAC when BAC is pending or unknown.

**Note:**
- Previous model included pedestrians and bicyclist.
- New model fitted to more recent data.

## Predicted Alcohol

There is a significant increase (about 80%) in the number of drivers predicted to be under the influence of alcohol.  When evaluating injury, the model has a decrease for fatal injury, suspected serious injury, and suspected minor injury crashes.

The major cause of the increase is from possible minor injury and no injury driver levels. There is a significant increase (about 180%) in the number of drivers under the influence of alcohol involved in property damage only crashes.

There is a decrease (about 23%) in the number of drivers under the influence of alcohol involved in fatal crashes.

The above decrease can be explained by the new model only predicting alcohol cashes when a driver, not pedestrians nor bicyclists (non-motorists), is predicted to be under the influence of alcohol.

# Updated Crash Definition

## Roadway Departure

The new roadway departure crash definition more accurately uses the crash data to identify where a vehicle leaves the pavement/roadway.

Crash occurring not at Intersection AND Single Vehicle AND First harm Location is not "On Road" AND

Train is False

OR

Crash occurring where Most Harmful Event or First Harmful Event of either "End Departure" or "Ran off

Roadway Left" or "Ran off Roadway Right"

## Roadway Departure

There is a major decrease (about 24%) in the number of people involved in a roadway departure crash. The roadway departure definition was updated within the LA Strategic Highway Safety Plan.

The new roadway departure crash definition more accurately uses the crash data to identify where a vehicle leaves the pavement/roadway.

# Updated Crash Definition

## Lane Departure

The new lane departure crash definition more accurately uses the crash data to identify where a vehicle leaves their respective lane. This increase is due to the definition changing to include all roadway departure crashes and expanding the criteria used to identify when a vehicle left the road.

Roadway Departure crash

OR

Crash occurring not at Intersection AND Relation to Junction is not "Cross-over Related" or "Driveway Access or Related" AND any vehicle has either Most Harmful Event or First Harmful Event of either "Cross Centerline" or "Cross Median"

OR

Crash occurring not at Intersection AND Relation to Junction is not "Cross-over Related" or "Driveway Access or Related" AND Manner of Collison is either 200 (Front to Front – Head on), 201 (Front to Front – Left Against Flow), 202 (Front to Front – Right Against Flow), 500 (Sideswipe – Left Against Flow), 501 (Sideswipe – Right Against Flow) , 502 (Sideswipe – Against Flow), 505 (Sideswipe – With Flow)

## Lane Departure

There is a major increase (about 58%) in the number of people involved in a lane departure crash. The lane departure definition was updated within the LA Strategic Highway Safety Plan. The new lane departure crash definition more accurately uses the crash data to identify where a vehicle leaves their respective lane.

The new lane departure crash definition more accurately uses the crash data to identify where a vehicle leaves their respective lane. This increase is due to the definition changing to include all roadway departure crashes and expanding the criteria used to identify when a vehicle left the road.

## Predicted Alcohol 08

A crash involving at least one driver or motorcyclist is predicted to have a blood alcohol content (BAC) greater than or equal to 0.08%. A Louisiana-specific regression equation is used to predict alcohol BAC when BAC is pending or unknown.

**Note:**

- This is a new calculation, so there was no analysis performed to compare against previous years.

## Drug – Involved

A crash involving a driver or motorcyclist identified by the police officer as either having a condition of drug use (whether impaired or not impaired), being suspected of having used drugs or both alcohol and drugs, or having drugs that were reported.

**Note:**

- This is a new calculation, so there was no analysis performed to compare against previous years.

# Center for Analytics and Research in Transportation Safety

This presentation identifies differences in converting the existing crash report data into the new MMUCC crash report data schema.

A 5-year comparison (2016 – 2020) was performed on each data element and differences are documented and explained in this presentation.