Maine Bureau of Highway Safety and MaineDOT are pleased to announce a new web tool that will provide general access to up-to-date information on Maine Crash Data. The new Maine Public Crash Query Tool is pretty self-explanatory as you go from screen to screen. You can develop data in three areas: 'Statistics'; 'Mapping'; and 'High Crash Locations'. More information and sample screen shots are attached for further guidance. Many of these items are also highlighted in the 'Helpful Tips' icon at the bottom of each of the three main topic screens – so check them ALL out. To access, go to: <u>https://mdotapps.maine.gov/MaineCrashPublic/</u>

User Notes: http://www.maine.gov/mdot/safety/docs/2017/PublicCrashSystemAnnoucementANDuserNOTes.pdf

- In 'Statistics', you can obtain statewide or specific town/county/police department results (Step 1) for single, multi-year or general trend results (Steps 2/3). You can focus on certain injury levels of interest (Step 4). Step 5 allows you to select specific crash qualities (you can pick more than 1) by clicking 'change' to the right of the option.
- For 'Mapping', there is a similar set of crash options to choose from. In the **upper left** part of the map portion of the screen is a Map/Satellite option; the **lower right** 'person' icon can be dragged for a Google Earth street view of the location.
 - Individual crashes are shown with red balloon markers that can be clicked on for general crash info. Other locations will show crash clusters with a number. Zoom in, and these clusters often disperse into individual crash locations. Some individual locations have multiple crashes and will retain a total number, even after maximum zooming. If there are a limited number of crashes in that location cluster (like 10 or less), clicking the number icon will list summary info of each crash. For very large crash clusters, there is a Cluster marker tool that will blow-up to show individual icons for each crash. See attached exhibit for how to drill down to the detail.
- In **'High Crash Locations'**, crash data for Intersection and Section is provided separately. It is best to use at least 3 years of crash data for location comparison purposes. Each of the columns of query results information is sortable, by clicking on the column header.
- In addition to the **Basic User** capabilities outlined above, there also is an **ADVANCED USER** option that gives you the opportunity to query on a selected intersection (select town location) or section of road (select statewide).

A tool that could help you navigate through MaineDOT road referencing is MaineDOT's Mapviewer. The web site for that tool can be accessed via <u>www.Maine.gov/mdot/mapviewer/</u>. It is helpful when looking up Route mile point references, etc.

You will need to sign up and be approved for the ADVANCED USER capability. This is done by logging in to the Advanced User through the link on the top right black bar. More on that in the attached screen shots.

We hope you find this new tool helpful in your crash analysis.

Robert Skehan Maine Department of Transportation Lauren Stewart Maine Bureau of Highway Safety

USER Data Notes and Screen Exhibits:

IMPORTANT - Data Counts: Number of Crashes vs. Number of Drivers vs. Number of Vehicle

Crash counts only include those crashes coded to Maine Public Roads. Those that occur in parking lots, driveways, private roads are not included. Keep in mind that some data reflects **CRASHES**, and that is defined as a single incident that may involve more than one road user and have multiple injury outcomes. The number of **INJURY CRASHES** therefore will usually be less than the total number of related injuries OR involved VEHICLES OR involved DRIVERS.

As an example: in STATISTICS, when you click on '**Fatal Crashes'**, the system will provide the number of Fatal crash events in the top OVERALL TOTAL display. In any single fatal crash, there is a possibility of multiple fatalities and a probability of multiple vehicles and drivers. If you scroll further through to the **INJURY DEGREE** display, it shows the total injury outcomes in those fatal crashes (others in the fatal crash may incur lesser degree injuries which also will be displayed –these are additional injuries occurring in a fatal crash). There you'll see the full (usually higher) number of fatalities. In other data displays, you will also see a higher number of DRIVER and VEHICLE totals that reflect total involved driver and vehicle data units. For example in a group of 100 fatal crashes, there could be 150 total involved Drivers and Vehicles. **Blue** explanatory notes in the bottom left of each display will indicate what is being counted.

Driver Action at time of Crash

Data returned will only reflect data for 'Driver Action 1', where the bulk of the data results reside. A police officer can also report on a secondary 'Driver Action at time of Crash' (Driver Action 2) that potentially could increase these counts slightly, but won't be included in the crash numbers shown.

Screen Exhibits

Crash map for Augusta is shown below with total crashes by area. By zooming in, these clusters will normally break up and be mapped at specific locations. At locations where many crashes are occurring at the same location, you may still have a crash marker with just a number displayed. More crash detail can be obtained by following the steps on the next page.



Crash Clusters:



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Tweaking graphics displays:



In this example, if you only wanted to focus on adverse Driver Conditions - and majority of data is 'Apparently Normal'...

Click on '<u>Apparently Normal</u>' in the graphic's legend above, and that BLUE slice will be eliminated. (You can de-select multiple categories.) The number of *adverse 'Driver Conditions'* then becomes clearer as shown in display below.



Looking at year by year trends:



In the above example, we wanted to look at specific crash type trends in Auburn, for 2011 through 2015. To do that:

- 1. Select City/Town, and enter desired City.
- 2. Toggle the 'Trend' button
- 3. Enter the years of interest
- 4. Click change, and select your specific area of interest. In this example, we chose 'Type of Crash'
- 5. Submit query
- 6. Graphic of results will display, and you can de-select areas you do not want featured by clicking on the legend's data element you want deleted, and that item will gray out in the legend and data bar will be removed. In this example, we chose to highlight just *Rear End; Head-On; Intersection Movement; Pedestrians; Went Off Road; Bicycle; and Deer*. (Depending on the complexity of the data, year-to-year trends will show either in Bar or Line style displays.)

Advanced User Login:



Advanced User Tips:

Note that in ADVANCED USER the 'set intersection' and 'set section' datasets are completely separate and distinct. 'Set section' will provide ONLY link type crash results on the corridor, but data is provided for the entire selected corridor (BUT - No intersection crashes will be included) – to get intersections crashes for the same section, you have to develop the intersection experience one intersection at a time.

In STATISTICS:

To query on a selected intersection (select town location) and pick from the drop-down list.

To query on a **section of road** (select statewide – then enter Route's Beginning Mile Point and Ending Mile Point). Use the following naming templates for route identification (ST RTE XXX; INT XX NB; US XX, or RD INV XX XXXXX for most other non-routed roadways.) Again, intersection crashes will NOT be included in this dataset.

Other user notes (12/15/16)

Road identification in Advanced 'Section' Queries – when map viewer returns a non-number routed Road ID such as 0560660, in the 'Enter A Route' box type RD INV 05 60660. As you type, a progressive drop down box will appear and you'll be able to make your selection.

Other user notes (10/22/19)

FARS Data - The **Maine Bureau of Highway Safety (BHS)** is responsible for maintaining Maine's official highway fatality data in their **Fatality Analysis Reporting System (FARS).** The fatal data displayed in this tool may not accurately reflect the official FARS data. Please contact BHS for official counts.

Pedestrian/Bicycle Data - Data for **'Type of Crash'** involving **'Pedestrians'** and **'Bicycles'** may differ slightly from actual results due to query limitations and the need for individual crash report analysis.