1 Data Module Overview

The IDOT Safety Portal is divided into several modules that cover specific functionality. This document will cover the data module which includes a) the Crash Manager searching, mapping & retrieving utility and b) the Law Enforcement Reporting Dashboard.

The law enforcement reporting dashboard is only available to law enforcement entities that are registered in the IDOT Safety Portal. It will be covered at the end of this document.

2 Crash Manager

The Crash Manager provides a comprehensive searching function for all Illinois motor vehicle Traffic Crash Reports (hereafter "crash reports") submitted to IDOT. Every crash report that has been submitted to IDOT in the last 10 years (IDOT’s record retention policy for non-fatal crashes) can be retrieved using this utility. This includes crash reports submitted on paper, through IDOT’s current Mobile Capture Reporting (MCR) system, and also through a third-party XML vendors. The Crash Manager utility also allows for searching crash reports that were just received no matter how they were received. Items recently scanned from paper reports can be retrieved, but the amount of information available to search for them is considerably less that the reports that are received electronically through MCR or third-party XML vendors. More information on how to search for recent paper reports will follow.

The Crash Manager utility is comprised of several areas as highlighted below. Each area will be discussed as a grouping of information.
2.1 Group A – Basic Search Fields

The basic search fields are the most common fields that are searched. A brief description and additional things to consider when using these fields follows:

**ICN – IDOT CONTROL NUMBER** – This is the unique value that IDOT assigns a crash after it has been processed through the various data processing steps. This number becomes the “official” number for the crash and appears on the Geographic Information System (GIS) mapped data.

**BARCODE** – This is the barcode printed on the paper form. This is the best way to search for a recently submitted paper report that has yet to go through the data processing steps. For MCR and XML reports, this number is assigned to the report when it is submitted to IDOT. After 2010, MCR crash reports were prefixed with the letter “M” after 2010. XML third-party reports are prefixed with an “X”.

**AGENCY REPORT NUMBER** – This is the number the law enforcement agency assigned to the crash report. This is typically a dispatch incident number and will probably be unique to the agency. This number may be typed in differently by the officer or by IDOT in the case of paper reports. IDOT enters this number after the “Data Entry” or DE work step. Until that work step has been completed on recently submitted paper reports, this field will be blank.

**DATE OPTION** – There are four choices of date to search on. This is necessary since the most relevant date – the crash date is not immediately known. The CREATED DATE is the date that the crash was received at IDOT. This is helpful because crashes do not come in in crash date order. By basing searches on the created date, you can be assured that you have seen/searched everything thru a particular date. POLICE NOTIFIED date is the date value that is used to queue the paper reports in order for data entry and is a proxy/double check on the crash date. The CRASH DATE is the final date that is used on the report once it has been data entered. The BEST AVAILABLE is the default selected value and uses the CRASH DATE (if it is available), then the POLICE NOTIFIED (if available) and finally the CREATE DATE which is always available.

**DATE RANGE** – Since IDOT stores 10 years’ worth of non-fatal, crash data, the crash date range is very useful to limit the amount of data that is returned when conducting a search. The crash date is not immediately available on all reports.
depending on how they were received. The crash date is available on MCR and XML reports once they have been submitted. For recently submitted paper reports, this information is not collected until the “Data Entry” or DE work step has been completed by IDOT. By giving you the option of which date option to select, you can fine tune your searching.

**IDOT REPORTABLE CRASHES ONLY** – this checkbox limits the results to crashes that are deemed “reportable” or above the damage or injury threshold. These crashes will be individually located against the IDOT GIS roadway information. Once located, these crashes can be seen on the map. By selecting this option, the search results will be limited to only the items that are above the damage or injury threshold, and have been located by IDOT.

**AGENCY** – is a combo box with all the agencies listed. This field works nicely in conjunction with the agency report number. MCR and XML reports will have the agency listed upon submission. With paper reports, the agency is entered early on in the data entry process and can be relied on for searching recently submitted reports. The value in this field also governs who can see the actual crash report. If there is an error in this field (due to poor handwriting etc.), please notify us via the report-a-problem feature or an email to the Safety Portal Help Desk.

**COUNTY** – a listing of all the counties in the state. Please note that the county initially appears as listed by the officer on the report. Once the crash has been located by IDOT the county may be different based on IDOT location procedures. If a crash occurs on a county line road for example, the crash may be listed in the neighboring county.

**CITY** – a listing of all cities in the state. Please note that the city initially appears as listed by the officer on the report. Once the crash has been located by IDOT the city may be different based on IDOT location procedures. If a crash occurs on a city boundary for example, the crash may be listed in the neighboring city or township.

**TOWNSHIP/TWP** – a listing of all townships in the state. Note that there are a number of duplicate township names. In these cases, the county the township is in is also listed. Crashes can be in either a city or a township but not both. Please also note that the township appears as listed by the officer on the report. Once the crash has been located by IDOT the township may be different based on IDOT location procedures.

**IDOT DISTRICT** – Searching can be done by IDOT district. The IDOT districts are mapped to counties. Once the county has been identified, then the crash will show up in this search.
2.2 Group B – Advanced Search

The advanced search options can be expanded by clicking on the triangle. There are four tabs with additional fields that can be searched on. Note that the basic search fields combine with the advanced search fields to zero in on the records that you are interested in. Only one advanced search tab can be selected and searched at a time.

CRASH TAB – This includes two fields:
   - Type of First Crash – (e.g., Pedestrian, Pedalcyclist, Head-on) the definition of the type of first crash is covered in the Illinois Traffic Crash Report, SR 1050 training guide. IDOT may change this value if the officer entered the value incorrectly.
   - Contributory Cause – This includes the primary and secondary causes of the crash. These values have changed over the years (e.g., cell phone, distracted driving)

VEHICLE TAB – This includes three fields
   - Make – a list of vehicle manufacturers of all different types of vehicles. As with any combo box, you can type the first few letters of the make to get to it in the list.
   - Model – a list of models based on the value selected in the make field. Note that the model is listed as the officer indicated on the form.
   - License Plate – a partial license plate can also be entered. This field contains whatever the officer entered.

PERSON TAB – This tab has six fields and can search on a driver/person involved in a crash or on a vehicle or property owner as entered by the officer. Partial names can be entered.

PROPERTY DAMAGE OWNER TAB – This tab allows searching for the owner of any non-vehicle property that was damaged in a crash. The owner may be a business or an individual. Partial names can be entered.
PREDEFINED SEARCH TAB – this tab allows for the searching of complex and compound values. All of these searches only work on items that have been submitted electronically or have been through the DE work step at IDOT. Select the search from the drop down combo box.

- ALCOHOL RELATED – this searches a variety of fields on the crash form including Contributory Causes, BAC, and DRAC. This can be used in conjunction with the mapping functionality to see where the alcohol related crashes are occurring once they have been located by IDOT.
- DAMAGE TO STATE PROPERTY – this searches the property damage field as well as vehicle owner fields for anything that contains “Illinois” or IDOT. This is intended to assist the IDOT claims process to recover the cost of repairs to state property caused by crashes.
- FATAL REPORTS – searches for any SR1050 report where it has been designated as a fatal crash. The fatal reconstruction reports are NOT part of the SR1050 and are not available at this point. (Note: A crash may be changed to a non-fatal after it has been received based on a coroner’s report of natural causes, for example.)
- HIT & RUN – If an agency submits an amended report with the hit & run driver information, the single crash record is updated and can be searched by the driver name or other information.
- SPEED RELATED – like the alcohol report, various contributory causes and other fields are searched to return crashes where speed was considered to be a factor by the officer handling the crash. These can be mapped once they have been located by IDOT.
2.3 Group C – Results Pane

After entering all the desired parameters and clicking SEARCH, the results (if any) are displayed.

There are a number of items displayed. Key points to remember include:

- **ICN** – The IDOT Control Number if the crash report has been assigned one. This is an indication of how far along the crash report is in the processing cycle.
- **Barcode** – The printed or assigned unique number for a crash. This value will almost always be available.
- **Agency** – the law enforcement agency that generated the crash report.
- **Agency Report Number** – entered as the officer entered it.
- **Crash Date & Time** if it is available
- **Police Notified Date** - the date the police were notified.
- **Created Date Time** – the date & time IDOT received the crash report.
- **County & City** – A new initiative by IDOT involving paper report processing will allow for the county to be entered on paper reports soon after they are received, but well before they have been through the “Data Entry” (DE) work step.

The status bar shows several items of interest:

- **1 – 25 of 7,188 items** – shows how many items were returned based on the search parameters.
- **Each grid displays a maximum of 25 items** at a time so you have to page through to see all the items.
- **The page options allow you to page through 10 or the next page or the last page of the results.** Typically you will be dealing with smaller search results and just have to look through a page or two.
- **If you click on the column header, you can sort the results in ascending or descending order. This action will affect the whole result set and the pages.**
- **View** – by clicking on this link you can launch a separate window to view the actual crash report, as explained in more detail below.
PLOT LOCATED REPORTS – this new button launches a modal window that lets you see the search results plotted in interactive map. For more information on this functionality, please see section 2.3.2 of this document.

DOWNLOAD CRASH REPORTS – this button generates a PDF file of all the crash reports displayed in the grid at that particular time. This is a fast way to look at the 25 crashes listed. Since the file is a PDF, any and all PDF viewing functions are available. Please note that the rules for viewing the crash reports are enforced and you cannot view items you are not authorized to view. You can also view individual crash reports as described below.

2.3.1 Viewing a Crash Report

When you click on the VIEW option, a dialog box will pop up with the actual crash report as shown below:

Some key features of this screen are:

- CRASH REPORT PAGE VIEW. If you move the mouse over this page it instantly magnifies the screen for easy viewing. Moving the mouse enlarges an area of the crash report page. If you click on the image, the image magnification is frozen. If you click again on the image, it returns to its normal behavior.
- THUMBNAILS – you can click on a thumbnail to view a different page of the crash report. (NOTE: Depending on the access you have been granted in the Safety Portal, you may not be able to see all the pages in the crash report. If you can see more than the two thumbnails, you can scroll to see additional pages.)
- ACTIONS – you can download a PDF of the pages you can see on the screen.
- REPORT-A-PROBLEM – if there is something that is not correct with the report, you can easily report a problem back to IDOT by completing the simple pop up form

![Report a Problem](image)

- CLOSE – closes the window and returns you to the results screen to view other crashes.

Depending on your access level, some rules govern what can be seen.
- Law Enforcement – Only the agency that submitted the report can view the complete report. Other agencies can search for the crash or see it on the map, but when they attempt to view the crash report, they will get a NOT AUTHORIZED notice.
- County Engineers – If the crash occurs in their county, then the county engineer can see the first 2 pages of the report. In most cases, the first 2 pages will contain the crash narrative and diagram but will not contain any arrest records and other potentially private personal information. No matter what is contained in the reports, the confidentiality agreement that you agreed to when registering to use the Safety Portal is still in effect. Also note that crashes located on county or bordering roads maybe located in a different county than the officer specified.
- State & Federal – Will be able to see all crash reports, but just the first 2 pages.
2.3.2 Plot Located Reports

Once a result set has been returned, the crashes can be plotted on a map if they have location information. The location entry (LE) work step happens at the end of the normal processing cycle and only on crashes that exceed the damage limit and/or injury thresholds. To facilitate the matching of the result set to the availability of the location data, select the checkbox shown below:

When you click on the map, the first 1,000 crashes are displayed on the map. However, you can break your search down into smaller searches (e.g., by date range) to see all crashes.

The different colors dots represent different years and the different shapes indicate crash severity as specified in the legend on the right. You can zoom in to select an individual dot as shown below. When you click on the dot a dialog box appears with summary information about the crash.

As shown, multiple crashes can be located at the same spot and you can click the next arrow to see the next crash (2 of 2).
2.4 Group D – Map

As an alternative to searching by crash data fields, you now can search a map directly to find the crashes of interest. To do this, you go directly to the MAP tab as shown below:

By default the entire state is shown. Since there are so many crashes statewide, you will need to zoom into a smaller area – typically a city level – to see the crash dots appear.

You can turn on different layers which are based on the crash year. Please note however that the current and previous years may not be fully located by IDOT and therefore all the crashes will not show up on this map. Nevertheless, as many crashes as have been located for those years, will show up on the map.
Different layers can be turned on and off and vary by the color as shown below:

The shapes of the dots represent the crash severity as specified in the legend.

With the layers of interest selected, you can use a number of different tools as listed below:

1) Measurement Tools – these tools allow you to measure length, area, latitude & longitude of a point either in decimal or degrees. To select the tool click on it, and then click on the map to the area of interest.

2) Selection & Drawing tools. In addition you can select any number of dots from the visible layers via the selection and drawing tools.

<table>
<thead>
<tr>
<th>Tool</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polygon selection</td>
<td>select the tool and then click around the area of interest. Double click to close the polygon.</td>
</tr>
<tr>
<td>Rectangular selection</td>
<td>click for the first corner of the rectangle and then a second time to complete the rectangle</td>
</tr>
<tr>
<td>Clear selection</td>
<td>click this to clear all selections displayed on the map</td>
</tr>
<tr>
<td>Info tool</td>
<td>select this tool to interrogate a dot to see more information in a pop-up info box as shown below.</td>
</tr>
</tbody>
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Note: If there are multiple crashes stacked on top of each other (1 of 2), you can scroll through the crashes with the next & previous icons.
Multiple selection modes can be used at the same time as shown below:

3) Grid results – after selecting any dots on the map, a result grid pops up with more information about the selected crashes. With the results grid you can scroll vertically and horizontally to see all the information. You can tab to additional pages of information as well. You can also filter the data by clicking the filter icon in the column header as shown below:

You can change the comparison type from IS EQUAL TO to a number of different options. Once you click the filter button, the results are refreshed in the grid (but not on the map) and the item counts should change. You can have multiple columns with filters on them. When a filter is applied, the filter icon background color in the column header is different. You can clear a filter by clicking the clear button in the filter dialog box. Note if filtering based on a date, be sure to include a 4 digit year.

You can also clear all the data by clicking the CLEAR DATA button in the results grid, or the red X in the selection tools pane. Alternately if you add or remove a layer in the layers dialog box, the results grid is cleared.
You can also hide all these dialog windows to maximize the amount of the map on screen. Each dialog window has an icon that can be clicked to hide and then show the corresponding window.
2.5 Group E – IDOT Processing Status

Finally, the top bar on the screen is not really a part of the Crash Manager module but conveys information that is of great benefit to the searching and mapping of crash data. The IDOT processing status displays differently based on organization type. Each person that logs into the Safety Portal will see the processing status for their “jurisdiction”. For example, a law enforcement agency will see everything submitted by their agency. A county engineer will be able to view all crashes for their entire county. State or federal users will be able to view the entire state and will show the largest values, as well as the date of the slowest item being processed. Items, for the most part, are processed based on the crash date but some variation can occur from jurisdiction to jurisdiction. State & Federal users see a statewide status:

Law Enforcement and County Engineers can select the year from a drop down:

If you hover over the icon, a small pop up will display explaining the statistic:

a) Estimated Outstanding – Law enforcement agencies have not submitted the reports yet for the year(s) in question (typically current year plus prior year).

b) Submitted Count – how many reports have actually been submitted for the year(s) in question?

c) Data Entered Thru – the latest date that can be safely used to search for anything on the Crash Manager screen. This includes driver names, alcohol/speed related, and state property damaged. Crash data after that date are still being processed and searches may return something, but they probably will not be complete.

d) At Location Entry (LE) – shows how many items are currently queued at the location entry work step. These crashes are above the damage limit and/or injury threshold and require location information.

e) Located Thru – the latest date that can be safely used to plot crashes on a map. The location processing occurs last on a crash report and therefore will trail the DE work step. Any queries with a date after this date will not show all the crashes.

These statistics are updated once per day after the previous days processing and new crashes have been submitted.

Overall the Crash Manager module is one of the most useful and powerful modules in the Safety Portal. If you have any questions or need help, you can contact IDOT through the HELP menu option or view additional documentation.
3 Law Enforcement Dashboard

This dashboard is only available to Law Enforcement agencies and is intended to share information on their overall crash reporting levels. As an example, the graph below shows the results for the Adams County Sheriff’s Office.

The top bar shows the overall number of crash reports processed by IDOT for the Adams County Sheriff’s Office. All reports are processed by the crash date/date police are notified so no agency is processed faster than another.

The graph has a number of key features:

- **End Date** – the chart is a rolling one year window and the date can be moved back.
- **Agency Name** – is listed here again but can be changed if you are a member of an additional law enforcement agency.
- **The orange line** represents the 5 year monthly average number of reports for that agency. This is considered the “baseline” to compare to the current year.
- **The second column in each month** is gray and shows the previous year’s total for that month.
- **The current year’s total** is the first column in each month and can be one of three different colors as indicated below
  - Green – everything is in order—(i.e., represents 95% or more of the 5yr average);
  - Yellow – slightly low (i.e., represents 90%-95% of the 5yr average and may require some investigation);
  - Red – low (i.e., represents less than 90% of the 5yr average and should be looked into).

To look at a particular month, the Crash Manager module can be used and a search based on agency and that month. The list will return all the crash reports that IDOT has that came from your agency and can be used as a basis for comparison to determine if any reports have not been completed or have not been submitted to IDOT.