

rsaopendata

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roadsafetyanalysis

RSA Open Data User Guide



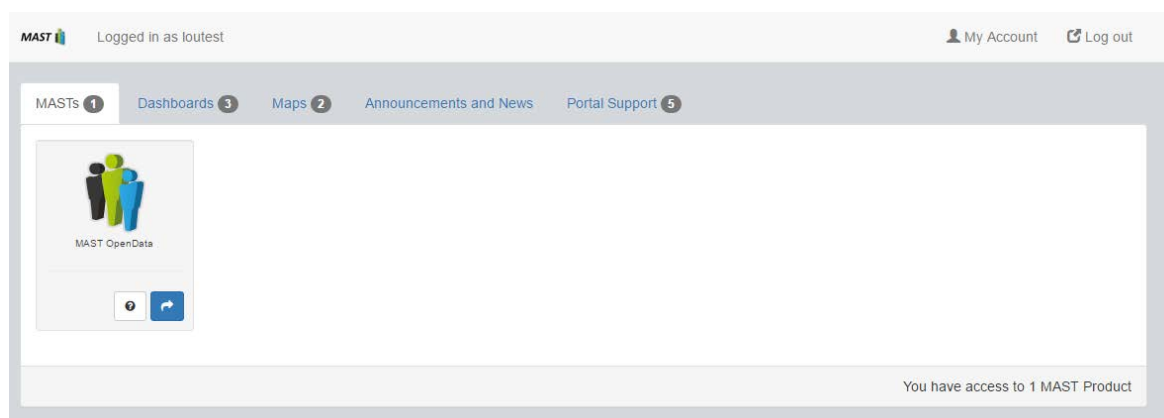
MASTonline is a multi-award winning web based data tool which provides easy access both to national crash data, and to information about the communities in which people involved in crashes reside using the [Experian Mosaic](#) classification system. Created through funding provided by the Department for Transport in 2008 and managed by Road Safety Analysis Limited (a not-for-profit company), it has been used by hundreds of road safety professionals across Great Britain to review collision and casualty data.

Local authorities, police forces, fire and rescue services and others interested in road safety statistics have accessed the system since 2010 using a low-cost subscription model, but now there is a way to access to the same tools used by professionals, but with a more restricted set of data.

Registration is straightforward and can be carried out online at <https://portal.roadsafetyanalysis.org/Register>

The MAST Portal

The MAST Portal is the home for all MAST products and services. After logging in with your username and password you will have access to the MAST Portal as shown below.



This will allow you access to a variety of products and services including:

- **RSA OpenData, Dashboards and Maps:** which can be selected by their individual tabs.
- **Announcements and News:** get access to the latest MAST news and links to blogs, articles and recent analysis.
- **My Account:** you can also view which products you have access to here and make changes to your password.
- **Portal Support:** for access to the MAST Forum for discussions and support, MAST Wiki for help and tutorials when using MAST (note that several topics only relate to the main MAST product), and for contact details.

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MASTs

On the MAST's tab you will have access to **RSA OpenData**, which can be launched by clicking the blue arrow. After loading you will enter the 'My Reports' page as shown below.

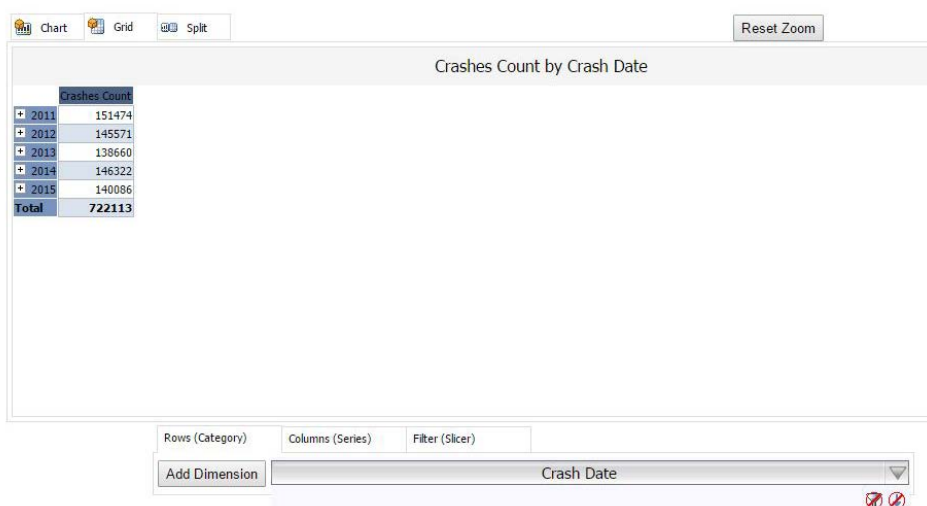
On this page there are a number of tabs which, when selected, will give you access to 3 types of blank reports:

- [Casualties](#) Blank Report – A count of the casualties as a result of crashes
- [Crashes](#) Blank Report – A count of the total number of crashes
- [Vehicles](#) Blank Report – A count of the vehicles/drivers involved in crashes

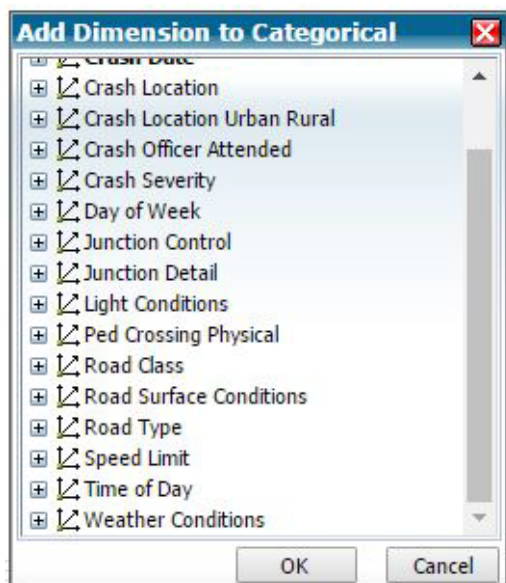
Within these reports the data from the most recent 5 years are available, and updates are made using full-year information only, usually in the following July.

In order to create a report, first click on the tab for the type of report you require (casualties, crashes or vehicles) and select the blank report. For example, if you select the crashes tab and select 'Crashes Blank Report' the report shown below will be loaded.

The report will display the data in grid format, and if you would like to view the data in a chart of both, toggle through the tabs above the grid to select 'Chart', 'Grid' or 'Split'.



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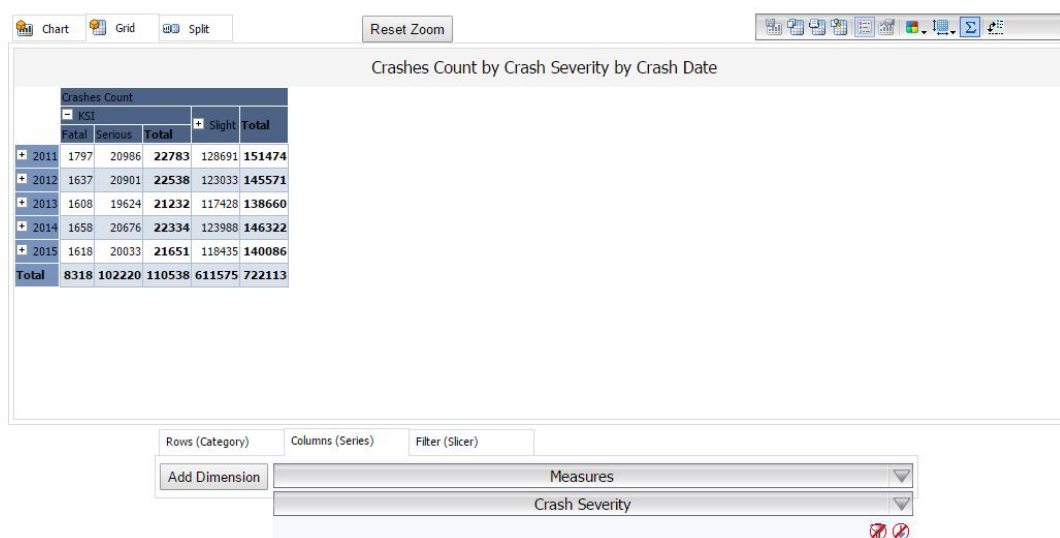
There are a number of variables (dimensions) within the road safety data which can be selected through the 'Add Dimension Button' displayed beneath the grid.

As shown above there is a wide range of variables with some of the more popular ones being 'Time of Day', 'Crash Location' and 'Crash Severity'.

In order to customise a report, these dimensions can be placed either in the 'Rows (Category)', 'Columns (Series)' and 'Filter (Slicer)' tabs located at the bottom of the page.

For example, if you wanted to display the number of crashes, by severity over the last 5 years, the 'Crash Date' dimension is already in the rows tab, so you would:

- Select the columns tab
- Add dimension 'Crash Severity' and press OK



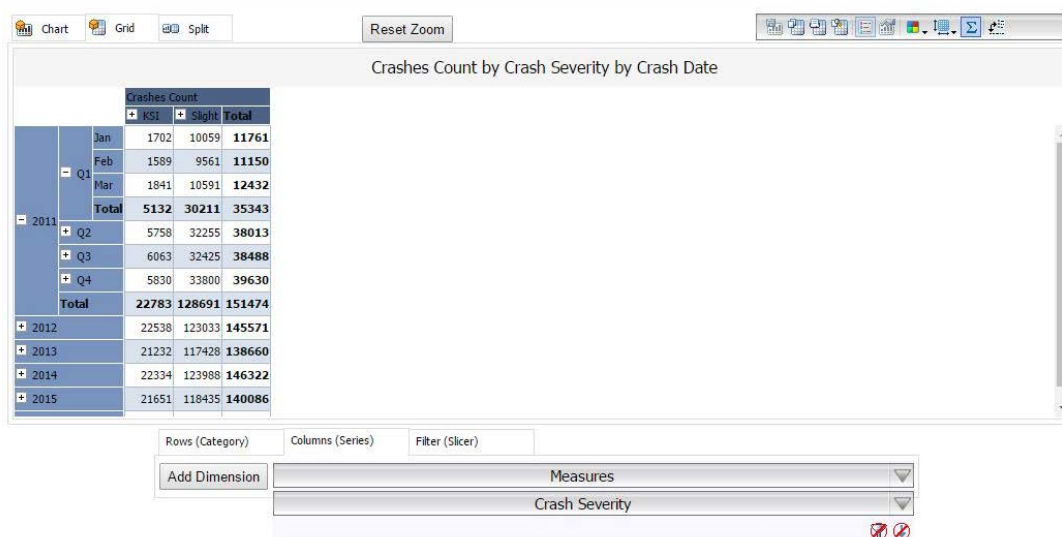
In order to drill down into the KSI numbers to show 'Fatal' and 'Serious' counts, select the small + symbol button next to KSI in the grid.



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These options to drill down into data exist in the majority of dimensions and can be utilised with dimensions in both the Rows and Columns. For example, if you wanted to drill down further into the year you could select the + symbol buttons to get the quarterly breakdowns, and select the buttons again within Q1 to see the monthly breakdown as shown below. To collapse simply select the – symbol buttons.



More information on [Rows](#) (Categories) and [Columns](#) (Series) can be found via the MAST [Wiki](#).

In addition to the 'Rows' and 'Columns' which appear directly in the report, 'Filters' can use any available dimension and can be selected when the 'Filters (Slicers)' tab at the bottom of the report is clicked. Filters do not appear directly in the report but do affect the values shown in the measure

In order to add a filter to the current report click the Filters (Slicers) tab, click the Add dimension button, select the name of the required dimension from the list and click OK.

For example, you already have the breakdown by severity over the last 5 years, you may want to filter this down to an area of the country or by a day of the week.

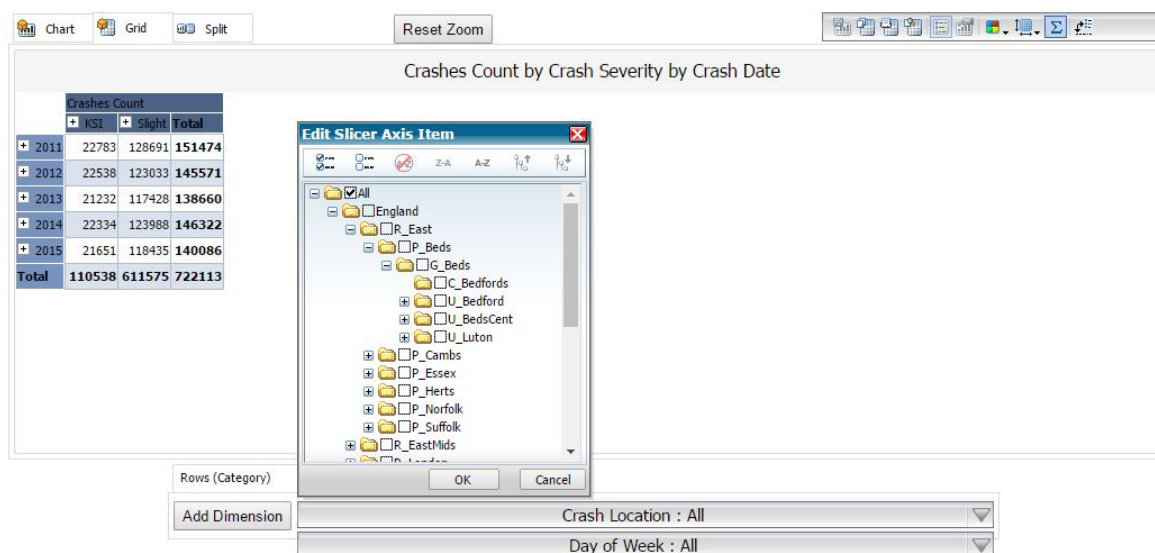
To do this, follow the steps above and select 'Crash Location', once this appears in the filters tab select the grey drop down arrow and the 'Edit Slicer Axis Item' (as shown below) will appear. From here you can use the same + and – symbols as shown earlier to drill down and up in to different areas of the country and check or clear the check boxes to select which elements to include in the report





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You can select all (which it will do by default), or select the country, regions or all the way down to districts which you would like to analyse. It is the same principle with 'Day of Week' you can select just weekdays or weekends, or drill down to individual days.



More information on [Filters](#) and an introduction to reports on the MAST Wiki can be found online - (<http://mast.roadsafetyanalysis.org/wiki/index.php?title=Intro: MAST Reports>)

Dashboards

In addition to the MAST instances, RSA also provide a series of dashboards. These can be found within the Dashboards tab on the portal homepage and can be accessed by clicking on the arrow underneath the relevant icon. RSA produced a constituency dashboard in partnership with PACTS and Direct Line showing resident casualties by Westminster parliamentary constituency. Further information on this can be found at <http://www.pacts.org.uk/dashboard/>

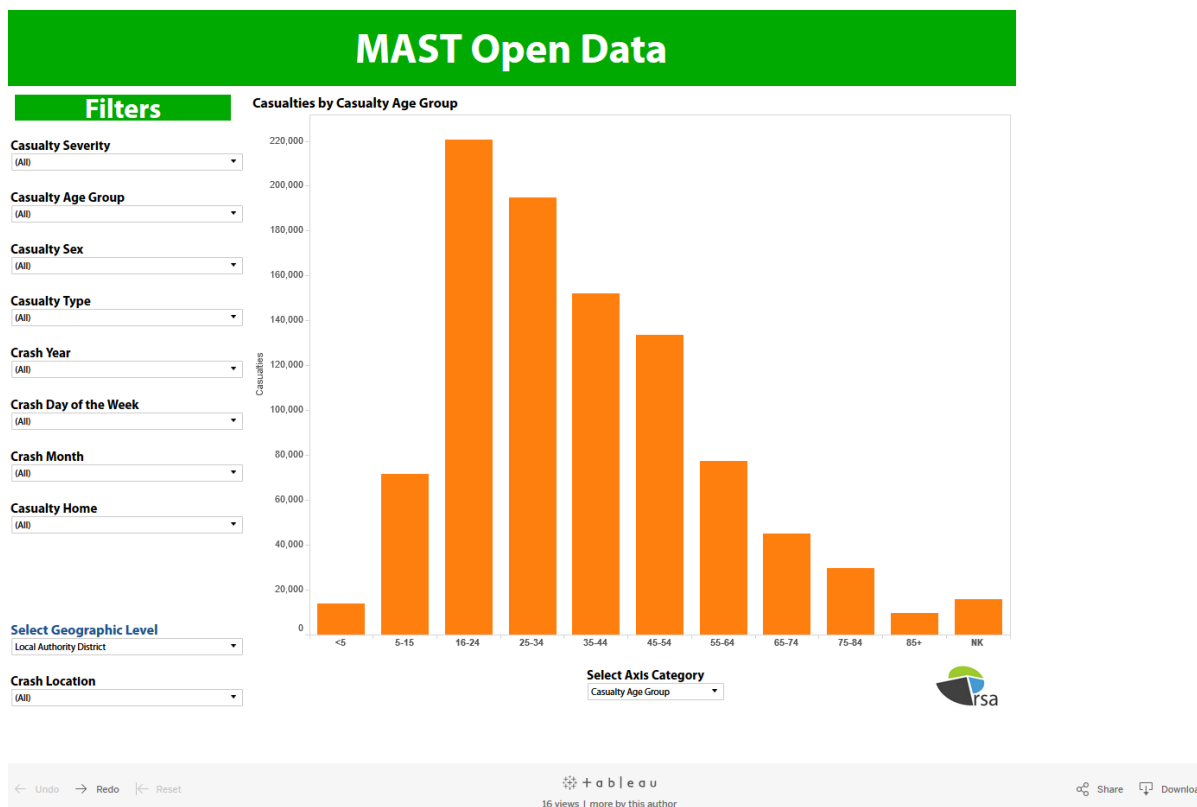
Also within the portal is a MAST Pedestrian dashboard. RSA have produced a series of MAST dashboards covering user groups such as child casualties, pedal cyclists and young drivers, which are all available to full MAST members. Further information on how to use the MAST Pedestrian dashboard can be found on the MAST Wiki - <http://mast.roadsafetyanalysis.org/wiki/index.php?title=Dashboard>





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RSA OpenData is also available as a dashboard and shows casualties, crashes and vehicles from 2011. As with the **RSA OpenData** instance there are 3 tabs within the dashboard: Casualties; Crashes; and Vehicles. The casualties tab is shown first by default. Each tab consists of a chart and a series of filters, as shown in the image below.



In the initial view, casualties are shown by age group. This can be changed using the drop down menu below the x-axis; the options are Casualty Type, Crash Year, Crash Month and Crash Day of the Week. Hovering over a bar in the chart brings up a box with the category (the value recorded on the x-axis) and the number of casualties. You can undo any changes to the chart or filters by clicking on the Undo icon to the bottom-left of the page. When filtering by the crash location, the geographic level can be selected using the 'Select Geographic Level' filter. For example, to filter by crashes in Warwickshire, select Geographical County as the Geographic Level. This will update the selection options for the Crash Location filter. You can then uncheck the '(All)' box and select just Warwickshire from the list. It is also possible to filter by whether casualties involved in a crash in an area are residents of that area. This can be done using the Casualty Home filter and selecting 'Resident'.



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A similar chart and filters format is present in the Crashes tab. In the Crashes tab there are filters for road number, crash hour and whether the crash involved a pedestrian casualty, pedal cycle user casualty or a motorcycle user casualty.

The dashboard page can be downloaded as either a *pdf* document or a *png* image via the Download icon to the bottom-right of the screen. You can also share a link to the dashboard, embed the dashboard on a web page or share to Facebook or Twitter using the Share icon to the bottom-right of the page.

To return to the portal page, simply click on the RSA logo in the bottom right-hand corner and you will be returned.

Maps

Within the MAST Portal, there are thematically coloured maps of the strategic network available to view. These can be accessed via the Maps tab from the portal homepage. Maps can be launched by clicking on one of the arrow icons. The available maps in **RSA OpenData** are, collisions on the strategic road network where fatigue was involved and collisions per km of road by strategic road link. Clicking on a section of road brings up an information box with details such as numbers of collisions and the road number. It is possible to zoom in to the map using the plus and minus buttons to the top-left of the screen or by using the mouse scroll wheel. You can also enter a place name or postcode in to the search box to zoom in to a chosen area.

RSA produce many other national and local maps that review risk on roads and these are available to full MAST members.

Usage and Feedback

If you would like to utilise **RSA OpenData**, we ask that you include a credit line in any publications as follows:

*“Data provided by **RSA OpenData** © 2016, Road Safety Analysis”*

Unfortunately, we are unable to offer a support service on **RSA OpenData**, however, if you have any feedback on the tool or thoughts on future development please feel free to contact us at:

www.roadsafetyanalysis.org/contact/



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RSA OpenData vs MASTonline

Whilst **RSA OpenData** marks a new dawn in the analytical power that is available free to the public, professionals will still want to maintain the added functionality that comes through MASTonline, the table gives a comparison of features between the product versions:

MASTopendata	MASTonline
Official National Statistics from Department for Transport (annually updated, previous 5 years)	Everything in MASTopen data and...
Friendly user web-based interface	Extensive data archive, currently to 2004
Analyse by collision factors (location, junctions, weather, lighting conditions)	Ability to analyse with full socio-demographic profiling using MOSAIC public sector from Experian
Analyse by casualty factors (class, severity, sex & type)	Analyse drivers and casualties according to levels of deprivation in home communities
Analyse by time factors (time of day, day of week)	Analyse drivers and casualties according to their home residence
Analyse by road factors (type, class, surface condition, speed limit)	Analyse collisions based on much wider array of dimensions such as journey purpose or crashes involving young drivers or pedal cyclists
Analyse by vehicle involvement (vehicle type, towing, manoeuvre)	Ability to analyse based on Contributory Factor information (requires DfT permission)
Cross-compare vehicle, casualty and collision factors	Save all reports to your own workspace
Filter by road number	Download underlying data to analyse in Microsoft Excel
Save charts as images for use in reports	Download PNG images of charts for use outside of MAST
Access to graphical OpenData Dashboard, previews of detailed MAST Dashboards	Access to the full MAST wiki site and user forum
Share dashboard views to social media	Access to a wider array of MAST dashboards including Young Drivers, Child Casualties, Pedal Cyclists, Motorcycle Riders and Older Drivers
Send links to dashboards or embed them on websites	Access to a wider array of national risk maps including PICs per million vehicle miles and per kilometre of road
Access to full GB strategic road maps for collision density and fatigue related crashes	Provisional updates with quarterly data
	User support from the RSA team
Free of charge	Low cost annual subscription payment



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Road Safety Analysis

Since its formation in early 2010, Road Safety Analysis has become a market leader in supplying innovative, creative and competitive services to the road safety sector. Built on the principles of social enterprise, Road Safety Analysis is focussed on developing and delivering a range of road safety services that are evidence based and highly cost effective.

With extensive experience in the road safety field and yet a wide range of specialties in areas such as analysis, insight reporting, social marketing, communications strategy, evaluation & partnership development, Road Safety Analysis are keen to support the profession with services that make a difference.

Our services and products are used by hundreds of public sector organisations, charities, transport consultants, listed companies and national governments.

For more information, visit www.roadsafetyanalysis.org

