

## Arlington County Crash Analysis Dashboard User Guide

The [Arlington County Crash Analysis Dashboard](#) illustrates crashes that occurred in Arlington and were reported by either local or state police officers. The Crash Analysis Dashboard pulls directly from the Virginia Department of Transportation’s crash database, which is owned and maintained by the Virginia Department of Motor Vehicles. The data is available starting from 2013 and is updated as the State database is updated (which is typically one to three months behind due to the need for data review and cleaning). Crashes in the database are limited to crashes that either resulted in an injury or over \$1,500 in damages.

This user guide explains the basics of how to use the Crash Analysis Dashboard to learn more about crashes in Arlington. Any questions or problems using the Dashboard should be directed to the contacts on the Vision Zero program webpage.

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## How to Navigate Tabs

The crash dashboard has three pages:

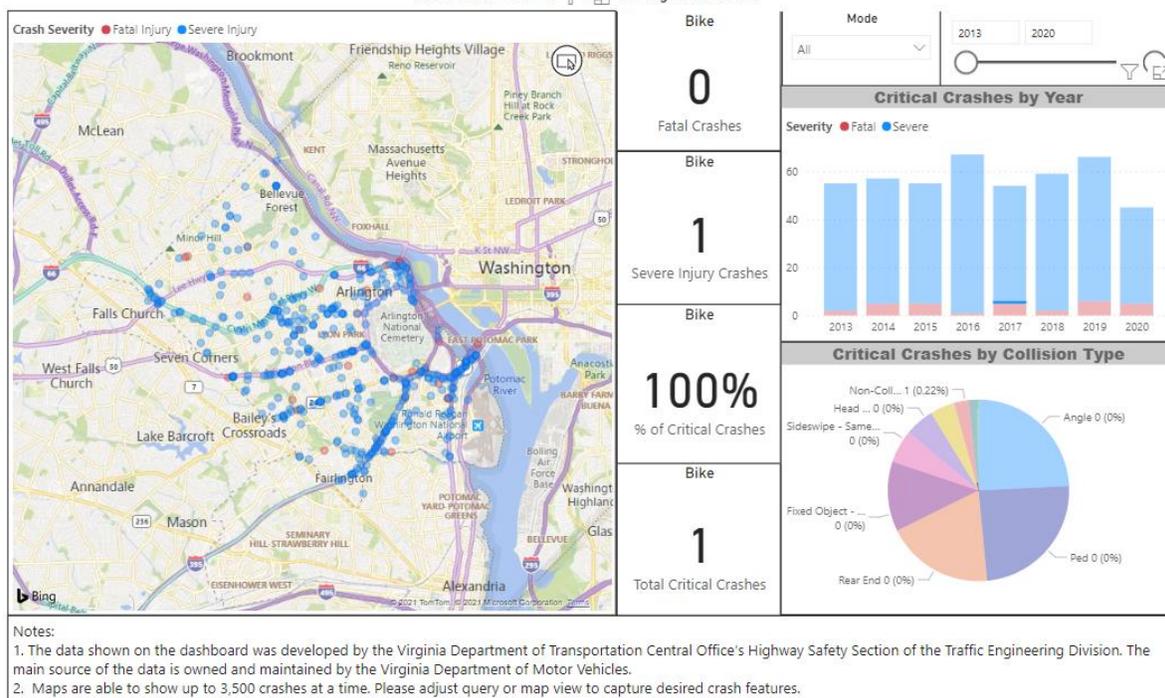
1. Critical Crashes (focuses on only crashes that resulted in a fatal or serious injury)
2. All Crashes – Details (focuses on all crashes in the State database and contributing factors)
3. Crash Trends (provides a summary of annual figures to show crash trends over time)

You can browse through different data pages by clicking the arrows at the very bottom to view the next page or previous page, as shown in the image below.

### Arlington County Crash Analysis - Critical (Fatal & Serious Injury) Crashes

Last Updated: 1/14/2021 1:33:22 PM

Crash Data from 1/1 through 10/30/2017



## Navigating Page 1: Critical Crashes

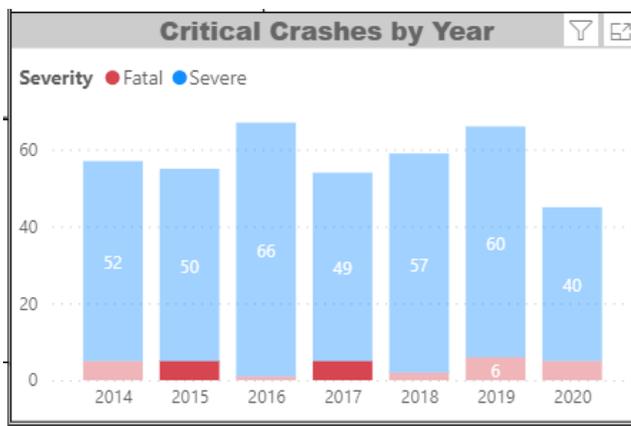
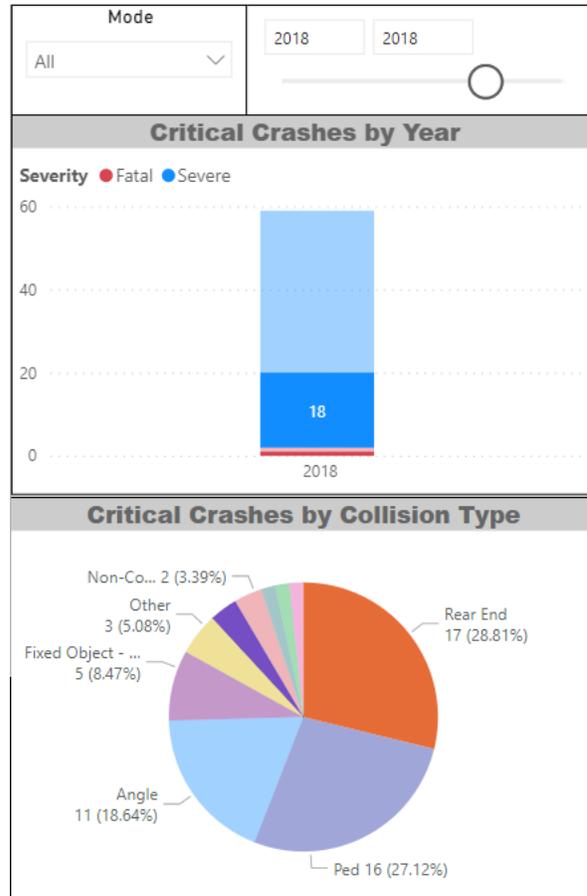
The first page displays fatal and severe injury crashes (“critical crashes”).

Under “Mode” in the top right corner, you can select to view crashes involving a bike, motorcycle, pedestrian, and/or vehicle-only. The map and charts will update automatically to only highlight the mode(s) you selected.

In the box next to “Mode” in the top right, you can toggle year ranges to view data in multiple years or in a single year. (For example, if you would like to only view crashes that occurred in 2018, you can drag the circles to overlap on one another or type out “2018” in both boxes.) The map and charts will update automatically to only highlight the year(s) you selected.

The “Critical Crashes by Collision Type” pie chart allows you to select the collision types that you would like to view, which will alter the map, and the “Critical Crashes by Year” bar graph will demonstrate when those crashes occurred and the severity of the crash. (For example, if you would like to view “Rear End” and “Head On” crashes only press the SHIFT button on your keyboard and select those two collision types.)

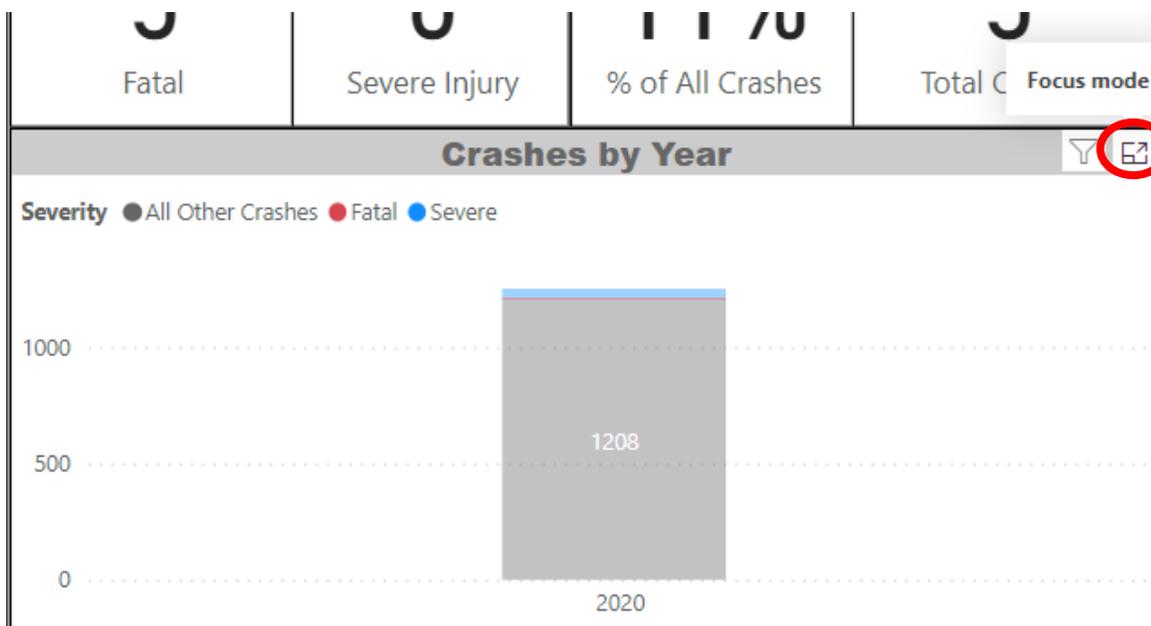
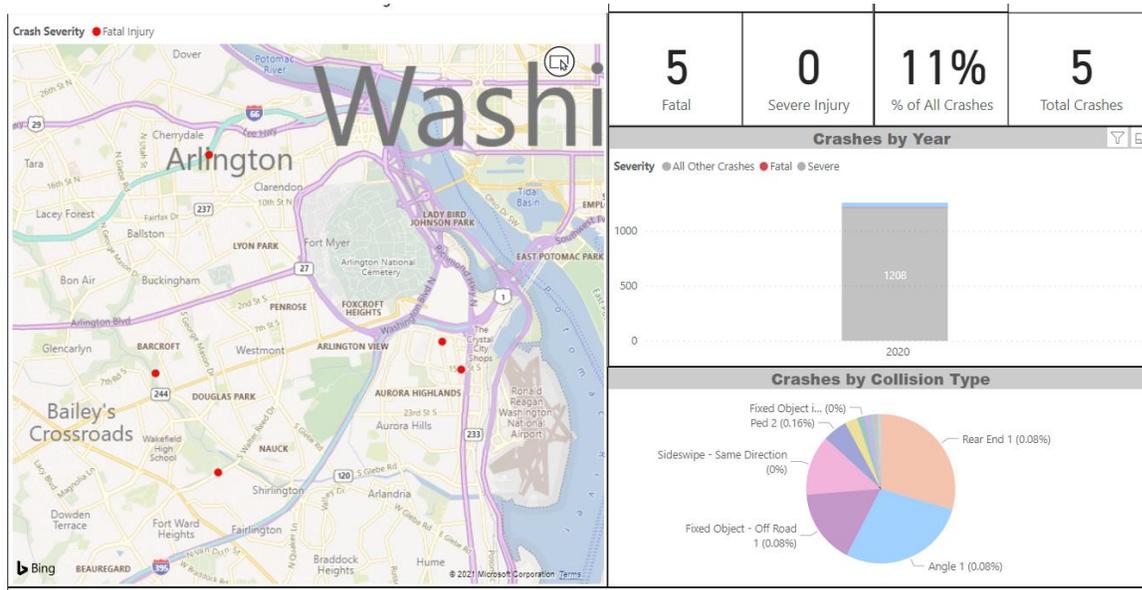
The “Critical Crashes by Year” bar graph will allow you to select the fatal or severe crashes only by clicking on their respective color. (For example, if you would like to view fatal crashes that occurred in 2015 and 2017 press the SHIFT button on your keyboard and then click on the red bars in 2015 and 2017.) If you would like to reset the bar graph, you can click on the white space within the box which will reset any modifications.



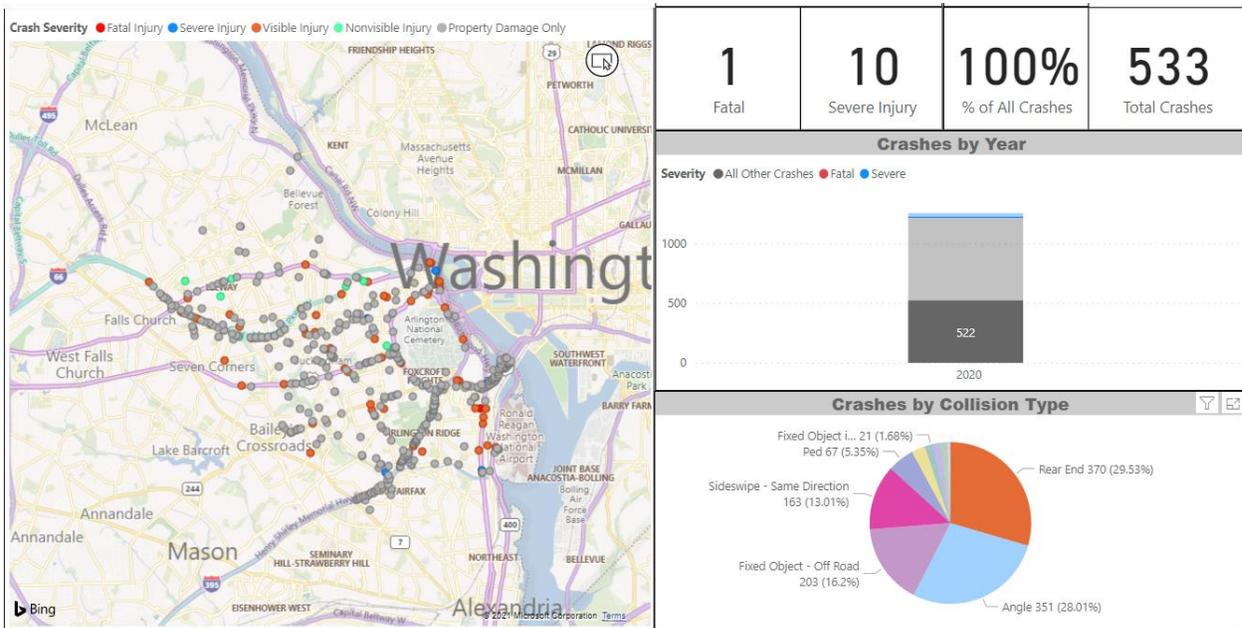
## Navigating Page 2: All Crash Details

The second page displays crashes of all severity levels available in the database (i.e., fatal, severe, visible injury, nonvisible injury, and property damage only crashes) on the map. Similarly, to the previous page you can select to view the crashes by year and mode. This page includes factors in crashes such as alcohol, distracted, intersection, night, speed, and all other crashes.

The “Crashes by Year” bar chart illustrates fatal, severe, and then all other crashes combined. If you would like to view a certain severity level only (for example, only fatal crashes only), you can click on the red circle next to “Fatal,” which will modify the map. Alternatively, you can select the “focus mode” button (see circled below), which will make the screen wider and allow you to click on fatal crashes.

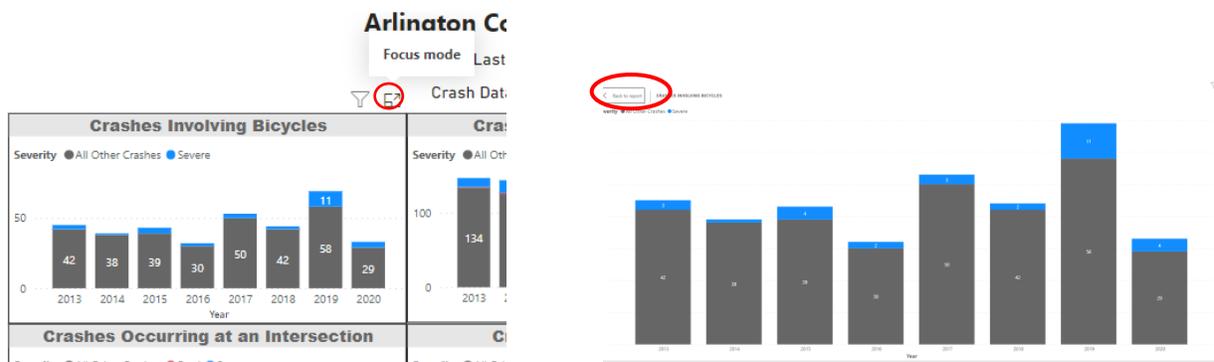


Similarly, to the previous page, you may use the “Crashes by Collision Type” pie chart to select various collision types, which will also modify the map. See the example in the image below where both “Sideswipe” and “Rear End” crashes were selected.

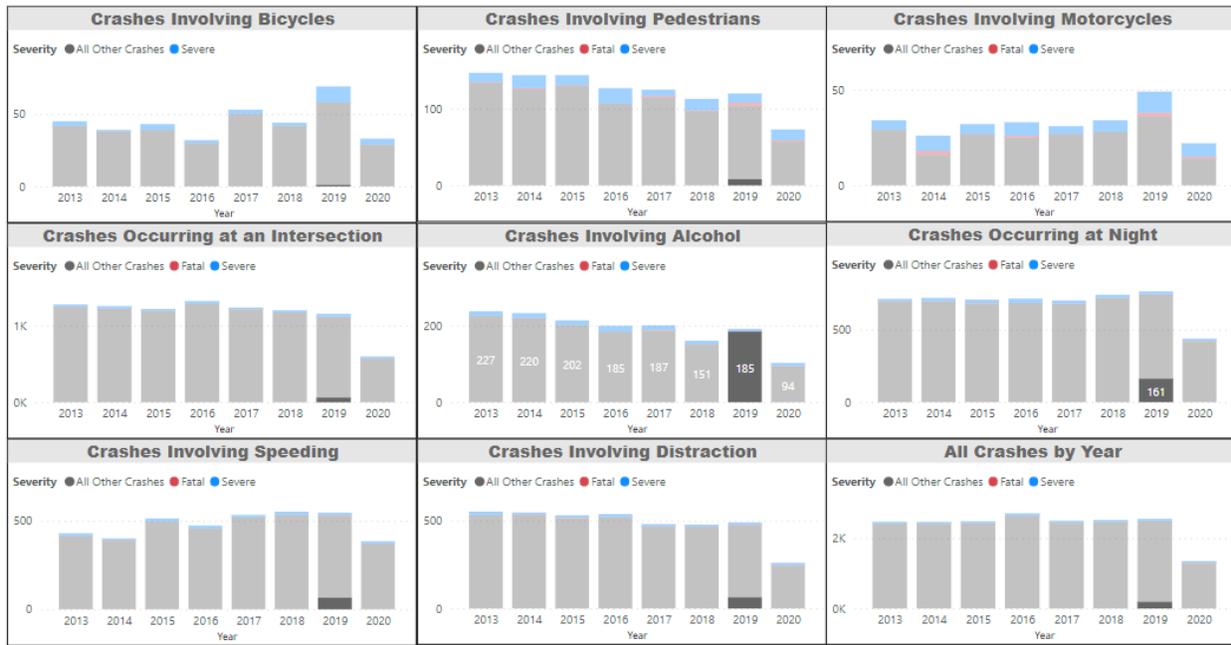


### Navigating Page 3: Crash Trends

The third page displays a series of bar graphs with annual data from 2013 to 2020. The bar charts are intended to show trends over time and cannot be modified. If you would like a zoomed in view of an individual bar graph, click the bar graph and select “Focus Mode,” as shown in the image below. (For example, if you would like to have a bigger view of the “Crashes Involving Bicycles” bar graph, select the “Focus Mode” icon and the graph will appear larger.) To exit out and view the other bar graphs again, simply click “Back to Report” button.



The data in the bar graphs are also connected with one another. If you select a bar within the bar chart, simultaneous factors or modes also involved in a portion of those crashes will highlight within the other bar charts. (For example, if you select the “All Other Crashes” within 2019 in the “Crashes Involving Alcohol” bar chart bar, then the surrounding bar charts will demonstrate the factors associated with those crashes in the respective 2019 column. See the image below, which illustrates this example.)



## Crash Severity Definitions

Police use the following definitions when reporting the level of severity for a crash. The level of severity reported in the Crash Analysis Dashboard is the highest level of severity reported for any one person involved in the crash.

- **Fatal Injury** = Dead
- **Severe Injury** = Suspected Serious Injury, which is any injury other than fatal, resulting in one or more of the following:
  - Severe laceration resulting in exposure of underlying tissues, muscle, organs, or resulting in significant loss of blood
  - Broken or distorted extremity (arm or leg)
  - Crush injuries d. Suspected skull, chest, or abdominal injury other than bruises or minor lacerations
  - Significant burns (second and third degree burns over 10 percent or more of the body)
  - Unconsciousness when taken from the crash scene g. Paralysis
- **Visible Injury** = Other Visible Injury, as Bruises, Abrasions, Swelling, Limping, etc.
- **Nonvisible Injury** = No Visible Injury, But Complaint of Pain, or Momentary Unconsciousness
- **Property Damage Only** = No Injury to driver.

## Crash Factor Definitions

Police use the following guidance when reporting factors that contribute toward a crash.

- *Speed-related Crashes:* Crashes in which the reporting officer indicated that speed contributed to the cause of the crash.
- *Alcohol-related Crashes:* Crashes in which the reporting officer indicated that a driver, pedestrian, or cyclist was impaired by alcohol (either determined by test or judgement) at the time of the crash.
- *Distraction-related Crashes:* Crashes in which the reporting officer indicated that a driver, pedestrian, or cyclist was distracted (e.g., looking at phone, changing the radio, not paying attention to path ahead) at the time of the crash. (Note that distraction is often difficult to prove, so distraction in crashes is likely underreported.)