

# Virginia CODES Crash Outcome Data Evaluation System



| Motor Vehicle Crash Outcomes in 2002 by Intersection Type |                  |               |              |                   |            |                           |                            |  |                         |                         |                        |
|---|------------------|---------------|--------------|-------------------|------------|---------------------------|----------------------------|--|-------------------------|-------------------------|------------------------|
| Intersection Type   | Persons Involved | # Injured     | Injury Rate  | % of All Injuries | Fatal      | Fatality Rate per 100,000 | Inpatient Hospitalizations | Inpatient Hospitalizations per 100,000 | Average Hospital Charge | Median Hospital Charges | Average Length of Stay |
| 1 - Signalized  | 26,598           | 6,435         | 24.2%        | 8.2%              | 37         | 139.1                     | 444                        | 1,669.3                                | \$ 18,415.56            | \$ 9,218                | 4.84                   |
| 2 - Crossing  | 9,182            | 2,923         | 31.8%        | 3.7%              | 52         | 566.3                     | 239                        | 2,602.9                                | \$ 25,974.58            | \$ 10,544               | 5.88                   |
| 3 - T - Intersection                                      | 19,769           | 5,980         | 30.2%        | 7.6%              | 106        | 536.2                     | 481                        | 2,433.1                                | \$ 26,292.43            | \$ 12,817               | 5.77                   |
| 4 - Branch  | 1,259            | 418           | 33.2%        | 0.5%              | 9          | 714.9                     | 40                         | 3,177.1                                | \$ 22,930.60            | \$ 11,441               | 4.48                   |
| 5 - Offset  | 1,017            | 291           | 28.6%        | 0.4%              | 4          | 393.3                     | 22                         | 2,163.2                                | \$ 30,236.73            | \$ 14,223               | 5.86                   |
| 6 - 5 Way or More   | 100              | 42            | 42.0%        | 0.1%              | 2          | 2,000.0                   | 2                          | 2,000.0                                | *                       | *                       | *                      |
| 7 - Major Channelization                                  | 7                | 4             | 57.1%        | 0.0%              | 0          | -                         | 1                          | 14,285.7                               | *                       | *                       | *                      |
| 8 - Interchange   | 11,920           | 2,928         | 24.6%        | 3.7%              | 37         | 310.4                     | 207                        | 1,736.6                                | \$ 16,877.47            | \$ 10,028               | 4.12                   |
| Not at an Intersection                                    | 222,951          | 59,876        | 26.9%        | 75.9%             | 666        | 298.7                     | 4,737                      | 2,124.7                                | \$ 24,234.84            | \$ 11,704               | 5.51                   |
| <b>State Total</b>  | <b>292,803</b>   | <b>78,897</b> | <b>26.9%</b> | <b>100.0%</b>     | <b>913</b> | <b>311.8</b>              | <b>6,173</b>               | <b>2,108.2</b>                         | <b>\$ 23,804</b>        | <b>\$ 11,534</b>        | <b>5.44</b>            |

**Intersection Type** - Based on VDOT's road inventory, and is defined as a crash occurring at an intersection. Included the following categories: Signalized (any intersection that contains a traffic light, supersedes all other categories), Crossing (All crossroads at grade regardless of intersecting angle), T-Intersection (leg enters between 80 and 100 degree angle), Branch (one leg enters at angle other than 'T' angle), Offset (all offset intersections when offset does not exceed 150 feet), 5 Way or More (any intersection in which 5 or more legs come together), Major Channelization (is the separation or regulation of conflicting traffic movements into definite paths of travel usually by means of a fixed barrier, traffic circles), Interchange (grade separation of intersection leg, cloverleaves)

**Persons Involved** - Number of persons involved in crashes, according to police crash reports, and includes all drivers as well as those passengers and pedestrians who were killed or injured

**# Injured** - Number of persons who were injured according to police crash reports (FR-300); includes 2 - Visible sign of injury - had to be transported, 3 - Other visible injury and 4 - no visible injury but complaint of pain or momentary unconsciousness; # Injured does not include 1 - Dead on Arrival, 5 - Died Later (within 30 days), 6 - Not Stated or blank values

**Injury Rate** - Of all persons involved in a crash and categorized within a **Intersection Type Group or State Total**, the percentage for the Intersection Type Group or State Total that were injured

**% of All Injuries** - Of all persons involved in a crash and categorized in a **Intersection Type Group or State Total**, the percentage of all injuries that category represents

**Fatal** - Number of persons killed, according to police crash reports, and includes those who died at the crash scene or up to 30 days later

**Fatality Rate per 100,000** - The fatality rate per 100,000 persons involved in crashes: (Persons Killed / Persons Involved) \* 100,000

**Inpatient Hospitalizations** - # of persons involved in crashes who were identified by data imputation as having been hospitalized in Virginia

**Inpatient Hospitalizations per 100,000** - The hospitalization rate per 100,000 persons involved in crashes: (Inpatient Hospitalizations)/(Persons Involved) \* 100,000

**Average Hospital Charge** - The total inpatient hospital charges divided by the number of persons hospitalized: Total Hospital Charges / Linked to Hospital

**Median Hospital Charges** - The midpoint of all of the hospital charges where half of the values are above the median charge and half are below; the halfway point of a set of numbers is less affected by low or high numbers that might otherwise skew a mean or average

**Average Length of Stay** - The total inpatient hospital days divided by the number of persons hospitalized: Total Hospital Days / Inpatient Hospitalizations

*This report is based on Virginia Department of Motor Vehicles crash data combined with Virginia hospital discharge data. Reports produced with small numbers in a grouping may distort rates and averages. Use caution when interpreting these results. Virginia CODES is a cooperative program of the Department of Motor Vehicles, Virginia Department of Health, Virginia Health Information and Inova Regional Trauma Center. For more information please contact [info@vacodes.org](mailto:info@vacodes.org) or 804-643-5573.*