# Formulas commonly used in UCR Reports

## Important Data Facts-

The table below lists which crimes are included in specific percent changes, crime rates, or clearances that are found in Florida's Uniform Crime Reports (UCR) or datasets.

| Crime (Total) | Murder, Rape, Aggravated Assault, Robbery, Burglary, Larceny, & Motor Vehicle Theft |
|---|---|
| Violent Crime | Murder, Rape, Aggravated Assault, & Robbery |
| Property Crime | Burglary, Larceny, & Motor Vehicle Theft |
| Individual Crime | Separate Individual Crime Types |

Population data are from the [Bureau of Economic and Business Research](#).

## Percent Change –

Percent change is used to demonstrate the difference between two values. In UCR it is typically used to show the change in the volume or rate of crime from one year to the next. A positive percentage represents an increase in crime and a negative percentage describes a decrease in crime.

$$\frac{(\text{Current Year Value} - \text{Previous Year Value})}{\text{Previous Year Value}} \times 100 = \text{Percent Change from previous year to current year}$$

*In small counties with low numbers of crime, a small increase in crime can cause a large percent change.*

*When the previous year's value is zero, a percent change cannot be calculated because division by zero is undefined.*

# Crime Rate –

A crime rate is an indicator of reported crime standardized by population. Florida's UCR Program uses the standard of 100,000. The 2016 crime rate of 3,787.6 is properly interpreted as 3,787.6 crimes occurred for every 100,000 people in Florida.

$$\left( \frac{\text{Number of Reported Crimes}}{\text{Population}} \right) \quad X \quad 100{,}000 \quad = \quad \text{Crime Rate}$$

# Clearance Rate –

A clearance rate is the number of offenses cleared compared to the number of offenses reported in the same time period.

Florida's UCR Program calculates clearance rate per 100 offenses. The formula for this clearance rate is below.

$$\left( \frac{\text{Number of Crimes Cleared}}{\text{Number of Crimes Reported}} \right) \quad X \quad 100 \quad = \quad \text{Clearance Rate per 100 Offenses}$$

*Clearance Rate per 100 may appear as "Percent Cleared" in documents published prior to 2017.*

*Caution must be used in interpreting clearance rates. Cases that are cleared in one year may have been reported offenses in a previous year. Therefore, the number of offenses and the number of clearances are not a direct relationship of the outcome of cases that occurred that year.*