

2.7.1 Critical Crash Rate Factor

KYTC uses a systematic screening technique to identify locations having high crash rates. The actual number of crashes (obtained from KYTC's database) occurring within a roadway segment is used to calculate the Actual Crash Rate accounting for the roadway length, annual average daily traffic (AADT), and the number of years for which crash data are being examined. Using an analysis procedure from the Kentucky Transportation Center (KTC) and referenced in *The Analysis of Traffic Crash Data in Kentucky (2014 -- 2018)*, Actual Crash Rates are compared to the Critical Crash Rate for similar types of Kentucky roadways. The Critical Crash Rate is the rate that compares collision conditions to the average crash rate for similar roadways and represents a rate above which crashes may be occurring in a non-random fashion. This ratio of Actual Crash Rate to the Critical Crash Rate is the Critical Crash Rate Factor (CCRF). A CCRF greater than 1.0 indicates crashes may be occurring more often than can be attributed to random occurrence. This screening technique indicates locations where further analysis may be needed. It is neither a definitive statement of nor a measurement of a crash problem.

As defined in the KTC methodology report, two analysis types exist: "segments" and "spots."

- Segments vary in length and are divided along roadways as geometry or traffic volumes change.
- Spots are defined by analyzing 0.1-mile-long sections where crashes are concentrated.

High crash spots and segments are presented in **Figure 20**.

