City of Chicago: Child Safety Zone Ranking

Methodology:
Child Safety Zones are defined as a 1/8\textsuperscript{th} of a mile boundary around every public and private school, and park in the City of Chicago.

Using crash data from the Illinois Department of Transportation, the City analyzes safety zones for automated speed enforcement based on the volume and type of crash that happens within the safety zone.

Several crash “types” are considered in the safety zone selection process, namely:

1. Total (all crashes reported)
2. Bike/Ped (vehicle crashes involving a bicyclists or pedestrian)
3. Serious/Fatal (crashes resulting in a serious or fatal injury)
4. Youth (crashes involving a person 18 years or younger)
5. Speed (crash where reporting officer indicated speed as a cause of the crash)

Safety Zone Rank is produced by sorting (from highest to lowest) each safety zones score based on the following calculation:

\[
\text{Total Vehicle Crashes} \\
\text{Serious/Fatal Crashes} \\
\text{Bicycle/Pedestrian Crashes} \\
\text{Speed Related Crashes (2x)*} \\
\text{Youth Related Crashes (2x)*} \\
+ \text{High-Youth Census Tract**} \\
\text{= Safety Zone Score}
\]

* The Child Safety Zone scoring methodology places an emphasis on speed related crashes and crashes involving people 18 and under, so these scores are weighted double.

** The average census tract in the City of Chicago has a youth population of approximately 24%. A “High Youth Census Tract” has a population of 30% or higher, and is awarded a flat score of 20 points.