

What is the KABCO Injury Severity Scale?

This scale is a way to report injury severity at the scene of a crash.

K – Fatal

A – Suspected Serious Injury

B – Suspected Minor Injury

C – Possible Injury

O – No apparent Injury

Selecting Crash Severity for the High Injury Network (HIN)

The goal of Vision Zero is to eliminate traffic fatalities and severe injuries from the transportation system, and, as such, focuses on K and A. Some cities include B crashes and sometimes C and O particularly for pedestrian and bicycle crashes in their analysis, for the following reasons:

1. Fatal and serious injuries, particularly among pedestrians and bicyclists, are relatively rare, meaning that the sample sizes are often small. Including additional injury crash levels helps bring the raw number of pedestrian and bicyclist crashes analyzed closer to that of motorist crashes, which tend to occur in higher numbers due to a higher prevalence of driving.
2. Given the low number of K and A crashes, a location may not experience another K and A crash for years, even without any improvement to the location. Including other less serious crashes gives additional information about the crash propensity of those locations.
3. The difference between a serious and minor injury outcome for a pedestrian or bicycle crash may be minor, and the injury itself may be somewhat random and influenced by factors beyond the roadway environment.
4. Research has found that a significant percentage of serious injuries may be miscoded as minor, and vice versa. Ignoring minor injuries may result in missing important data that helps highlight problematic locations and corridors. In addition, many crashes may be unreported if the person did not realize the severity of the injury at the time it happened.
5. Even if minor injuries are classified correctly, a high number of them in a certain area may still indicate a problem.

Options:

- K and A only
- Include B for all Modes
- Include B for Pedestrian and Bicycle Crashes Only
- Include any crash for Pedestrians and Bicycle

5 Year Total					
	K	A	B	C	O
Motor Vehicle	15	223	1857	2842	16206
Bicycle	2	34	286	121	59
Pedestrian	13	84	217	110	25
5 Year Avg					
	K	A	B	C	O
Motor Vehicle	3	44.6	371.4	568.4	3241.2
Bicycle	0.4	6.8	57.2	24.2	11.8
Pedestrian	2.6	16.8	43.4	22	5

Weighting of Crash Data for the HIN

Some cities weight crash data to emphasize or de-emphasize certain modes and crash severities. This approach can also mitigate the difference between the numbers of automobile crashes versus pedestrian and bicycle crashes. Since a smaller percentage of automobile crashes results in fatalities, weighting fatal crashes more heavily can lead to a more equitable impact of all modes' crashes on the analysis. However, even fatal motorist crashes are likely to be higher in number than bicycle or pedestrian fatal crashes, simply due to exposure.

Cities that choose to include B or other crashes in the analysis sometimes weight them less than K and A crashes. This allows for their inclusion in the analysis but acknowledges that the key goal of Vision Zero is elimination of fatal and severe injury crashes, and therefore the more severe crashes should count for more in the analysis. It also acknowledges the reality that K and A crashes have a greater impact on the victim's family and acquaintances, as well as a greater societal cost. There are multiple weighting schemes used by other Vision Zero cities.

Options include:

- Fatal and serious crashes weighted equally
- All modes weighted equally
- Weighting of 3 for all mode K and A crashes and 1 for bicycle and pedestrian B, C or O crashes
- K and A crashes only - Bicycle and pedestrian crashes weighted at 3, motorist crashes weighted at 1
- Some cities weight motorcycle/moped crashes the same as bicycle crashes
- Madison's smaller street network and crash numbers may make weighting unnecessary