

Alaska Highway Safety Manual Calibration

Transportation and traffic engineers are always looking for new ways to improve safety on existing and future sites. These improvements include identifying problem features or areas, and attempting to reduce crash rates. The Highway Safety Manual provides a system to quantitatively analyze safety for existing roadways and discover which aspects of current sites contribute more to crashes than others. In Alaska, drivers must deal with many dangerous driving conditions, which result in crashes. In

order to try to bring awareness to and to reduce the amount or severity of crashes, the Highway Safety Manual was calibrated to Alaska specifically. This research work presents this calibration for main roadway facilities in the state, mainly, four way signalized intersections, stop controlled intersections and two lane rural highways. Local calibration for these facilities showed that the results for stop controlled intersections were generally consistent with the HSM, with Central Alaska Urban 4 leg stop controlled being an exception, while the HSM tended to signi