

# Safety Resources



**Kittelson & Associates, Inc.** was the contractor producing the first edition of the AASHTO *Highway Safety Manual*, (HSM), released in the spring of 2010. The HSM provides tools to measure safety quantitatively and to predict the safety performance of design, operations, and planning decisions. The HSM includes guidance on implementing a comprehensive roadway safety management program. The following are some useful safety related websites to support application of the HSM, and other safety activities.

## HiSafe Software

<http://www.hisafe.org>

HiSafe is companion software to the HSM, applying Part C: Predictive Method for estimating the expected average number of crashes per year at a particular location as a function of traffic volume and geometric characteristics of the facility. It allows for safety to be quantitatively assessed and meaningfully used as a project performance measure in conjunction with other typical project considerations.

## SafetyAnalyst

<http://www.safetyanalyst.org/>

SafetyAnalyst comprises a suite of software tools used for programming site-specific roadway safety improvements. Safety Analyst can help agencies identify and prioritize safety improvements at a system-wide level.

## Interactive Highway Safety Design Model (IHSDM)

<http://www.tfrc.gov/safety/ihsdm/ihsdm.htm>

IHSDM is a suite of software analysis tools for evaluating safety and operational effects of geometric designs on highways. IHSDM includes six evaluation modules (Crash Prediction, Design Consistency, Intersection Review, Policy Review, Traffic Analysis, and Driver/Vehicle). The IHSDM Crash Prediction Module (CPM) automates the predictive method contained in the HSM.

## FHWA Crash Modification Factors Clearinghouse

[www.cmfclearinghouse.org](http://www.cmfclearinghouse.org)

Crash Modification Factors quantify the projected change in crash frequency due to design, operational, or planning decisions. The FHWA Crash Modification Factor (CMF) Clearinghouse is a central repository that makes the latest CMFs available to transportation professionals.

## Pedestrian Safety Guide and Countermeasure Selection System

<http://www.walkinginfo.org/pedsafe/>

The Pedestrian Safety Guide and Countermeasure Selection System is intended to provide practitioners with the latest information available for improving the safety and mobility of those who walk. The online tools provide the user with a list of possible engineering, education, or enforcement treatments to improve pedestrian safety and/or mobility based on user input about a specific location.

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## BIKESAFE: Bicycle Countermeasure Selection System

<http://www.bicyclinginfo.org/bikesafe/>

The Bicycle Countermeasure Selection System (BIKESAFE) is intended to provide practitioners with the latest information available for improving the safety and mobility of those who bicycle.

## PBCAT

<http://www.walkinginfo.org/facts/pbcats/index.cfm>

The Pedestrian and Bicycle Crash Analysis Tool (PBCAT) enables users to identify countermeasures for motor vehicle-pedestrian crashes. This tool is a database of details associated with the crashes, analyze the data, produce reports, and select countermeasures.

## PlanSafe

<http://www.ctre.iastate.edu/educweb/ce451/LECTURES/Safety/>

PlanSafe is being developed as part of project NCHRP 8-44 (2). PlanSafe will provide state and metropolitan planning organizations (MPOs) with a tool for integrating safety into the transportation planning processes. PlanSafe consists of a suite of software programs to quantify and predict regional crash frequencies by type and severity as a function of typical long range planning variables, such as land use, demographics, and transportation network characteristics.

## Road Safety Audits (RSAs)

<http://safety.fhwa.dot.gov/rsa/>

Road Safety Audits bring together a team of independent design, traffic, and safety experts to formally evaluate safety conditions on an existing or planned transportation facility. As an outcome of the evaluation, the team provides an documentation of potential safety issues. FHWA has produced guidelines for RSAs, which can be found on their website.

## FHWA Safety Program

<http://safety.fhwa.dot.gov/>

The FHWA Office of Safety's mission is to reduce highway fatalities through the implementation of the 4 E's: Engineering, Education,, Enforcement, and Emergency Medical Services. The Office of Safety's website provides a wealth of information related to federal programs and strategies aimed at achieving this goal.