Abstract: The evaluation of driver assistance systems concerning the influence on potential property damage may only be performed retrospective at this time. This paper shows a methodology which allows the prospective evaluation of field effectiveness of driver assistance systems as to property damage. A reconstruction is performed based on real-world accident data collected in accident research. Subsequently, a re-simulation of the accident is performed using driver assistance system algorithms. Preference should be given algorithms of future assistance systems. The re-simulation with virtual equipment with an assistance system will produce modified accident parameters. These parameters will be evaluated by means of a novel property damage risk function. This function allows to derive the changes in repair costs and therefore customer value. On one hand, damage is completely prevented, on the other hand the extent of damage is reduced. Both effects may result in a purchasing incentive for the customer and thus contribute to increased traffic safety.