

CARS-Mayday: Improving Crash Response Times in Rural Areas

Primary Author: Peter Davies, Castle Rock Consultants

Secondary Author: Kristin Virshbo, Castle Rock Consultants

Emergency response can be particularly challenging in rural areas, where difficult roads and long distances between populated areas can hamper response times. In these areas it is especially important for emergency dispatchers to be notified about crashes as quickly as possible, and to be able to convey critical, accurate information to on-the-ground responders. In 2010, Castle Rock worked with the Idaho State Police Communications Center (State Comm) on a software module called CARS-Mayday that will address this need. CARS-Mayday is a web-based tool that imports and displays automated “Mayday” crash reports from OnStar-equipped vehicles. General Motors’ OnStar technology detects when a vehicle impact has occurred, and sends crash details to a designated response center using a standardized message format called Vehicular Emergency Information (VEI). VEI reports, which have been developed by the Comcare Alliance, include data that help responders to determine crash severity, e.g. vehicle speed and seatbelt usage. CARS-Mayday software allows State Comm operators to communicate real-time crash details to EMS responders. Incoming crash reports are presented on-screen using both a map-based display and a panel listing all data received from the VEI. Most prominently displayed is the Probability of Injury (POI) for the car’s passengers. The POI is calculated on the back-end, and is correlated with thresholds that define the level of EMS response needed. Operators can thus see instantly which services are needed, and take action accordingly. This presentation will discuss the Idaho Mayday development, including design challenges, lessons learned, and plans for the future.