Introduction/Business Problem:

The ability to predict the severity of car accidents given certain parameters would be useful to many organizations but this information has the largest impact possible when it's used to save lives. One possible use for this capability is to predict when accidents will happen and how bad they will be given factors like the weather, time of day, holidays, etc. Public emergency services could use this information to have more or less responders (police, firefighters, ambulances) on standby and even deploy them to potential accident hotspots in anticipation of incidents.

This could be extremely valuable to public agencies and obviously the public itself.

Data:

SEVERITYCODE is a target variable, so this must be used. Any other variable that influences accident severity that is not taken into account by SEVERITYCODE (FATALITIES, for example, would be excluded) would be used in our model. Especially parameters like WEATHER, ROADCOND, LIGHTCOND, SPEEDING, etc.