

The main purpose of the project is to avoid and/or reduce accidents due to vehicle collisions with animals, i.e. deer, elk, moose, bear, etc. The research project uses multiple sensors to detect these large animals crossing a roadway. They are placed on both sides of the roadway to cover a one mile section. The sensors have a maximum sensing distance of one quarter of a mile. A central controller receives crossing information from each sensor pair, records the data for analysis and commands the warning system to activate. The warning system alerts drivers to the animal presence thus avoiding the collision or reducing injuries and property damage. The communications between the central controller and the other sensors is the subject of this application.

The communications link is used as follows: the central controller initiates a timing signal, the sensors send their data back to the central controller and the sensors with the warning systems (placed at the beginning and half-way points of the test section) receive a command to turn on/off the warning system (currently a flashing amber beacon). The system data can also be monitored, and data retrieved via a cell phone modem located at the central controller.