

RESEARCH PROBLEM STATEMENT

DATE: 12/19/2019	PROJECT AREA: Special Projects
-------------------------	---------------------------------------

TITLE: Prevent the Recurrence of a Recent Fatality by Barrier Placement

PROBLEM STATEMENT:

The newspaper reported a fatality last weekend in Russellville at 100 block of Hwy. 64 E at the RR overpass. (I could not get full report or details but) It appears that the west end of the overpass where the concrete begins to support the side-rail needs to have a deflector or an impact absorbing apparatus. My company patented an Impact Absorbing Apparatus (US patent #5,947,538) years ago. These could be used to save lives if oriented to absorb energy and decelerate vehicles or high-speed mass over a greater stopping distance to reduce force. In the past barriers, barrels, railings and break-away devices have been used to some advantage. Nothing was in place at the suspected place of impact. Variations of these could be used for rail and other high-risk grade crossings with linkages to deploy when needed.

OBJECTIVES:

Prevent the predictable trajectory of out-of-control vehicles from resulting in a fatality or sever injury. If these were properly designed. sized and placed at hazard locations the annual death toll on our highways could be reduced greatly. With funding for design modularized versions and certifications these could reduce the severity of injury when used in conjunction with existing vehicle safety features. Applications include mitigating consequences from: icy roads; vehicle malfunctions; driver inattentions; excessive speed; and other factors that might cause a moving vehicle to strike an immovable object.

FORM OF RESEARCH IMPLEMENTATION AND RETURN ON INVESTMENT:

Reduce this design concept to devices that could be installed at locations that could save lives. Seek out locations that are similar to where sever impacts have occurred and evaluate the benefit of whether these could be worth installation compared to the health and safety risk of not having them. Besides the lives that could be saved, the aggressive, pro-active thinking that ARDOT could lead the way in a program that could quantitatively be traced to saving lives as compared to other states and to prior years.

Estimated Project Duration: 36 Months

PREPARED BY: Don White

AGENCY: Sail D. White Enterprises, Inc.

PHONE: (479) 970-4451 **REVIEWER:** Davin Webb

Standing Subcommittee
Ranking

7/9

Advisory Council
Ranking

27

Statement Combined with
Statement Number(s)