

Arkansas Department of Transportation
Transportation Research Committee
RESEARCH PROBLEM STATEMENT

DATE: 09/18/2019	PROJECT AREA: Planning
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TITLE: Innovative Countermeasures to Deter Wrong-Way Driving

PROBLEM STATEMENT:

There has been a significant increase in wrong-way crashes on divided full-control of access highways in Arkansas since 2015, resulting in 29 fatalities (as of 9/3/19). This has mirrored a broader trend of increased wrong-way crashes throughout the US. Approximately 60 percent of wrong-way in Arkansas crashes occur at night, and about 50 percent are the result of drug or alcohol impairment. Wrong-way crashes are largely random and scattered throughout the State's freeway system. As a result of the Department's annual review of wrong-way crashes, signs and markings at ramps and interchanges are checked to determine if any are missing or out of compliance. Furthermore, the Department implemented a statewide project (Job 012260) in 2017/2018 that upgraded and added additional signs and markings to deter wrong-way entry. Despite the improvements, the trend has remained unchanged, and therefore a need exists to test innovative countermeasures utilizing technology that can be implemented in a cost effective manner.

OBJECTIVES:

The objectives of this project are to: (A) identify potential contributing factors to wrong-way entry and (B) determine effective countermeasures that can be implemented in a cost effective manner. Proposed tasks include: (1) review existing data sources to determine factors correlating to wrong-way crashes, (2) literature review, (3) determine which countermeasures should be tested, and (4) conduct evaluation.

FORM OF RESEARCH IMPLEMENTATION:

The results of this research will help the Department determine which countermeasures are effective to deter wrong-way entry onto freeways and that can be implemented in a cost effective manner.

Estimated Project Duration: 24 months

PREPARED BY: Andy Brewer and Adnan Qazi (ARDOT)

AGENCY: Transportation Planning and Policy Division, ARDOT

PHONE: (501) 569-2201 **REVIEWER:**

Standing Subcommittee Ranking <u>1/7</u>	Advisory Council Ranking <u>5/10</u>	Statement Combined with Statement Number(s) _____
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